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PSYCHOPATHIC DELINQUENCY, EMPATHY, AND
HELPING BEHAVIOR

by

Norman H. Reed

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

May

1980

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DEDICATION

To my parents, who raised me with love and understanding; to my teachers, for their encouragement and guidance; and to Vivian, whose love and support makes this effort worthwhile.

VITA

The author, Norman H. Reed, Jr., is the son of Norman H. Reed and Bernice L. Reed. He was born July 26, 1952, in Oak Park, Illinois.

His elementary education was obtained in the public schools of Harwood Heights, Illinois, and secondary education at Ridgewood High School, Norridge, Illinois, where he was graduated in 1970.

In September, 1970, he entered Elmhurst College and in September, 1971, he transferred to Loyola University of Chicago where in June, 1974, he received the degree of Bachelor of Science with a major in psychology.

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chology intern at Loyola's Child Guidance Center from
September, 1978, to August, 1979.

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CHAPTER I

INTRODUCTION

Until recently, the study of psychopathy as a behavioral disorder and social problem has received little attention by scientifically oriented researchers (Hare, 1970). Instead, the literature relevant to psychopathy appears to be more concerned with clinical descriptions, treatment problems, and legal/moral issues rather than the empirical study of psychopathy. Although the clinical observations and treatment discussions are necessary and important, controlled studies concerning psychopathy are essential for verification and clarification of the observations and discussions. The following study examined some clinical observations about psychopathy.

One clinical observation that had been made by several authors (Cleckley, 1976; Duff, 1977; Hare, 1970) suggests that psychopathy is extremely self-centered and lacks the emotional responsivity necessary to develop and sustain normal interpersonal relationships. The observed interpersonal disturbance of the psychopath has been attributed to an inability to share another's emotional experience; that is a deficit in empathy. However, little

research directly studying the relationship between empathy and psychopathy has been conducted (Smith, 1978). Considering the implications for treatment, law enforcement, and prison reform that a deficit in empathy may have, the relationship between empathy and psychopathy was considered important for further study.

One reason for the lack of research on empathy with psychopaths may be the considerable conceptual and methodological difficulties involved in studying empathy. For example, although empathy has been described as the ability to share or experience another's emotional experiences, researchers disagree about the important aspects of this shared experience. Several researchers stress a cognitive approach to the sharing of experience and define empathy as knowing what another person feels (Borke, 1971; Chandler, 1977; Savitsky & Czyzewski, 1978; Truax, 1972). Other researchers stress an affective approach to empathy and define empathy as feeling what another person feels (Berger, 1962; Feshbach & Roe, 1968; Mehrabian & Epstein, 1972). A third group contends that both cognitive and affective elements are important elements of an empathic response and define empathy as both an emotional response and a cognitive understanding (Feshbach, 1978; Iannotti, Note 5). The problems associated with definition are further compounded by the fact that investigators who may agree on a definition of empathy, do not agree on how to operationalize the defi-

dition. For example, researchers who agree that empathy is an affective response have measured empathy with self-report questionnaires, physiological measures, mood adjective checklists, and even the subject's willingness to administer electric shock.

This lack of agreement on what empathy is and how it should be measured has led Smith (1978) to describe empathy as a "slippery," "uneasy," "bugaboo" construct and minimized its importance in research on psychopathy. Regardless of the conceptual and methodological problems that plague this research, empathy remains a central construct to clinical observations of psychopathy and should not be ignored. Two lines of research with antisocial populations further underscore the importance of the concept of empathy to the study of psychopathy.

The first line of research concerns the autonomic reactivity of the psychopath. Changes in the activity of an individual's autonomic nervous system have been suggested to be an adequate measure of emotional responsiveness or emotional empathy (Stotland, 1969). Psychopaths have been reported to exhibit less autonomic reactivity than other prisoner groups while anticipating an aversive stimulus (Hare & Cox, 1978b). The lower level of autonomic activity demonstrated by the psychopath has been interpreted as a deficit in emotional responsiveness or affective empathy.

The second line of research supporting an empathy

deficit in psychopathy concerns the role-taking ability of the psychopath. Psychopaths are considered to be deficient in the ability to imagine another's role or to understand an experience from another's perspective (Gough, 1948). Psychopaths have exhibited poorer cognitive role-taking skills (Jurkovic & Prentice, 1977) and idiosyncratic interpersonal construct systems (Widom, 1976) when compared to normal samples. The poorer role-taking ability of the psychopath suggests a deficit in understanding another's emotional experience or in cognitive empathy.

The above studies suggest that psychopaths do exhibit a deficit in both cognitive and affective aspects of an empathic response. However, there has been no reported research utilizing a cognitive/affective definition of empathy with a psychopathic sample. In this study, both the cognitive and affective aspects of empathy are examined in their relationship to the psychopath.

The experimental manipulation of empathy with an antisocial population has also been a relatively neglected area of research. The research completed by Aderman and Berkowitz (1970) and Stotland (1969) suggests that empathy can be successfully induced or inhibited in college students by manipulating the observational instructions given to the subjects just before observing or listening to a distress situation. The use of this empathy manipulation with an antisocial population has not been previously reported and

may offer some important information concerning the relationship between empathy and psychopathy.

The concept of empathy has also been hypothesized to be closely related to helping behavior. A number of theorists have suggested that helping behavior is motivated by empathy (e.g., Aderman & Berkowitz, 1970; Eisenberg-Berg & Mussen, 1978; Feshbach, 1978; Hoffman, 1975; Iannotti, Note 5). Specifically, both an emotional response and a cognitive understanding have been postulated as important prerequisites of a helping response to a distress situation (Hoffman, 1975). However, research on the relationship between empathy and helping behavior has yielded conflicting results. The conflicting results may have occurred because many researchers ignore either the cognitive or affective aspects of empathy and have not consistently used legitimate distress situations. A study examining affective and cognitive aspects of empathy with a distress situation may help clarify the relationship between empathy and helping behavior.

Recognition of the problems in defining and assessing empathy as well as the relevance of this variable in the study of psychopathy and altruistic behavior provided the motivation for the present study. In order to investigate these relationships, psychopathic, neurotic, and a general comparison group of delinquent youths were assessed for both cognitive and affective aspects of empathy. In

addition, the three delinquency groups were exposed to a distress situation involving the experimental manipulation of empathy and a helping situation where helping behavior was assessed. Psychopathic delinquents were hypothesized to score significantly lower in empathy (both cognitive and affective), be less responsive to the empathy arousal manipulation, and be less likely to help another than the neurotic or comparison groups.

CHAPTER II

REVIEW OF THE LITERATURE

Psychopathy

The Concept. The concept of psychopathy has had a long and confusing evolution (McCord & McCord, 1956; Morrison, 1978; Rotenberg & Diamond, 1971; Smith, 1978; Yochelson & Samenow, 1977). Vague definitions, moral issues, and legal concepts have plagued and confused the concept of psychopathy throughout its history and continue to plague it even today. During this evolution, some of the terms used to label the concept of psychopathy have included antisocial personality, differential insensitivity (Rotenberg, 1978), "mania without delirium, moral insanity, constitutional psychopathic inferiority, semantic dementia, moral mania, moral imbecility, egopathy, anethopathy, anomia, troopathy, and sociopathy" (Speilberger, Kling, & O'Hagen, 1978, pp. 23-24). Each term has descriptive criteria which focus on different aspects of psychopathy. This vast sea of labels and descriptions are a good example of the confusion which surrounds the concept of psychopathy.

The confusion of terms has led several authors to consider the concept of psychopathy as a wastebasket cate-

gory (Karpman, 1948; Lewis, 1974; Robbins, 1967) which has never been clearly defined and "is in fact an empirically non-existent entity" (Rotenberg, 1978, p. 187). The concept of psychopathy according to Rotenberg (1975), lacks consensus among legal and medical professionals concerning its nature and probably its very existence. Rotenberg (1975) further observed that the diagnosis of psychopathy is also used to identify the "untreatable" cases. The concept's vagueness and its use to identify the "incurable" has made psychopathy a dangerous label, according to Rotenberg (1975), because it perpetuates a myth of the "big, bad psychopath." Research, theory, and treatment possibilities then become shrouded by this myth.

However, McCord and McCord (1956) maintained that much of the difficulty with definition [of psychopathy] . . . has . . . been superficial and overly stressed. Below their surface argument, most social scientists postulate a common core of psychopathy with which all would agree: The psychopath is an asocial, aggressive, highly impulsive person, who feels little or no guilt and is unable to form lasting bonds of affection with other human beings. (p. 2)

Duff (1977) also suggested that the concept of psychopathy has a legitimate use because "it can be used to identify a kind of disorder not captured by the more widely accepted . . . diagnostic . . . criteria" (p. 189). The psychopath, according to Duff (1977), cannot be considered disabled because of a deficiency in the intellectual capacity for reasoning nor for an incapacity "to control one's actions,

and resist contrary impulses, in the light of one's rational purposes" (p. 189). Rather, the psychopath suffers from an inability to experience "such emotional and moral responses as love, remorse, and concern for others" (Duff, 1977, p. 191). It is his inability to share in this dimension of the human experience which blocks his ability to reasonably understand his actions and the actions of others. His inability

to participate in a significant dimension of human life and thought, which includes both moral concepts and values and conceptions of self-interest, of emotion, and of concerns other than the strictly moral (Duff, 1977, p. 199)

is the unique characteristic identified by the concept of psychopathy and gives this concept an important position in the diagnostic nomenclature.

Following McCord and McCord (1956) and Duff (1957), this paper considers psychopathy as an important concept for mental health practitioners. An examination of clinical descriptions, diagnostic criteria, empirical measurement and selected research in psychopathy follows. However, an attempt to focus on the unique quality of the concept of psychopathy as described by Duff (1977) and mirrored in the McCord and McCord (1956) definition quoted above is of primary importance and reflected in the material selected for review.

Clinical descriptions. Currently, the American

Psychiatric Association refers to the concept of psychopathy in the diagnostic category of antisocial personality (Cleckley, 1976). The antisocial personality is defined in the second edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1968) as follows:

The term is reserved for individuals who are basically unsocialized and whose behavior pattern brings them repeatedly into conflict with society. They are incapable of significant loyalty to individuals, groups, or social values. They are grossly selfish, callous, irresponsible, and unable to feel guilt or to learn from experience and punishment. Frustration tolerance is low. They tend to blame others or offer plausible rationalizations for their behavior. A mere history of repeated legal or social offences is not sufficient to justify this diagnosis. (p. 43)

Reid (1978) reported the proposed diagnostic criteria for antisocial personality listed in an early draft of DSM III. In order to be diagnosed as an antisocial personality in the proposed DSM III an individual must fit criteria in five areas. Reid (1978) reported the client must: (1) be at least 18 and have a history of violating the rights of others; (2) exhibit development of the disorder before the age of 15 by demonstrating at least two of the following behaviors: truancy, persistent lying, contact with juvenile court, stealing, early drinking, running away, etc.; (3) exhibit after the age of 15, at least three of the following: poor work history, felony arrests or convictions, repeated stealing, repeated acting out, continuous unplanned traveling from place to place, multiple

divorces or separations, etc.; (4) have no history of behaving in a socially acceptable manner for more than 5 years unless institutionalized; and (5) does not fit into the diagnostic criteria of schizophrenia or mental retardation. Reid (1978) also cited the DSM III draft as describing several additional "essential factors" of the antisocial personality which included "a marked impaired capacity to retain lasting, close, warm and responsible relationships with family, friends, or sexual partners" (cited by Reid, 1978, p. 5).

Karpman (1948) suggested that the diagnosis of psychopathy be divided into two groupings, the symptomatic or secondary psychopathy and the primary or idiopathic psychopathy. The secondary psychopath would include all cases where antisocial acting out was a consequence of psychogenic factors and should be labeled according to their proper clinical categories under neurosis or psychosis. A majority of the cases now labeled as psychopathic personality would fit into these groupings. The remaining idiopathic psychopath group would be characterized by some constitutional defect rather than by psychodynamic conflicts. Karpman (1948) suggested labeling this group as anethopathic and described them as "having in particular a virtual absence of any redeeming social reaction: conscience, guilt, binding and generous emotions, etc., while

purely egoistic, uninhibited, instinctive trends are predominant" (p. 533).

McCord and McCord (1956) maintained that the two main features of psychopathy were guiltlessness and a warped capacity for love. The psychopaths' sense of guiltlessness, according to McCord and McCord, is what sets them apart from normals and other deviants. Even the average criminal has developed some set of values for which he can feel a pang of guilt or sadness when he violates such values (e.g., the criminal code). The psychopath was also described as very cold and compassionless and his ability to exhibit love or strong emotional attachment appears incapacitated or never developed.

Ziskind (1978) considered five criteria essential for the diagnosis of psychopathy or antisocial behavior. These included impulsiveness, superficiality of affect, irresponsibility, inability to profit from past experience or punishment, and an impaired conscience. Superficiality of affect is defined as "the failure of the subject to have strong or full loyalties, loves, and empathy, as well as strong emotional feelings such as anxiety, guilt, and worry" (Ziskind, 1978, p. 51).

By far the most extensive clinical descriptions of the psychopath have been presented by Cleckley (1976). He described the psychopath as exhibiting superficial charm and good intelligence; absence of delusions and other signs

of irrational thinking; absence of nervousness or psychoneurotic manifestations; unreliability, untruthfulness and insincerity; lack of remorse or shame; inadequately motivated antisocial behavior; poor judgment and failure to learn from experience; pathological egocentricity and incapability for love; general poverty in major affective reactions; specific loss of insight; unresponsiveness in general interpersonal relations; fantastic and uninviting behavior with drink and sometimes without; impersonal, trivial, and poorly integrated sex life; and failure to follow any life plan.

Important for this paper are the characteristics of egocentricity and emotional poverty reported by Cleckley. The psychopath exhibits a self-centeredness which is so complete and extreme that Cleckley considered the psychopath to be incapable of any durable, meaningful object love. This is reflected in all interpersonal and sexual relationships. The psychopath is further described as exhibiting a paucity of genuine affect. Deep grief, anger, joy, or true despair are not in the psychopath's realm of emotional reaction. Hare (1970) summarized it best by describing the psychopath as lacking

the ability to experience the emotional components of personal and interpersonal behavior--he mimics the human personality but is unable to really feel. Thus, although his verbalizations (for example, "I'm sorry I got you in trouble") appear normal, they are devoid of emotional meaning . . . he is unable to show empathy or genuine concern for others. (pp. 5-6)

It is important to note here the consistency found across the many authors in describing the psychopath. Each of the sources mentioned above described the psychopath in some way as egocentric, and as lacking strong affective or empathic responsivity. The psychopath's egocentricity and impaired emotional responsivity or lack of empathy appear to be important variables in considering the concept and diagnosis of psychopathy. It is these variables (egocentricity and emotional responsivity) that are explored further in relation to psychopathy.

Types of antisocial behavior. The above descriptions of psychopathy refer to what Hare and Cox (1978a) described as "primary" psychopathy. However, there are a number of individuals who exhibit antisocial behavior which reflects some deep-seated emotional disturbance or conflict. Hare and Cox (1978a) reported that the "terms neurotic, secondary, or symptomatic psychopathy have been used to describe these individuals" (p. 4) because their antisocial behavior is a consequence of a neurotic conflict. According to Hare (1970), however, these terms are misleading because the motivations behind their behavior, as well as their personality structure, life history, response to treatment, and prognosis are very different from those of the psychopath. Moreover, unlike the psychopaths, these individuals experience guilt and remorse for their behavior, and are able to form meaningful, affectional relationships with others. (p. 8)

Hare (1970, 1975) preferred to use terms such as acting-

out neurotic or neurotic delinquent which stress the neurotic element in their behavior rather than their similarities to psychopaths.

It is important to note here that if the secondary psychopaths or neurotic delinquents exhibit the ability to develop meaningful emotional relationships then neurotic delinquents may also show more empathic ability than primary psychopaths. Acting out neurotics may also exhibit less egocentric qualities and be better at role-taking than the primary psychopaths.

Another form of antisocial behavior occurs as a result of having been raised in a deviant subculture. While the behavior exhibited by the individual raised in such a subculture is considered normal by this group, it may be considered deviant by society in general. So, when this deviant subgroup exhibits antisocial behavior, it is not due to an internal conflict or an emotional deficit, but, it occurs because their environment rewards deviant behavior. This group is capable of developing normal emotional relationships given a different social environment. This group has been described as dysocial psychopaths (Hare & Cox, 1978a) and subcultural delinquents (Quay & Peterson, Note 4).

The above descriptions of primary, neurotic, and dysocial psychopathy are based upon clinical observation and are difficult to define in an empirical way. However,

several studies have succeeded in empirically determining factors, dimensions, or typologies which bear out the clinical descriptions of psychopathy. Hare and Cox (1978a) reported an unpublished investigation which analyzed prison inmates on 14 variables which included a clinical rating of psychopathy and scores from personality inventories measuring psychopathy, impulsivity, empathy, trait anxiety, socialization, sensation seeking, depression, mania, and schizophrenia. Two clusters were discovered which corresponded to the concepts of primary and secondary psychopathy. The cluster corresponding most closely to primary psychopathy included high clinical ratings of psychopathy, a low socialization score and high scores on impulsivity and sensation seeking. The cluster consistent with neurotic delinquency included high scores of trait anxiety and on the Depression, Schizophrenia, and Psychopathic Deviate subscales of the MMPI.

Using self-report data (Peterson, Quay, & Cameron, 1959; Peterson, Quay, & Tiffany, 1961; Quay & Cameron, 1958), case-history data (Quay, 1966), and behavior ratings (Quay, 1964), Quay and his associates have isolated several factors related to delinquency. The factors isolated have been labeled psychopathic delinquency, neurotic-disturbed, subcultural delinquency, and inadequate-immature (Quay & Parsons, 1971). Quay (1972) summarized items associated with each of the factors over the course of his research.

The psychopathic delinquency factor is associated with aggressive, antisocial behavior, guiltlessness, distrust of authority, and impulsive behavior. The neurotic delinquency factor is associated with feelings of distrust, fear, anxiety, physical complaints, withdrawal, and open and expressed unhappiness. The third factor, derived from case history data and behavior ratings, "represents behavior which is neither generally a source of personal distress nor clearly maladaptive when one considers the social conditions under which it seems to arise" (Quay, 1972, p. 14). Behaviors, such as staying out late at night, truancy, engaging in gang activity or cooperative stealing, and exhibiting a strong loyalty to selected peers, are associated with the subcultural delinquency factor. The inadequate-immature factor is associated with a short attention span, clumsiness, furtive stealing, incompetence, preoccupied attitude, and general immaturity. The inadequate-immature factor has not appeared in all the factor analytic studies and is, therefore, not as reliable as the other factors (Quay & Peterson, Note 1). From the factors discovered and analyzed by Quay and his associates several scales have been developed for use with juvenile delinquents which will be covered in more detail later.

