VIOLENT AND NONVIOLENT JUVENILE OFFENDERS: AN ASSESSMENT OF DIFFERENCES IN OBJECT RELATIONS FUNCTIONING USING THE THEMATIC APPERCEPTION TEST

DISSERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Randall J. Cox, B. A.
Denton, Texas
December, 1994
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TAT stories and demographic information of 30 violent and 30 nonviolent juvenile delinquents were obtained. Institutional assessment records at Dallas County Juvenile Department (DCJD) served as the data base for this study. Differences with respect to object relations functioning between juveniles charged with two categories of index offenses: property offenses and aggravated assault were examined. Object relations were assessed utilizing a scoring system designed for use with the Thematic Apperception Test (TAT). The scoring system encompasses a psychoanalytic perspective and consists of four dimensions representing separate but interrelated aspects of object relations. It was hypothesized that juvenile delinquents who commit violent crimes would exhibit lower object relations functioning as compared to juvenile delinquents who commit nonviolent crimes.

Contrary to what was predicted, violent juvenile offenders did not exhibit more pathological object relations functioning on any of the four scales. Nonviolent juvenile
offenders did evidence a significantly higher frequency of high level responses on the scale measuring affect-tone of relationship paradigms. The possible relationship between a proclivity for violence and a relative absence of benevolent representations was discussed.
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CHAPTER I

INTRODUCTION

Juvenile delinquency has an impact on nearly all aspects of society. It affects all members of society regardless of social class, age, education, race, and gender. Conformity to societal demands and expectations is crucial to the successful functioning of any community. A complex system of laws has evolved to ensure conformity by members of our society. Throughout most of history the prevailing philosophy was one of protecting the interests and rights of society, and children who violated those rights were severely punished. Only during the latter part of the 19th century were juveniles afforded special consideration. Due to the growing view that juveniles should not be held to the same level of responsibility as adults, a separate court system for juveniles was established. The first juvenile court was established in Cook County, Illinois in 1899. Viewed as parens patriae, i.e., in place of parents (Fuhrmann, 1990), it represented the movement away from guilt and punishment, and toward an emphasis on understanding and guidance (Levine & Levine, 1970). The Illinois Juvenile Court Act of 1899 provided a juvenile system model, which was replicated throughout the
United States. By 1925, all but two states had juvenile courts (Footlick, 1977). The juvenile justice system has attempted to utilize psychological principles to understand youth who engage in criminal activity. Each year, the juvenile court system spends millions of dollars for traditional psychological assessment of delinquent youth. The comprehensive assessments of their emotional, intellectual, social, and educational functioning are used by the courts in the dispositional process.

The subject of juvenile delinquency has become an area of increasing concern. Schools and neighborhoods throughout this country are being forced to deal with the increasing problem of juvenile violence. Gentry and Eron (1993) wrote, "The American Psychological Association (APA) Commission on Violence and Youth, established by the Public Interest Directorate in May 1991, was organized to bring psychological expertise to bear on the problems society faces as growing numbers of young people become victims, witnesses, or perpetrators of interpersonal violence or live under the constant threat of violence" (p. 89). In an executive summary the Commission on Violence and Youth (APA, 1993) wrote:

Laying down the groundwork for preventing violence begins early in a child’s development. In the early years, children learn fundamental ways of dealing with social conflict. Everyone who comes
into contact with the child—parents, educators, childcare providers, healthcare providers—has the potential to contribute to a child’s attitudes toward violence and propensity toward violent behavior. (p. 5)

This project aims to add to our understanding of violence and youth by focusing on the developmental aspects of violent delinquent behavior. A traditional personality assessment instrument will be used to examine the differences between violent and nonviolent juvenile delinquents.

The term juvenile generally refers to individuals between 10 and 17 years of age. Delinquency refers to illegal activities committed by children or adolescents. Unfortunately, the term delinquent has been used to characterize a wide range of adolescent behavior from truancy to serious felonies. Researchers must make concerted efforts at clearly defining delinquency so as to allow for the comparison of more and less severe delinquents. Some have chosen to distinguish between status and index offenses. Status offenses comprise those activities for which an adult would not be arrested (e.g., running away, truancy, alcohol use). Index offenses on the other hand, include activities such as murder, rape, aggravated assault, burglary, larceny, and arson. Researchers typically distinguish between violent
(e.g., murder, aggravated assault, rape) and property
(e.g., burglary, larceny, arson) index offenses.

During 1990, male juveniles between the ages of 10 and
17 years accounted for 15.9% of arrests for violent crimes,
and 32.3% of arrests for property crimes (Federal Bureau of
Investigation, 1991). The number of male juveniles arrested
for violent crimes increased 36.6% between 1986 and 1990.
Male juvenile arrests for property crimes increased 2.7%
during the same period. Violent and property arrests
between 1989 and 1990 among male juveniles increased 15.4%
and 1.8% respectively.

Research aimed at understanding and discriminating
between violent and nonviolent juvenile offenders will
contribute meaningful information to the study of youth and
violence. The present study will examine differences with
respect to personality structure and functioning between
juveniles charged with two categories of index offenses,
specifically felony property offenses and aggravated
assault. Uniform Crime Reports (Federal Bureau of
Investigation, 1991) defines aggravated assault as:

An unlawful attack by one person upon another for the
purpose of inflicting severe or aggravated bodily
injury. This type of assault usually is accompanied by
the use of a weapon or by means likely to produce death
or great bodily harm. Simple assaults are excluded.
(p. 327)
With simple assault, a misdemeanor, no weapon is used, and serious or aggravated injury does not result. Aggravated assault is a felony that carries more severe penalties than simple assault. In contrast, property offenses do not involve direct bodily assaults by one person against another, but rather involve unlawful acts against property (e.g., burglary, larceny, and arson).

**Etiology of Juvenile Delinquency**

**Psychosocial factors.** Concerns over childhood delinquency led to the formation of the Juvenile Psychopathic Institute in Chicago as early as 1909, directed by William Healy. In *The Individual Delinquent* Dr. Healy (1915) emphasized the importance of socioeconomic factors in the development of delinquency. He intended to thwart speculations of genetic or intellectual defects. Like Healy, researchers from various disciplines have attempted to identify early familial and environmental influences on juvenile delinquency. Levy (1937) suggested that grossly disturbed relationships with the maternal figure contributed to the development of repeated delinquency. O'Neal, Robins, King and Schaefer (1962) suggested that various forms of "parental rejection" (e.g., coldness, desertion, failure to supervise and discipline) are related to the formation of the antisocial personality (p. 1116). They asserted that the most important parental behaviors are neglect and abandonment. They demonstrated that for those diagnosed
sociopathic as adults, antisocial behavior extended far back into childhood. Huston (cited in O’Neal et al., 1962) remarked, "A remarkable result is that 98% of the persons diagnosed sociopathic personality showed antisocial behavior 30-odd years earlier. The patterns of disordered behavior appearing in childhood persist with considerable tenacity" (p. 1123).

Sociologists have generally criticized psychiatric theorists for failing to consider the significance of social forces, class biases, and the like in the occurrence of delinquent behavior. Merton (1957), for example, asserted that delinquency was simply a response of deprived individuals who desperately sought the material goods available to most of society. Building on Merton’s views, Cloward and Ohlin (1960) implicated increased access to unlawful roles (e.g., gang membership) in the occurrence of delinquency. Despite Binder’s (1987) contention that "Within the United States, the domination of the field by sociology is so great that it is not much of an exaggeration to state that the field of scientific study of delinquency is a subdiscipline of sociology" (p. 3), the present study will study juvenile delinquency from a distinctively psychological perspective.

Biological theories of aggression and criminality. Aggression is generally defined in the literature as verbal and/or physical behavior that is destructive in nature.
Aggression is considered an act, whereas anger is associated with an emotional state (Lochman, 1984). Research has demonstrated that the innate capacity for aggression has a biological origin. Namely, aggression is thought to be related to the functions of the hippocampus, amygdaloid nucleus, and ventromedial nucleus of the hypothalamus (Carlson, 1986). Berman (1984) suggested that the aggressive drive is modulated by activities of the temporal lobes (i.e., memory) and the frontal lobes (i.e., reasoning, judgment).

A complete review of potential biological contributions to aggression and criminality is well beyond the scope of this paper; therefore, only a cursory discussion of the research will be presented. Biological perspectives on aggression and criminality have been given serious consideration. The most common explanations have focused on genetic, hormonal, and neural causes of aggression. Lange (1928) conducted an early twin study to examine the potential role of genetic inheritance in criminality. He looked at prison sentences among thirteen monozygotic (MZ) and seventeen dizygotic (DZ) twin pairs. Ten of the thirteen MZ twins of individuals in prison had also served prison sentences, whereas only two of the seventeen DZ twins had been imprisoned. Mednick and Hutchings (1978) reported criminality concordance rates between twin pairs of 36% and 12.5% respectively. After reviewing later twin studies,
Trasler (1987) suggested that there are fewer differences between MZ and DZ twin pairs among juvenile delinquents. Sex chromosome abnormalities have been associated with antisocial behavior disorders. Hunter's (1966) survey of patients with more than one X (Klinefelter's Syndrome) chromosome included an unusually high percentage of men with antisocial behavior problems (64.5% compared with 19.5% for all male patients). Kahn, Reed, Bates, Coates, and Everitt (1976) reported that juveniles with abnormally long Y chromosomes tended to have more extensive criminal histories than other juveniles from similar backgrounds. Witkin et al., (1978) compared XXY, XYY, and normal males and concluded that the groups were not significantly different concerning the incidence of violent crime.

Aggressiveness has been linked to the male hormone testosterone. Kruez and Rose (1972) reported that a high testosterone level was related to adolescent aggression among males with a history of violent crime. Reinisch (1981) reported that exposure to synthetic testosterone, commonly used to prevent miscarriages, has been associated with higher male aggression in adulthood.

Elliott (1978) described a dyscontrol syndrome in which complications related to head injury, brain tumors, epilepsy, and infections of the nervous system result in brain abnormalities that precipitate aggression. The ability to treat aggression related to brain abnormalities
depends on the biological mechanism involved. For instance, aggression related to temporal lobe epilepsy may be effectively managed by anticonvulsive drug treatment (Carlson, 1986). Head injury on the other hand is much less likely to respond to a medication regimen.

Olweus (1979) reviewed several longitudinal studies that examined aggression in males from childhood through adolescence. He concluded that aggressive behavior in males was nearly as stable a characteristic as intelligence. He suggested that the findings strongly supported the notion that personality variables are related to aggressive adolescent behavior. Another review concluded that delinquent behavior is most stable in children who, at an early age, evidence a variety of antisocial behaviors in a variety of settings (Loeber, 1982). These reviews were corroborated by a longitudinal study that examined the stability of aggression over time and across generations (Huesmann, Lefkowitz, Eron, & Walder, 1984).

Considering the multifaceted nature of aggression, it is unlikely that sociological or biological explanations alone will provide the breadth of understanding needed to effectively discriminate between violent and nonviolent juvenile offenders. An increased understanding of the role of aggression in juvenile delinquency is essential to providing more effective assessment and treatment. It is expected that the present study will contribute to the
understanding of juvenile delinquency by focusing on differences with respect to personality structure and functioning between juveniles charged with violent and nonviolent crimes.

Classification of Juvenile Delinquency

Juvenile delinquency has been classified by describing characteristics as well as by formulating diagnostic criteria. In an attempt to improve the prediction and prevention of juvenile delinquency, Glueck and Glueck (1950) focused on characteristics and experiences of individual children which influence the development of delinquent behavior. They reported that delinquents tend to be emotionally unstable, muscular, assertive, and defiant. Glueck and Glueck (1970) stressed that the most significant psychological factors were destructiveness and nonsubmissiveness; the most significant environmental factors were poor supervision, lax discipline, and poor parental cohesiveness. The Glueck’s research attempted to improve the prediction and prevention of juvenile delinquency.

Jenkins (1973) characterized three types of delinquency. The "Unsocialized Aggressive" type included individuals who were hostile, violent, destructive, and lacked a sense of guilt (p. 59). The "Socialized" type included individuals who belonged to something analogous to a gang (p. 71). The "Overinhibited" type included
individuals who were seclusive, shy, and apathetic (p. 29). Jenkins (1973) speculated that the three types of delinquents are caused by rejecting, neglecting, or critical types parents, respectfully. Similarly, Quay (1975) delineated four types of delinquents. The "Unsocialized-Psychopathic" type is represented by aggressive, hostile, and impulsive individuals who lack regard for others (p. 384). The "Neurotic-Disturbed" type is represented by anxious and seclusive individuals who experience guilt (p. 384). The "Socialized-Subcultural" type is represented by gang members (p. 384). The "Inadequate-Immature" type is represented by passive and dependent individuals (p. 384).