A study reported by Widom (1978) adds further support for the distinction between neurotic psychopathy and primary psychopathy. She studied 66 women, with a history

of previous offenses, awaiting trial in a correctional facility. Using their scores on the Special Hospital Assessment of Personality and Socialization inventory, developed by Blackburn (1975), four personality types were discovered upon cluster analysis of the scores. The first type included women who exhibited hostility, aggressiveness, impulsivity, little anxiety, and appeared undersocialized. Widom tentatively labeled this type the primary psychopathy group. The second type was also described as aggressive, impulsive, and undersocialized but with extreme anxiety and depression. This type was labeled as secondary or neurotic psychopaths. The third type was described as exhibiting extremely low scores on anxiety, hostility, tension, depression, and psychopathy scales, but demonstrated a high lie score on the inventory. As a consequence, Widom suggested this type could be characterized by patterns of extreme denial and control. This type was labeled overcontrolled. The fourth type was characterized as a normal criminal with little or no personality pathology.

Blackburn (1979) also reported similar factors using the self-report Special Hospital Assessment of Personality and Socialization inventory and behavior ratings with two samples of male offenders. The factor analysis of the self-report data for both samples brought out a psychopathy versus conformity factor and a social withdrawal

versus sociability factor. The first factor had high loadings on the impulsivity, aggression, hostility, extraversion, psychopathic deviant scales and loaded negatively on the lie scales. The second factor is delineated mainly by its high loadings on an introversion-shyness scale but also by high loadings on the anxiety, tension, and depression scales. A high negative loading on the extraversion scales was also noted. Similar higher order factors were reported from the behavior ratings of one of the samples of offenders. The first factor, described as psychopathy or antisocial aggression "reflects assaultive, quarrelsome, and a rebellious behavior versus conformity to ward routine" (p. 114). The second factor was described as withdrawal versus sociability and "contrasts isolation, inactivity, and withdrawal with social spontaneity and interaction" (p. 114). Although the content of the factors appeared similar between both methods of measurement, only the psychopathy factor correlated significantly across methods for both medicated and unmedicated patients at admission. Also, a significant correlation for unmedicated subjects between the withdrawal-sociability factor from the self-report inventory and the social withdrawal factor from a behavior rating was attained two years after admission. Although the correlation between methods for the withdrawal-sociability factor were not always significant, the existence of a psychopathic factor and a factor based on anxiety,

tension, and depression is consistent with the other studies and further suggests the expediency of having both primary and secondary psychopathy categories.

Both clinical observation and factor analytic studies of antisocial populations stress the existence of several personality types comprising the acting-out population. Two of the most prevalent factors found across several studies can be described by the two types of psychopathy observed by Hare (1970) which are labeled primary psychopathy and secondary psychopathy or acting out neurotic. Both groups exhibit impulsive, aggressive acting out but the neurotic group has been associated with more emotional responsiveness. The acting out neurotic is characterized by feelings of guilt, remorse, and high levels of anxiety. This greater degree of affective responsiveness suggests that the neurotic psychopath may respond better to treatment and be better able to form attachments to others than the psychopath. However, the neurotic is also typified by withdrawal. The neurotic may withdraw because interpersonal relations are too arousing and he controls this by staying away.

Measurement of psychopathy for research. Hare and Cox (1978a) in a review of subject selection techniques for research concerned with psychopathy, reported a variety of selection procedures including self-report in-

inventories, global ratings, and checklists. Each method reportedly measures the concept of psychopathy, however, Hare and Cox (1978a) suggested that many of these methods may not be selecting the same subjects as psychopaths. Hundleby and Ross (1977) examined six of the most commonly used self-report inventories for measuring psychopathy in order to determine whether they measure the same concept. The inventories included were the revised Activity Preference Questionnaire, the Sixteen Personality Factor Questionnaire, the Eysenck Personality Questionnaire, the Minnesota Multiphasic Personality Inventory, the Sensation Seeking Scale, and the Personal Opinion Study. Each inventory was completed by all or part of a sample of 397 inmates of a federal prison. Hundleby and Ross concluded, after a factor analysis, that these self-report inventories were not all measuring the same concept and would lead to selecting different subjects as psychopaths.

The self-report method is also subject to considerable faking. Subjects wishing to portray a certain pattern of behavior or report a socially acceptable picture could easily do it undetected with most of the self-report psychopathy measures. Considering the faking issues and what Hundleby and Ross (1977) reported, it would be difficult to choose a self-report measure for research in psychopathy because one is not really sure exactly what the scale is measuring.

Hare (1978) reported considerable success in choosing homogeneous samples of psychopaths with a global rating method. Hare related the belief that a global rating of psychopathy based upon Cleckley's criterion of psychopathy, case history analysis, and interviews would be the method of selection which is most closely related to current clinical conceptions of psychopathy. In the global method described by Hare (1975), the researcher first discusses the Cleckley criteria of psychopathy with the institutional staff and selects names of patients who fit the criteria. Next, the researcher obtains whatever information is available on the patient. From these data, the researcher rates on a 7-point scale whether the patient fits or does not fit the psychopathy criteria. Using this method, Hare and Cox (1978a) reported interrater reliability coefficients ranging from .80 to .90 with experienced judges. Using a checklist of Cleckley (1976) criteria rated on 7-point scales, Siegel (1978) reported test-related reliability correlations of .85 and interrater reliability of .72 for male sex offenders. Rime, Bouvy, Leborgne, and Rouillon (1978) reported interjudge reliability of .68 on a checklist of 18 items based on Cleckley (1976) and McCord and McCord (1964) criteria.

Although considerable success with global ratings has been reported, there are some problems mentioned by Hare and Cox (1978a), in using this method. One of the

first problems is that the method is dependent upon extensive historical and behavioral data which may not be available for many criminal or noncriminal subject populations. Secondly, the "global ratings of psychopathy are based primarily upon evidence of a consistent pattern of behavior over a long period of time" (Hare & Cox, 1978a, p. 9). This type of evidence may not be available for younger subjects who have not yet established chronic behavior patterns. Finally, this method is open to considerable error, such as the rater's professional experience or knowledge about the concept of psychopathy.

Psychopathy measures which are more empirical, reliable, applicable to many different situations, and which do not require extensive background training to complete are the Behavioral Problem Checklist (Quay, 1964; Quay, 1966; Quay & Peterson, Note 1) used with young offenders and the Correctional Adjustment Checklist (Quay, Note 2) for adult offenders. Subjects rated with the Behavior Problem Checklist are rated on a range of behaviors including such things as restlessness, irritability, crying, withdrawal, attention span, and drowsiness. Behavior Problem Checklist ratings have been completed by teachers (Eaves, 1975; Proger, Mann, Green, Bayuk, & Burger, 1975; Quay, Galvin, Annesley, & Werry, 1972; Schultz, Salvia, & Feinn, 1973), parole officers (Mack, 1969), and correctional institution staff (Schuck, Dubeck, Cymbalisky, &

Green, 1972). These ratings have been completed in a number of different situations including public schools (Schultz et al., 1973) and residential treatment facilities (Schuck et al., 1972).

The Behavior Problem Checklist items have been factor analyzed into the four factors mentioned above. Items for each factor have been grouped into four different subscales which coincide with the factor groupings. These scales include (a) conduct problem scale or psychopathic delinquency factor, (b) the personality problem scale or neurotic delinquency factor, (c) the inadequate-immature scale or factor, and (d) the socialized delinquency scale or dysocial psychopath factor. Interrater reliability of the checklist ratings were reviewed by Quay and Peterson (Note 1) and ranged from .58 to .83 for the conduct problem scale, and from .22 to .75 for the personality problem scale. The lower reliability coefficients were obtained in studies where raters had little contact with the subjects or unequal amounts of contact (i.e., parent-teachers).

Quay (1972) suggested that due to the behavior associated with individuals scoring high on the conduct problem scale or on the personality problem scale, these scales appear to be measures of primary and secondary psychopathy respectively. Individuals scoring high on the conduct problem scale have been labeled "psychopathic delinquents" (Peterson et al., 1959) and unsocialized psy-

chopaths (Quay, 1964). High scorers on the conduct problem scale would be expected to be similar to those psychopaths described by Cleckley (1976) and exhibit such behavior as egocentricity, untruthfulness, and a lack of anxiety, remorse, or empathy. High scores on the personality problem scale have been described as secondary psychopaths or neurotic delinquents (Hare & Cox, 1978a). Such individuals have been associated with some degree of impulsive acting out but also "with tension, guilt, remorse, depression, and discouragement" (Hare & Cox, 1978, p. 5). Individuals scoring high on the personality problem subscale would be expected to be more emotionally responsive, more able to develop meaningful interpersonal relationships, and be less egocentric than high conduct problem scale scorers.

Several lines of research have added support to the above expectations for adolescents rated high on the conduct problem and personality problem subscales. Mack (1969) investigated the Behavior Problem Checklist ratings for two groups of male offenders who differed on their rate of recidivism. Recidivists were rated significantly higher on the conduct problem scale than non-recidivists. Psychopaths would be expected to be more impulsive and get into more trouble with the law. Borkovec (1970) examined differences in autonomic reactivity between these groups of juvenile offenders which included high conduct problem scorers, high personality problem scorers, and those who

scored low on both subscales. High conduct problem scorers exhibited significantly lower skin conductance response to an auditory stimulus. Hare (1978) has reported similar findings concerning psychopathic prisoners which will be summarized later.

Schuck et al. (1972) investigated the relationship between guilt, neuroticism, extroversion, and level of institutional adjustment to the four Quay (1966) factors mentioned above. In this study, the Case History Scale, Personal Opinion Inventory, and the Behavior Problem Checklist were used to measure the four factors. Subjects rated high on the Behavior Problem Checklist psychopathy factor and neurotic delinquency factor exhibited no significant correlation with guilt measures. Neurotic delinquents were expected to exhibit more guilt. Schuck et al. (1972) suggested that the neurotic factor did not measure "the presence of internalized value systems and guilt" (p. 225). However, psychopathic delinquents were found to exhibit more aggressive behavior and a poorer adjustment within an institution than neurotic delinquents. This would be expected if this factor actually measures psychopathy.

Jurkovic and Prentice (1977) examined psychopathic, neurotic and socialized delinquents and their levels of moral and cognitive development. Psychopathic delinquents were found to exhibit significantly lower levels of moral development than both of the other delinquent

groupings and a nondelinquent control group. Psychopathic delinquents and neurotic delinquents also exhibited poorer cognitive role-taking ability as measured with the nickel and dime procedure (Flavell, Botkin, Fry, Wright, & Jarvis, 1968) than controls or subcultural delinquents. These results coincide with Gough's (1948) theory of psychopathy examined later in the text.

Akamatsy and Farudi (1978) investigated differences among delinquent subgroups in responding to modeling. Subjects categorized as immature-inadequate delinquents were more responsive to staff modeling than peer modeling conditions.

In summarizing these findings, the above studies suggest, first, that the Behavior Problem Checklist is successful in dividing a delinquent population into meaningful subtypes which can be shown to perform differently on a number of tasks. Secondly, and probably more important for this study, is that two of the subtypes appear to categorize primary and secondary psychopathy. Subjects fitting into the psychopathic delinquent group have demonstrated poor moral development, poor cognitive role-taking abilities, less autonomic responsivity, and more recidivism. However, none of the above studies investigated what has been suggested in this paper, as a very important element of psychopathy (empathy). If the role-taking measure in the Jurkovic and Prentice (1977) study is considered a

measure of egocentrism or empathy, then this study could lend support to the notion that psychopaths, as measured by the Behavior Problem Checklist, do exhibit more egocentrism and less empathy than a normal control group. But the neurotic delinquents also did poorly on such tasks. Further investigation into psychopathic delinquency and its relation to empathy and egocentrism is important to further validation of this subscale.

The neurotic delinquent does not always react as would be predicted from clinical theory (Schuck et al., 1972). This may occur because the Behavior Problem Checklist does not measure neurotic delinquency well, or there may have been problems with the measures used by Schuck et al. (1972). Further investigation into this subtype as measured by the Behavior Problem Checklist needs to be completed.

Theories of psychopathy. Up to now, the focus has been on describing psychopathy and its measurement. Very little has been mentioned about what social scientists believe motivates the psychopath to act in the manner he does. The two most prominent theories used to explain psychopathic behavior are the physiological explanation of psychopathy and the social role explanation of psychopathy.

1. Physiological explanations: The physiological explanations of psychopathy have attempted to establish

differences between psychopaths and comparison groups in cortical activities, autonomic activities, and arousal levels (Hare, 1970). The following is only meant to highlight some of the research findings for each of these areas. For more detailed treatment of the material, the reader is referred to the excellent reviews of physiological correlates of psychopathy found in Hare (1970, 1975, 1978) and Smith (1978).

Studies investigating electrocortical activity in psychopaths have focused mainly on electroencephalogram (EEG) measures of cortical activity. In a review of EEG studies with psychopaths, Syndulko (1978) suggested "that psychopaths show a higher incidence of EEG abnormalities than do controls, but not necessarily higher than the incidence in other psychiatric groups" (p. 148). However, the EEG studies are not all consistent with the above conclusion. Smith (1978) cites a review of EEG studies concerning psychopathy by Gale which concluded that "EEG research has been ambiguous, correlational, and better executed on the negative (findings) side than the positive" (p. 51). Syndulko (1978) suggested that even though EEG studies are not consistent and slow-wave brain activity may or may not describe the psychopath, the mere incidence of abnormal EEG patterns is uninformative because EEG abnormalities "have not been successfully related to any other relevant data about the sociopath" (p. 150), such as

prognosis, treatment, or any sociological-psychological aspect of the psychopath. Syndulko concluded that EEG studies bent on investigating the incidence of abnormal patterns rather than using more sophisticated methods of EEG study, such as profile analysis, would continue to exhibit inconsistent meaningless results.

Attempts to explain clinical descriptions of the psychopath as guiltless, lacking anxiety or empathy, and exhibiting poor interpersonal relationships have also focused on differences in autonomic nervous system functioning as a causal factor. Hare (1970) has even suggested

that the psychopath's lack of empathy may be associated with an inability to give appropriate autonomic responses to the suffering and distress of others and to situations involving the interpersonal exchange of love, affection, cruelty, and so forth (p. 49).

Autonomic research with psychopaths has focused primarily on electrodermal (skin conductance) and cardiovascular activity (heart rate, pulse amplitude) (Hare, 1978). These studies have focused on autonomic activity during rest periods of experimental procedures, in response to a simple stimulus, and in classical conditioning paradigms where an aversive stimulus is anticipated by a warning signal or conditional stimulus.

Research focusing on autonomic activity during experimental rest periods has found no consistent differences between psychopathic and other inmates in cardio-

vascular activity (Hare, 1978). Electrodermal studies have also been inconsistent, but this may be due to the different methods of selecting psychopaths and the possibility that skin conductance may not only be affected by emotional factors (lack of anxiety) but also to differences in cognitive activity and emotional factors brought to the experimental procedure (Hare, 1978). In well controlled studies with adequate subject selection procedures, psychopaths have been found to exhibit lower skin conductance than others during an initial resting period (Hare & Cox, 1978b).

Autonomic activity measured in response to a simple stimulus such as an electric shock or noise has shown different patterns of results for electrodermal and cardiovascular studies. In summarizing cardiovascular studies concerning cardiovascular responses to an unsignalled stimulus, Hare & Cox (1978b) suggested that psychopaths do not differ from others in this aspect of autonomic functioning. However, Hare & Cox (1978b) reported that research concerned with the electrodermal response to an unsignalled stimulus has usually found the psychopaths responding with smaller skin conductance activity than others.

The most significant and consistent result in studying autonomic activity and psychopathy has been reported in studies utilizing a classical conditioning paradigm. In this experimental procedure, psychopathic inmates,

in comparison with other inmates, show less electrodermal activity while awaiting the forewarned stimulus and have shown an increased heart rate while anticipating the aversive stimulus (Hare & Cox, 1978b). The lowered electrodermal activity and increased heart rate have been "hypothesized to reflect the operation of an active, efficient coping process, and the inhibition of fear arousal" (Hare & Cox, 1978b, p. 219). This process has the result of dampening the emotional impact of the experimental stimulus for the psychopath.

House and Milligan (1976) demonstrated this lowered responsiveness to emotional impact in a study which examined autonomic activity in response to seeing a confederate given either low or high shocks. Prison subjects scoring high on the Psychopathic Deviate scale of the MMPI and low on an anxiety test (primary psychopaths) exhibited significantly less skin resistance than the neurotic psychopathic and nonpsychopathic groups. The heart rate measure exhibited no significant difference for psychopathy groups, or observed distress level. House and Milligan concluded that psychopaths are affectively (autonomically) less responsive than nonpsychopaths and that this coincides with clinical descriptions.

Research examining autonomic activity in psychopaths has been relatively successful in discovering a difference in autonomic response patterns. This difference

has been used to explain the lack of empathy, lack of anxiety, impulsivity, inability to tolerate boredom, and poor interpersonal relationships exhibited by psychopaths. Smith (1978) however, disagreed with this explanation, arguing that such an explanation defined feeling as an autonomic response and negated "the possibility of having a 'feeling' at odds with one's ANS state" (p. 51). Smith further observed that the poor relationship between objective and subjective measures of anxiety reported in many studies was a good argument against equating feelings with an autonomic response. Autonomic differences may also be related to differences in cognitive styles or motivational styles. So, although there is a demonstrated difference in autonomic functioning between psychopaths and nonpsychopaths, it is very speculative as to how it actually relates to clinically observable behavior.

2. Social-Role Theory: Gough (1948) has postulated an explanation of psychopathy which is based upon the sociological theory of Mead (1934). According to Gough, the psychopath is lacking in role-taking skills. Role-taking is the ability to put oneself into another's place and to experience the other's point of view. The process of role-taking is considered an imaginative process and is not necessarily concerned with physically playing or acting out the other's roles. Role-taking is considered an integral part of the normal socialization process by which an indi-



vidual begins to learn others' perspectives, intentions, and behavior. Through role-taking, others' perceptions of oneself are experienced and take on importance. These outside perspectives or viewpoints which the individual encounters and imagines, begin to become internalized and a sense of self develops. Through role-taking, the individual also learns social cooperation, self-control, and a conception of the social community.

If an individual is deficient or lacks the ability to experience another's perspective, then the socialization process becomes disrupted. The psychopath, without role-taking skills, would not be able to judge his own behavior from another's perspective, could not learn to predict what effect his behavior would have on others, and would not experience loyalty, embarrassment, shame, or guilt (Hare, 1970). The psychopath's sense of self would not develop socially and would be very egocentrically oriented. Without the ability to identify with others' perspectives, the psychopath would not be able to appreciate others' feelings, would not develop prohibitions against socially unacceptable behavior, and would probably not be able to develop close interpersonal relationships (Hare, 1970).