**Diagnostic and Statistical Manual.** Since its inception, the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM, American Psychiatric Association, 1952, 1968, 1980, 1987) has attempted to provide reliable and valid descriptions of individuals who exhibit antisocial behavior. Modlin (1983) offered a brief historical perspective regarding the diagnosis of Antisocial Personality Disorder. The diagnosis of sociopathic personality disturbance was included in the original DSM-I (APA, 1952). Modlin (1983) pointed out that the DSM-I listed three divisions of psychopathic states: pathological sexuality, pathological emotionality and asocial or amoral trends. With the DSM-II (APA, 1968) the term psychopath was changed to sociopath. Later in the DSM-III (APA, 1980) the
term sociopath was changed to the currently used term of antisocial personality disorder. Starting with the DSM-I classification, the sociopathic personality disturbance was primarily considered a personality disorder, and as such was characterized by a life-long pattern of behavior. To this end, the DSM-II (APA, 1968) introduced provisions for childhood disorders, which included an "unsocialized aggressive reaction" (p. 50). This category encompassed characteristics such as lying, teasing others in a hostile manner, temper tantrums, and stealing. Antisocial personality of adulthood was thought to originate from extreme cases of childhood unsocialized aggressive reaction (Jenkins, 1960). DSM-III (APA, 1980) offered four categories of childhood conduct disorder: undersocialized, nonaggressive; undersocialized, aggressive; socialized, nonaggressive; and socialized, aggressive. In the current DSM-III-R (1987) system, a minimum of three out of 13 behaviors is required to give the diagnosis of "conduct disorder" (p. 53). Kernberg (1992) stressed that DSM-III-R appropriately emphasizes childhood origins of antisocial character pathology. Throughout the evolution of the DSM classification system many early psychodynamic formulations have been discarded and replaced with more readily observable behavioral criteria. Lewis and Balla (1976) conceded that early psychodynamic explanations of delinquency brought with them a more empathic understanding.
This statement seems significant considering the stinging criticism that Lewis and her colleagues have directed at psychiatric contributions. Referring to the broad nature of the term "sociopathy," Lewis and Balla (1976) wrote:

While the judicial and correctional systems understandably looked to psychiatry to assist them in fathoming the puzzle of deviant behavior, psychiatry persisted in furnishing them with synonyms for delinquency or criminality, adding little to the understanding of youthful or adult deviance. (p. 10)

In recent years many authors have criticized the current DSM criteria for relying almost exclusively on behavioral descriptors. Commenting on DSM-III personality disorders, Frances (1980) suggested that under comparable criteria 80% of criminals would receive the diagnosis of antisocial personality disorder. McManus (1985), in a study of incarcerated delinquents, reported that 90% of the subjects met the diagnostic criteria for conduct disorder. Gacono and Meloy (1988) argued that the failure of current DSM-III-R criteria to combine behavioral, cognitive and psychodynamic characteristics has resulted in the antisocial personality disorder representing a heterogeneous group that does not adequately describe the core characteristics of the psychopath. Gacono (1990) asserted that the DSM-III-R merely classifies a group of individuals who have committed criminal offenses. Similarly, Kernberg (1989) criticized
DSM-III-R criteria for relying too heavily on descriptions of antisocial behavior and failing to consider important pathological personality traits. Commenting specifically on the diagnosis of conduct disorder, Kernberg (1992) wrote, "Unfortunately, however, in its emphasis on the criminal aspect, it includes delinquents with very different personality makeup and blurs the distinction between sociocultural and economic determinants of delinquency, on the one hand, and psychopathology of personality, on the other" (p. 68).

Pathological personality traits were clearly emphasized by Cleckley (1941/1976), in his book, Mask of Sanity, arguably one of the most commonly cited books in the psychopathic literature. Cleckley (1941/1976) provided a list of the primary symptoms of psychopathy, which included such things as superficial charm and intelligence; absence of delusions or other irrational thinking; absence of nervousness or psychoneurotic manifestations; unreliability, untruthfulness and insincerity; lack of remorse or shame; inadequately motivated antisocial behavior; poor judgement and failure to learn by experience; pathological egocentricity and incapacity for love; general poverty of major affective reactions; specific loss of insight; unresponsiveness in interpersonal relations; fantastic and uninviting behavior with drink and sometimes without; suicide rarely carried out; sex life impersonal, trivial and
poorly integrated; and failure to follow any life plan (pp. 337-338). His emphasis on personality traits has been well received by the research community. Modlin (1983) suggested that while Cleckley (1941) described an actual personality type, the DSM-III merely describes a behavior disorder. Nonetheless, the DSM-III-R system has continually shied away from such formulations of personality and has chosen instead to focus on directly observable and less meaningful criteria. Holzman and Perry (1987) identified the need for research that demonstrates that the psychodynamic perspective adds information beyond the descriptive framework of personality traits currently used. The article asserted the need for research that demonstrates that the psychodynamic perspective adds information beyond the descriptive framework of personality traits currently used. This project aims to explore the usefulness of psychodynamic formulations in augmenting our understanding of juvenile delinquency.

**Prediction and Measurement of Juvenile Delinquency**

Researchers have been interested in identifying youths at risk for delinquency. Many have attempted to uncover reliable predictors of delinquent behavior. Most investigators concur on the correlates of delinquency in general, however, studies which attempt to delineate the particular correlates of violent offending are limited (Henggeler, 1989; Quay, 1987). Dorothy Lewis and her
colleagues have extensively researched the relationship between central nervous system complications and violent behavior. Lewis (1983) argued that many violent delinquent behaviors may be related to some underlying neurological vulnerability (e.g., seizure disorder, epilepsy, head injury). Neurological vulnerabilities theoretically diminish the individual's ability to control impulses. Brickman, McManus, Grapentine, and Alessi (1984) similarly provided evidence of neuropsychological abnormalities in delinquent adolescents. Tarter, Hegedus, Alterman and Katz-Garris (1983) suggested that their results cast doubt on previous findings relating neurological vulnerabilities in juvenile delinquents. They compared juvenile violent, nonviolent, and sexual offenders on several intellectual, neuropsychological, and psychoeducational measures and found group differences. Tarter et al. (1983) specifically reported that cognitive capacity was not related to the severity of violent behavior. The authors asserted that their subject groups more closely matched the broader noninstitutionalized population of delinquent adolescents. Tarter et al. (1983) contended that there may be neurological vulnerabilities in a subset of juvenile offenders, but they caution against generalizing such findings to the population of juvenile offenders. Similarly, McManus (1985) was unable to find significant indications of neurological dysfunction among a more
heterogeneous group of juvenile delinquents. Miller (1988) theorized about the possible involvement of pre-frontal or left hemispheric regions of the brain in aggressive behavior. He cautioned against retreating into what he termed "neurodeterminism," arguing instead, for an approach to the study of delinquency that integrates neuropsychological findings with the larger body of personality and social theory (p. 409). Other researchers have explored the relationship between specific organically related difficulties and delinquency. Cantwell (1981) reported a relationship between childhood attention deficit disorder and subsequent delinquent behavior. Glueck and Glueck (1950) found a significant correlation between antisocial behavior and learning disabilities. Reading disabilities in particular have been associated with childhood delinquency (Tarnapal, 1970). Rutter, Tizard and Whitmore (1970) reported that one third of the children with conduct disorders had discernable reading disabilities.

Specific measures of cognitive functioning have been used to predict delinquent behavior. Wechsler (1958) observed that a significant verbal IQ (VIQ) -- performance IQ (PIQ) discrepancy was the most significant feature of the psychopath's profile. Since then, the PIQ greater than VIQ discrepancy has been used to define psychopathy in a number of studies examining violence and other forms of antisocial behavior. Haynes and Bensch (1981) suggested that there is
an association between the degree of VIQ — PIQ discrepancy and the severity of delinquent behavior. Tarter, Hegedus, Winsten, and Alterman (1985) reported a significant PIQ greater than VIQ discrepancy when comparing delinquents with a normal control group; however, the PIQ greater than VIQ discrepancy was not significantly different between violent and nonviolent juvenile delinquents. These results are similar to those reported by Hays, Soloway, and Schreiner (1978). Walsh and Beyer (1986) reported that the VIQ - PIQ discrepancy discriminated between delinquents and normals. Although research has demonstrated that the PIQ greater than VIQ discrepancy may be a potentially useful diagnostic discriminator with delinquents, some researchers have questioned the results (Matarazzo, 1972; Prentice & Kelly, 1963). More generally, Hays et al. (1978) demonstrated that the intellectual pattern of delinquent juveniles was similar to that of their adult counterparts. Namely that a lower level of intellectual functioning is seen in violent juvenile offenders compared to nonviolent juvenile offenders.

Other researchers have looked at a history of family abuse and neglect as potential predictors of violent delinquency. Lewis, Shanok and Pincus (1979) found that 75% of their violent juvenile group had been physically abused compared with 33% of their less violent juvenile group. Walsh, Beyer, and Petee (1987) reported that abuse/neglect
was a strong predictor of violent behavior among a heterogeneous sample of juvenile delinquents. Lewis, Pincus, Lovely, Spitzer, and Moy (1987) compared seriously delinquent juvenile offenders with a demographically similar nondelinquent population on several clinical and family variables. The authors reported that delinquent juveniles were more likely to have come from families with histories of extreme abuse and violence, more likely to exhibit severe psychiatric symptoms (especially paranoid ideation), and more likely to suffer subtle neurological impairment. These variables were reportedly especially powerful discriminators when combined. Lewis et al. (1987) asserted "that the combination of neurological impairment, limbic dysfunction, episodic psychotic symptoms, and a history of severe abuse and/or family violence creates within the individual the matrix for the occurrence of violence" (p. 750). Lewis, Lovely, Yeager, and Della Femina (1989) concluded from their follow-up study that a history of juvenile violence alone is an unreliable predictor of adult criminal violence. They suggested that children with combinations of psychiatric, neurological, and cognitive vulnerabilities along with abusive/violent family environments were most likely to commit violent offenses as adults.

Stouthamer-Loeber and Loeber (1988) extensively reviewed the use of prediction data in understanding juvenile delinquency. The authors suggest that the research
indicates that an individual's own behavior predicts later delinquency better than variables related to his or her environment (e.g., SES, parents' marital relations, discipline, and parental criminality and aggressiveness). It is interesting to note, however, that Stouthamer-Loeber and Loeber (1988) found that variables related to poor supervision and parental rejection predicted delinquency as well as a child's own behavior. They conclude that the evidence clearly suggest that juvenile delinquency is best predicted by considering a combination of variables. Due to the inherent problems of high proportions of false-positive and false-negative errors, Stouthamer-Loeber and Loeber (1988) urge caution when applying predictive data to individual cases. The authors wrote:

Our study of prediction data has taught us to be hesitant about expecting that a single set of causal factors can explain the delinquent behavior of large populations of youngsters. Instead, it is much more likely that there are different groups of offenders whose behavior is influenced by unique as well as common causal factors. (p. 348)

Tolan and Lorion (1988) similarly asserted that there are many variables that individually correlate significantly with delinquency, but account for only a very small portion of the variance in delinquency type. In their study of 5th through 12th graders, Tolan and Lorion (1988) concluded:
The importance attributed previously to individual and school factors, family demographics, and social status is not supported using multivariate procedures. Their explanatory power seems more directly attributable to onset age and family systemic/interactional characteristics. (p. 559)

As mentioned previously, juvenile courts spend millions each year on the psychological assessment of juvenile delinquents. Pinkerman, Haynes, and Keiser (1993) wrote, "The purpose of a typical psychological evaluation of a delinquent male is to determine the degree of psychopathology present, to address treatment and placement needs and to assess dangerousness" (p. 10). Haynes and Peltier (1983) surveyed 107 psychologists from 35 courts and institutions to ascertain their typical test battery. Nearly 70% cited the Wechsler Intelligence Scale for Children -- Revised, the Rorschach, projective drawings, and the Bender-Gestalt. Over 50% cited the Wide Range Achievement Test -- Revised and the Thematic Apperception Test. Interestingly, of the 337 personality measures mentioned by respondents, 80% were projective measures as compared to 20% that were self-report inventories. Haynes and Peltier (1985) specifically examined the use of the TAT in juvenile forensic settings. They reported that card 1 (boy and violin) and card 6BM (mother and son) are the two most frequently administered TAT cards. Most notably,
Haynes and Peltier's (1985) found that less than 5% of their respondents specified the use of any scoring system in evaluation of the TAT. In the present study, the utility of a specialized TAT scoring system will be examined as a potential way to assess risk factors of violence.

Johnson-Niarhos and Routh (1992) argued that traditional assessment techniques yield results which have low validity and exert negligible influence on the juvenile court decision-making process. Grisso (1987) suggested that specialized assessment instruments that integrate traditional intellectual and personality inventories with specific legal questions (e.g., recidivism, dangerousness) need to be developed for use with forensic populations.

Self-report inventories like the Minnesota Multiphasic Personality Inventory (MMPI) have been used to predict aggressiveness among adolescents. Hathaway and Monachesi (1963) reported that MMPI scales 4 (Pd), & (Sc), and 9 (Ma) most clearly predicted delinquent behavior in general. Huesmann, Lefkowitz, and Eron (1978) more specifically found that aggressive ratings were correlated with MMPI scales $\Psi$, 4 (Pd), 6 (Pa), & (Sc), and 9 (Ma). Huesmann et al. (1978) suggested that a linear summation of T-scores for scales $\Psi$, 4 (Pd), and 9 (Ma) effectively predicted the delinquency of adolescents. Using MMPI profiles, Cornell, Miller and Benedek (1988) were unable to distinguish juveniles who were charged with homicide from a group of juveniles charged
with larceny (auto theft or breaking and entering). Cornell et al. (1988) suggested that seriousness of the crime does not correspond with level of psychopathology as measured by the MMPI. Monahan (1981) has suggested that current measures of potential violence have poor predictive validity. The lack of clear evidence suggests a need for alternative ways to discriminate violent from nonviolent juvenile offenders. This study chooses to examine the utility of psychodynamic formulations as a way to understand the differences between violent and nonviolent juvenile offenders. An emphasis on developmental differences within the psychodynamic context will serve to expand our understanding of juvenile delinquency.