Gough's (1948) theory of psychopathy has received support from several experimental studies (Berg, 1974; Chandler, 1973b; Reed & Cuadra, 1957; Widom, 1976). Reed and Cuadra (1957) examined psychopathy ratings, self-

descriptions, descriptions of others, and predictions of how others would describe the individual for a group of student nurses. Student nurses scoring high on the psychopathy scale were significantly less able than low scoring nurses to predict how others would describe them and were described by others as being less aware of the social consequences of their behavior and of what others thought about them.

Berg (1974) studied the self-concept, ideal self-concept, and self-ideal discrepancy for psychopaths and a neurotic group. Ideal self-concepts were the same for both groups, while self-concepts and self-ideal discrepancies were significantly different for both groups. The psychopathic group exhibited less discrepancy from ideal concept and "described themselves as daring, adventurous, clear-thinking, outspoken, warmhearted, and unselfish" (p. 622). The neurotic group exhibited the biggest discrepancy from the ideal concept and "described themselves as nervous, anxious, high-strung, immature, hurried and worried" (p. 622). Others' ratings of self were not included in this study which makes it impossible to say with any certainty which of the two groups displayed self-ideal discrepancy. However, it could be argued that one would expect the psychopath to have less self-ideal discrepancy because he has not internalized others' views concerning his self, so he is less likely to rate himself lower. It is

important to point out that the psychopathic and neurotic groups do exhibit different self-concepts which could also come from a difference in role-taking skills as postulated by Gough (1948) and may be important to consider when studying neurotic and primary psychopaths.

Widom (1976) studied primary psychopaths, secondary psychopaths, and a normal control group on their perspectives of different interpersonal situations. Subjects rated 30 different interpersonal situations according to 10 value constructs they supplied themselves and 8 which were supplied by the experimenter. The subjects were asked to complete the ratings twice, once as they themselves would rate the situations and once as they thought people in general would rate the situations. Both of the psychopathy groups exhibited extreme differences on their ratings of people in general with the people in general ratings of the control group. For example, the psychopathy groups rated people in general as feeling good about cooperating with someone when you think they have taken advantage of you (82.35 percent of the primary psychopaths and 58.82 percent of the secondary psychopaths checked this item). Only 25 percent of the control group rated people in general as feeling good about such a situation.

This discrepancy suggests that psychopaths do not understand interpersonal situations in the same manner as society at large. Primary psychopaths appear to have the

most idiosyncratic or eccentric understanding. Even more important is the fact that the primary psychopaths' personal ratings were very consistent with their ratings of people in general. Widom (1976) suggested this occurred because the primary psychopaths "do not think other people think differently, and hence, they make little effort to modify their own construct system" (p. 622). If psychopaths have a role-taking deficit, then they would be expected to understand interpersonal situations differently than people in general. The inability to step out of one's self could also lead to an over-evaluation of one's own opinions, thoughts, and feeling, or a high level of egocentricity. This could explain the assigning of personal values to the people in general and the inability to see any discrepancy between the two.

Chandler (1973a, 1973b) and Chandler, Greenspan, and Barenboim (1974) have indirectly exhibited support for the role-taking hypothesis of psychopathy from a developmental perspective. In the cognitive developmental perspective, the development of role-taking skills can be conceptualized as progression from a condition of extreme egocentric or highly personal point of view to a condition of perspectivism (Langer, 1969). Using a Piagetian developmental perspective, Chandler (1977) defined some of the concepts underlying his research. Chandler (1977) described the ability to take the role of the other . . . as a special case of a more fundamental capacity to decenter

or depar-ticularize the focus of one's conceptual activities and simultaneously to consider and coordinate two or more points of view. The term "egocentrism" is applied to that state of recurrent subject-object confusion which operates to confine an individual to a singular and highly personalized point of view while denying to the other the uniqueness of their own vantage. Perspectivism, on the other hand, refers to the progressive capacity to differentiate between one's own and other's points of view. (p. 110-111)

Under conditions of normal socialization, a child is characterized by a decrease in egocentric orientation and an increase in social decentering skills. However, under conditions where deviant socialization seems to have occurred, role-taking skills or decentering ability would be deficient and an egocentric perspective would prevail.

Chandler (1973b) and Chandler et al. (1974) investigated role-taking skills in a group of delinquent adolescents. Using a series of cartoon sequences as a measure of egocentrism, Chandler (1973b) and Chandler et al. (1974) reported both a group of delinquent boys and a group of emotionally disturbed boys as exhibiting deficits in role-taking skills. Training in role-taking skills was also reported to improve perspective-taking skills which were associated with decreased delinquent activity (Chandler, 1973b) and improved social adjustment (Chandler et al. 1974) upon follow up. Although psychopaths were not directly identified in these studies, the fact that a group of delinquents which probably included some psychopaths was

found deficient in role-taking skills does add further support for Gough's theory.

Gough (1948) characterized the deficient role-taking skills of the psychopath as essentially a lack of empathy. However, Smith (1978) suggested that this does not fit well with the clinical observations of the psychopath. If the psychopath is postulated to "suffer a basic failure of empathy" (p. 62), then how can he also be an excellent manipulator of people, as some observers have noted (Cleckley, 1976)? Smith argued that in order to manipulate others, one must be able to judge others' behavior, know what they want, and sense what they are experiencing. If the psychopath can do all that is necessary to manipulate, then how can he also be a poor role-taker?

Hare (1970) suggested that what the psychopath may be good at is the cognitive components of empathy. The psychopath has learned and can understand the socially appropriate manner of thinking about situations (although Widom's [1976] research might disagree with this). However, the psychopath is described as lacking "the emotional components of personal and interpersonal behavior" (Hare, 1970, p. 5). So, the psychopath may be able to handle the cognitive aspects of interpersonal relations, but is unable to experience the emotional components.

The above hypothesis also corresponds with the autonomic research mentioned above. There the psychopath's

different autonomous responsivity was viewed as an emotional underarousal. The psychopath's inability to experience the affective side of interpersonal relationships may be related to his inappropriate autonomic functioning.

Ax (1962) suggested that the psychopath's improper autonomic functioning may be due to a preoccupation or overinvolvement with the self (egocentrism). This would be related to Chandler's (1977) developmental approach to role-taking skills. The more one is preoccupied with egocentric concerns, the less willing or able one is to experience the total perspective of another. This total perspective includes the emotional aspects of the interpersonal relationships and is shown by the psychopath's low autonomic responsivity to outside stimuli. It is that pathological egocentricity and failure in empathy which Buss (1966) described as the reason for the psychopath's poor interpersonal relationships. If the psychopath is unable or unwilling to experience the affective aspect of another's role but can grasp the cognitive aspects of the situation, then the psychopath can manipulate others to fulfill his needs without concern over experiencing guilt, shame, sorrow, or embarrassment.

Clark (1980) addressed the relationship between empathy and egocentrism. Empathy, according to Clark, is "the capacity of an individual to feel the needs, the aspirations, the frustrations, the joys, the sorrows, the

anxieties, the hurt, indeed the hunger of others as if they were his or her own . . . and is the . . . very opposite of rigid egocentricity" (p. 188). He also described different levels of empathy and its relationship to egocentrism. The totally empathic person experiences others' affects as his own and is driven to assist and support. At the other end of the extreme is the egocentric psychopath who,

lacking a modicum of functional empathy, is free of the need for realistic moral accommodations and is free of ethical anxieties, conflicts, and guilt. He or she functions in terms of sheer personal and immediate gratification. (Clark, 1980, p. 189)

The psychopath, then, can be described as an individual with a lack of emotional responsivity and an inability to decenter or take another's perspective without his or her own immediate needs or concerns intruding into the perspective. The psychopath's role-taking ability would be blunted by this egocentric concern and inability to experience another's affect. The present study had as a primary purpose the examination of the relationship between perspective-taking skills and emotional empathy in psychopathy.

Empathy Measures and Psychopathy

The term empathy has often been used to describe "the responsiveness of an individual to the feelings of another person" (Iannotti, 1975, p. 22). Empathy is "considered to be a critical determinant of social transactions"

(Feshbach, 1978, p. 2). Empathy has been posited to be important to the effectiveness of psychotherapy (Rogers, 1957), inhibition of aggressive behavior (Mehrabian & Epstein, 1972), attribution of responsibility (Fiske, Taylor, Etcoff, & Laufer, 1979), and as a motivating emotion behind such prosocial behaviors as generosity (Rushton, 1976) and helping behavior (Hoffman, 1975). However, research on empathy is difficult to integrate because the conceptual and operational definitions of empathy are quite different across research projects (Chandler, 1977).

In a review of selected literature on empathy, Chandler (1977) suggested that the many definitions fall into three general positions or approaches. The three approaches can be labeled the (a) affective approach, (b) cognitive approach, and (c) cognitive/affective approach (Iannotti & Meacham, Note 3). Some of the different empathy measures and how they relate to psychopathy will be examined according to the three types of empathy categories mentioned above.

Emotional empathy. In the affective approach, the investigator defines empathy as feeling what another person feels and stresses the emotional response of the observer over all other aspects of the empathic process (Aronfreed, 1970; Berger, 1962; Clark, 1980; Feshbach & Roe, 1968; Mehrabian & Epstein, 1972; Stotland, 1969). Investigators using the affective definition of empathy have measured

empathy through physiological methods (Stotland, 1969), by matching observer emotion with the emotion arousing stimuli (Feshbach & Roe, 1968), and through questionnaire methods (Mehrabian & Epstein, 1972).

Physiological measures of empathy have measured skin conductance or the cardiovascular responses of a subject while watching a person undergoing a traumatic or highly pleasurable experience (Stotland, 1969). Differences in autonomic response while observing these confederates are considered measures of empathy. Stotland (1969) reported increased palmar sweating in some subjects observing another person undergo what they thought was a painful experience. It is important to note here that psychopaths, as mentioned before, have generally exhibited a low level of autonomic activity while observing another's distress (House & Milligan, 1976). Psychopaths, then could be reported as exhibiting a low level of empathy when using physiological methods to measure empathy.

Hoffman (1977) however, reported several competing interpretations of physiological responses. Physiological measures "may also reflect a startle reaction to the victim's bodily movements, an emotional response to the noxious stimulus, . . . or the fear that what happened to the other person might also happen to oneself" (p. 713). Hoffman's interpretations suggest that it is difficult to know exactly what a physiological response actually represents.

Feshbach (1978) described the development of an emotional matching procedure for measuring empathy. Using this procedure, a subject is presented with an array of slides depicting situations where one of four affects are evident (i.e., happiness, sadness, fear, and anger). Immediately following the slides, children were asked how they felt. Empathy was defined as a match between the child's verbalized affect and the affect portrayed in the slide sequence. Correct understanding of what was being portrayed on the slides was investigated either after the affect inquiry or with a separate group of children.

Chandler (1977) cited an unpublished report by Greenspan which reported several procedural and conceptual difficulties with the emotional matching procedure. One of the most important procedural flaws concerned the repeated inquiry of feelings. It was suggested that this inquiry created extreme demand characteristics which may confound the reported results. The emotional matching procedure, then, may not actually be measuring empathy but may be measuring some level of experimenter demand.

Mehrabian and Epstein (1972) gathered a set of items which were thought to represent different aspects of emotional empathy. Subjects were asked to rate themselves on 33 items and were then divided into high and low empathy groups according to their scale scores. Both groups of subjects were asked to help teach a pupil/confederate by using

electric shock to signify errors in the pupil/confederate's performance. The confederate was either seated in another room or in the immediate vicinity of the subject. Highly empathic subjects shocked the immediate victim significantly less than the low empathy group. Mehrabian and Epstein concluded that the scale was able to measure affective empathy because high scorers were less aggressive in more immediate interpersonal situations. Eisenberg-Berg and Mussen (1978) have also reported considerable success in using this measure with normal subjects.

Aleksic and Savitsky (Note 4) revised the Mehrabian and Epstein (1972) questionnaire to read at a fourth-grade level and to be answered in a true-false format. The revised questionnaire was then administered to both a delinquent and a nondelinquent population. The delinquent group scored significantly lower than the nondelinquent group. Also, high and low empathy delinquents significantly differed in their level of aggressive behavior, with low empathy delinquents being much more aggressive.

Although the above study did not investigate psychopathic and neurotic delinquency directly, it does suggest that a measure of emotional empathy can successfully differentiate subgroups of delinquents. These data, along with the lowered autonomic responsivity of the psychopath (Hare, 1978; House & Milligan, 1976) suggest that an affective measure of empathy can be important in studying psychopathy.

Considering the problems reported with physiological measures and the emotional matching procedures, a self-report measure seems to be the better method of measurement and has worked with psychopaths. For example, Emmons and Webb (1974), using a self-report measure of affect, found psychopaths to report "experiencing less overall affect in their daily lives than normals or acting-out neurotics" (p. 620). In this study, it was hypothesized that psychopathic delinquents exhibit less emotional empathy than neurotic delinquents or a comparison delinquency group.

Cognitive empathy. The cognitive approach defines empathy as knowing what another person feels and stresses the observer's knowledge about the feeling of another person (Iannotti, Note 5). Investigators using this approach have been concerned with whether the observer can accurately judge or understand the other person's actions and feelings (Dymond, 1950; Truax, 1972), the ability to label or identify the affect of others (Borke, 1971; Savitsky & Czyzewski, 1978), and the role-taking ability of the observer (Chandler, 1977).

Those subscribing to this latter method, although cognitive, do not suggest that empathy is simply the accurate judging of emotions in different situations (Chandler & Greenspan, 1972). Instead, empathy is suggested to be "a special case of role-taking ability" (Chandler, 1977,

p. 136) which develops in the same manner as a child's understanding of the physical world (Feshbach, 1978). What becomes important to the empathic response, then, is the ability to decenter and understand or share another's perspective when it is different from one's own point of view. In this framework, an egocentric perspective, or the inability to decenter, would suggest an inability to make an empathic response.

A considerable amount of research has been completed on role-taking skills, decentering, and egocentrism in children. Good reviews of the literature can be found in Chandler (1977), Ford (1979), Kurdek (1978), Looft (1972), Rubin (1978), and Shantz (1975). What seems to be important in understanding empathy and role-taking are "studies in which the social objects whose points of view are in question are engaged in affectively charged interpersonal interactions" (Chandler, 1977, p. 138). The Chandler (1973b) and Chandler et al. (1974) studies mentioned above are a good example of such research. Children are asked to understand the affect of the central character of the story and the reason for such affect. Secondly, the child must be able to decenter from this perspective and take on the perspective of a bystander who does not know what is upsetting the central character. These studies focus on an empathic process because of the interpersonal nature of the stimuli. A child who does accomplish the

affective understanding and manipulation of perspectives is considered to be exhibiting an empathic response.

Another study fitting in this area was completed by Staub (1971). He examined role-playing and its relationship to helping those in a distressful situation. It was postulated that if helping behavior is motivated by empathy, children who role play helper and victim roles will improve their perspective-taking skill and help or share more with a distressed child. The improvement in role-taking ability produced by role-playing would improve empathic skills and thereby increase helping behavior. Staub found that girls who role played prosocial behavior helped more in a distress situation than controls who role played such roles as shop-keeper and policeman. Boys in the prosocial role-playing group shared more than control subjects.

Chaplin and Keller (1974) investigated egocentrism and peer interaction with a group of grade school children. Third grade children who were rated as poor social interacters exhibited less ability to decenter in interpersonal situations than children who were rated as good social interacters. Here, the inability to take another's perspective (to be emphatic) was shown to be related to poor personal relationships. The more egocentric the child was the more he or she was perceived to interact poorly with others. This is important to psychopathy research because the psy-

chopath has also been postulated to be egocentric and poor in interpersonal relations.

The role-taking or perspective-taking approach to empathy, examined above, appears to be applicable to studying psychopathy, especially since psychopaths have been postulated to lack role-taking skills (Gough, 1948) and exhibit extreme egocentrism (Cleckley, 1976). A Piagetian role-taking approach which conceptualizes social cognitive development along a perspective-taking/egocentrism continuum, would appear to work best in studying the psychopathic empathy deficit. In support of this expectation, Chandler (1973b) and Chandler et al. (1974) found a general group of delinquents to exhibit poorer perspective-taking skills than a normal control group. Jurkovic and Prentice (1977) also found psychopathic and neurotic delinquents, as measured by the Behavior Problem Checklist, to do poorly on a cognitive role-taking task when compared with a control group.

Although the above studies have shown control groups to exhibit better perspective-taking skills and less egocentrism than delinquency groups, there has been no observed differences between neurotic and psychopathic delinquents in perspective-taking skills. Theoretically and in clinical observation, the neurotic has been described as more socially sensitive and more advanced in moral reasoning. The observed advanced cognitive development of the

neurotic delinquent suggests that the neurotic delinquent should exhibit better role-taking skills or tale-taking empathy than the psychopathic delinquent. In this study, it was hypothesized that psychopathic delinquents exhibit significantly less cognitive empathy skills than neurotic delinquents and a comparison group of delinquents.

Cognitive empathy measurements that are concerned purely with the accurate judgment or labeling of affect in others may not be the best method for studying empathy in psychopathy. Chandler and Greenspan (1972) suggested that such an approach in the measurement of empathy may confound empathy with projection or stereotyping. That is, subjects can make accurate judgments not only by truly understanding the actor's perspective but by projecting their own feelings onto the actor's situation or by knowing the general stereotypic response to the situation presented. The psychopath, then, could make accurate judgments and be considered empathic just by projecting or giving stereotypic responses and never really understand the actor's experience. In partial support of this observation, Savitsky and Czyzewski (1978) found no difference in emotional labeling ability between delinquents and nondelinquents when IQ was controlled. An emotional labeling measurement of cognitive empathy would probably demonstrate no significant differences between psychopaths and nonpsychopaths because of the methodological confounding.

Another measure of empathy which can be considered cognitive comes from the area of attributional research. Jones and Nesbitt (1971) suggested that actors and observers of a social interaction have different situational and organismic information available to them, and process this information differently. When asked to make ratings of responsibility for the situation, actors have been found to emphasize the environmental variables while observers have emphasized the actor's dispositional attributes as responsible for the situation. Empathy, according to this theory, is operationalized as the observer attributing responsibility as the actor would (Regen & Totten, 1975). The empathy process occurs to the degree that the observer makes situational attributions. This definition makes no reference to affect or matching emotions. What is required is that the observer be able to understand or take on the actor's point of view and make attributions as the actor would. However, some emotional sharing may be occurring (Galper, 1976).

Several studies have supported this definition of empathy. Galper (1976) read a distressing story about a man saving a baby in a fire to subjects who were told either to imagine themselves as the actor (empathy) or to just picture the events clearly. Following the story, subjects made both verbal and written causal attributions about the actor. Subjects in the empathy condition gave

situational factors more emphasis both verbally and in their ratings. Galper concluded that "empathy may be inferred from the attributions, by an observer, of environmental or situational causes for the behavior of an actor" (p. 334).