**Historical Overview of Object Relations Theory**

**Sigmund Freud.** Although Sigmund Freud referred to interpersonal relations, his theory primarily viewed others as the object of one's instincts. Though Freud chose to focus on drives, he did not consider relations with others to be unimportant. Later in his theorizing, Freud addressed the problem of ego and its relations to the external world and other people. Object relations theorists have expanded psychoanalytic formulations to include the domain of human relationships. Such theorists have suggested that the psyche is formed primarily by a process of internalizing relationships and secondarily by drives and instinctual impulses. Klein and Tribich (1981) wrote, "The unique,
central, and unitary claim of object relations theorists is that optimal development and individuation is predicated upon an optimal early human relationship" (p. 30). Some believe that in his later writings Freud (1917/1957, 1921/1955, 1923/1961, 1926/1959) laid the foundation that allowed for subsequent elaborations of object relations theories. There is no question that Freud continued to develop psychoanalytic theory throughout his lifetime. Freud (1905/1953) initially emphasized drives in his topographical theory of personality. Later Freud (1923/1961) became interested in personality organization and introduced his structural theory of personality. Clearly Freud never intended for psychoanalytic theory to be static. Modell (1968) asserted, "There is in Freud, I submit, a latent but not manifest theory of object relations" (p. 7). Tuttman (1981) reviewed Freud's ideas concerning object relations and suggested that his later writings focused on the importance of the early mother-child relationship as the first and strongest object relation, the foundation for all later relationships. Hamilton (1988) suggested that several of Freud's works, Mourning and Melancholia (1917/1957) Group Psychology and the Analysis of the Ego (1921/1955), and Inhibitions, Symptoms, and Anxiety (1926/1959) emphasized the manner in which individuals internalize and identify with others. He asserted, "In Inhibitions, Symptoms, and Anxiety, Freud verged on
recognition of the importance of attachment to the mother and fear of losing her over and above sexual and aggressive drives as the major determinants of human behavior" (p. 298). Kernberg (1984) asserted, "Psychoanalysis as a general theory constitutes an object relations theory" (p. 56).

Object. There is admittedly confusion in the literature concerning the meaning of the term object. Different schools of thought refer to objects in various ways. Freud and traditional theorist understand the role of objects strictly in relation to drives, objects are merely inhibitors, facilitators, or targets of drives. At the other extreme are theorist like Harry Stack Sullivan (1953) and W. R. D. Fairbairn (1954) who provided a conceptual framework in which relationships with objects, not drives, constitute the primary dynamic processes within mental life. In the middle are theorists who have attempted to preserve as much as possible of classical drive theory (e.g., Klein, Winnicott, Jacobson, Kernberg). Kernberg (1976) referred to an object as reflecting relations with others that, may be internal or external, fantasy or real. Hamilton (1988) distinguished between internal and external objects, writing, "An external object is a person, place, or thing invested with emotional energy. An internal object is an idea, fantasy, or memory pertaining to a person, place, or thing" (p. 7). This differs from Freud’s (1927/1961) notion
of an object as the target of a libidinal drive. Writings in object relations literature make reference to an object in both ways.

**Self and ego.** The terms self and ego are used throughout the object relations literature and can sometimes be difficult to understand. Hamilton (1988) suggested that the term ego is confusing because it can mean self, organizer, or organization. For Hamilton (1988) the ego represents a set of functions. Freud (1923/1961) in *The Ego and the Id* clearly did not differentiate between ego as organizer and ego as organization. For Hartmann (1952, 1959), ego represented both organizer and organization. Klein (1932/1954) used the ego and self interchangeably. Jacobson (1964) described ego as the organizer in the formation of self representations. According to Hamilton (1988), "Self refers to conscious and unconscious mental representations that pertain to one's own person" (p. 72). Development of self stems from a sense of self as separate from object. The characteristics of relationships that are incorporated as part of the self directly affects how one relates and views others in relationships (Hamilton, 1988).

**Contributions from the British School**

Several theorists, through their emphasis on the dynamics of early relationships, made significant contributions to the development of object relations theory. Fairbairn (1954) through an attempt to significantly revise
traditional Freudian instinct theory, formulated a developmental model that was based on the internalization of object relations. In contrast to another theorist of the time, Melanie Klein, Fairbairn explicitly described his conceptualizations as an object relations theory. During this period, Anna Freud and Heinz Hartmann provided contrasting viewpoints that emphasized the ego psychology approach. Fairbairn (1954) asserted that behavior is driven not only by seeking pleasure but also by seeking meaningful relationships. In contrast to the traditional psychoanalytic view that libido was pleasure seeking, Fairbairn argued that libido was primarily object seeking. He rejected Freud's psychosexual stages in favor of stages of relationships. His stages of relationships progress from a state of dependent psychological merger to mature dependence where differences are acknowledged. Fairbairn's views were distinct in that he emphasized actual interpersonal relationships and did not focus on fantasy or imagined relationships. For Fairbairn, bad objects result from internalized aspects of actual rejection or deprivation. He focused on the relationship between early childhood experience (e.g., abuse and neglect) and feelings of hostility. In summary, Fairbairn's views are in glaring contrast with theorists closely aligned with traditional Freudian notions of innate drives. Fairbairn (1954) rejected Freud's dual instinct theory but he accepted
"Freud's view that libido and aggression constitute the two primary dynamic factors in mental life" (p. 145). Kernberg (1980) agreed with Fairbairn's contention that one rarely finds pure drives in clinical situations, but rather witnesses the triggering of affects which reflect such drives.

Melanie Klein, through her application of psychoanalytic technique to children, contributed greatly to the growth of object relations theory. Cashdan (1988) referred to her as "the mother of object relations" (p. 8). Others among the psychoanalytic mainstream were threatened by the dogmatic style of her writings. This led to an unmistakable division between the Kleinian school developed in Great Britain and psychoanalytic ego psychology. Klein emphasized instinctual drives in her writings. Klein's basic theoretical assumptions were in line with Freud's (1920/1955) Dual Instinct Theory. She specifically considered the death instinct to be the foundation of aggression throughout development. She stressed the importance of the aggressive drive in determining internal object relations. Kernberg (1980) asserted that Klein's notion of the death instinct as decisive and initial determinants of anxiety represented unfounded extensions of Freud's hypothesis. Klein discovered that traditional notions of psychoanalytic technique inadequately reflected her work with children. Due to childrens' limited verbal
abilities, she determined that play therapy techniques could be used to understand children within a psychoanalytic perspective. She argued that children were not driven so much by libidinal impulses, but were actively attempting to make sense of their interpersonal world. In *Psychoanalysis of Children* (1932/1954), Klein explained that children begin constructing an interpersonal world based on internal representations of significant relationships in their lives at an early age. She referred to the internal object world of the child as representing an internal world of relationships. For Klein, the mother's breast represented the first object relation or part object. She asserted that the mother-child relationship determined to a significant degree, all the relationships that follow it. Klein's ideas preceded current object relations thought that the first significant relationship (usually with the mother) lays down the groundwork of the child's inner world of relationships.

Using a modified analytic technique, Klein explored unconscious conflicts in terms of love and hate throughout early and late childhood development. According to Klein, object relations develop along a continuum of love and hate. She referred to several positions in her theory of the development object relations. The first position occurs in the first half of the first year of life. Klein referred to this as the paranoid-schizoid position, where splitting is used to break off threatening images from comforting ones.
This represents a primitive way of handling destructive impulses. Splitting is a normal defense mechanism in early life used to protect the self and object from the destructive impulses originating from the death instinct. The second position occurs in the second half of the first year of life. Klein (1948) referred to this as the "depressive position", where the mother is established as a whole object with both good and bad attributes (p. 299). The child is forced to acknowledge negative feelings toward the mother. This leads to what Klein (1948) referred to as "depressive" anxiety for having harmed the mother in some way (p. 296). Depressive anxiety results from the child replacing destructive impulses with feelings of guilt. It is the successful negotiation of the depressive position that provides the child with the capacity for empathy.

Klein (1958) observed that children constantly struggle with an overwhelming urge to destroy the object and a desire to preserve it. For Klein, the death instinct is represented by the bad object, whereas libidinal energy is represented by the good object. Klein contended that bad objects result from the child's innate destructiveness that gets projected outward. For Klein, splitting and aggression are intimately connected. Splitting represents primitive ego functioning aimed at reducing the anxiety associated with the aggressive drive. Introjection and projection are used to foster integration of ego and to neutralize the death instinct.
The ego responds to expression of the death instinct with anxiety. According to Klein, introjection, projection, and splitting are ego operations used to defend against anxiety. The superego is derived in part from reintrojection of bad objects that have been split off. The concept of projective identification referred to in object relations theory was first discussed by Klein. She described a process where unwanted parts of the self are split off and projected into an external object. The object is not considered to be separate, but is identified with the projected parts, which allows for a sense of control over the object.

**Jacobson, Mahler, and Kernberg**

Edith Jacobson, an ego psychologist, incorporated object relations theory into a comprehensive developmental and psychostructural model. She published a book entitled *The Self and the Object World* in 1964. In the book she discussed superego formation and the relation between normal and pathological affects in structural development. She focused on the relationship between affect theory and self- and object representations. For Jacobson, affects are more than discharge states, they represent drive investments in self- and object representations as well as in external objects (e.g., self-esteem represents a complex libidinal affect investment of the self and not simply a drive-determined, affective discharge.) Accordingly, the normality or pathology of the affect depends on the
structural arrangements of self- and object representations within the ego and superego.

Building in part on the collaborative writings of Hartmann, Kris, and Loewenstein, Jacobson integrated her findings with those of Margaret Mahler to form a comprehensive developmental framework. For Jacobson, intrapsychic life begins as a primary self within which ego and id are not yet differentiated, and within which aggressive and libidinal drives are undifferentiated as well. The first intrapsychic structure is a fused self-object representation that evolves under the influences of the mother-child relationship. According to Jacobson, the initial stage of intrapsychic development is characterized by multiple differentiated, but not integrated, good and bad, self- and object representations. During the next stage of development a more realistic integration of good and bad self- and object representations occur. Through this process, partial aspects of self- and object representations become total self- and object representations. A more mature realization of both one’s own limitations and the limitations and frustrations of the major care provider are established. During the next stage of development, ideal self- and object representations become integrated into an ego ideal, which becomes part of the superego. It is at this time that a clear differentiation between ego and superego occurs.
Jacobson (1964) provided a comprehensive exploration of the superego. She delineated three layers of superego formation. The first layer is represented by bad fused self- and object representations that have been projected onto the frustrating object in an effort to deny aggressively invested object relations. The second layer is represented by the integration of the ego ideal into the superego. The third layer represents an integrated superego structure formed by the internalization of realistic, demanding, and prohibitive aspects of the parents. According to Jacobson (1964), a pathological, excessively aggressive and primitive superego is characterized by a predominance of severe depressive mood swings. A mature superego on the other hand is characterized by control exerted through modulated mood swings such as guilt feelings or a sense of autonomy.

Margaret Mahler, an ego psychologist by description, drew on the early work of Edith Jacobson. Her developmental observations provided general evidence for the ego psychology approach to structural development. Through their work with autistic and severely disturbed children, Mahler and her colleagues came to appreciate the significance of early bonding experiences.

Probably more than any other object relations theorist, Mahler provided the most comprehensive description of the mother-child interaction within a developmental framework
Her elaborate description of early childhood development has proved to be an influential developmental view of object relations. Whereas theorists like Fairbairn (1943) and Klein (1958) suggested that the child relates to objects from birth, Mahler (1968) proposed an autistic phase that precedes a capacity for object relationships. The autistic phase is dominated by reflexes (e.g., grasping and sucking), and characterizes the child's early interactions with others. Freud (1941) referred to this phase as primary narcissism, where the child does not yet direct emotional energy outward. Hartmann, Kris, and Loewenstein (1964) similarly described an "undifferentiated phase" (p. 36). Jacobson (1964) referred to the fused self-object representation.

Mahler, Pine, and Bergman (1975) introduced the concept of "separation-individuation" to explain the child's struggle to develop a separate identity (p. 3). According to Mahler et al. (1975), the child moves from a symbiotic attachment to the mother to a stable separate identity. She delineated three developmental phases: the autistic phase, the symbiotic phase, and the separation-individuation phase.

During the autistic phase, the child is essentially unaware of others. The child is primarily concerned with tension reduction, and has limited awareness that others are responsible for reducing tension. During the symbiotic phase, the child begins to have primitive awareness
concerning the connection between tension reduction and the caretaker. However, the child still experiences the mother as an extension of self. Mahler et al. (1975) explained that the child behaves as if he or she and his or her mother form an "omnipotent system—a dual unity within one common boundary" (p. 44). This is the phase in which the child organizes experiences into good and bad, pleasure and pain, where the splitting defense first becomes evident. The separation-individuation phase is made up of several subphases, and represents the most influential phase of development. The subphases include differentiation, practicing, rapprochement, and libidinal object-constancy.

Differentiation marks the beginning of the child's ability to experience the mother as separate. "Separation anxiety" is evidence of the child's sense of differentiation (Mahler, 1968, p. 20). Self and object become increasingly differentiated during this subphase. It is during this subphase that the child comes to treasure a blanket or stuffed animal. This phenomenon relates to what Winnicott (1951/1958) described as a "transitional object" (p. 230). According to Winnicott (1951/1958) the transitional object seemed to enact the omnipotence of symbiosis.