Brehm and Aderman (1977) investigated either empathy inducing (imagine-self) or empathy inhibiting (listen-to-him) instructions. Subjects listened to a taped conversation between two students named Bruce and Tom which had either a positive (Bruce helped Tom) or a negative ending (Bruce did not help Tom). Subjects in the empathy-negative outcome condition rated the victim actor (Tom) more favorably than in the nonempathy condition. Brehm and Aderman suggested that these less positive results follow the empathy explanation, but cautioned that it is possible some other phenomena motivated this behavior (e.g., sympathy).

Aderman, Archer, and Harris (1975) investigated the connection between emotional empathy and attribution of responsibility ratings. In the first experiment, subjects were given the Mehrabian and Epstein (1972) empathy scale and a series of short stories developed by Sulzer and Burglass (1968) were used to measure attribution ratings. A small but significant correlation between actor's responsibility ratings and a subscale of the empathy questionnaire was observed. Aderman et al. explained this result by suggesting that high empathy scorers may have "vicariously experienced the victims' suffering" (p. 158) in the

short stories and, therefore, expressed the victim's point of view in the responsibility ratings rather than the actor's.

In a second experiment, Aderman et al. (1975) manipulated the empathy level of college students by taking them on a wheelchair ride through a hospital while they imagined one of four victim conditions. The four victim roles included a nonvictim role, an innocent victim role, a responsible victim-harmdoing role, and a responsible victim role. After completing the wheelchair ride, subjects completed a mood questionnaire, and rated the Sulzer and Burglass (1968) short stories. Results suggested "that the subjects who have been induced to empathize with an innocent victim's plight assigned more personal responsibility to the central actors than did their 'nonvictim' counterparts" (Aderman et al. 1975, p. 166).

Attribution theory offers a unique way of measuring empathy and suggests a way to experimentally manipulate empathy by setting up different observational sets. However, whether empathy, sympathy, or some other variable is causing the observer-turned-actor attributions has not really been substantiated. The only evidence offered to tie these observer-turned-actor attributions and empathy is a small correlation between an empathy questionnaire and actor's responsibility ratings (Aderman et al., 1975). Further investigation between empathy and attribution ratings would

help to verify empathy as the motivator of the observer-turned-actor attributions. In this study, it was hypothesized that actor and actor-related responsibility ratings are significantly negatively correlated with measures of emotional empathy and with cognitive empathy measures. External-environmental responsibility ratings were hypothesized to be significantly positively correlated with measures of emotional and cognitive empathy.

The Aderman and Berkowitz (1970) and Brehm and Aderman (1977) studies also suggested a way to successfully manipulate empathy by changing the observational set of the observer when listening to or viewing an interpersonal exchange. In this study, it was hypothesized that actor and actor-related variables would be rated less responsible by subjects listening to a negative outcome interaction with empathy inducing instructions than by subjects receiving empathy inhibiting instructions. It was further predicted that subjects given empathy inducing instructions, in contrast to those given empathy inhibiting instructions, would rate external-environmental variables more responsible for the actor's distress than the actor himself.

The use of a population which has been hypothesized as deficient in empathy skills and role-taking skills (psychopaths) might also add to the investigation of empathy and attribution. Because of their hypothesized deficit in empathy and role-taking skills, psychopathic delinquents

should not respond to empathy inducing instructions with lower actor responsibility ratings. Instead, psychopaths should be characterized by high actor ratings and low external-environmental ratings. The neurotic delinquent, on the other hand, should respond more to empathy inducing and empathy inhibiting instructions because of their greater emotional responsivity and cognitive development. In this study, it was hypothesized the neurotic delinquents rate the actor significantly less responsible than psychopathic delinquents under empathy inducing instructions. It was further hypothesized that neurotic delinquents would rate external-environmental variables more responsible than psychopathic delinquents under empathy inducing instructions.

Cognitive/Affective approach. The third approach to empathy research contends that both a social comprehension and an emotional response are important components of an empathic response. Although Chandler (1977) has argued that to "decompose empathic responses into separable affective and cognitive components seem[s] mistakenly analytic and unnecessarily piecemeal" (p. 127), Iannotti (Note 6) has suggested that empathy defined as both emotional responsivity and role-taking or perspective-taking skills offers the greatest advantage to understanding empathy and how it is related to prosocial behavior. Adding weight to Iannotti's analysis is a recent article by Zajonc (1980).

He reviewed evidence which suggested that affective and cognitive components of human responsivity are separate functions and need to be examined as separate components.

The investigator of the component approach to empathy is concerned with the role-taking or cognitive ability of the observer as well as what the observer feels and how that relates to the actor's feelings (Feshbach, 1978; Rotenberg, 1974; Iannotti, Notes 5, 6). Feshbach (1978) argued that empathy defined entirely as a cognitive function loses its conceptual usefulness and could be replaced by many other terms. The argument continued that empathy is different, as a concept, because of its affective dimension. One can understand a situation but not be moved emotionally. A person can also be moved emotionally but not understand what has happened. It is the combination of both cognitive and affective experience that are necessary for an empathic response.

A good example of empathy research using the component model was reported by Feshbach and Roe (1968). Using the same procedure reviewed above (Feshbach, 1978), a measure of the affective component of empathy was defined in terms of emotional matching. The cognitive component was assessed by inquiring whether children could label the appropriate affect depicted on slides showing children in various situations. It was reported that all of the subjects would understand or properly judge the action shown

in the slides but, not all of them exhibited a matching affective response. Moreover, the affective responses significantly varied according to the sex and similarity of the child in the slide to the observer. Feshbach (1978) concluded that just understanding the pictures does not account for the systematic variability observed in the matching procedure. Rather, both affect and social comprehension must be taken into account.

Although Feshbach (1978) demonstrated the independence of the cognitive and affective components of an empathic response, the two components are also closely interrelated. She reported an unpublished study by Kuchenbecker, Feshbach, and Pletcher which examined the affective and cognitive aspects of empathy for children across several age groups. Both social comprehension scores and emotional empathy scores were reported to improve as the child became older. Feshbach concluded that the similar developmental progression of the cognitive and affective components of empathy suggests that the two components are also significantly interrelated. In the present study, it was hypothesized that the affective and cognitive components of empathy would be significantly positively correlated so that a subject scoring high on the cognitive empathy measure would also score high on the emotional empathy measure.

The measurement of both cognitive and affective components of the empathic process appears to be especially

important in studying psychopathy given the above research and the descriptions of psychopathy. However, there are no published studies which directly examine both cognitive and affective components of empathy for psychopathy.

One study which does add partial support to the importance of measuring both affective and cognitive components of empathy for psychopaths was completed by Rotenberg (1974). Although Rotenberg did not examine psychopathy directly, he used a general delinquent sample which may have included a group of psychopaths. In this study, cognitive role-taking was measured in a guessing game in which subjects guessed how their partners might actually respond. The affective component was measured by the strength of shocks given to a confederate using a teacher/pupil paradigm. It was reasoned that a person with high emotional empathy would be less aggressive and give weaker shocks to the confederate. No significant correlation between the two components was found. Also no significant difference between the delinquent and nondelinquent group on cognitive role-taking was reported. However, a significant difference between the delinquent and nondelinquent groups was reported for the affective measure. The delinquent group issued stronger shocks than the nondelinquent group and was, therefore, considered to be less emotionally responsive.

This study shows again that an affective measure

of empathy is important in studying antisocial samples. The role-taking results were not as promising and contradict the results of Jurkovic and Prentice (1977) who also used a cognitive role-taking task. One of the reasons for the discrepancy may be that Rotenberg's (1974) sample was made up of all types of delinquency. If the study had considered subtypes of delinquency perhaps the measures of both cognitive and affective ability would have shown lower scores for psychopathic delinquents than the other types.

Empathy and Helping Behavior

Considerable research has been performed to examine the relationship of empathy and prosocial behavior (Aderman, 1972; Aderman & Berkowitz, 1970; Borke, 1971, 1973; Eisenberg-Berg & Mussen, 1978; Feshbach & Feshbach, 1969; Hoffman, 1976; Iannotti, 1978; Karylowski, 1977; Krebs, 1975; Kurdek, 1978; Midlarsky & Bryan, 1972; Moore, Underwood, & Rosenhan, 1973; Rushton, 1976; Rushton & Wiener, 1975; Iannotti, Notes 6, 7). Most of the research relating empathy and altruism has suggested that empathy is a motivator for altruism. Although other motivators for altruism have been posited, Iannotti (Note 6) argued that empathy can be considered "the only motivator for true altruism--altruism having no immediate or anticipated external reinforcer" (p. 3). Hoffman (1975, 1976) suggested

that both social perspective-taking or role-taking ability and emotional responsiveness are important to understanding empathy and its role as a motivator of helping behavior. Hoffman (1975) observed that when we see someone in emotional distress we also have an emotional reaction. The observed distress reaction is an empathic reaction to another's distress. Once observers feel the emotional distress they can either react to it or ignore it. If the observers react, they either react as if the emotion were their own or react with the realization that the emotion is a consequence of the other's distress. This is where it is important for observers to be able to decenter from their own perspective and be able to place themselves into another's perspective. The more egocentric a person is the less decentering ability that person exhibits. Once observers realize the distress belongs to another person they can reduce the feeling of distress by helping to reduce the other's plight. However, the above theoretical explanation of the relationship between altruism and empathy requires both cognitive and emotional components of empathy. Not all of the research connecting empathy and altruism uses such a definition of empathy.

Affective empathy and helping behavior. Considerable evidence is available suggesting that people observing another's distress typically have an affective reaction

which can be measured physiologically (House & Milligan, 1976; Stotland, 1969) and this is usually followed by an attempt to help (Geer & Jarnecky, 1973; Stotland, 1969). Krebs (1975) studied the psychophysiological responses of 60 males as they observed a person playing roulette. Each subject was either led to believe they were similar or dissimilar to the player and that the player either experienced pleasure, pain, or was just performing a cognitive and motor task while playing roulette. The subjects in the similar pleasure or pain situation exhibited stronger psychophysiological reactions and, when given a chance to help, helped a significantly greater amount of the time than subjects in other groups. Krebs concluded that subjects who reacted most empathically behaved most altruistically.

Iannotti (Note 6) reported a study exploring empathy and altruism. Although the study examined many different definitions of empathy, the emotional matching measure of empathy did not relate significantly to sharing. Feshbach (1978) also reported an absence of significant correlations between emotional matching empathy and a measure of generosity.

Eisenberg-Berg and Mussen (1978) examined the relationship between empathy, moral reasoning, and helping. Male subjects who helped (volunteered to assist the experimenter) scored significantly higher on the Mehrabian and Epstein (1972) emotional empathy measure. This relationship did not

hold for females. Empathy scores were also significantly correlated with a measure of prosocial moral judgment for both sexes.

Aderman and Berkowitz (1970) studied emotional empathy and altruism using a mood adjective checklist as a measure of emotional responsiveness. Subjects were asked to listen to a conversation between two people, a person in need of help and a potential helper, with instructions to imagine themselves as the helper or the person in need of help. The helper either did not help or helped and was thanked or not thanked. After listening to the taped conversation, subjects were asked to fill out a mood checklist and to help the experimenter. Results suggested that

pleasurable empathic experiences had mediated the helping behavior of subjects who attended to the thanked helper, while unpleasant empathic reactions had more strongly motivated the helping behavior of subjects who observed the unaided person in need. (Aderman & Berkowitz, 1970, p. 141)

The Aderman and Berkowitz study suggests that people do respond emotionally to a distress situation and that the affect produced does increase helping behavior. On the basis of these findings, it was hypothesized, for the present study, that subjects given empathy inducing instructions help significantly more than those given empathy inhibiting instructions.

It may also be noted that the Aderman and Berkowitz empathy manipulation required considerable role-taking

ability. In order to imagine oneself as a helper or helpee, one must be able to decenter or role-play properly, and this ability is never addressed in the study. Subjects who are more egocentric would be expected to show little empathy regardless of the observational set instructions. Thus, for the present research, psychopaths were hypothesized to exhibit significantly less helping behavior under empathy inducing instructions than neurotic delinquents given the same instructions.

The studies mentioned above suggest that empathy defined as an affective reaction is related to helping behavior. However, not all of the procedures used to measure affective empathy were successful. The emotional matching measure of empathy did not relate to altruism at all. This may have been due to the possibility that the emotional matching procedure is not actually measuring empathy but is measuring experimenter demand. Both the physiological and self-report measures have been successfully related to helping behavior and further study into their relationship to helping behavior would be beneficial.

Labeling empathy and helping. Very little research has been reported concerning the relationship between helping behavior and labeling definition of empathy. Iannotti (Note 6) reported there was no significant relationship between a social understanding measure of empathy and sharing

behavior. The social understanding measure consisted of eight photographs wherein "the emotional response of the character was congruent with the situation, e.g., a happy child at a birthday party" (Iannotti, 1975, p. 3). Social understanding was scored when the subject correctly identified the emotion portrayed in the picture. More research exploring the relationship between a labeling or a social comprehension definition of empathy and helping behavior needs to be completed.

Role-taking and helping behavior. The relationship between empathy as role-taking and helping behavior has been explored to a greater extent (Emler & Rushton, 1974; Kurdek, 1978; Rubin & Schneider, 1973; Rushton & Wiener, 1975; Staub, 1971; Iannotti, Note 7). Staub (1971) examined the relationship between role-playing, induction, role-playing with induction, and altruism (sharing and helping behavior). He reported that girls, after playing the roles of both helpers and victims, helped another child significantly more. Boys role playing both helpers and victims shared significantly more than control subjects. Staub also reported that these findings continued 5 to 7 days after the training sessions. Rubin and Schneider (1973) found scores on a measure of communicative egocentrism correlated positively with measures of altruism. Low egocentrism scorers displayed more donating and help-

ing behavior. Emler and Rushton (1974) and Rushton and Wiener (1975), however, found no relationship between role-taking ability, egocentrism, and generosity behavior. Iannotti (Note 7) studied role-taking, role-taking training, empathy, and altruism. A significant positive correlation between role-taking and altruism was reported for 7-year-old subjects but not for 10-year-old subjects which suggests the relationship between role-taking and altruism may change with age.

Kurdek (1978), in a review of the perspective-taking literature concerned with moral behavior, concluded that there was no consistent significant relationship between measures of altruism and perspective-taking measures. One of the possible reasons for the lack of support is the fact that investigators used various different measures of role-taking ability, Kurdek suggests that these different measures actually deal with quite different aspects of perspective-taking (perceptual, cognitive, and affective aspects of perspective-taking) and require the subject to solve the role-taking task in different ways (i.e., successive decentering, simultaneous decentering, or referential communication). Not all of these different types of perspective-taking or different decentering processes may be equally related to helping behavior.

Also the many different situations used to elicit helping behavior may be responsible for the inconsistent

relationship between altruism and perspective-taking skills. For example, Emler and Rushton (1973), Rushton and Wiener (1975), and Iannotti (Note 7) used experimental situations in which the subject could help in a very indirect manner by sharing or being generous to an absent person. Such a helping situation may not elicit any affective response in the subject because the distress is so far removed. This would disrupt the altruistic process as outlined by Hoffman (1975). In an immediate distress situation, where the subject must perform some direct helping behavior, this emotional component is more likely to be activated and the helping occur. For example, Green (1975) and Rubin and Schneider (1973) both found a positive correlation between perspective-taking and helping behavior in an interpersonal distress situation.

Cognitive/affective empathy and helping. Emotional responsiveness appears to be related to altruism and appears to be a motivator of altruistic behavior. However, the affective response is facilitated or inhibited by cognitive factors. Hoffman (1975) posited three cognitive developmental steps a person must attain before an empathic reaction can lead to an act of altruism. These steps include the following abilities: (a) to distinguish self from others; (b) "to acquire a sense of others not only as physical entities but also as sources of feelings and

thoughts in their own right, that is as persons who have inner states that, at times, differ from his own, as well as perspective based on their own needs and interpretation of events" (p. 616); (c) to conceive "of himself and others as continuous persons each with his own history and identity" (p. 616). These three steps have all been hypothesized to make up role-taking ability.

The relationship between altruism and empathy defined by both cognitive and affective components has received very little empirical attention. Iannotti (1978) studied role-taking ability, role-taking training, altruism, aggression, and empathy. It was hypothesized that role-taking training would increase role-taking ability as measured by the Flavell et al. (1968) nickel-dime game. The increase in role-taking ability would increase empathy since empathy requires both an affective and cognitive component and, as empathy increased, altruism would increase. However, no significant relationship was found between empathy and role-taking ability which may suggest either empathy cannot be influenced by social comprehension training or the measure of empathy was not very sensitive. The measure of empathy used by Iannotti consisted of 16 pictures and coinciding stories depicting four different emotions. In eight of the pictures the emotion portrayed by the character was incongruent with the situation. Subjects were asked to indicate how the character felt and how they felt

by pointing to one of eight faces which were labeled as very happy, sad, angry, or afraid or just happy, sad, angry, and afraid. Feshbach (1978) observed that "the incongruous situation is an artificial one, rarely occurring in the life history of the child . . . and would appear to be more cognitively disruptive than empathy evoking" (pp. 21-22). This suggests that Iannotti's (1978) empathy measure is not really tapping empathy but is perhaps better "for investigating the resolution of incongruent stimuli and other cognitive dilemmas" (Feshbach, 1978, p. 22). Such a measure would not be expected to relate significantly with any measure of altruism.

Overall, the relationship between empathy and altruism is very unclear. Studies investigating the relationship between empathy and altruism have generally demonstrated a significant positive relationship between emotional empathy and helping behavior. Research connecting cognitive definitions of empathy with altruism have reported conflicting results. It was suggested that these conflicting results may have occurred because the many cognitive measures of empathy actually examine different cognitive skills and not all of these skills may be equally related to helping behavior. Finally, very few studies have investigated the relationship between both cognitive and affective measures of empathy with altruism. However, it is the cognitive/affective approach which Hoffman (1975)

has postulated to be the most important to understanding helping behavior. In this study, it was hypothesized that a measure of cognitive empathy and a measure of helping are significantly positively correlated, so a person scoring high on the cognitive empathy measure also demonstrates more helping behavior. As noted previously, the affective empathy measure and the helping measure were hypothesized to be significantly positively correlated so that a subject exhibiting high emotional empathy also helps more.

The use of a subject population (psychopaths) which has been described as lacking emotional empathy skills and has exhibited a deficit in cognitive role-taking skills may also help clarify the relationship between empathy and helping. An empathy deficient population would help less than other groups in a distress situation. In terms of Hoffman's (1975) model, the psychopath would first exhibit difficulty in responding emotionally to another's plight. If an emotional response were possible, the psychopath would next exhibit extreme difficulty in decentering and knowing that this affect was in response to another's distress. With this in mind, it was hypothesized that psychopaths exhibit significantly less helping behavior than neurotic delinquents or a comparison group of juvenile offenders.