During the practicing subphase the insecure child initiates multiple attempts to physically distance from the mother. The child continues to return to the mother for reassurance and "emotional refueling" (Mahler, 1968, p. 17).
During this time the child practices new found ego functions. Mahler et al. (1975) explained that the child becomes "intoxicated with his own faculties and with the greatness of his own world. Narcissism is at its peak" (p. 71). If the child is given encouragement and praise for his or her accomplishments during this subphase, a sense of security and mastery will develop.

The rapprochement subphase is characterized by the child's new found feelings of independence. Unfortunately, the child is simultaneously struggling with issues of dependency. According to Mahler et al. (1975), the child experiences a "rapprochement crisis" (p. 95), that is, a conflict between his or her need for the mother and his or her desire for separation-individuation. The mother's ability to provide the child with needed emotional support, while still allowing him a sense of independence, will determine the extent to which the rapprochement crisis is successfully weathered. It is during this subphase that the child becomes more aware of his or her vulnerabilities and becomes noticeably more rebellious. The child’s fantasies of omnipotence and symbiosis give way to a more mature understanding of his or her abilities and limitations, successes and failures.

The libidinal object-constancy subphase is the most crucial aspect of healthy development (i.e., Jacobson's description of total self- and object representations).
During this subphase, the child develops the ability to internalize a stable image of the mother, characterized by an ability to integrate both good and bad aspects. In other words, the child is able to maintain a consistent image of the mother whether she is present or absent, gratifying or depriving. The achievement of libidinal object-constancy enables the child to function independently and experience a strong sense of self that is stable across a variety of situations. For Mahler, it is the mastery of this subphase that contributes to the child’s ability to establish healthy object relations. Mahler pointed out that the phases of development tended to blend into one another, and that some issues from earlier phases resurface during later phases.

Otto Kernberg (1980) suggested that his work could "provide a psychoanalytic dimension from adulthood that reinforces Mahler’s assumptions about intrapsychic correlates of developmental observations in early childhood" (p. 6). Kernberg (1984) commented "Mahler provided the clinical evidence that permitted us to establish timetables for the developmental stages of internalized object relations proposed by Jacobson" (p. 190). Kernberg (1980) suggested there were serious problems with Klein’s and Fairbairn’s theories of early childhood development.

Building on the writings of Mahler and Jacobson, Kernberg (1986) offered a developmental perspective to object relations theory. He asserted that development
occurs within the mother-child dyad. According to Kernberg, object relations are derived from three parts: an image of self, an image of other, and some affective experience. The affective experience is dependent on the drive state that is active during the interaction with the significant other.

Kernberg (1976) referred to three different stages of development that he labeled "identification systems" (p. 25). The first level of development involves a process he referred to as "introjection" (Kernberg, 1976, p. 29). For Kernberg, introjection is a primitive process by which images of self and objects with corresponding affective experience become internalized. Splitting is first evident during this stage. Good and bad experiences are not integrated; the child is unable to understand the origin of feeling states or their significance. Kernberg (1976) referred to the next level of development as "identification" which represents a higher-level process of internalizing roles (p. 30). The child is able to understand and appreciate the reciprocal nature of self-object interactions. However, the child's sense of self is still not fully integrated. The highest level of object relations organization constitutes what Kernberg (1966) referred to as "ego identity" (p. 243). Ego identity represents a synthesized sense of self that originates from a multitude of self-object interactions. A more mature level of object relations development represents the ability
of an individual to move beyond a given situation or relationship and pull from a broad array of self-object experiences. Similar to Mahler, Kernberg (1977) explained that the primary problem of primitive charactered individuals is "their failure to achieve a satisfactory loving relation with an object that can be trusted and relied upon in spite of the patient's aggression toward it [and] in spite of the shortcomings and frustrations stemming from the object" (p. 301). Discussing narcissistic psychopathology, Kernberg (1974) implicated an "inborn intensity of aggressive drive" and a "chronically cold" maternal figure (p. 221). The latter of which corresponds closely with what Winnicott (1963/1965) referred to as the "environmental provision" (p. 99).

Other Contributions

Heinz Kohut (1971), in his work with narcissistic personality disorders, introduced the notion of self psychology in psychoanalytic work. Kohut focused on the dynamics of the mother-child relationship to explain the development of self. According to Kohut, severe psychopathology is related to early disturbances in the mother-child relationship, or an inability to move beyond the narcissistic internalizations of infancy. He stressed that the child has two basic narcissistic needs: to show off developing capabilities and be admired for them, and to form an idealized image of a parent (usually the mother). Kohut
emphasized the importance of empathic interchanges between mother and child. It is these interchanges that Kohut believed formed the child's sense of self and his or her connectedness with others. Cashdan (1988) explained that according to Kohut, "Greed, envy, guilt, and pride are not mysterious affairs. They are psychological functions whose origins lie in concrete, observable, communications that make up the mother-child interaction" (p. 21).

**Traditional Psychoanalytic Explanation of Delinquency**

In *Beyond the Pleasure Principle*, Freud discussed the "death instinct" which is associated with an aggressive drive (Freud, 1920/1955, p. 49). Freud believed that the acting out character disorder represents unconscious conflicts expressed through behavior as opposed to a neurotic disorder expressed through symbolic symptoms.

Multiple psychoanalytic explanations of delinquency have been offered during this century. Aichorn’s (1935) frequently cited text *Wayward Youth* provided one of the first explanations of psychopathic behavior offered from a psychoanalytic frame of reference. He generally viewed delinquents as having difficulty establishing relationships. His conceptualizations were largely oedipal in that he frequently discussed issues of repressed antagonism and rivalry. For example, he described a boy who refused to go to school and achieved unconscious revenge against his father. He suggested that conscious and unconscious
struggles occur within a youth whose efforts at oedipal rebellion and resolution have failed. Aichorn (1935) explained that a child who was severely treated too early in development would be unable to make the necessary adjustments. Consequently, regression would occur and the pleasure principle would achieve mastery. He argued against inherited psychopathy, explaining that such a child is hardly criminal from birth. External circumstances, such as an abusive parent or a parent who uses the child to fulfill unconscious drives, interfere with the formation of a socially acceptable ego-ideal (i.e., superego). According to Aichorn (1935), aggression is the result of the ego’s failure to manage impulsivity. Similarly, Menninger (1963) suggested that an inadequate ego is what allows for aggression. Johnson and Szurek (1952) proposed an influential explanation of delinquent behavior. They hypothesized that delinquent children were merely acting out unconscious antisocial fantasies of their parents. Johnson and Szurek (1952) proposed that parents gratify their own impulses in the acting out of the child, through their unconscious permissiveness or inconsistency in such situations. The authors described a dual purpose to a child’s antisocial behavior: the parent’s unconscious impulses are acted out in the child, which provides the parent an opportunity to vent hostile, destructive impulses toward the child. Abrahamsen (1952) similarly emphasized
the role of parental figures with the statement:

In general we may say that the causes of a child's delinquent behavior may be traced to his parents, particularly to his mother's emotional attitude toward his early instinctual manifestations, which may be partly caused by her own personality makeup or by other elements from his environment. (p. 27)

Traditional views on delinquency have generally described superego disorders related to unresolved oedipal conflicts.

**Contemporary Psychoanalytic Explanation of Delinquency**

Many contemporary psychoanalytic theorists have chosen to focus on preoedipal experiences to explain the development of delinquent character pathology. Following more traditional drive theory, Anna Freud (1949) emphasized early life experiences, especially the first year of life. She focused on the important transition from primary narcissism to object love. In cases where the mother was absent, neglectful, emotionally unstable, or ambivalent, the transformation of narcissistic libido to object libido was not carried out adequately (i.e., inadequate identification). She asserted that such early deprivation led to inadequate binding of aggressive impulses. Anna Freud (1965) wrote:

Aggression in the diffused form is not controllable either externally by the parents or internally by the ego and superego. If fusion is not reestablished
through strengthening of libidinal processes and object attachments, the destructive tendencies become a major cause for delinquency and criminality. (p. 181)

Melanie Klein's notions of splitting and aggressive impulses suggest that delinquents are operating at a primitive level. For Klein, the death instinct is manifest as destructive processes directed against objects and the self. The delinquent has failed to negotiate the depressive position and is thus incapable of the more mature response reflected in a capacity for empathy. Klein's views suggested that stealing may symbolize the introjection or taking in of good or bad objects, whereas aggressive acts often reflect the projection of internalized bad objects outward and the attempt to destroy it.

While some theorists continue to emphasize more traditional drive theory, many contemporary theorists rely on object relations constructs to explain the significance of preoedipal relationships. Fenichel (1945) explained that a lack of lasting object relationships in early development is the result of inconsistent environmental influence, frequent environmental change, and a lack of love in the infant's surroundings. Correlated with this history is a weak, inconsistent, and disorganized superego. Others have suggested that object constancy, needed for object related experience, is missing in the delinquent child who has had failed opportunities at attachment. Early object constancy
is closely related to the child’s ability to internalize objects. It is these internal representations that allow the child to tolerate frustration, and delay and control impulses (Lustman, 1966; Schaffer & Emerson, 1973). Schmideberg’s (1949) clinical impressions were that antisocial development and psychopathy were largely due to disturbances in object relations rather than of the superego. She described her patients as excessively ambivalent and particularly unstable. She explained that adaptations, ego functions, and object relations were handicapped during development. According to Schmideberg (1949), attachments to parents were prevented or distorted, compromising the process of internalization and identification needed for the development of a strong and flexible superego. Consequently, the extension of object relationships to community and society was interfered with.

Edith Jacobson (1964) suggested that pathological object relations lead to faulty ego and superego formation. She contended that severe identity conflicts in adolescence reflect a failure in the stage of development where good and bad self-representations are integrated into a total self-concept (i.e., failure to integrate idealized and sadistic forerunners of the superego). Consequently, the third layer of superego involving the internalization of realistic parental images also fails, reactivating a chaotic world of all-good and all-bad self- and object representations. This
corresponds with the description of the primitive defense of splitting, which in turn interferes with integration of the superego and the overall structural apparatus. This is characteristic of borderline conditions and narcissistic psychopathology. Modlin (1983) similarly asserted "the developing child who suffers at the hands of those with whom he needs to identify himself internalizes faulty ego and superego models" (p. 139). Modlin (1983) suggested that psychopathic individuals have an inadequate capacity for object relations. He clarified, "it is not the severe lack of object relations posited for the schizophrenic and borderline patient but the objects' consistent inconsistency that leaves the child uncertain and bewildered" (p. 139).

Mahler pointed out that narcissistic types typically have mothers who have varying degrees of difficulty allowing their children to separate. For her, inferior object relations result from the child's failure to achieve loving relationships with dependable objects (mother fails to adequately respond to the child's needs). In contrast, a loving parent helps to bring out appropriate ego functioning (Mahler et al., 1975). Appropriate parental comforting leaves the child with the ability to comfort himself. This notion relates to Winnicott's (1960/1965) assertion concerning the importance of the "environmental condition of holding" (p. 45) or "good enough" mothering (p. 49). Mahler believed that the sense of grandeur and omnipotence that the
child experiences during the practicing subphase fosters a sense of confidence that is intimately linked to the child's sense of safety and mastery. In other words, it is extremely important for the parent to allow the child to explore his or her environment with the security of continued emotional support. During the rapprochement subphase the child loses his or her sense of omnipotence, which induces a sense of helplessness and rage. By successfully letting go of omnipotence, the child develops a capacity for empathy. The neglected child, on the other hand, defends against the pain of badness, helplessness, and depression, he projects the bad introject outward and attacks it (fuels aggressive acting out). Masterson (1972) who expanded on Mahler's writings has suggested that this dynamic intensifies as adolescence brings new pressures to complete separation and individuation.

More than any other object relations theorist, Kernberg has provided a comprehensive description of antisocial personality organization. Kernberg (1970) outlined a psychoanalytic system of classifying character pathology and personality organization that has significantly increased our understanding of antisocial behavior. He proposed an organization of levels of character pathology related to developmental level of internalized object relations. Under Kernberg's system, all antisocial personalities are organized at a low level, characterized by limited
integration of the superego and an inability to experience guilt. Kernberg (1984) explained that superego development occurs within the second and third year of life. According to Kernberg, structural consequences result from pathological object relations. Kernberg views pathology in terms of the quality of object relations and the superego functioning. Kernberg (1975) commented that structural characteristics of narcissistic personalities reflect more than a lack of development of certain intrapsychic structures, they reflect the development of pathological differentiation and integration of ego and superego structures, deriving from pathological object relations. Combining Mahler's and Jacobson's formulations, Kernberg (1976) concluded that the early ego "must differentiate self-representations from object representations, and it must integrate libidinally determined and aggressively determined self- and object-representations" (p. 11). For individuals with low level personality organization, integration of self- and object representations constructed under libidinal and aggressive drive derivatives and their related affect has been significantly compromised, in part because of a pathological predominance of pregenital aggression (Kernberg, 1980). Kernberg (1980) wrote "Failure to integrate libidinally determined and the aggressively determined self- and object- representations is the major cause for non-psychotic ego disturbances" (p. 12). This
lack of integration derives from pathological predominance of aggressively determined self- and object representations. Low level personality organization is often characterized by the intensity of the aggression with which the mental representations are filled. Kernberg (1975) considered the antisocial personality to be a subgroup of the narcissistic personality, presenting similar traits with the addition of severe superego pathology. Although some prohibited parental demands are internalized, they have a distorted, aggressive, primitive quality. They are not integrated with the more loving aspects of the superego that are usually drawn from idealized self- and object representations. Consequently, the superego is harsh and hostile, a do to others before it can be done to you mentality prevails. Kernberg (1989) recently advocated that antisocial behavior be explored in light of a patient’s organizational level of the superego functions. According to Kernberg, the antisocial personality presents more severe superego pathology (passive-parasitic type -- lying, stealing, cheating and aggressive type -- murder, armed robbery). The aggressive type has an incapacity for authentic feelings of guilt or remorse. Kernberg’s contributions to object relations theory have been immense. His writings in the area of psychopathology have significantly influenced contemporary psychoanalytic theory.
Through direct observation of infants, Winnicott (1953) studied the relationship between neglect, abuse, and delinquency. He asserted that the environmental response shapes development. For Winnicott, antisocial behavior (i.e., aggression) is a reaction to basic deprivation. Winnicott (1956, 1973) believed that delinquency represented the early and primitive object hunger for the mother. He suggested that the delinquent attempts to recapture this period by way of his delinquent behavior.

Object relations theorists (Jacobson, 1964; Mahler, 1968, Mahler et al., 1975) have discussed levels of development of object relations, ranging from primitive (e.g., autistic) to mature (e.g., separation/individuation). Although the representations of self and others are initially diffuse and undifferentiated, after numerous experiences the child begins to differentiate self from other (Freud, A., 1965; Jacobson, 1964; Mahler, 1968). Based on early experiences of frustration and gratification the child builds representations of self and others that eventually become part of the child's sense of identity. Object relations theory views maturity in terms of stable relations with others, tolerance of ambivalence toward love objects, capacity to tolerate guilt and separation, and a well integrated sense of self (Kernberg, 1976). In normal development the initial undifferentiated representations evolve into more consistent and stable ways of experiencing
and understanding the world. The quality of object relations impacts structural development and pathology (Kernberg, 1984). Kernberg’s view of pathological development differs from other contemporary theorists who argue that pathology results from arrests in development (e.g., Kohut, 1971).

Kernberg (1970) provided an outline of different levels of pathology. At the least pathological level are individuals with a well integrated ego and a well integrated but severe and punitive superego. The individual is able to maintain stable relationships and can experience feelings of guilt. At a higher pathological level are individuals with an extremely punitive superego and less integrated ego. Although the individual is able to function interpersonally, there is some tendency toward more primitive defenses such as splitting. At the highest pathological level are individuals with significant disintegration of superego and ego. These individuals habitually rely on ineffective and maladaptive behavior (e.g., criminality). This level of development is represented by a pronounced incapacity for empathy. The individual primarily relies on the extremely primitive defense of splitting characteristic of early development. Aggressive behavior reflects this primitive means of obtaining basic needs. Kernberg (1966) stressed that the developmental level of an individual’s capacity for object relatedness is the focal diagnostic issue.
Measuring Object Relations

Building on traditional psychoanalytic theory, modern object relations theory has provided the groundwork for a more comprehensive theory of personality development. Researchers have provided construct validity for object relations as a theoretical dimension. A sample of such studies includes: early memories (Mayman, 1968; Nigg, et al., 1991), human response on the Rorschach (Blatt & Ritzler, 1974; Stuart et al., 1990; Urist, 1973), and Sentence Completion (Loevinger, 1976). Blatt and Lerner (1983) note that many of these studies have not been well integrated because they are not founded in a more comprehensive conceptualization of personality development and organization. Blatt and Lerner (1983) wrote, "There is a need in contemporary clinical assessment to find ways of integrating recent advances of concepts derived from object relations theory with the methods of psychological assessment" (p. 7). Lerner and St. Peter (1984) suggested that object relations theory offers a framework "for highlighting the developmental significance of interpersonal relationships in the formation of psychological structure" (p. 345).

Psychoanalytic researchers have frequently utilized projective instruments to explore a variety of psychological difficulties. Projective testing has been used to assess the structure of an individual's mental representations.
The premise behind projective techniques is that the vague and ambiguous nature of the tasks will provide invaluable information about how the individual perceives and interprets his or her environment. The expectation is that individuals will project their characteristic thought processes, needs, anxieties, and conflicts onto the stimulus (Anastasi, 1988). Anastasi (1988) explained that projective techniques typically focus on more global aspects of personality and less on specific traits. Anastasi (1988) stated that those who use projective techniques regard them as "... especially effective in revealing covert, latent, or unconscious aspects of personality" (p. 595). Referring to psychoanalytic theory, Bellak (1986) wrote, "... psychoanalysis is in part a theory of learning especially concerned with the life history of the acquisition of percepts with their emotional tone, their lawful interaction with one another, and their influence upon the perception of later stimuli" (p. 28). Bellak (1986) asserted, "... everything said or written as a response to some stimulus situation, like all other psychological productions, has a dynamic cause and meaning" (p. 35).

**The Thematic Apperception Test.** This study aims to determine whether violent and nonviolent juvenile offenders can be discriminated by level of object relations. Object relations will be assessed by utilizing a scoring system
designed for use with The Thematic Apperception Test (TAT; Murray et al., 1938). According to Bellak (1986), "The Thematic Apperception Test is a technique for the investigation of the dynamics of personality as it manifests itself in interpersonal relations and apperception or meaningful interpretation of the environment" (p. 42). Among practitioners who use projective techniques, the TAT is second in popularity only to the Rorschach Inkblot Test (Bellak, 1986). The TAT test consists of 31 intentionally ambiguous pictures. TAT instructions ask the individual to tell a story about a picture, tell about what is going on, what led up to the situation, what the characters are thinking and feeling, and what the outcome would be (Bellak, 1986). The individual is essentially asked to respond to a series of social situations. Published TAT normative information has examined such variables as frequent response features for each card, the manner in which cards are perceived, typical themes, roles attributed to characters, emotion expressed, response time, and story length (Atkinson, 1958; Henry, 1956; Murstein, 1972). Several quantitative scoring systems and rating scales have been developed for use with the TAT (e.g., McClelland, Atkinson, Clark, & Lowell, 1953; Pine, 1960; Stephenson, 1953). Although good interrater-reliability has been established, the time-consuming nature of these systems has precluded their use in most clinical settings. Various approaches
have been put forth concerning the interpretation of TAT responses. The original interpretative technique advocated analysis of each sentence for the needs of the hero and the environmental forces impinging on those needs (Murray et al., 1938). This scoring technique was quite time-consuming and never caught on clinically (Bellak, 1986). Wyatt (1947) reviewed different methods for scoring and analyzing TAT responses. The systems focused on different aspects of TAT responses such as themes, identification with characters, conflicts, relationships, attitudes, emotions, cliches, organization of thought, language usage, positive and negative content, and needs and fantasy. Bellak (1973) delineated a popular method of interpretation in his book entitled, *Bellak TAT Blank, Analysis Sheets, and Guide to the interpretation of the TAT*. Bellak’s system includes ten scoring categories: the main theme, main hero, needs and drives of the hero, view of the world, view of significant relationships, significant conflicts, nature of anxieties, main defenses, adequacy of the superego, and integration of the ego. Bellak (1986) elaborated on specific ego functions. He specifically addressed important object relations notions such as investment in others, the effect of past relationships on quality of present relationships, view of others as separate or extensions of self, ability to maintain object constancy (tolerate frustration, anxiety, and hostility related to the object). Concerning these
notions, Bellak (1986) wrote:

The TAT and its offspring, the CAT and SAT, are suitable projective tests for the assessment of an individual's interpersonal and intrapersonal object relations. Since the individual is presented with a set of pictures of human beings or animals in social situations and asked to construct a fantasy story about each picture, the outcome of these tests provide rich material about the individual's ability to relate to others, his capacity for experiencing other people with an appreciation of their complexities, and the individual's manner of experiencing interpersonal relationships in his family, job situation, or circle of friendships. (p. 191)

Several modified forms of the TAT have been designed for use with various special groups such as children, the aged, African Americans, and Native Americans (Bellak, 1986).

Aggression and the TAT. Several investigators have used the TAT to study the relationship between aggressive themes and actual aggressive acts. Stone (1956) studied a group of army prisoners and reported that the assaultive group produced significantly more thematic aggression than the combined nonassaultive group. Purcell (1956) reported similar findings with a group of psychiatrically referred army trainees. Several studies focused on adolescent male aggression and reported a significant relationship between
thematic aggression and overt aggression (James & Mosher, 1967; Mussen & Naylor, 1954). McNeil (1962) studied a group of aggressive and/or antisocial male adolescents and found few variables that consistently distinguished the thematic responses of delinquents and normals. Summarizing the research on TAT and aggression, Murstein (1963) concluded there was little relationship between TAT aggression and overt aggression with typical samples of adults, adolescents and children. However, he suggested that individuals with a history of overt aggression are readily differentiated by thematic aggression. More recently, Matranga (1976) reported an inverse relationship between aggressive TAT themes and overt aggression with a group of male juvenile offenders. Interestingly, Kempler and Scott (1970), who compared male delinquents and normal controls, found that the delinquent group produced more aggressive themes, stories that exhibited less conformity and guilt, less positive interpersonal relationships, and less nurturance.

The evidence concerning potential relationships between TAT aggressive themes and overt aggression has been inconclusive and contradictory. This suggests that TAT responses need to be explored beyond aggressive themes alone. Lochman (1984) encouraged the use of the TAT to assess aggressive adolescents. He suggested that psychologists analyze how characters cope with conflict across stories. Such an analysis would serve to assess the
adolescents' ability to problem solve, comprehend the consequences of their behavior, demonstrate a sense of responsibility for their behavior, understand others' perspectives, and manifest a sense of guilt and remorse. Focusing on TAT responses from an object relations perspective will increase the clinical value of the TAT in understanding violent and nonviolent delinquent behavior.

Westen object relations scoring system. Recently, Westen and his colleagues developed a TAT scoring system that allows for the quantification of object relations (Westen, Lohr, Silk, Kerber, & Goodrich, 1985). In the scoring system manual they wrote:

Object representations are conscious and unconscious, affectively laden ideas and images about the self, others, and the relationships between self and others, which derive from interpersonal experiences as well as from fears and fantasies about those experiences.

(p. 11)

Westen (1991a) suggested that the TAT is particularly well suited to assessing object relations due to the social nature of the test. He explained that the process of describing characters and relationships provides substantial information about the test taker's interpersonal functioning. The Westen scoring system encompasses a psychoanalytic perspective and consists of four dimensions representing separate but interrelated aspects of object
relations (Westen et al., 1985). Westen (1991a) described the four scales as follows: (1) Complexity of representations of people (CR) assesses "the extent to which the subjects clearly differentiate the perspectives of self and others, and recognize the complexity of the personality dispositions and subjective experience of the self and others" (p. 58); (2) Affect-tone of relationship paradigms (AT) assesses the "extent to which the person expects relationships to be destructive and threatening or safe and enriching . . . this scale does not assess a dimension that develops with age" (p. 59); (3) Capacity for emotional investment in relationships and moral standards (CEI) assesses the extent to which the subject views people primarily as instruments for gratification or invests in deep, committed relationships; and (4) Understanding of social causality (USC) assesses the "logic, complexity, and accuracy of attributions" (p. 62).

The scoring system is used to interpret TAT stories both quantitatively and qualitatively. Each of the four object relations dimensions is scored on a five-point scale. With the exception of affect-tone, the scales attempt to measure developmental dimensions of object relations (Westen et al., 1991b). In other words, a level one score would indicate relatively primitive object relations, a level five score would suggest more mature object relations. The scoring system has been shown to reliably discriminate
between borderline patients, major depressive patients, and non-psychiatric controls (Westen, Lohr, Silk, Gold, & Kerber, 1990a). Westen, Ludolph, Lerner, Ruffins, and Wiss (1990b) reported similar results in a sample of adolescent borderlines, psychiatric comparison subjects, and normal comparison subjects. Westen, et al. (1991b) used the scoring system to compare both 2nd and 5th graders as well as 9th and 12th graders and found developmental differences on all scales except AT, as predicted. Ornduff, Freedenfeld, Kelsey, and Critelli (1994) reported that the scoring system distinguished between sexually abused and non-abused out-patient females.

Purpose

Object relations theory has steadily gained recognition as a useful approach to understanding a variety of clinical problems (Cashdan, 1988). To date, there has not been a dominant view of juvenile violence that has helped to shape our understanding and the differential treatment of violent and nonviolent juvenile offenders. This project will augment the research in the area of juvenile delinquency at a time when violent juvenile crimes are rising nearly twice as fast as adult violent crimes (Federal Bureau of Investigation, 1991). Schmideberg (1953) asserted that psychoanalysis would eventually prove to be one of the most effective research and treatment methods of dealing with delinquency. Others have taken a strong position against
the utility of psychoanalytic formulations with delinquent individuals. Gibbons (1970) argued "that there is little convincing empirical support for the contention that delinquents are commonly plagued by emotional problems to which their deviant acts are a response" (p. 192). He suggested that "the popularity of psychogenic orientations to criminality and delinquency is certainly not due to any hard evidence" (p. 192). Gibbons (1970) asserted "Our analysis has rejected psychoanalytic claims and notions about psychopathy as untestable" (p. 87). In direct response to such positions, this project will rely on psychoanalytic formulations to study the complexities of juvenile delinquency. The unique contribution of this study is that it is anchored within a developmental framework. Stuart et al. (1990) wrote:

Psychoanalytic theorists generally understand psychopathology as resulting either from developmental deficits or from conflicts originating in particular developmental stages. Either construal of psychopathology suggests that diagnostic assessment requires articulation of a developmental theory.