Psychopathy and Helping Behavior

Hoffman's (1975) explanation of the relationship between empathy and helping behavior, mentioned earlier, offers a good theoretical base for studying empathy and psychopathy. Both cognitive (decentering) and affective components of empathy were postulated to be connected with a helping act. As suggested, both components are important to studying empathy in psychopaths. Berkowitz (1970) has also suggested that extreme self-interest (egocentrism) hampers helping. Since it is hypothesized that psychopaths are deficient in empathy and egocentric, their helping behavior would also be expected to be less than that of neurotics who are more emotionally responsive. Unfortunately, I was unable to find any studies which directly addressed this issue.

Several studies concerned with the helping behavior of other clinical populations and personality groupings may add some support to the above hypothesis concerning helping behavior and psychopathy. First, Tolor, Kelly, and Stebbins (1976) investigated the helping behavior of college students and psychiatric patients. No significant difference was found between the groups on an altruism scale. The psychiatric patients, though, more often offered assistance and actually gave assistance to a disabled confederate than college students. This suggests that a group characterized by emotional disturbance or emotional conflicts can exhibit

empathy and helping behavior. Since neurotic delinquents are also characterized by an emotional conflict, it can be suggested that neurotic delinquents may exhibit helping behavior similar to the helping behavior demonstrated by the psychiatric patient group. However, an inference about psychopaths and helping behavior can not be made from this study.

Wagner, Manning, and Wheeler (1971) examined differences in helping behavior between high and low scorers on an Insolence scale (Kipnis, 1968). High scorers on this scale were "characterized as immature, materialistic, resistant to social norms, and exploitive of peers" (Wagner et al. 1971, p. 37). They also reported high-insolence scorers helped less than low scorers as the cost of the help to the helper increased. The high-insolence group exhibited some characteristics similar to those of psychopaths. If these groups are similar, then the psychopath can also be expected to exhibit lower levels of helping behavior.

Weiner and Pisano (1977) investigated the relationship between donating behavior and the mean level of electric shocks administered to an experimenter/confederate. Aggressive measures and donating behavior were significantly negatively correlated so that extreme aggressors donated less than low aggressors. This suggests that an aggressive, acting-out population would probably exhibit

less altruistic behavior. Since low-empathy scorers on the Mehrabian and Epstein (1972) scale also shocked pupils more than high-empathy scorers, it can be further suggested that a low-empathy, acting-out population (psychopaths) would be the least altruistic. This relationship needs further exploration.

Statement of the Problem and Hypotheses

The present study investigated empathy and helping behavior in psychopathic, neurotic, and a general comparison group of delinquents. Empathy measures included two self-report questionnaires of affective empathy (Mehrabian and Epstein emotional empathy scale and Schalling's Detachment scale) and a cognitive empathy measure (Chandler's perspective-taking measure). Empathy was also manipulated in an experimental situation with subjects listening to a taped distress situation after receiving either empathy inducing or empathy inhibiting observational instructions. Attribution of responsibility ratings for the taped situation and helping measures were obtained following the empathy manipulation. Subjects rated to what extent the actor of the tape (Tom), an actor related variable (Tom's manner of speech), and external-environmental variables (luck, detention center staff, and the potential helper, Bob) were responsible for the distress situation. Helping behavior was operationally defined as the total number

of Neuroticism subscales of the Eysenck Personality Inventory (Eysenck & Eysenck, 1968) scored for the experimenter in a 10 minute period. A quality of help measure was obtained by determining the total number of accurately scored Neuroticism subscales for the 10 minute period.

In a review of literature on empathy, it was reported that empathy has been conceptualized in three general ways: (a) the affective hypothesis; (b) the cognitive hypothesis; and (c) the cognitive/affective hypothesis. In line with Feshbach's (1978) suggestion that an adequate understanding of empathy must take into account both cognitive and affective components, empathy was conceptualized as being comprised of both components in this study. Feshbach also suggested that the cognitive and affective components of empathy follow a similar developmental pattern and are closely interrelated. Because of the interrelatedness of the cognitive and affective components of empathy, the following is hypothesized.

Hypothesis 1. The measures of affective empathy and cognitive empathy are significantly positively correlated.

In the review of the psychopathy literature, it was postulated that the psychopath exhibits a lack of empathy. This deficit in empathy was reported in research which examined the emotional responsivity of the psychopath (Hare, 1978) and the cognitive perspective-taking

skills of the psychopathic delinquent (Jurkovic & Prentice, 1977). Since the psychopath has exhibited deficits in both cognitive and affective measures of empathy, the cognitive/affective definition of empathy was considered the best suited for studying psychopathic delinquency. The following hypotheses are generated concerning psychopathic delinquency and the cognitive/affective measurement of empathy.

Hypothesis 2. Psychopathic delinquents exhibit (a) significantly less emotional empathy than neurotic delinquents and (b) significantly less emotional empathy than a comparison group of delinquents.

Hypothesis 3. Psychopathic delinquents exhibit (a) significantly less cognitive empathy than neurotic delinquents and (b) significantly less cognitive empathy than a comparison group of juvenile offenders.

Hoffman (1975) suggested empathy is a motivator of helping behavior. According to Hoffman (1976), the observer of a distress situation must first experience an emotional response to the situation and, second, be able to cognitively determine that the emotional response is caused by the situation and not some personal distress before help-

ing behavior can take place. Both cognitive skills and affective aspects of empathy are important in bringing about a helping response. In this study, both cognitive and affective components of empathy were postulated to be motivators of helping behavior. The following relationship between helping behavior and the cognitive/affective measures of empathy are hypothesized.

Hypothesis 4. The measure of cognitive empathy and helping behavior are significantly positively correlated.

Hypothesis 5. The measures of emotional empathy and helping behavior are significantly positively correlated.

Several studies conducted by Aderman and his colleagues (Aderman & Berkowitz, 1970; Aderman et al. 1975; Brehm & Aderman, 1977) suggest that empathy can be manipulated by using different observational instructions for subjects observing a distressful situation. Aderman and Berkowitz (1970) successfully demonstrated a connection between empathy and helping behavior by varying empathy through observational set manipulation. Subjects who listened to a distress situation with a negative outcome and were given empathy inducing instructions were reported to have helped the experimenter more than subjects who listened to the distress situation under empathy inhibiting instructions.

The method for empathy manipulation utilized by Aderman and his colleagues was suggested to require a great deal of role-taking ability as well as some degree of emotional responsiveness. Considering the psychopath's observed deficit in role-taking ability (Jurkovic & Prentice, 1977) and postulated deficit in emotional empathy (McCord & McCord, 1956), it was reasoned that the psychopath might react differently to an empathy manipulation task than subjects in previously reported studies. Also, neurotic delinquents have been associated with greater degrees of emotional responsiveness and a more advanced social cognitive development than psychopathic delinquents (Hare & Cox, 1978a; Quay & Peterson, Note 1). With this in mind, it was reasoned that the neurotic delinquent may respond more appropriately to an empathy manipulation than the psychopathic delinquent and help more under an empathy inducing observational set.

The following hypotheses are generated concerning the experimental manipulation of empathy, delinquency subgroups, and helping behavior.

Hypothesis 6. Subjects given empathy inducing instructions help significantly more than those given empathy inhibiting instructions.

Hypothesis 7. Psychopaths exhibit (a) significantly less helping behavior than

neurotic delinquents and (b) significantly less helping behavior than a comparison group of delinquents.

Hypothesis 8. Psychopaths given empathy inducing instructions exhibit significantly less helping behavior than neurotic delinquents given the same instructions.

Another measure of empathy which has surfaced recently, comes from attribution theory. Regen and Totten (1975) and Galper (1976) suggested that empathy could be defined as an observer making actor like attributions. An empathic observer, then, would be expected to rate environmental or external conditions more responsible for the observed situation than the actor's disposition. Studies completed by Aderman et al. (1975), Galper (1976), and Brehm and Aderman (1977) have supported this hypothesis. However, whether empathy, intelligence, or some other factor causes the observer-turned-actor attributions has not been clarified. If observer-turned-actor attributions are related to empathy, then these attributions should be related to other empathy measures.

The following hypotheses concern the relationship between cognitive/affective measures of empathy and the attribution measure of empathy.

Hypothesis 9. The emotional empathy questionnaire and responsibility ratings concerning actor variables such as Tom and Tom's manner of speech are significantly negatively correlated.

Hypothesis 10. The emotional empathy questionnaire and responsibility ratings concerning the external environment, such as the potential helper, the staff, and luck are significantly positively correlated.

Hypothesis 11. Cognitive empathy and actor responsibility ratings are significantly negatively correlated.

Hypothesis 12. Cognitive empathy and external environment ratings are significantly positively correlated.

According to the attribution theory reviewed earlier, observers tend to rate external-environmental factors less responsible and the actor variables more responsible for the outcome of an observed situation (Jones & Nesbitt, 1968). Actors, on the other hand, have been observed to rate external-environmental factors more responsible and personal variables less responsible. However, Aderman et al. (1975) and Brehm and Aderman (1977) have shown responsibility ratings to be sensitive to the acting-out of

different roles and changes in observational sets. Under an empathy inducing observational set, observers were found to rate external-environmental factors more responsible and the distressed actor as less responsible for the distress situation. With this in mind, the following hypotheses concerning the relationship between an empathy manipulation and attribution ratings are made.

Hypothesis 13. Subjects given empathy inducing instructions rate actor and actor related items less responsible than subjects given empathy inhibiting instructions.

Hypothesis 14. Subjects given empathy inducing instructions rate external environment items such as the potential helper (Bob), staff, and luck more responsible than subjects given empathy inhibiting instructions.

Delinquency subgroups were also considered important to attribution of responsibility ratings under different observational sets. Since psychopathic delinquents demonstrated poor role-taking ability and have been observed to lack empathic ability, it was reasoned that the psychopathic delinquent would continue to make observer-like attributions even under empathy inducing instructions. Since neurotic delinquents were observed to be more socially sen-

sitive and responsive, it was reasoned that this offender group would respond more to the empathy manipulation and make more actor-like attributions under empathy inducing instructions.

The following hypotheses are related to the experimental manipulation of empathy, attribution of responsibility ratings, and the delinquency subgroups.

Hypothesis 15. Under empathy inducing instructions, neurotic delinquents rate the actor less responsible than psychopathic delinquents.

Hypothesis 16. Under empathy inducing instructions, the neurotic delinquent rates the staff, luck, and potential helper more responsible than the psychopathic delinquent.

CHAPTER III

METHOD

Subjects

Subjects for this study were 52 male adolescents obtained from two youth homes in the Chicago metropolitan area. The youth homes can best be described as juvenile detention centers where juvenile offenders are held until released or transferred by the juvenile court. The youth homes were selected on the basis of their similarity in subject population, admissions criteria, and treatment approach. Only males between the ages of 13 to 18 were included in this study.

Originally, 64 boys were asked to take part in the study. Of those asked, 9 preferred not to participate in the study and were dropped from the sample without completing any of the research procedures. Three subjects who were presented the research procedures were later excluded because they did not complete all of the research procedures.

Sample data. The sample of 52 youths had an average of 2.27 incarcerations with a standard deviation of 1.33. Subjects had been charged with a variety of offenses. Their

current charges were categorized as: (a) violence to others (21.2%), (b) violence to property (7.7%), (c) theft (59.6%) which included burglary, auto theft, armed robbery without injury to others, and shoplifting, and (d) nonviolent crimes (11.5%) which included possession of drugs, disorderly conduct, and probation violations. The length of stay in the homes averaged 11.14 days with a standard deviation of 6.90.

The age, race, socioeconomic status, and IQ of the sample were also monitored. Subjects' ages ranged from 13.80 years to 17.17 years with a mean of 15.69 years and standard deviation of .94. The total group of offenders were 73.1% Caucasian, 17.2% Negro, and 9.6% Latino. Ratings of socioeconomic status were obtained by ranking the occupation of the offender's head of household according to a scale developed by Coleman (1959). The greatest number of boys fell in the upper lower class category (32.7%). There were 25.0% of the sample which fell in the indeterminate lower class, 13.5% in the lower middle class, 1.9% in the lower lower class, 7.7% in the indeterminate middle class, and 1.9% in both the middle and upper class. The average IQ for the sample was 91.69 with a standard deviation of 13.91.

Ratings by the detention staff on the Behavior Problem Checklist (Quay & Peterson, Note 1) yielded a mean of 7.86 with a standard deviation of 5.76 for the conduct

problem subscale and a mean of 5.81 with a standard deviation of 3.66 for the personality problem subscale. Schuck, Dubeck, Cymbalisky, and Green (1972) reported a similar conduct problem subscale mean of 6.67 with a standard deviation of 5.10 and a similar personality problem subscale mean of 5.75 with a standard deviation of 3.44 for a sample of 85 male delinquents.

Delinquency subgroup data. On the basis of the mean scores from the subscales of the Behavior Problem Checklist, the subjects were divided into three research subgroups which were labeled the psychopathic delinquent group, the neurotic delinquent group, and the contrast delinquent group. Psychopathic delinquency was defined as all subjects scoring above the mean on the conduct problem subscale and below the mean on the personality problem subscale. Eleven of the offenders comprised this group. The neurotic delinquency group included all subjects scoring above the mean on the personality problem subscale and below the mean on the conduct problem subscale. This group was made up of nine subjects. The contrast group consisted of all offenders whose Behavior Problem Checklist ratings did not fit the above criteria and consisted of 32 subjects.

Table 1 includes the means and standard deviations for the conduct problem and personality problem subscales,

Table 1

Means and Standard Deviations of the Conduct Problem Scale, the Personality Problem Scale,
IQ Scores, Age, and Number of Admittances

Delinquency Group	Variables						
		Conduct Problem	Personality Problem	IQ	Age (Months)	Admit- tances	SES
Psychopath	<u>M</u>	10.91	3.73	90.27	185.64	2.00	2.43
	<u>SD</u>	2.30	1.56	16.81	15.29	1.10	.53
Neurotic	<u>M</u>	2.56	9.22	99.11	185.89	2.56	3.38
	<u>SD</u>	2.30	2.04	8.71	7.47	1.94	.74
Contrast	<u>M</u>	8.31	5.56	90.09	189.78	2.28	3.31
	<u>SD</u>	6.31	3.90	13.73	10.62	1.22	1.34
Total	<u>M</u>	7.86	5.80	91.69	188.23	2.67	3.18
	<u>SD</u>	5.76	3.66	13.91	11.27	1.33	1.14

as well as those for the variables of age, intelligence, socioeconomic status (SES), and the number of admittances to a detention facility. The data are presented according to the three delinquency subgroups of psychopathy, neuroticism, and a contrast offender group.

Differences between the three delinquency groups in age, intelligence, socioeconomic status, and number of admissions were checked to insure the comparability of these groups. There were no significant differences in verbal intelligence between the delinquency groups, $F(2,49) = 1.58$. Also no significant differences were evident between delinquency groups for age, $F(2,49) = .78$, socioeconomic status, $F(2,41) = 1.55$, or the number of admissions, $F(2,49) = .42$. The lack of significant differences between delinquency groups on these variables indicated that any further group differences found in empathy levels, perspective-taking skills, or helping behavior are not confounded by these variables.

Materials

Behavior ratings. The Behavior Problem Checklist (Quay & Peterson, Note 1) is a 55-item behavior-problem rating scale which can be used to determine problem behaviors manifested in childhood and adolescence. Factor analytic studies of the Behavior Problem Checklist have identified four major factors or subscales related to

juvenile delinquency. The conduct problem subscale (psychopathic delinquency) has been described as including "such behaviors as impulsiveness, distrust of authority, lying, stealing, physical aggression, hostile and negative demeanor, poor response to praise or punishment" (Borkovec, 1970, p. 218), and "an absence of concern for others" (Quay, 1966, p. 101). The personality problem subscale (neurotic delinquency) has been described as "a dimension of anxiety, depression, inferiority and withdrawal" (Quay, 1966, p. 102). The other two subscales of the Behavior Problem Checklist are labeled Inadequacy-Immaturity and Socialized Delinquency and were not used in this study.

Although there are no standardized Behavior Problem Checklist norms for the age group utilized in this study, Quay and Peterson (Note 1) reported mean behavior ratings for a general sampled school children ranging from kindergarten to sixth grade. A mean conduct problem scale score of 2.93 with a standard deviation of 3.66 was reported for a sample of 62 sixth grade males. A mean personality problem subscale score of 2.77 with a standard deviation of 3.13 was also reported for this group.

In the present study, 14 of the juvenile offenders were rated by two different staff members to allow for a measure of interrater reliability. Ratings by the different staff members demonstrated significant interrater reliability coefficients of .83 for the conduct problem sub-

scale and of .63 for the personality problem subscale.

Affective empathy. A questionnaire measure of empathy (emotional empathy) was used to determine the empathic tendency of each subject. Aleksic and Savitsky (Note 4) revised an empathy questionnaire developed by Mehrabian and Epstein (1972) for use with a delinquent population. The questionnaire consists of 33 statements which are rated either true or false by the subject (Appendix A). Statements concern various interpersonal situations and possible emotional reactions which may be associated with such situations. A total empathy score is computed by assigning one point for each answer matching the scoring key and then obtaining the algebraic sum of all 33 responses to the questionnaire.

A second measure of affective empathy (Detachment) consisted of items from the Detachment subscale of the Impulsiveness-Monotony Avoidance-Detachment inventory (Schalling, 1978) (Appendix A). This scale was developed to measure a "lack of closeness and warmth in interpersonal relations" (Schalling, 1978, p. 92). The inventory consists of 10 true-false items. A detachment score was obtained by assigning one point for each answer which indicates a preference for distance and lack of warmth in interpersonal relationships. The higher the score the more the subject was considered detached or less emotionally responsive

(emotional empathy). Since this scale did not come to the researcher's attention until after the present study was underway, this second measure of empathy was completed by only 31 subjects.

Cognitive empathy. Cognitive empathy was measured with a procedure developed by Chandler (1973a, 1973b) and Chandler et al. (1974). The empathy or perspective-taking measure consisted of a series of three cartoon sequences. Subjects were asked to describe each cartoon both from the main character's point-of-view and from the perspective of a second story character (bystander) who had access to less information than the main character. Verbatim recordings were made of each subject's responses. Points were scored when a subject assigned more information to the cartoon bystander during inquiry than was available to the bystander in the cartoon. Each cartoon description was rated with a 5-point scoring system reported by Chandler (1973b). For the present study, the point system was inverted from the original Chandler system so that a high score would reflect a lack of egocentric intrusion and more empathic ability. A score of zero was assigned to those stories which did not take into consideration any difference in the availability of information between the cartoon's main character and the cartoon bystander. A score of four was assigned to those stories which took into consideration the

difference of information available to the bystander and the main character. A sum was obtained by totalling the ratings from all three cartoons. The interrater reliability computed for a sample of 21 cartoon stories which were scored by two independent raters, indicated a high level ($r = .99$) of interrater agreement.