(p. 298)

Notions of object relations theory have meaningful implications for understanding the etiology and organization of various forms of psychopathology. Examining the differences in object relations development of violent and
nonviolent delinquents will advance our understanding and treatment of juvenile offenders. The purpose of this study is to gather evidence on the validity of an object relations scale as it applies to delinquent behavior in an adolescent sample. It is expected that the current investigation will demonstrate the clinical utility of an examination of object representations on the TAT and how the use of such clinical data can contribute to the understanding of juvenile delinquents.

Many psychoanalytic theorists implicate pathological object relations in the character pathology of delinquents. The design of this study will help to answer the question of whether violent and nonviolent juvenile delinquents differ psychologically. It is important to increase our knowledge and understanding of cognitive and affective processes underlying the interpersonal pathology of juvenile delinquents. The present investigation will compare TAT stories of a sample of violent juvenile offenders with a nonviolent delinquent sample. The hypotheses in this study are based on object relations theories that suggest that antisocial individuals represent a low level of personality organization (Kernberg, 1970). Consistent with object relations theory, it is hypothesized that juveniles whose antisocial behavior involved violent crimes against persons (aggravated assault) will have more impaired object relations than those whose acting out behaviors were limited
to felony property offenses. Using the Object Relations and Social Cognition Scoring System (Westen et al., 1985), it is hypothesized that violent subjects will exhibit less developed object relations than nonviolent comparison subjects. This difference will be reflected in lower mean scores on all four dimensions of object relations.

Complexity of representations of people (CR) measures the extent to which an individual is able to differentiate the perspectives of self and others; and the degree to which the individual understands the complexity of subjective experience of the self and others. Individuals who, for example, rely most on the splitting defense would be expected to score at the lower levels of this dimension (e.g., all good vs. all bad). In contrast, individuals scoring at higher levels would demonstrate a more integrated representation of people including both positive and negative attributes. The less impaired the individual's object relations the greater his ability to recognize that people can express different aspects of their personality in numerous ways in a variety of situations. Kernberg (1976) views childhood development in terms of types of "indentification systems" which represent development from emotionally erratic self-object representations to ones that are highly differentiated and capable of organizing experience (p. 25). Violent subjects are expected to manifest lower object relations on this dimension because
aggressive behavior theoretically reflects an extremely primitive way of obtaining basic needs. Such individuals primarily rely on the primitive defense of splitting characteristic of early development, which theoretically results in reduced capacity to understand the complexity of subjective experience. It is specifically hypothesized that violent subjects will have a lower mean score on the CR scale than nonviolent comparison subjects.

Affect-tone of relationship paradigms (AT) measures the overall affective coloring of the object world ranging from malevolent to benevolent. Individuals with more impaired object relations would be expected to see the world as primarily threatening and painful. Kernberg (1975) suggested that the malevolent object world reflects the projection of the individual's own intense aggression. Dodge and Somberg (1987) reported that aggressive boys tended to make more malevolent attributions than non-aggressive peers. Westen et al. (1985) suggested that AT may be the most discriminating dimension with character disordered individuals because of their overgeneralized and poorly differentiated affective expectations. Violent subjects are expected to manifest lower object relations on this dimension because aggressive behavior theoretically reflects a view of relationships as predominantly hostile and threatening. It is specifically hypothesized that violent subjects will have lower mean scores on AT.
Capacity for emotional investment in relationships and moral standards (CEI) measures the extent to which an individual places value in relationships. Stated differently, CEI reflects the development of the affective relationship between self and others. Development of object relations on this dimension progress from a need gratifying (i.e., narcissistic) emotional investment to a more mature investment characterized by a genuine concern for others. Individuals scoring at the lower levels of this dimension may obey societal rules, but do so out of a fear of retribution. In contrast, those who score at higher levels are obedient out of concern for others. Westen et al. (1985) suggested, "What sociopaths typically lack is not knowledge of social rules; it is an affective-motivational investment in them" (p. 24). Kernberg (1980) stated:

a lack of integration of object representations interferes with deepening of empathy with others as individuals in their own right, and lack of integration of the self-concept further interferes with full emotional understanding of other human beings. The end result is defective object-constancy or an incapacity to establish total object relations. (p. 13)

Violent subjects are expected to manifest lower object relations on this dimension because theoretically, an inability to integrate libidinally and aggressively invested internalized self and object representations results in an
impaired capacity for empathy (Kernberg, 1970). Kernberg (1989) suggested that aggressive antisocial behavior reflects an incapacity for authentic feelings of guilt or remorse. Specifically, it is hypothesized that violent subjects will have a lower mean score on the CEI scale than nonviolent comparison subjects.

Understanding of social causality (USC) measures how an individual interprets interpersonal events. The quality of object relations is reflected in the types of attributions an individual makes concerning peoples' intentions. Low level scores characterize individuals whose over-reliance on observable cues frequently results in illogical or confused understanding of interpersonal interactions. Individuals who score at higher levels of this dimension demonstrate an increased understanding of the way complex internal psychological processes are involved in thoughts, feelings, and behavior. Kernberg (1975) suggested that individuals with narcissistic personality structure "... lack emotional depth and fail to understand complex emotions in other people" (p. 228). Violent subjects are expected to manifest lower object relations on this dimension because theoretically, they are less equipped with object relations development that would allow the individual to move beyond the specifics of a given situation or relationship and pull from a broad array of self-object experiences. This impoverishment with regards to self-object experiences will
result in a simplified interpretation of social events. It is specifically hypothesized that violent subjects will have a lower mean score on the USC scale than nonviolent comparison subjects.

A proclivity for aggressive behavior theoretically reflects a primitive level of personality structure and functioning. The hypothesis that violent subjects will manifest more severe object relations pathology will be reflected in higher frequencies of pathological scores across the system's four scales. Notable egocentrism and boundary disturbances should cause violent subjects to construct more poorly differentiated representations of people (scored level 1) on CR. Violent subjects should produce more obvious malevolent responses (scored level 1) on AT than nonviolent comparison subjects. Because of their accentuated need-gratifying position, violent subjects should construct more level-1 responses on CEI. Because violent subjects are likely to produce blatantly fallacious social attributions, they should present more level-1 responses on USC than nonviolent comparison subjects.
Subjects

Subjects were 60 male juvenile offenders, ranging in age from 12 to 16 years (mean = 14.8 years, SD = 1.1), who were evaluated at the Psychological Service Division of the Dallas County Juvenile Department (DCJD) pursuant to court order or to facilitate case disposition. The subjects were selected and classified with respect to charge (aggravated assault, \( n = 30 \); felony property offenses, \( n = 30 \)) by sequential examination of the files at the Psychological Services Division of the DCJD, beginning with the most recent cases. Juveniles charged with aggravated assault comprised the violent (V) group, and juveniles charged with felony property offenses comprised the nonviolent (NV) group. In cases in which a juvenile was previously referred for a violent felony charge but was psychologically evaluated following referral for a less serious charge or a nonviolent offense, the subject was classified according to the most serious charge in the record. Thirty-five (58\%) of the subjects were African-Americans, eighteen (30\%) were Hispanic, five (8.3\%) Caucasian, and two (3.3\%) were of mixed or other racial heritage. Subjects were excluded from this study if psychological testing data were missing or
incomplete, or if there was evidence of organic pathology, psychosis, physical limitations which could interfere with the test performance (e.g., visual, auditory, or speech difficulties), or an IQ below 70 contained in the files.

**Characteristics of the violent group.** The sample of 30 violent subjects had an average of 3.4 (SD = 2.6) prior offenses (see Table 5, Appendix A). The four most frequent offenses were: aggravated assault (27%), theft (9%), burglary (8%), and unlawful use of a motor vehicle (7%). Ten (33%) of the violent subjects met the criteria of chronic delinquency (more than 4 offenses; Wolfgang, Figlio, & Sellin, 1972). Information concerning reported substance use was available for twenty-two (73%) of the violent subjects (see Table 6, Appendix A). Fifteen (68%) of these subjects acknowledged having used alcohol and/or other substance at some time. Ten (46%) of the violent subjects acknowledged having used both alcohol and illicit drugs. Finally, 32% denied use of any substance at all.

**Characteristics of the nonviolent group.** The sample of 30 nonviolent subjects had an average of 4.1 (SD = 2.2) prior offenses (see Table 5, Appendix A). Ten (33%) subjects met the criteria of chronic delinquency (Wolfgang et al., 1972). The four most frequent offenses were: theft (17%), unlawful use of a motor vehicle (14%), burglary of a motor vehicle (12%), and burglary (11%). Information concerning reported substance use was available for twenty-
eight (93%) of the nonviolent subjects (see Table 6, Appendix A). Twenty-three (82%) of these subjects acknowledged having used alcohol and/or other substance at some time. Fourteen (50%) of the nonviolent subjects acknowledged having used both alcohol and illicit drugs. A history of substance use was denied by five (18%) of the nonviolent subjects.

**Measures**

Data utilized in this study were archival, and included social histories, intelligence and achievement test scores, and TAT records. Demographic and criminal history information was obtained from subjects' social histories. Intelligence tests, achievement tests, and TATs were administered as part of a larger test battery by DCJD clinical staff who had completed at least a master's degree in psychology with formal coursework in psychological assessment. All testing was supervised by a licensed psychologist.

**Intelligence and academic achievement.** Intelligence was measured using the Wechsler Intelligence Scale for Children - Revised (WISC-R; Wechsler, 1974) and the Culture Fair Intelligence Test (Institute for Personality and Ability Testing, 1973). Five of the 60 subjects who comprised the final research sample (4 nonviolent subjects and 1 violent subject) had received the WISC-R as part of their psychological evaluations. The WISC-R is a well-
standardized intelligence test with respectable reliability and validity (Sattler, 1982). The average reliability coefficients for several age groups ranging from 6 to 16 years is .96 for Full Scale IQ. The remaining 55 subjects had been assessed with the Culture Fair Intelligence Test. The Culture Fair Intelligence Test is a non-verbal measure of intelligence designed to limit the influence of such things as educational level, verbal fluency, and cultural impingements. Given the high representation of minority subjects in the present study, the Culture Fair Intelligence Test was clearly an appropriate instrument for measuring intelligence. The average split-half reliability coefficient reported for the Culture Fair Intelligence Test is .87. Concurrent validity of the test is demonstrated by an average correlation of .77 with other intelligence measures, including the WISC and the Stanford-Binet. Academic achievement was measured using the Wide Range Achievement Test - Revised (WRAT-R; Jastak & Wilkinson, 1984). The WRAT-R is a respected and frequently used instrument for measuring academic achievement in the areas of reading, spelling, and arithmetic. Jastak and Wilkinson (1984) reported that the WRAT-R correlates highly with other achievement tests (i.e., California Achievement Test).

Object relations. The Object Relations and Social Cognition: TAT Scoring Manual was used to assess object relations (Westen, Lohr, Silk, Kerber, & Goodrich, 1985).
The scoring system consists of four dimensions representing different aspects of object relations. Each dimension is scored using a Likert type scale ranging from 1 to 5, with level-1 representing the most primitive level of response and level-five representing the most mature. Complexity of representations of people (CR) measures the complexity, differentiation, and integration of representations. The scale ranges from poor differentiation between people; to simple but differentiated representations; to complex, multifaceted, and integrated representations (Westen, 1991b). Affect-tone of relationship paradigms (AT) measures the extent to which a person expects relationships to be harmful and threatening, or secure and enriching. The scale ranges from malevolent expectations of interpersonal interactions to a predominantly positive experience of interpersonal interactions (Westen, 1991b). Capacity for emotional investment in relationships and moral standards (CEI) measures the degree to which a person is able to rise above a need-gratifying orientation toward relationships, and is able to invest in people, values, and ideals that improve the quality of life for all. The scale ranges from a narcissistic pattern of emotional investment to a mature pattern of emotional investment in rules, values, and roles that benefit society as a whole (Westen, 1991b). Understanding of social causality (USC) measures the degree of complexity, logic, and accuracy of a persons
attributions. The scale ranges from an absence of causal understanding, to a more complex understanding of the mediating role of cognitions (Westen, 1991b). Several studies have demonstrated that the four dimensions can be coded very reliably, with reported reliabilities ranging from .80 to .95 (Westen, 1991a).

**Procedure**

To ensure homogeneity of data, responses to the following four TAT cards were analyzed: 1, 2, 6BM, and 7BM. These cards are among those recommended by Bellak (1993), and were selected on the basis of their 100% representation in subjects' files. For purpose of independent scoring, TAT records were photocopied, transcribed, and separated into individual stories. The stories were rated by a doctoral student in clinical psychology blind to the hypotheses of this study. This rater was part of a four-member research team which trained extensively with the scoring system. Once adequate levels of interrater reliability were established among the four raters, this single rater completed the scoring for the data set. Reliability for the group was computed using Pearson's $r$, with the Spearman-Brown correction for multiple raters. Corrected reliabilities were: (CR), $r = 0.84$; (AT), $r = 0.93$; (CEI), $r = 0.91$; and (USC), $r = 0.88$. 
CHAPTER III

RESULTS

Preliminary analyses compared the violent and nonviolent groups on the following dependent variables: age, t(58) = -.85, p = .40; race, χ²(3, N = 60) = 2.45, p = .48; intelligence, t(58) = 1.68, p = .10; WRAT-R Reading, t(58) = -.62, p = .53; WRAT-R Spelling, t(58) = -1.05, p = .30; WRAT-R Arithmetic, t(58) = -.72, p = .47; reported history of substance use, χ²(3, N = 50) = 1.64, p = .65; and number of prior offenses, t(58) = 1.13, p = .26. Results of these analyses indicate that the groups did not differ significantly with respect to any of these variables. A summary of the above subject data are presented in Table 1 through Table 6 (Appendix A).

The magnitude of relationship among the four object relations scales was measured using Pearson Product Moment correlation coefficients (see Table 7, Appendix A). Correlations ranged from .09 between CR and AT to .63 between CR and USC. As expected, low to moderate correlations were observed, suggesting that the scales are measuring interrelated but distinct aspects of object relations. This finding corroborates past studies using Westen et al.'s (1985) scoring system that reported similar results (Ornduff, Freedenfeld, Kelsey, & Critelli, 1994;
Westen, Lohr, Silk, Gold, & Kerber, 1990a; Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990b; Westen et al., 1991b).

**Data Analysis**

Due to the hypothesized developmental nature of object relations, and the possible influence of intelligence and verbal fluency on scale scores, Pearson correlations were computed for mean scores on each of the four object relations scales and age, IQ, and mean word count (derived by counting the number of words per story per subject, and averaging across the four TAT cards). These variables were not included in subsequent analyses because the observed correlations failed to reach statistical significance (see Table 8, Appendix A).

To test the hypotheses that the object relations development of violent juvenile offenders are more pathological than nonviolent juvenile offenders, two Multivariate Analysis of Variance (MANOVAs) were performed with offender status as the grouping variable, and 1) mean scores and 2) percentage of level-1 scores across the four object relations scales (Westen et al., 1985) as the dependent variables. Mean scores were calculated by averaging the ratings across cards on each of the scales for each subject (see Table 10, Appendix A). Percentage of level-1 responses were computed for each scale by summing the number of level-1 scores and dividing by the total number of scores for each subject (see Table 11, Appendix A).
The analysis of mean scores revealed no significant differences between groups, with Wilks' Lambda = .25, F(4,55) = 1.39, p = .25. Thus, the first hypothesis that subjects in the violent group would obtain significantly lower mean scores than nonviolent subjects across the four scales was not supported. The calculated multivariate effect size was .09 and the observed power at the .05 level was .40.

The analysis of percentage of level-1 scores similarly revealed no significant differences between groups, with Wilks' Lambda = .93, F(4,55) = 1.02, p = .40. Thus, the second hypothesis that subjects in the violent group would obtain significantly higher percentages of level-1 scores than nonviolent subjects across the four scales was not supported. The calculated multivariate effect size was .07 and the observed power at the .05 level was .30.

Considering each of the scales separately, it is interesting to note that 16.7%, 18.3%, and 16.6% of the subjects produced at least one level-1 response on CR, AT, and USC respectively. However, at least one level-1 response was produced by 76.7% of the subjects on CEI.

**Exploratory Analyses**

Although the percentage of level-1 responses did not differ significantly between the groups, the question of whether or not the violent and nonviolent groups differed with respect to more mature object relations functioning (level-5 responses) remained unanswered. Percentage of
level-5 responses were computed for each scale by summing the number of level-5 scores and dividing by the total number of scores for each subject. Interestingly, subjects in both groups received level-5 scores on the AT scale only. Therefore, an univariate analysis of variance (ANOVA) was performed on the independent variable group (violent vs. nonviolent) across percentage of level-5 responses for the dependent variable AT. Results indicated there was a significant difference between the groups on the AT scale, $F(1,58) = 3.95, p < .05$ (see Table 12, Appendix A). Specifically, nonviolent juvenile offenders produced a significantly higher percentage of level-5 responses than violent juvenile offenders on AT.
CHAPTER IV

DISCUSSION

Contrary to prediction, violent and nonviolent juvenile delinquents were not differentiated using the Object Relations and Social Cognitions: TAT Scoring System (Westen, Lohr, Silk, Kerber, & Goodrich, 1985). Violent juvenile offenders were not found to be more impaired than their nonviolent delinquent peers with respect to object relations functioning. Specifically, the two groups did not show significant differences on any of the four scales of the Westen et al. (1985) scoring system: Complexity of representations of people (CR), Affect-tone of relationship paradigms (AT), Capacity for emotional investment in people and moral standards (CEI), and Understanding social causality (USC). It is possible however, that both groups would show significant impairment on the developmentally oriented scales if compared to a normal comparison group. Analyses of demographic and criminal history information revealed that the two groups were quite similar. For example, violent and nonviolent juvenile delinquents did not differ with respect to IQ, academic achievement, number of prior offenses, and both groups evidenced similar offense profiles (e.g., most common offenses: theft, unlawful use of a motor vehicle, and burglary). Frances, Pincus, Widiger,
Davis, and First (1990) discussed the difficulty that is frequently encountered when attempting to examine differences between what they refer to as "near neighbors" (p. 1447). For example, significant differences between depression and schizophrenia are much more readily identifiable than are differences between depression and dysthymia. Examining the research on intellectual functioning and delinquency demonstrates this point well. Several researchers have identified a significant PIQ > VIQ discrepancy when comparing delinquents with a normal control group (Tarter, Hegedus, Winsten, & Alterman, 1985; Walsh & Beyer, 1986), but have been unsuccessful at finding the PIQ > VIQ discrepancy between violent and nonviolent juvenile delinquents (Hays, Soloway, & Schreiner, 1978; Tarter, Hegedus, Winsten, & 1985; Walsh & Beyer, 1986).

Dimensions of object relations. Some psychoanalytic theorists contend that object relations represents a single phenomenon (Masterson, 1972). Westen et al. (1985) propose that object relations are represented by several distinct but related dimensions, some of which progress along developmental lines. In the present study, two clearly delineated dimensions of object relations functioning emerged. Examination of observed scale intercorrelations first revealed a more cognitive dimension represented by CR and USC ($r = .63$, $p < .01$). A second, more affective dimension is represented by AT and CEI ($r = .48$, $p < .01$).
It was surprising to find that the groups differed in the predicted direction on only two of the four scales. Although the results were not statistically significant, violent juvenile offenders did score lower on AT and CEI. Contrary to what was expected, violent juvenile offenders scored higher than their nonviolent delinquent peers on CR and USC. This adds to the growing body of evidence which suggests that the four scales are most likely measuring different aspects of object relations.

Unfortunately, the absence of a "normal" comparison group in this study precludes us from answering the question of which, if any, aspects of object relations development appear to be most affected in the case of juvenile delinquency generally. Westen et al.'s (1991b) comparison of 2nd and 5th graders as well as 9th and 12th graders provided the only possible comparison to date. The present sample of juvenile offenders were just slightly older than Westen et al.'s (1991b) sample of 9th graders, however, it is interesting to note that the juvenile delinquents' mean scores on AT and CR very closely approximated the mean scores of Westen et al.'s (1991b) 2nd graders: CR = 2.17 (SD = .22), AT = 3.15 (SD = .52). On CEI and USC, the sample of juvenile delinquents more closely resembled Westen et al.'s (1991b) 5th graders: CEI = 1.78 (SD = .23), USC = 2.18 (SD = .44). Although this comparison may be important heuristically, significant differences between the two
research samples seriously restricts our ability to draw any meaningful conclusions. Additional research is needed to better understand the possible role that variables such as race, SES, and gender may play in object relations functioning as measured by the Westen et al. (1985) scoring system.

Contrary to what was expected, age did not correlate with the three scales hypothesized to be developmental in nature (i.e., CR, CEI, USC). This may be due in part to the negatively skewed distribution of ages in the sample. Thirty-nine (65%) of the 60 subjects were either 15 or 16 years of age (range = 12 to 16 years). Although object relations development is thought to develop beyond the preoedipal years, the extent to which development continues past the period of early adolescence remains a question for future research. The results from this study suggest that development may be complete or significantly decelerated by the time an individual reaches mid adolescence (mode and median age of sample = 15 years).

In addition to the hypothesis that violent juvenile offenders would have lower mean scores on all four scales of the scoring system, the hypothesis that violent juvenile offenders would evidence greater object relations pathology (measured by a higher percentage of level-1 responses on the scoring system) was not supported. A level-1 score is hypothesized to reflect considerable pathology. This is
especially true for the CR scale, where a level-1 score is thought to reflect an individual's inability to clearly differentiate the perspectives of self and others (Westen, Lohr, Silk, Gold, & Kerber, 1990a). Although the groups did not differ significantly with regards to percentage of level-1 responses, it is interesting to note that over 40% of the subjects produced at least one level-1 response. Westen et al. (1990) described the level-1 response as one that is relatively rare. We can only speculate that juvenile delinquents in general may be prone to low-level (immature) object relations functioning. An alternative explanation might be that the ambiguity and negative coloring of the TAT may have been less disturbing to delinquent subjects. Thus, the juvenile offenders in this study may have been less likely to consciously or unconsciously defended against presenting more pathological responses. The absence of clear normative data unfortunately precludes us from making definitive statements concerning the extent to which the percentage of level-1 responses in this sample of juvenile delinquents may differ from a sample of non-delinquent cohorts. The four scales did differ with respect to frequency of percentage of level-1 responses, however. Approximately 5% of the total responses received a level-1 score on CR, AT, and USC. In contrast, 27% of the total responses on CEI received a level-1 score (see Table 14, Appendix A). The percentage of
subjects who produced at least one level-1 response was notably higher on CEI (77%). The nearest scale was AT, with only 18% of the subjects producing at least one level-1 response. As pointed out previously, AT and CEI are believed to represent more affective aspects of object relations functioning. The remaining scales, CR and USC, are thought to reflect more cognitive dimensions of object relations functioning. It was hypothesized that violent subjects would manifest greater pathology across all four object relations scales. Although the results did not reach the level of statistical significance, an interesting pattern of object relations functioning emerged. Rather than finding the expected global pattern of impairment, the results suggested a more specific difference between the violent and nonviolent delinquents in this sample. Specifically, the violent juvenile offenders manifested higher object relations functioning on cognitive dimensions and lower functioning on affective dimensions. In contrast, the nonviolent juvenile offenders manifested lower object relations functioning on cognitive dimensions and higher functioning on affective dimensions. This finding supports Westen et al.'s (1985) assertion, "... simply possessing a complex representation or capacity for complex social cognition does not imply maturity of emotional investment" (p. 24). Although the results may have occurred by chance, it raises several interesting questions for future research.
Are violent juvenile delinquents more likely to defend against profound feelings of emptiness and aloneness through cognitive constructions of separateness and uniqueness? Or, are complex cognitive representations and social attributions a manifestation of a hypervigilant style which relates to a predominately malevolent view of the world and a history of failed attachments?

Although CEI only approached significance during the initial analysis, it may hold the most potential for future research with juvenile delinquents. Specifically, CEI measures the degree to which an individual is able to rise above a need-gratifying orientation toward relationships, and is able to invest in people, values, and ideals that improve the quality of life for all. Low level scores (i.e., level-1) clearly reflect a narcissistic pattern of emotional investment (Westen, 1991b). The high frequency with which level-1 responses occurred on CEI suggest that this sample of juvenile delinquents may have impairment in their ability to invest in genuine and meaningful relationships with other people. The results suggest that juvenile delinquents tend to view people primarily as instruments for gratification. This raises questions about the extent to which juvenile delinquents are capable of experiencing genuine feelings of empathy. The findings support Anna Freud's (1949) assertion that the destructive tendencies characteristic of delinquency and criminality are
the result of failed object attachments (primary narcissism). Future research utilizing larger samples should help to clarify the potential differences between violent and nonviolent juvenile delinquents on this dimension of object relations functioning.

Exploratory analysis revealed that the two groups were significantly different with respect to percentage of level-5 responses. This finding suggests that violent and nonviolent juvenile delinquents may differ in their range or repertoire of object relations functioning, especially on more affectively related dimensions. It is perhaps this potential for mature levels of object relations functioning that allow the nonviolent juveniles to opt for the more sublimated forms of delinquency. It is important to note that 100% of the level-5 responses among this sample of juvenile delinquents occurred on the scale measuring affect tone of relationship paradigms (AT). This finding supports previous research which showed that AT is the only non-developmental scale (Westen et al., 1991b). Given the findings in this study, future research is warranted to study the relationship between violence and the relative absence of a benevolent object world. It is not all that surprising to find that juveniles who have difficulty viewing the world as a safe and enriching place, are more likely to act out in violent ways. Theoretically, violent individuals are less likely to have developed more
benevolent representations. This impairment with respect to their view of the world (i.e., painful and threatening) may exacerbate the tendency of violent offenders to react aggressively to imagined threats or provocation.

Suggestions for future research. The present study did not employ the use of a normal comparison group. By using a normal comparison group, future research could address the question of which aspects of object relations development may be more or less affected in the case of juvenile delinquency. Does juvenile delinquency reflect a general impairment in object relations functioning or can specific deficits or patterns be delineated? It may have been more prudent to examine differences between juvenile delinquents and normals, following with research designed to examine differences between various categories of delinquency (e.g., violent vs. nonviolent).