Empathy manipulation. Two cassette tapes containing either empathy inducing or empathy inhibiting instructions and a 90-sec. taped conversation were used to manipulate empathy. The taped conversation was fashioned after that reported by Aderman and Berkowitz (1970), however, the content was changed to make it more familiar to the subject population (Appendix A). On the tape, two boys named Tom and Bob met in a hallway of a youth home. When the two boys meet, Tom is working hard mopping the floors and Bob is on his way to do some schoolwork. Bob learns that Tom is behind in his work because no one would help and cannot go to play basketball until he is finished. Bob, however, does not offer to help Tom and leaves to finish his schoolwork.

Attribution ratings. Each subject was asked to make attribution of responsibility ratings in response to an audio tape. Subjects rated to what extent the main actor (Tom), an actor related variable (Tom's manner of speech), and external-environmental variables (Bob, staff,

and luck) were responsible for the main character's predicament. Each of the above were rated on a scale which ranged from 1 to 100% responsibility with increments of 10 being marked between the two endpoints.

Helping measures. Helping behavior was operationalized as the number of questionnaires scored in 10 minutes by the subject in response to the experimenter's plea for help. Subjects scored the Neuroticism subscale of the Eysenck Personality Inventory (Eysenck & Eysenck, 1968) which had been filled out on standard answer sheets during a previous research project completed by the author. A helping behavior total was obtained by summing the number of completely scored questionnaires and an accuracy of helping score was obtained by determining the percentage of correctly scored questionnaires.

Intelligence measure. The Peabody Picture Vocabulary Test (Form A) was used as a measure of verbal intelligence. The test consists of 150 words with a corresponding card of four pictures. Subjects are required to point out which picture best describes the corresponding word. Scoring followed the standard procedure as described by Dunn (1965).

Procedure

Juvenile offenders were assigned to a staff member

for behavioral observation upon admission to the detention center. Subjects were observed from 3 to 32 days depending upon their length of stay at the detention center. Staff members rated their assigned offender on the Behavior Problem Checklist the day of the juvenile's release from the home. Subjects were assigned to one of the three delinquency groups based on the behavior ratings.

The experimenter talked with each juvenile during his stay in the detention center. Upon first meeting, the experimenter explained to each offender that this was a research project studying social observation, explained confidentiality, and secured consent. Each consenting subject was interviewed individually and the experimental procedure lasted about 80 minutes.

Introduction to the first procedure was as follows:

First, I want you to listen to a taped conversation between two boys. After the tape ends you will be asked to rate the boys and what happened on the tape. I want you to listen to this conversation in a special way. Directions for how you are to listen to the conversation are recorded on this tape. In order to keep me from influencing your ratings, I want you to listen to the directions through this earplug so I cannot hear which directions you've received. Please signal when the talking stops.

Each subject listened to one of two taped observational instructions which were taken from the imagine-self (empathy inducing) and the listen-to-me (empathy inhibiting) instructions reported by Aderman (1972). However, Aderman's instructions were changed slightly to make them more easily understood by the subject sample utilized in this

study. The tapes were coded so that the investigator was blind to the actual directions contained on each tape.

Subjects who received the imagine-self (empathy inducing) instructions heard the following:

In a few moments you will be listening to two boys named Tom and Bob, acting out a conversation which actually took place. While the two boys talk, please imagine how you would feel if you were Tom talking with Bob. While you are listening to Tom you are to think about the way you would feel while talking to Bob. Your job will be to think about what your reactions would be in Tom's place while talking with Bob. In your mind's eye, you are to imagine how it would feel to you to be Tom in this situation.

Subjects who received the listen-to-him (empathy inhibiting) directions heard the following:

In a few minutes you will be listening to two boys named Tom and Bob, acting out a conversation which actually took place. While the two boys talk, please listen to what Tom says very closely. You are to listen carefully to Tom's speech, his tone of voice, how fast he talks, how he is talking, how loudly he is talking, whether his voice breaks, etc. You are not to think about how you would feel in Tom's place, or about how Tom is feeling.

Once the subject signaled the end of the directions, the earplug was disconnected and the tape was advanced. The experimenter explained that the subject must first learn the differences between Bob and Tom's voices before listening to the conversation. In order to accomplish this, each subject listened to both Bob and Tom saying, "Testing 1 - 2 - 3, this is _____ speaking," a technique employed by Aderman and Berkowitz (1970). Following this, one of the boys (Bob) stated, "Peter Piper picked a peck of pickled

peppers." Each subject was asked to identify the speaker. Subjects were allowed to listen to the identification segment again if they were unsure or had not identified the speaker properly. After speaker identification, all subjects listened to the same taped interchange described earlier.

Upon completion of the taped conversation the experimenter gave the subject a sheet of paper containing the five attribution-of-responsibility scales to complete. Each scale was read to the subject to facilitate completion.

Next, the experimenter explained to the subject that he must leave the room in order to pick up the forms needed for the next part of the study. Before leaving, the experimenter attempted to elicit the subject's help by stating:

It will take me about 10 minutes to get the forms for the next part of the experiment and fill them in. While I am gone I was wondering if you would mind doing me a favor. I am behind in scoring these data sheets from another study and I need help to get them done. Let me show you how to score them so you can work on the data sheets, if you want to, while I am gone.

The experimenter presented the subject with a stack of data sheets and demonstrated to the subject how to score them. After explaining, the experimenter left the room and returned 10 minutes later with the forms needed to complete the study. Two magazines were available in the room to give offenders who did not wish to help something else to do.

Upon his return, the experimenter thanked the subject, if he had helped, and introduced the revised empathy questionnaire for completion. Items were read aloud in order to facilitate completion of the questionnaire by poor readers.

After the questionnaire was completed the cognitive empathy procedure was introduced. The experimenter explained that he wanted the subject to look at three cartoons which are similar to comic strips in the daily newspaper. The subject would find that each cartoon sequence had a theme and the experimenter was interested in what the subject thought was happening in the cartoon. Both the main character's and the bystander's thoughts and feelings were elicited through inquiry following the procedure outlined by Chandler (1973b).

Following the cognitive empathy measure, subjects were presented the intelligence test, a demographic questionnaire, and the Detachment empathy scale.

CHAPTER IV

RESULTS

Cognitive and Affective Measures of Empathy

In this study, an empathic response was conceptualized as being comprised of both cognitive and affective components. It was hypothesized (H1) that both the cognitive and emotional measures of empathy correlate significantly positively, i.e., subjects who exhibited more affective empathy were expected to exhibit more cognitive empathy. Table 2 includes the correlations between the two affective empathy measures (Detachment scale and emotional empathy scale), the cognitive empathy measure, helping scores, and the IQ measure. Contrary to the prediction, there were no significant correlations between the affective and cognitive measures of empathy. However, both of the self-report scales of affective empathy correlated significantly so that a person who expressed more emotional detachment in interpersonal relationships also reported less emotional empathy, $r(31) = -.36, p < .02$.

Cognitive/Affective Empathy and Psychopathy

Several authors have observed that the psychopath

Table 2
Pearson Product-Moment Correlations Between
Empathy, Helping, and IQ Measures

Variables	1	2	3	4	5
1. Emotional Empathy					
2. Cognitive Empathy	.17				
3. Detachment ^a	-.36**	.03			
4. Total Help	.21	.19	-.07		
5. Helping Accuracy	.14	-.28**	.01	-.10	
6. IQ	.15	-.21	.19	.26*	.01

Note. Unless indicated otherwise, $\underline{n}=52$.

^a $\underline{n}=31$.

* $\underline{p}<.03$

** $\underline{p}<.02$

exhibits an empathy deficit (Gough, 1948; Hare, 1970; McCord & McCord, 1956). In this study, psychopathic delinquents were hypothesized (H2 and H3) to exhibit less emotional and cognitive empathy than a neurotic or a general comparison group of delinquents. In Table 3, the means and standard deviations of the affective and cognitive measures of empathy are included. These data were analyzed according to delinquency groups with a one-way analysis of variance statistic. Contrary to the hypothesis, there were no significant differences between delinquency groups on the emotional empathy measure, $F(2,49) = 1.62$. However the delinquency groups did differ significantly on the cognitive measure of empathy, $F(2,49) = 5.20$, $p < .009$. A posteriori analysis showed the psychopathic delinquent group to be significantly poorer in perspective-taking skills than the neurotic delinquency group, $t(49) = 2.72$, $p < .01$ and the comparison group, $t(49) = 2.99$, $p < .01$. There was no significant difference between the neurotic and comparison groups in cognitive empathy scores, $t(49) = .47$. Thus, only the hypothesis concerning differences in cognitive empathy was confirmed.

Cognitive/Affective Empathy and Helping

Since empathy has been considered a motivator of helping behavior (Iannotti, Note 6), it was hypothesized (H4 and H5) that both the cognitive and affective measures

Table 3

Means and Standard Deviations of Empathy Measures by
Delinquency Group

Empathy Measure	Delinquency Group		
	Psychopathy ^a	Neurotic ^b	Contrast ^c
Emotional			
M	16.64	19.78	19.19
SD	6.02	3.53	4.08
Cognitive			
M	6.18	9.11	8.69
SD	2.86	2.26	2.26

^an = 11.

^bn = 9.

^cn = 32.

of empathy would significantly correlate with the helping measures so that high scorers on the empathy measures would demonstrate more helping behavior. As can be seen in Table 2, the relationship between empathy and helping behavior was not as predicted. The emotional empathy measures did not significantly correlate with the accuracy of help measure and only approached a significant positive correlation with the total help measure ($p < .07$). The Detachment measure of empathy did not correlate significantly with either helping measure. Cognitive empathy did not correlate significantly with the total help measure, but, did correlate significantly negatively with the accuracy of help measure. The significant relationship between cognitive empathy and help accuracy was opposite from the predicted direction so that a subject who exhibited poorer perspective-taking skills also exhibited greater accuracy or quality of help.

Overall, the significant relationship, as predicted in the review of the literature, between helping and empathy was not observed. The one significant correlation between the cognitive measure of empathy and helping accuracy was in the opposite direction of that predicted.

Empathy Manipulation, Psychopathy, and Helping

The relationships between empathy, psychopathy and helping behavior were also investigated in an experimental situation. It was hypothesized (H6) that subjects given

empathy inducing instructions would help significantly more than those given empathy inhibiting instructions. Considering the psychopath's observed deficit in empathic ability, it was further hypothesized (H7) that the psychopathic delinquent would demonstrate significantly less helping behavior than the other delinquency groups. The psychopathic delinquent was also hypothesized (H8) to exhibit less helping behavior than the neurotic delinquent under empathy inducing instructions.

Table 4 presents the means and standard deviations for the total help and accuracy of help measures. These data are presented according to observational set and delinquency group membership. A least squares analysis of variance solution for unequal sample sizes was used to investigate the hypothesized relationships for each of the helping measures. Each helping measure was examined according to two levels of observational instructions (empathy inducing/empathy inhibiting) and three delinquency subgroups (psychopath/neurotic/contrast delinquents). Table 5 summarizes the analysis of variance results for both the total help (total number of Neuroticism scales scored) and accuracy of help (percentage of correctly scored Neuroticism scales) measures. None of the hypothesized relationships were supported. Neither delinquency group membership, observational instructions, nor the interaction of these two variables had any significant effect

Table 4

Means and Standard Deviations of Helping Behavior by
Delinquency Group and Observational Set

Delinquency Group	Observational Set	Helping Behavior		
		Total Help	Helping Accuracy	
Psychopathy	Empathy Inducing	<u>M</u>	10.83	54.06
		<u>SD</u>	6.94	15.69
	Empathy Inhibiting	<u>M</u>	11.20	49.67
		<u>SD</u>	2.68	14.22
Neurotic	Empathy Inducing	<u>M</u>	10.50	58.13
		<u>SD</u>	5.80	12.95
	Empathy Inhibiting	<u>M</u>	12.00	61.74
		<u>SD</u>	2.12	29.90
Contrast	Empathy Inducing	<u>M</u>	11.39	58.17
		<u>SD</u>	4.08	26.07
	Empathy Inhibiting	<u>M</u>	9.29	51.78
		<u>SD</u>	4.05	31.84

Table 5
 Analysis of Variance Results for the Total
 Amount and the Accuracy of Help Scores

Source of Variance	<u>df</u>	Total Help		Help Accuracy	
		<u>MS</u>	<u>F</u>	<u>MS</u>	<u>F</u>
Delinquency group (A)	2	3.87	<1.0	161.05	<1.0
Observational set (B)	1	.06	<1.0	54.55	<1.0
A X B	2	14.27	<1.0	86.51	<1.0
Error	46	19.21		670.75	

on the total amount of help or the accuracy of help given to the experimenter.

Attribution, Cognitive/Affective Empathy, and Helping

The relationship between attribution of responsibility ratings and the cognitive/affective empathy measures were also investigated in this study. It was hypothesized (H9 and H11) that actor (Tom) and actor related (Tom's speech) responsibility ratings would be significantly negatively correlated with the emotional empathy measure and the cognitive empathy measure. External environmental ratings (Bob, staff, luck) were hypothesized (H10 and H12) to be positively correlated with the emotional empathy measure and the cognitive measure.

Table 6 includes correlations between the attribution of responsibility ratings and empathy, helping, socioeconomic status, and IQ measures. Actor and actor related variables did not correlate significantly with the emotional, cognitive, or Detachment empathy measures. External-environmental related responsibility ratings also did not correlate significantly with any of the empathy measures. Overall, none of the experimental hypotheses concerning cognitive/affective empathy and attribution were supported.

Although predictions were not made concerning helping behavior and responsibility ratings, the relationship

Table 6
 Pearson Product-Moment Correlations Between
 Attribution Ratings, Empathy, Helping, SES,
 and IQ Measures

Variables	Attribution Ratings				
	Tom	Tom's Speech	Bob	Staff	Luck
Emotional Empathy	.22	.20	.07	.05	.11
Cognitive Empathy	-.11	-.02	-.15	-.04	.11
Detachment ^a	-.13	-.16	-.01	.06	.13
Total Help	.26**	.35***	-.10	.13	.05
Helping Accuracy	.03	-.19	.11	.13	.06
IQ	-.06	.13	-.30***	.23	-.07
SES	.07	-.20	-.20	-.16	.07

Note. Unless indicated otherwise, $n = 52$.

^a $n = 31$.

* $p < .05$

** $p < .03$

*** $p < .01$

was explored. If observer-turned-actor ratings are related to empathy and helping is motivated by empathy, then actor responsibility ratings and helping should be negatively correlated. The data in Table 6 suggest that the total help measure was significantly related to actor responsibility ratings but in a positive direction, i.e., subjects who helped more also rated the actor more responsible for the observed experimental situation. Again, attribution ratings did not correlate in the expected direction with an empathy related variable which raises further doubts about observer-turned-actor ratings being a measure of empathy.

Experimental Manipulation, Psychopathy, and Attribution

Attribution ratings were also examined in an experimental situation with two independent variables, observational set and delinquency group membership. Responsibility ratings were completed on a 100 point scale with a score of 100 representing the highest degree of responsibility. Table 7 includes the means and standard deviations of the actor related (Tom, Tom's speech) and external-environmental related (Bob, staff, luck) responsibility ratings. The scores are presented according to the three delinquency subgroups (psychopath/neurotic/contrast groups) and the two levels of observational instructions (empathy inducing/inhibiting).

Table 7

Means and Standard Deviations of Attributions by
Delinquency Group and Observational Set

Delinquency Group	Observational Set	Attribution Scale						
		Tom	Speech	Bob	Staff	Luck		
Psychopathy	Empathy Inducing	<u>M</u>	50.00	43.33	16.67	30.00	10.00	
		<u>SD</u>	38.99	23.38	26.58	24.49	20.00	
	Empathy Inhibiting	<u>M</u>	16.00	56.80	12.00	62.00	21.00	
		<u>SD</u>	23.02	25.47	16.43	25.88	28.81	
	Neurotic	Empathy Inducing	<u>M</u>	10.00	17.50	12.50	40.00	30.00
			<u>SD</u>	20.00	20.62	15.00	27.08	35.59
Empathy Inhibiting		<u>M</u>	14.00	29.00	0.0	31.00	1.00	
		<u>SD</u>	19.49	27.93	0.0	41.90	2.24	
Contrast	Empathy Inducing	<u>M</u>	16.39	20.00	7.50	45.56	30.83	
		<u>SD</u>	25.77	25.84	23.47	29.70	33.49	
	Empathy Inhibiting	<u>M</u>	27.14	27.86	20.00	39.29	44.29	
		<u>SD</u>	18.58	20.45	24.18	36.89	37.15	

Actor ratings. Under empathy inducing observational instructions, actor and actor related items were hypothesized (H13) to be rated less responsible for the distress situation than under empathy inhibiting instructions. Neurotic delinquents were also hypothesized (H15) to rate the actor variables less responsible than the psychopathic delinquents under empathy inducing instructions. A 2x3 least squares analysis of variance for unequal sample sizes was used to examine the hypotheses concerning the actor variables. Table 8 presents the analysis of variance results for the attribution of responsibility ratings concerning the actor, Tom. No significant main effects were observed. Contrary to expectation, the observational set, empathy inhibiting and empathy inducing instructions, did not significantly alter responsibility ratings.

A significant Observational Set by Delinquency Group interaction was observed, $F(2,46) = 3.34, p < .04$. Figure 1 graphically portrays the mean attribution of responsibility ratings for Tom by delinquency group and observational set. Examination reveals that under empathy inducing instructions, neurotic and contrast group delinquents rated the actor less responsible than the psychopathic delinquents. A simple effects analysis of the delinquency groups' actor ratings obtained under empathy inducing instructions supports the observation that this instructional set did significantly affect the delinquency groups' ratings. Under

Table 8

Analysis of Variance Results for Attribution of
Responsibility Ratings for Tom

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Delinquency group (A)	2	1,099.82	1.79
Observational set (B)	1	392.53	<1.00
A X B	2	2,049.48	3.34*
Error	46	613.39	

* $p < .04$

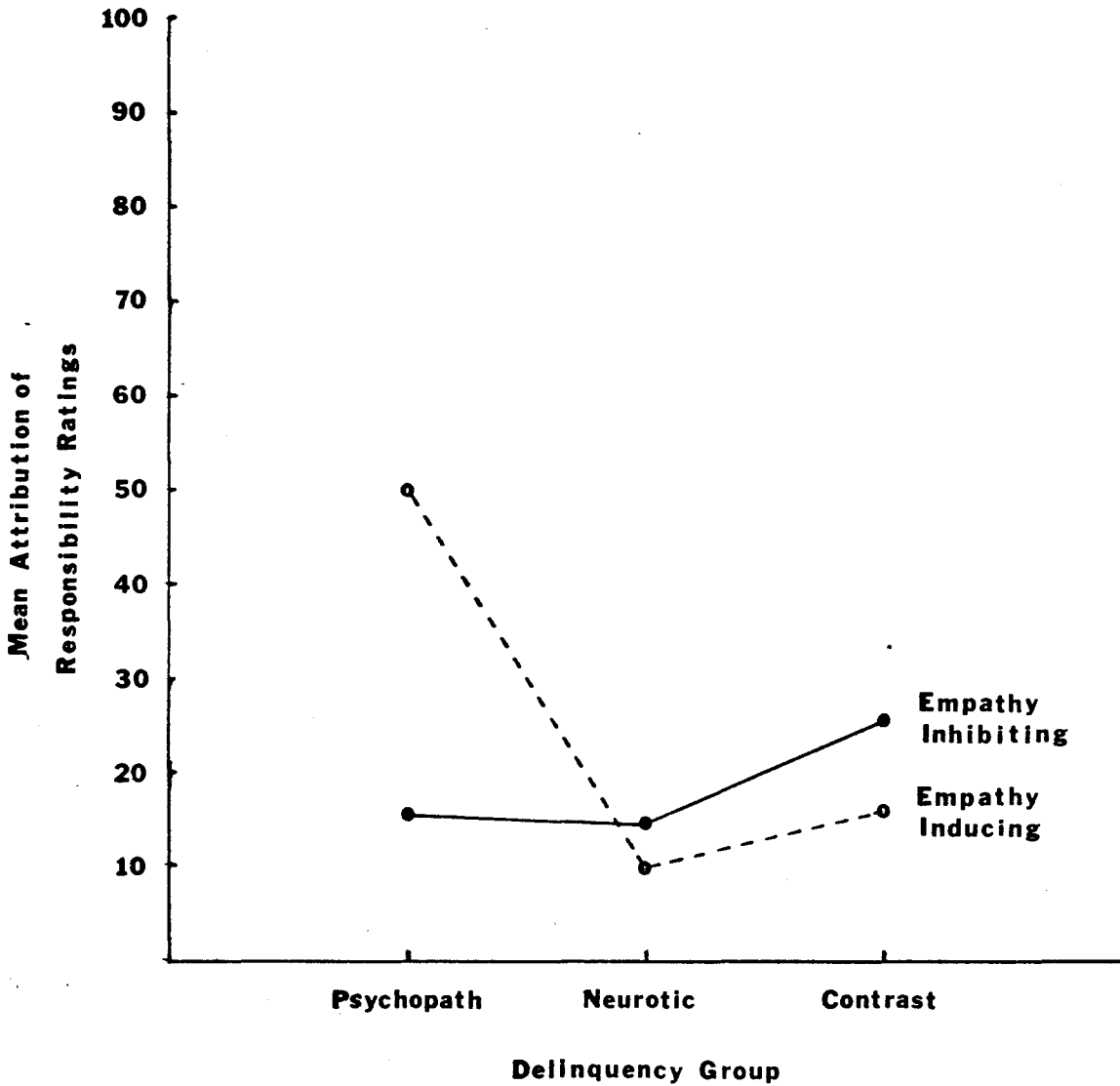


Figure 1. The mean attribution of responsibility ratings for Tom by delinquency group and observational set.

the empathy inducing instructional set, psychopathic delinquents rated the actor significantly more responsible than either the neurotic group, $t(46) = 3.88$, $p < .05$, or the contrast group, $t(46) = 3.88$, $p < .05$. There was no significant difference in actor ratings under empathy inducing instructions between the neurotic and contrast delinquency groups, $t(46) = <1.0$. The simple effects analysis for the delinquency groups' actor ratings obtained under empathy inhibiting instructions was not significant, $F(2,46) = <1.0$, suggesting that this observational set did not produce different effects for the delinquency groups.

Simple effects analyses of observational instructions for each of the delinquency groups were also completed. There was no significant difference in performance under empathy inducing or empathy inhibiting instructions for the contrast group, $F(1,46) = <1.0$, or the neurotic group, $F(1,46) = <1.0$. However, the analysis of the observation conditions for the psychopathy group was significant, $F(1,46) = 5.99$, $p < .01$, suggesting that psychopaths rated the actor more responsible for the distress situation under empathy inducing instructions than empathy inhibiting instructions.

The simple effects analyses of the actor ratings suggest that the empathy inhibiting instructions had no differential effect on any of the delinquency groups and that there were no significant differences in performance

between the two observational sets for either neurotics or the contrast group. The significant simple effects appeared with the psychopathy group's performance under empathy inducing instructions. The psychopathy group responded to empathy inducing instructions with higher actor responsibility ratings.

Actor characteristics (Tom's speech) were also expected to be rated in a manner similar to the actor ratings. Tom's manner of speech was hypothesized to be rated less responsible for the distress situation under empathy inducing instructions than under empathy inhibiting instructions. Neurotic delinquents were also hypothesized to rate Tom's speech less responsible than psychopaths under empathy inducing instructions. Table 9 includes the analysis of variance summary for Tom's speech ratings by delinquency group and observational set. Contrary to the above predictions, the observational instructions did not alter responsibility ratings of Tom's speech. Also, no significant interaction effect was observed.

The significant delinquency group main effect for Tom's speech responsibility ratings was not expected. Specifically, the mean attribution of responsibility ratings concerning Tom's manner of speech showed that the psychopathic delinquents assigned more responsibility to Tom's manner of speech ($\underline{M} = 50.06$) than either the neurotic group

Table 9
 Analysis of Variance Results for Attribution of
 Responsibility Ratings Concerning Tom's
 Manner of Speech

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Delinquency group (A)	2	2,969.27	5.15*
Observational set (B)	1	1,141.74	1.98
A X B	2	36.32	<1.00
Error	46	576.28	

*p<.01

(\underline{M} = 23.25) or the contrast group (\underline{M} = 23.93), $\underline{F}(2,46) = 5.15$, $p < .01$.

External-environmental ratings. It was hypothesized (H14) that under empathy inducing instructions, observers would rate such external-environmental variables as luck, detention center staff, and the potential helper, Bob, as more responsible for Tom's distress than under empathy inhibiting instructions. Neurotic delinquents were also expected (H16) to rate the external-environmental variables less responsible for the distress situation under empathy inducing instructions than the psychopathic delinquents.

A 2x3 least squares analysis of variance for unequal sample sizes was completed for each of the external-environmental variables (luck, staff, Bob). Table 10 summarizes the analysis of variance results for responsibility ratings attributed to Bob, the detention center staff, and luck. Contrary to the above hypothesis, no significant main effect for observational set was observed for any of the external-environmental responsibility ratings. Also, no significant Observational Set by Delinquency Group interaction was observed for any of these ratings.

Unexpectedly, the delinquency group main effect for the luck ratings approached significance, $\underline{F}(2,46) = 2.95$, $p < .06$. Examination of mean luck responsibility ratings

Table 10

Analysis of Variance Results for External-Environmental Attribution
of Responsibility Ratings

Source of Variance	<u>df</u>	Attribution Scale					
		Bob		Staff		Luck	
		<u>MS</u>	<u>F</u>	<u>MS</u>	<u>F</u>	<u>MS</u>	<u>F</u>
Delinquency group (A)	2	216.41	<1.0	277.83	<1.0	2,957.97	2.95
Observational set (B)	1	23.08	<1.0	296.61	<1.0	21.92	<1.0
A X B	2	687.69	1.42	1,628.66	1.57	1,612.72	1.61
Error	46	483.71		1,034.51		1,003.16	

revealed that the contrast group ($\underline{M} = 37.56$) rated luck more responsible than either the neurotic ($\underline{M} = 15.50$) or the psychopathic delinquent ($\underline{M} = 15.50$) groups. This suggests that the contrast group perceived the taped distress situation more like the distressed actor on the tape would be expected to perceive the situation than how an uninvolved observer would be expected to perceive the situation. However, the delinquency group main effect did not occur for the other two external-environmental ratings which weakens the above observation.

Classification

Throughout the discussion of psychopathic delinquency, the importance of empathy and perspective-taking skills have been stressed. It was suggested that deficits in empathy are at the core of the psychopath's disability (McCord & McCord, 1956). If this is true, then scores on the empathy measures should differentiate psychopathic delinquency from the neurotic and contrast juvenile offenders. A stepwise discriminant analysis was completed on all of the subjects using the emotional empathy scores, egocentrism scores, attribution ratings, helping scores, and IQ. The \underline{F} level for inclusion and deletion with stepwise procedure was set at 1.00.

Table 11 illustrates the two discriminant functions set up to classify the subjects. Each function is presented

Table 11
Stepwise Discriminant Functions

Function	Eigen- Value	Percentage of Variance	Wilks Lambda	<u>df</u>	χ^2
1	0.819	86.12	.485	10	33.96*
2	0.132	13.88	.883	4	5.83

* $p < .0002$

with its corresponding eigenvalue, Wilks lambda score, the percentage of variance it accounts for, and the chi-square score. Only the first function exhibited significant discriminating power.

The five variables which satisfied the inclusion criteria are presented in Table 12. Each variable is presented along with its respective standardized discriminant function coefficients. The attribution ratings and egocentrism scores were the best predictors of inclusion in the delinquency subgroups. Subjects rating Tom's manner of speech as responsible for his predicament and subjects exhibiting poor perspective-taking skills were more likely to be included in the psychopathy group. Low luck attributions, low emotional empathy scores, and lower IQ scores also contributed to discriminating psychopaths from neurotics.

The discriminant functions were successful in classifying 76.1% of the subjects into one of the three delinquency subgroups utilizing the five variables. Table 13 includes the percentage of predicted group membership for the three subgroups. The discriminant functions were able to correctly classify 63.6% of the psychopathic delinquents and 93.8% of the contrast group. However, correct prediction of the neurotic group was very low (11.1%). In fact, most of the neurotic delinquents were classified in the contrast group. The discriminant function appeared

Table 12
Variables Utilized in Discriminant Analysis

Variables	Standardized Discriminant Coefficient	
	Function 1	Function 2
1. Cognitive Empathy	-.614	.132
2. Tom's Speech Attribution	.890	-.079
3. Luck Attribution	-.399	-.697
4. Emotional Empathy	-.501	.169
5. IQ	-.015	.639

Table 13
 Classification of Delinquency Using
 Discriminant Functions

Delinquency Groups	<u>N</u>	Predicted Percentage of Group Membership		
		Psychopath	Neurotic	Contrast
Psychopath	11	63.60	9.10	27.30
Neurotic	9	0.00	11.10	88.90
Contrast	32	6.30	0.00	93.80

to be successful in discriminating psychopathic delinquents from the neurotic and contrast groups but poor at discriminating the neurotic and contrast groups.

CHAPTER V

DISCUSSION

Cognitive/Affective Empathy and Helping

The results of this study offer very little support for the relationship between empathy and helping behavior postulated by Iannotti (Note 6) and Hoffman (1975). According to Hoffman, a potential helper must be able to emotionally experience the distress of the person in need of help (affective empathy) and to cognitively separate self from other (perspective-taking skills) before acting in a helpful manner. However, neither the measure of emotional empathy or of perspective-taking skill showed any consistent significant relationship with the helping measures. The one significant relationship was inconsistent with Hoffman's observations and suggested that as the quality of help increased so did the level of egocentricity.

Since a significant relationship between the Mehrabian and Epstein (1972) measure of emotional empathy and helping had been previously reported (Eisenberg-Berg & Mussen, 1978), why did it not show up in this study? One possibility is that the experimenter failed to design a

believable distressful situation. Instead, the subjects may have misinterpreted the help manipulation and, because of their incarceration, viewed it as one where they could gain something (e.g., quicker release, favors from the staff). Helping in such a situation would not be motivated by an empathic response, but by a self-centeredness. The positive significant correlation between the perspective-taking measure and one measure of helping offers partial support for this interpretation. The more self-centered or egocentric a subject was the more help was given. Subjects who had good perspective-taking skills might have observed quite accurately, that the experimenter did not really need help and that the situation offered no gains for them so they helped less. The poor-perspective-takers may not have perceived the situation accurately and, consequently, they helped more in hopes of gaining something in return.

One important finding was the significant relationship between the Detachment scale and the emotional empathy scale. The statistically significant correlation offers some validation for Schalling's (1978) Detachment scale, suggesting that subjects who reported more interpersonal detachment also exhibited less emotional empathy. However, the significant correlation may also be due to the similar methods of measurement (both self-report, true-false questionnaires) of the scales. The fact that the perspective-taking scale and the Detachment scale did not significantly

correlate adds some support to a method interpretation. Further research examining high and low scores on the Detachment scale with a multimethod approach would help clarify the relationship observed in this study.

The different correlation patterns between the total and quality of help measures adds support to Kurdek's (1978) observation concerning a need to look at different types of helping. In this study, the total help measure correlated significantly with IQ and suggests that subjects who helped more had higher intelligence scores. Although a causal relationship cannot be inferred, from this correlation, the relationship may have occurred because of the counting skills and vigilance required to engage in the helping task. However, the quality of help measure was not significantly related to intelligence. So, although both measures reflect helping behavior, only one of the helping measures appears to be confounded by verbal intelligence. Further research examining the different variables related to total help and quality of help measures is necessary. Impulsiveness or assertiveness might be an important variable differentially affecting these two measures of helping behavior.

Psychopathy and Cognitive/
Affective Empathy

The results of this study add partial support to the clinical observation that psychopaths are deficient in

empathic ability. The psychopath's significant deficiency in interpersonal perspective-taking skills and the importance of perspective-taking performance in discriminating psychopathic delinquents from other delinquency groups further support the importance of Gough's (1948) social role-taking theory of psychopathy. In Gough's theory, empathy was conceptualized as role-taking or perspective-taking skills. The psychopath's deficiency in such skills disrupts the socialization process leaving an egocentrically oriented sense-of-self and an inability to experience guilt, shame, embarrassment, or loyalty (Hare, 1970).

These results also point out the importance of measuring both cognitive (perspective-taking) and emotional components of empathy when studying psychopathy. Both components were important in discriminating psychopathic delinquents from other delinquent groups. However, the emotional empathy measure, alone, was not able to distinguish among psychopaths, neurotics, and other offender groups. This finding suggests that the affective definition of empathy may not be as important to studying psychopathy as hypothesized. A significant emotional empathy deficit was observed between delinquents and nondelinquents (Aleksic & Savitsky, Note 4), but in comparing subgroups of delinquents, such a measure may lose its discrimination power and the cognitive component becomes the more important variable.

The lack of a significant difference among delinquency groups in emotional empathy may also have something to do with the experimental situation. The reading of each item to each subject, individually and the subject's incarceration status may have significantly increased the demand to give socially appropriate responses. Such a response set would affect a self-report measure like the emotional empathy scale much more than it would the perspective-taking task. The socially appropriate response set would decrease the variability of empathy scores and therefore decrease the ability to differentiate between delinquency groups.

Several items from the Personal Opinion Study (Quay & Parsons, 1971) which were included at the end of the emotional empathy scale were checked to determine if there was a socially desirable response set. One such item, when answered true, had a factor loading of .58 (Quay & Parsons, 1971) with the psychopathic delinquency factor and was presented as follows: "The only way to make big money is to steal it." However, in this study, no psychopathic delinquents and only 5.77% of the whole sample answered true to this item. This suggests that subjects may well have been answering items in a socially desirable manner.

This study also offers some support for the construct validity of the conduct problem subscale of the Behavior Problem Checklist. High scorers, on this subscale,

were hypothesized to be psychopathic delinquents and were expected to show a deficit in empathy. The success of the discriminant analysis and the significant difference in the cognitive empathy scores between the psychopathy group and the other delinquency groups supports the use of the conduct problem subscale as a measure of psychopathy.

However, there is one major drawback in interpreting the performance of high conduct problem scale scorers as psychopathy. The absence of a normal control group greatly limits the psychopathy interpretation. Although the high conduct problem scale scorers of this study responded as psychopaths were predicted to respond on the cognitive empathy measure, it is difficult to claim with a high degree of certainty that this group was actually made up of extreme scorers without normative data or a normal control group. However, there is some support for the contention that the high conduct problem scorers were extreme scorers and can be considered to be psychopathic. First, the mean conduct problem score for the psychopathy group in this study was much higher ($\bar{M} = 10.91$) than that reported by Quay and Peterson (Note 1) for a group of normal adolescent boys ($\bar{M} = 2.93$). Second, the mean psychopathy group score was also considerably higher than that reported by Schuck et al. (1972) for a general institutionalized delinquency group ($\bar{M} = 6.67$). Future research should

include a matched control group of normal adolescents for a better comparison.

Psychopathy and Helping

The lack of a significant relationship between delinquency and helping behavior which was observed in this study may have occurred for several reasons. As mentioned above, the experimental helping situation may not have been perceived as a real distress situation. Instead, subjects may have been responding to an institutional or situational demand to comply with the staff in all situations. It is also possible that there simply is no difference in helping behavior between different delinquency subgroups. The fact that Tolor et al. (1976) and Steinberg, Payson, and Evans (1974) found hospitalized mental patients to be helpful, and in some cases more helpful than college students, supports this interpretation. Further investigation of psychopathy and helping behavior needs to be attempted to clarify the nonsignificant findings of this study. A more distressful helping situation like that reported by Tolor et al. (1976) may help maximize any difference in helping that exists between delinquency groups. In future research, subjects not currently residing in an institutional setting should also be included to check for any demand characteristics coming from such a situation.

The failure of the empathy manipulation to affect

helping behavior and to differentially affect delinquency subgroups may have occurred for several reasons. Although a similar empathy manipulation procedure was successful in changing helping behavior (Aderman & Berkowitz, 1970), the procedure used in this study was somewhat different (e.g., listening to observational instructions, different tape content). These differences may have changed the procedure in such a way as to reduce its empathy inducing ability. For example, in this study, subjects had to listen to the observational instructions rather than reading them as in other studies. This different mode of presentation may not have been as effective in producing empathy. In fact, in a study reported by Feshbach (1978), children exhibited greater empathic responsiveness when materials were presented in a combined auditory-visual mode and were significantly less responsive when material was presented in either an auditory or a visual mode. Further study of empathy and psychopathy should include an auditory-visual presentation of materials to maximize empathic responsiveness.

The tape content may also have been responsible for the general failure of the empathy manipulation. Although the general outline of the Aderman and Berkowitz negative outcome story was followed, the tape was substantially altered. Subjects may have been unable to imagine the situation presented to them or understand the tape characters.

Also, the situation on the tape may not have been perceived as distressing by the subjects and the emotional empathy created by the empathy inducing instructions would not have been any different than that created by the empathy inhibiting instructions.

Several subjects also complained about not being able to understand what occurred on the tape. Postexperimental discussions with these subjects revealed that they had difficulty concentrating on the tape. This difficulty in auditory concentration or processing may have reduced the effectiveness of the empathy manipulation. A study by Bachara and Zuba (1978) suggested that juvenile delinquency is significantly related to learning disabilities, of which deficits in auditory processing may play an important role. Also, the significant positive correlation between IQ and the total amount of help measure adds further support to the idea that the empathy manipulation may be effected by a cognitive skill such as concentration. Further research examining auditory processing deficits in the different delinquency subgroups needs to be undertaken to further clarify this point. Empathy manipulations which do not require considerable auditory or visual-perceptual processing, such as that reported by Aderman et al. (1975) may be more helpful in studying delinquency and helping behavior.

Cognitive/Affective Empathy
and Attribution

The results of this study suggest that observer-turned-actor attributions do not significantly correlate with the cognitive/affective definition of empathy utilized in this project. However, Aderman et al. (1975) also reported a nonsignificant positive correlation between a total emotional empathy score and attributions of responsibility. The lack of consistent significant relationship between empathy measures and attribution of responsibility ratings suggest that the observer-turned-actor attribution may not be motivated by an empathic process. In contrast, several studies (Aderman et al. 1974; Brehm & Aderman, 1977; Gould & Sigall, 1977) consistently found subjects who had been given empathy inducing instructions attributed less responsibility to victims in a negative outcome situation. What seems to be important here in understanding these two sets of results, is the type of empathy related to the observer-turned-actor attributions. The nonsignificant relationship between empathy and attribution seemed to occur with trait measures of empathy while the significant relationships all occurred with a situationally induced empathy or mood change. Differential causal attributions, then, may be more a function of situational variables, passing cognitive sets, or mood changes rather than a trait conceptualization of empathic ability.

The unexpected positive relationship between the total helping measure and actor attribution is quite confusing and requires further experimental clarification. If emotional empathy is a motivator of helping behavior as well as observer-turned-actor attribution, then helping should be negatively correlated with actor attributions. The positive correlation may have occurred if the helping score and other attributions were motivated by a manipulative response set. Under these conditions, subjects would help more in order to appear ready for release and would rate any person perceived to have similar problems more harshly.

Psychopathy and Attribution

The empathy manipulation alone had no significant effect on attribution ratings. These results do not coincide with those reported by Brehm and Aderman (1977). In their study, subjects receiving empathy inducing instructions evaluated a victim more favorably (less responsible) than under empathy inhibiting instructions. Several of the reasons mentioned above (e.g., tape content changes, auditory processing problems) may account for this discrepancy in results.

The only empathy manipulation which did produce significant attribution ratings occurred in interaction with the delinquency variable for actor ratings. Psycho-

pathic delinquents rated the actor significantly more responsible under empathy inducing instructions than either the neurotic or contrast groups. This interaction suggests that psychopathic delinquents were unable to be empathic and failed to blame the actor's problem on external factors as the actor would be likely to do. Although this finding was in the predicted direction for the empathy inducing instructions, the empathy inhibiting condition failed to produce significant differences in any group's attribution ratings. Neurotics were expected to rate the actor more responsible under empathy inhibiting instructions but, no significant difference was observed. Since there were no significant interactions or observational set main effects for the other responsibility ratings concerning Tom's speech, luck, staff, and Bob, the one significant interaction for the actor ratings may have been a random result. Further consideration of empathy instructions on attribution of responsibility ratings for different pathology groups should be pursued. Presentation of a visual situation like that reported by Aderman et al. (1974) may be more easily processed by delinquency groups and produce more consistent results.

An unexpected significant main effect for delinquency groups was observed for the actor's speech ratings. Psychopathic delinquents rated Tom's speech significantly more responsible for the distress situation than either

the neurotic or contrast groups. It is possible that this result occurred because of differing interpersonal construct systems in psychopaths. The actor in the taped situation was set up as a victim. To many, the concept of "victim" may carry with it implications of powerlessness, pain, and injustice. However, Widom (1976) demonstrated that psychopaths exhibited extreme idiosyncratic construct patterning when compared to a normal control group. The construct of victim may not carry the same implications for the psychopath as for other delinquency groups. Instead, victim may carry implications of repulsiveness and weakness. Harsher responsibility ratings may then follow from these different construct implications. Further research studying the connection between attribution, construct patterning, and psychopathy would help clarify the relationship.

In summary, this study adds partial support to a research approach which conceptualizes empathy as both a cognitive skill and an emotional response. However, the problems and difficulties of operationalizing empathy were also evident in this study. The different empathy measures did not correlate significantly with each other or with the helping measures as was expected. This raises the question of whether the empathy measures utilized in this study really do represent the theoretical conceptualiza-

tions of empathy or do they represent other processes such as insight or projection? Unfortunately, an answer to this question is not possible from the results of this study and the search for an accurate measure of empathy must continue.

The one clear finding from this study is that psychopathic delinquents are significantly poorer at perspective-taking skills than the other delinquency groups. This is important when considering rehabilitation of the delinquent. Certain treatment approaches may be used more appropriately with psychopathic delinquents than with neurotic delinquents. For example, the role-taking skills training utilized by Chandler (1973) might be more effectively put to use with psychopathic delinquents than with just a general delinquency group. Further examination of role-taking skills training with different delinquency groups is indicated considering the significant perspective-taking skills deficit of psychopathic delinquents when compared to other delinquency groups.

SUMMARY

The main purpose of this study was to examine differences in empathic ability and helping behavior which may exist between psychopathic and neurotic delinquents. There were 52 adolescent males who were randomly assigned either empathy inducing or empathy inhibiting observational instructions and listened to a taped negative outcome distress situation. Following the tape, subjects were asked to make attribution of responsibility ratings and to help the experimenter complete scoring some questionnaire responses. Each subject then completed two self-report measures of affective empathy, Chandler's cognitive perspective-taking measure, and a measure of verbal intelligence. Using scores from the Behavior Problem Checklist, 11 boys were identified as psychopaths, 9 boys were identified as neurotics, and 32 boys were identified as a comparison group of delinquents.

A number of predicitions were made concerning the relationships between the affective, cognitive, and attribution measures of empathy. There were no significant correlations between the affective, cognitive, or attribution measure of empathy. However, the two measures of affective empathy, which included a revised Mehrabian emotional em-

pathy scale and Schalling's Detachment subscale, did significantly correlate so that subjects reporting more interpersonal detachment also reported less emotional empathy.

Empathy and help measures were expected to be positively correlated so that subjects who helped more would also exhibit more empathy. There were no significant correlations in the predicted direction between the affective, cognitive, and attribution measures of empathy and the total or quality of help scores.

Psychopathic delinquents were hypothesized to lack empathic ability and exhibit less helping behavior than the other delinquency groups. Psychopathic delinquents demonstrated significantly poorer cognitive empathy than either the neurotic or comparison groups. No significant differences between delinquency groups were observed on the emotional empathy scale, the Peabody Picture Vocabulary Test, or a measure of socioeconomic status. No significant differences in total help or quality of help scores were observed for delinquency groups, observational sets, or their interaction.

Actor and external-environmental attribution of responsibility ratings were expected to vary with observational instructions and delinquency group membership. However, no consistent pattern of responsibility ratings emerged in this study. Contrary to expectation, responsibility ratings did not significantly vary according to

observational set. Psychopathic delinquents did rate an actor-related variable (manner of speech) significantly more responsible for the outcome than the other delinquency groups, but there were no other significant delinquency group differences in responsibility ratings. Psychopathic delinquents also rated the actor of the taped distress situation more responsible under empathy inducing instructions than the neurotic or comparison delinquency groups. No other significant delinquency group by observational set interaction for attribution ratings was observed.

Empathy, helping, and IQ measures were utilized in a discriminant analysis to classify delinquency group membership. Psychopathic delinquents were successfully differentiated from the other groups using the cognitive empathy, emotional empathy, luck attribution, actor's speech attribution, and IQ measures.

These results are discussed in relation to a cognitive/affective definition of empathy, Hoffman's theory of helping behavior, and the clinical observations of an empathy deficit in psychopathy. Specific suggestions for future investigations were also made.

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APPENDIX A

Consent Form

I _____ understand that my participation in the research being conducted by Norman Reed is voluntary and that I may withdraw from it at any time without consequence.

(signature)

(date)

BEHAVIOR PROBLEM CHECKLIST

SUBJ. No. _____

- | | | | |
|---|---|---|---|
| 0 | 1 | 2 | 1. Oddness, bizarre behavior |
| 0 | 1 | 2 | 2. Restlessness, inability to sit still |
| 0 | 1 | 2 | 3. Attention-seeking, "show-off" behavior |
| 0 | 1 | 2 | 4. Stays out late at night |
| 0 | 1 | 2 | 5. Doesn't know how to have fun; behaves like a
little adult |
| 0 | 1 | 2 | 6. Self-consciousness; easily embarrassed |
| 0 | 1 | 2 | 7. Fixed expression, lack of emotional reactiv-
ity |
| 0 | 1 | 2 | 8. Disruptiveness; tendency to annoy & bother
others |
| 0 | 1 | 2 | 9. Feelings of inferiority |
| 0 | 1 | 2 | 10. Steals in company with others |
| 0 | 1 | 2 | 11. Boisterousness, rowdiness |
| 0 | 1 | 2 | 12. Crying over minor annoyances and hurts |
| 0 | 1 | 2 | 13. Preoccupation; "in a world of his own" |
| 0 | 1 | 2 | 14. Shyness, bashfulness |
| 0 | 1 | 2 | 15. Social withdrawn, preference for solitary
activities |
| 0 | 1 | 2 | 16. Dislike for school |
| 0 | 1 | 2 | 17. Jealousy over attention paid other children |
| 0 | 1 | 2 | 18. Belongs to a gang |
| 0 | 1 | 2 | 19. Repetitive speech |
| 0 | 1 | 2 | 20. Short attention span |
| 0 | 1 | 2 | 21. Lack of self-confidence |
| 0 | 1 | 2 | 22. Inattentiveness to what others say |
| 0 | 1 | 2 | 23. Easily flustered and confused |
| 0 | 1 | 2 | 24. Incoherent speech |
| 0 | 1 | 2 | 25. Fighting |
| 0 | 1 | 2 | 26. Loyal to delinquent friends |
| 0 | 1 | 2 | 27. Temper tantrums |
| 0 | 1 | 2 | 28. Reticence, secretiveness |
| 0 | 1 | 2 | 29. Truancy from school |
| 0 | 1 | 2 | 30. Hypersensitivity; feelings easily hurt |
| 0 | 1 | 2 | 31. Laziness in school and in performance of
other tasks |
| 0 | 1 | 2 | 32. Anxiety, chronic general fearfulness |
| 0 | 1 | 2 | 33. Irresponsibility, undependability |
| 0 | 1 | 2 | 34. Excessive daydreaming |
| 0 | 1 | 2 | 35. Masturbation |
| 0 | 1 | 2 | 36. Has bad companions |
| 0 | 1 | 2 | 37. Tension, inability to relax |
| 0 | 1 | 2 | 38. Disobedience, difficulty in disciplinary
control |
| 0 | 1 | 2 | 39. Depression, chronic sadness |

- 0 1 2 40. Uncooperativeness in group situations
- 0 1 2 41. Aloofness, social reserve
- 0 1 2 42. Passivity, suggestibility; easily led by others
- 0 1 2 43. Clumsiness, awkwardness, poor muscular coordination
- 0 1 2 44. Hyperactivity; "always on the go"
- 0 1 2 45. Distractibility
- 0 1 2 46. Destructiveness in regard to his own and/or other's property
- 0 1 2 47. Negativism, tendency to do the opposite of what is requested
- 0 1 2 48. Impertinence, sauciness
- 0 1 2 49. Sluggishness, lethargy
- 0 1 2 50. Drowsiness
- 0 1 2 51. Profane language, swearing, cursing
- 0 1 2 52. Nervousness, jitteriness, jumpiness; easily startled
- 0 1 2 53. Irritability; hot-tempered, easily aroused to anger
- 0 1 2 54. Enuresis, bed-wetting
- 0 1 2 55. Often has physical complaints, e.g., headaches, stomach aches

REVISED EMOTIONAL EMPATHY SCALE

DATE: _____ SEX: _____ AGE: _____

Instructions: Read each statement and answer True (T) or False (F) as applied to you.

- _____ 1. It makes me sad to see someone who doesn't have any friends.
- _____ 2. People make too much fuss over the feelings of animals.
- _____ 3. I get angry when someone shows too much love.
- _____ 4. I am bothered by unhappy people who feel sorry for themselves.
- _____ 5. I am nervous if others around me are nervous.
- _____ 6. I find it silly for people to cry when very happy.
- _____ 7. I get too involved with a friend's problems.
- _____ 8. Sometimes the words of a love song make me happy or sad.
- _____ 9. I am sad when I tell people bad news.
- _____ 10. The people around me make me grouchy.
- _____ 11. Most people from other countries I have met seemed unfriendly.
- _____ 12. I would rather be a social (welfare) worker than work at training people to do jobs.
- _____ 13. I don't get upset just because a friend is upset.
- _____ 14. I like to watch people open presents.
- _____ 15. Lonely people are unfriendly.
- _____ 16. Seeing people cry upsets me.
- _____ 17. Some songs make me happy.

- ___ 18. I sometimes feel just like the hero of a story.
- ___ 19. I get very angry when I see someone being treated wrong.
- ___ 20. I am calm even if people around me worry about things.
- ___ 21. When a friend starts to talk about his problems, I try to talk about something else.
- ___ 22. Somebody laughing doesn't make me laugh.
- ___ 23. Sometimes at the movies I laugh at people who cry about the pictures.
- ___ 24. I can make decisions without being bothered by other people's feelings.
- ___ 25. I get sad and unhappy if people around me are sad.
- ___ 26. It is hard for me to see how some things upset people so much.
- ___ 27. I am very upset when I see an animal in pain.
- ___ 28. Getting excited or very interested in books or movies is a little silly.
- ___ 29. I feel uneasy when I see helpless old people.
- ___ 30. Sometimes I feel angry when I see someone cry.
- ___ 31. I get very involved when I watch a movie.
- ___ 32. I often find that I can remain calm in spite of the excitement around me.
- ___ 33. Little children sometimes cry for no reason.
- ___ 34. I do what I want to do, whether anybody likes it or not.
- ___ 35. A person is better off if he doesn't trust anyone.
- ___ 36. I feel tired a good deal of the time.
- ___ 37. I don't think I'm quite as happy as others seem to be.

- ___ 38. The only way to make big money is to steal it.
- ___ 39. It seems as if people are always telling me what to do, or how to do things.

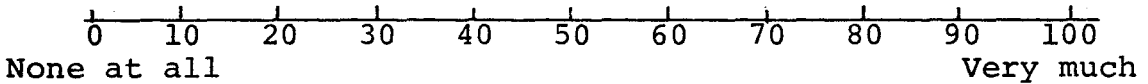
DETACHMENT SCALE

Instructions: Read each statement and answer True (T) or False (F) as applied to you.

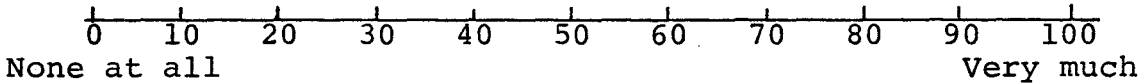
- ___ 1. It is easy for me to get close to people
- ___ 2. I want to confide in someone, when I am worried and unhappy.
- ___ 3. I avoid people who are interested in my personal life.
- ___ 4. I feel uncomfortable when people take me into their confidence.
- ___ 5. I am deeply moved by other people's misfortunes.
- ___ 6. I feel best when I keep people at a certain distance.
- ___ 7. I prefer to avoid involving myself in other people's personal problems.
- ___ 8. People generally think that I hide my feelings so that they have difficulties in understanding me.
- ___ 9. I consider myself reserved and a little cold rather than kind and warm.
- ___ 10. People often come to me with their troubles.

How much do you think that Tom's problem on the tape was caused by:

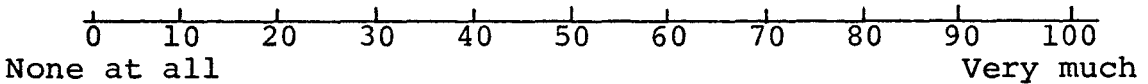
1. Tom, himself.



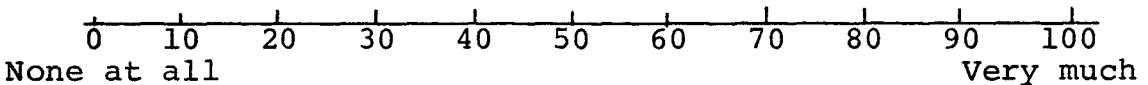
2. Tom's friend, Bob.



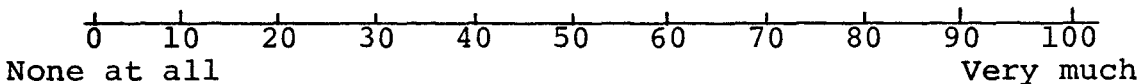
3. The staff.



4. Tom's luck.



5. Tom's way of talking.



TAPE CONTENT

Bob: Hi, Tom!

Tom: Hi, Bob!

Bob: How do you like it here at the Home so far?

Tom: Well, you know . . .

Bob: Yeah, I know what you mean. . . . Say, you're really workin up a sweat with that mop.

Tom: You better believe it! I've been mopping the hallways since breakfast and I still have to wax all of them. I was suppose to go to the gym now to play some B-ball but the staff won't let me go until I'm finished with this mopping. Everyone else has finished their work and are already at the gym. The way this moppin is going, I probably won't play ball at all today.

Bob: Yeah . . . when what's going on° How come you're doing the floors?

Tom: Well, for some reason the jobs were all changed around this morning and I got stuck with all the mopping and waxing for the week.

Bob: Say, that's too bad. That's hard work. How come you're doing it all alone? When I had to do the floors, two other guys were assigned to work with me. I only had to do a small part of the ahll and we finished it in no time at all.

Tom: Yeah, well I guess they haven't sent enough guys here this week. There are only enough guys here to give one guy all of the mopping for the whole week. So, here I am. . . .

Bob: Well, I'm glad it is you and not me. I'd give you a hand but I've got schoolwork due tomorrow.

Tom: Yeah, so do I.

Bob: Well, take it easy, Tom.

Tom: Yeah, when I get a chance.

APPROVAL SHEET

The dissertation submitted by Norman Reed has been read and approved by the following committee:

Dr. Jeanne Foley, Director
Professor, Psychology, Loyola

Dr. James E. Johnson
Associate Professor, Psychology, Loyola

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

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

June 5, 1980
Date

Jeanne M. Foley
Director's Signature