The present study attempted to extend the findings of past research which utilized the TAT to study object relations development. Future research can address whether violent and nonviolent juvenile delinquents differ in the way they cognitively and affectively make sense of the world and relationships? In this respect, the TAT may offer a very useful way of identifying juveniles who are prone to acts of violence. Future research efforts in this area would be enhanced by a more rigorous and standardized approach to interviewing juveniles who come into contact
with the juvenile justice system. Basic background information should include such topics as abuse, family structure, school-related problems, psychiatric history, and medical history. Clearly, there is great need for longitudinally oriented studies that consider such variables and their relationship to both violent and nonviolent delinquent acts.

Limitations of the study. As with any retrospective study, the investigation is limited by what data is available in the records being used. The limitations inherent in this type of research clearly affect what can reasonably be asked or answered. Unfortunately, background information for many of the subjects in the present study was unavailable. The information provided can vary greatly from record to record. Records may contain incomplete or inaccurate information. This issue is of particular concern when considering the TAT responses used in this study. The scoring system used in the present study relies on rich TAT content in order to sample each subject's repertoire of responses. Consequently, the potential differences among examiners with regards to TAT administration (e.g., prompting) could seriously compromise internal consistency.

Current and prior offenses were used to assign subjects in this study to either the violent or nonviolent group. The records of subjects in the nonviolent group evidenced no history of violent criminal activity. However, it does not
seem unreasonable to consider the possibility that an individual may have engaged in some form of violent criminal behavior for which he was never formally charged. This raises the question of whether or not the groups used in this study truly provided a reliable sample of violent and nonviolent juvenile offenders. Henggeler et al. (1993) examined the validity of measures which address the assessment of violent offending. They reported that neither arrest records or self-reported violent offenses provided an accurate index of violent criminal behavior.
Table A-1

Mean Age of Research Subjects

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Age</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample</td>
<td>60</td>
<td>14.88</td>
<td>1.21</td>
<td>-.85</td>
<td>58</td>
<td>.40</td>
</tr>
<tr>
<td>Violent</td>
<td>30</td>
<td>14.93</td>
<td>1.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonviolent</td>
<td>30</td>
<td>14.70</td>
<td>1.12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Violent subjects have been charged with aggravated assault. Nonviolent subjects have been charged with felony property offenses.
<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Entire Sample (n = 60)</th>
<th>Violent (n = 30)</th>
<th>Nonviolent (n = 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afr-Amer</td>
<td>58.3%</td>
<td>30.0%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>30.0</td>
<td>16.7</td>
<td>13.3</td>
</tr>
<tr>
<td>Caucasian</td>
<td>8.3</td>
<td>3.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Other</td>
<td>3.3</td>
<td>0</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Table A-3

Measured Intelligence of Research Subjects

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample</td>
<td>60</td>
<td>90</td>
<td>11</td>
<td>70-118</td>
<td>1.68</td>
<td>58</td>
<td>.10</td>
</tr>
<tr>
<td>Violent</td>
<td>30</td>
<td>88</td>
<td>9</td>
<td>70-102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonviolent</td>
<td>30</td>
<td>92</td>
<td>12</td>
<td>73-118</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Intelligence measures include the Culture Fair Intelligence Test (Institute for Personality and Ability Testing, 1973) and the Wechsler Intelligence Scale for Children - Revised (Wechsler, 1974).
Table A-4

**Mean Wide Range Achievement Test - Revised (WRAT-R; Jastak & Wilkinson, 1984) Standard Scores**

<table>
<thead>
<tr>
<th>WRAT-R Scales</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group</td>
<td>n</td>
<td>Reading</td>
</tr>
<tr>
<td></td>
<td>Entire sample</td>
<td>60</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td></td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>t</td>
<td></td>
<td>-.62</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td></td>
<td>.53</td>
</tr>
<tr>
<td></td>
<td>Violent</td>
<td>30</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td></td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Nonviolent</td>
<td>30</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Group</td>
<td>n</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>-------------</td>
<td>----</td>
<td>------</td>
<td>----</td>
</tr>
<tr>
<td>Entire Sample</td>
<td>60</td>
<td>3.72</td>
<td>2.41</td>
</tr>
<tr>
<td>Violent</td>
<td>30</td>
<td>3.37</td>
<td>2.55</td>
</tr>
<tr>
<td>Nonviolent</td>
<td>30</td>
<td>4.07</td>
<td>2.24</td>
</tr>
</tbody>
</table>
Table A-6

**Reported Substance Use of Research Subjects**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Entire Sample (n = 50)</th>
<th>Violent (n = 22)</th>
<th>Nonviolent (n = 28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>24%</td>
<td>18%</td>
<td>28%</td>
</tr>
<tr>
<td>Drugs</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Poly</td>
<td>48</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>Denied</td>
<td>24</td>
<td>32</td>
<td>18</td>
</tr>
</tbody>
</table>

**Note.** Poly = both alcohol and illicit drug use. Denied = history of drug or alcohol use denied.
Table A-7

Pearson Correlations Among the Scales of the Object Relations and Social Cognitions TAT Scoring System (Westen et al., 1985)

<table>
<thead>
<tr>
<th>Scale</th>
<th>CR</th>
<th>AT</th>
<th>CEI</th>
<th>USC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample of Juvenile Offenders (n = 60)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>.26*</td>
<td>.09</td>
<td>.28</td>
<td>.63**</td>
</tr>
<tr>
<td>AT</td>
<td>.56*</td>
<td></td>
<td>.48**</td>
<td>.20</td>
</tr>
<tr>
<td>CEI</td>
<td></td>
<td>.35*</td>
<td></td>
<td>.35*</td>
</tr>
<tr>
<td>USC</td>
<td></td>
<td></td>
<td>.19*</td>
<td></td>
</tr>
</tbody>
</table>

Note. CR = Complexity of representations of people. AT = Affect-tone of relationship paradigms. CEI = Capacity for emotional investment in relationships and moral standards. USC = Understanding of social causality.

*Standard deviations are printed on the diagonal.

* p < .01, ** p < .001
Table A-8

Pearson Correlations Between Age, Intelligence, and Mean Word Count and the Scales of the Object Relations and Social Cognitions TAT Scoring System (Westen et al., 1985)

<table>
<thead>
<tr>
<th>Object Relations Scales</th>
<th>CR</th>
<th>AT</th>
<th>CEI</th>
<th>USC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample of Juvenile Offenders (n = 60)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-.01</td>
<td>-.08</td>
<td>-.07</td>
<td>.21</td>
</tr>
<tr>
<td>IQ</td>
<td>.09</td>
<td>.03</td>
<td>.23</td>
<td>.13</td>
</tr>
<tr>
<td>Mean Word Count</td>
<td>.12</td>
<td>-.06</td>
<td>.18</td>
<td>-.04</td>
</tr>
</tbody>
</table>

Note. CR = Complexity of representations of people. AT = Affect-tone of relationship paradigms. CEI = Capacity for emotional investment in relationships and moral standards. USC = Understanding of social causality.
Table A-9

Mean Word Count

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample</td>
<td>60</td>
<td>79.74</td>
<td>28.50</td>
<td>.35</td>
<td>58</td>
<td>.73</td>
</tr>
<tr>
<td>Violent</td>
<td>30</td>
<td>77.71</td>
<td>35.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonviolent</td>
<td>30</td>
<td>81.77</td>
<td>52.20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table A-10

**Mean Scores Across the Scales of the Object Relations and Social Cognitions TAT Scoring System (Westen et al., 1985)**

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>CR</th>
<th>AT</th>
<th>CEI</th>
<th>USC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entire Sample</strong></td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
<td>2.03</td>
<td>3.15</td>
<td>1.91</td>
<td>2.03</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.26</td>
<td>.56</td>
<td>.35</td>
<td>.19</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>1.29</td>
<td>1.63</td>
<td>2.57</td>
<td>.11</td>
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<td>D</td>
<td></td>
<td>.26</td>
<td>.21</td>
<td>.12</td>
<td>.74</td>
</tr>
<tr>
<td><strong>Violent</strong></td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
<td>2.07</td>
<td>3.06</td>
<td>1.84</td>
<td>2.03</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.32</td>
<td>.45</td>
<td>.32</td>
<td>.23</td>
</tr>
<tr>
<td><strong>Nonviolent</strong></td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
<td>1.99</td>
<td>3.24</td>
<td>1.98</td>
<td>2.02</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>.17</td>
<td>.65</td>
<td>.37</td>
<td>.16</td>
</tr>
</tbody>
</table>

**Note.** CR = Complexity of representations of people. AT = Affect-tone of relationship paradigms. CEI = Capacity for emotional investment in relationships and moral standards. USC = Understanding of social causality.
Table A-11

Mean Percentage of Level-1 Scores Across the Scales of the Object Relations and Social Cognitions TAT Scoring System (Westen et al., 1985)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>CR</th>
<th>AT</th>
<th>CEI</th>
<th>USC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample</td>
<td>60</td>
<td>5.42</td>
<td>5.42</td>
<td>27.08</td>
<td>5.00</td>
</tr>
<tr>
<td>M</td>
<td>30</td>
<td>5.0</td>
<td>5.83</td>
<td>31.67</td>
<td>4.17</td>
</tr>
<tr>
<td>SD</td>
<td>13.09</td>
<td>12.26</td>
<td>19.69</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>.06</td>
<td>.07</td>
<td>3.38</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>.81</td>
<td>.80</td>
<td>.07</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Violent</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>5.83</td>
<td>5.00</td>
<td>22.50</td>
<td>5.83</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>12.60</td>
<td>13.77</td>
<td>21.12</td>
<td>12.60</td>
<td></td>
</tr>
<tr>
<td>Nonviolent</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. CR = Complexity of representations of people. AT = Affect-tone of relationship paradigms. CEI = Capacity for emotional investment in relationships and moral standards. USC = Understanding of social causality.
Table A-12

Mean Percentage of Level-5 Scores on the Object Relations and Social Cognitions TAT Scoring System Scale measuring Affect-tone of Relationship Paradigms (Westen et al., 1985)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample</td>
<td>60</td>
<td>5.83</td>
<td>13.31</td>
<td>3.95</td>
<td>58</td>
<td>.05</td>
</tr>
<tr>
<td>Violent</td>
<td>30</td>
<td>2.50</td>
<td>7.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonviolent</td>
<td>30</td>
<td>9.17</td>
<td>16.72</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
APPENDIX B
OBJECT RELATIONS AND SOCIAL COGNITIONS SCORING SUMMARY
Complexity of Representations of People

Principle: Scale measures the extent to which the subject clearly differentiates the perspectives of self and others: sees the self and others as having stable, enduring, multidimensional dispositions; and sees the self and others as psychological beings with complex motives and subjective experience.

Level 1: People are not clearly differentiated; confusion of points of view.

Level 2: Simple, unidimensional representations; focus on actions; traits are global and univariant.

Level 3: Minor elaboration of mental life or personality.

Level 4: Expanded appreciation of complexity of subjective experience and personality dispositions; absence of representations integrating life history, complex subjectivity, and personality processes.

Level 5: Complex representations, indicating understanding of interaction of enduring and momentary psychological experience; understanding of personality as system of processes interacting with each other and the environment.
Affect-tone of Relationship Paradigms

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle Scale measures affective quality of representations of people and relationships. It attempts to assess the extent to which the person expects from the world, and particularly the world of people, profound malevolence or overwhelming pain, or views social interaction as basically benign and enriching.</td>
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</tr>
<tr>
<td>Level 1 Malevolent representations; unprovoked violence or gross negligence by significant others.</td>
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<tr>
<td>Level 2 Representations of relationships as hostile, empty, or erratic but not profoundly malevolent; profound loneliness or disappointment in relationships.</td>
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<tr>
<td>Level 3 Mixed representations with mildly negative tone.</td>
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</tr>
<tr>
<td>Level 4 Mixed representations with neutral or balanced tone.</td>
<td></td>
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<tr>
<td>Level 5 Predominantly positive representations; benign and enriching interactions.</td>
<td></td>
</tr>
</tbody>
</table>
### Capacity for Emotional Investment

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Level 1</strong></td>
<td>Need-gratifying orientation; profound self-preoccupation.</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td>Limited investment in people, relationships, and moral standards; conflicting interests recognized, but gratification remains primary aim; moral standards primitive and unintegrated or followed to avoid punishment.</td>
</tr>
<tr>
<td><strong>Level 3</strong></td>
<td>Conventual investment in people and moral standards; stereotypic compassion, mutuality, or helping orientation; guilt at moral transgressions.</td>
</tr>
<tr>
<td><strong>Level 4</strong></td>
<td>Mature, committed investment in relationships and values; mutual empathy and concern; commitment to abstract values.</td>
</tr>
<tr>
<td><strong>Level 5</strong></td>
<td>Autonomous selfhood in the context of committed relationships; recognition of conventual nature of moral rules in the context of carefully considered standards or concern for concrete people or relationships.</td>
</tr>
</tbody>
</table>
Understanding of Social Causality

<table>
<thead>
<tr>
<th>Principle</th>
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</thead>
<tbody>
<tr>
<td>Scale measures the extent to which attributions about the causes of peoples’s actions, thoughts, and feelings are logical, accurate, complex, and psychologically-minded.</td>
</tr>
</tbody>
</table>

| Level 1 | Noncausal or grossly illogical depictions of psychological and interpersonal events. |

| Level 2 | Rudimentary understanding of social causality; minor logic errors or unexplained transitions; simple stimulus-response causality. |

| Level 3 | Complex, accurate situational causality and rudimentary understanding of the role of thoughts and feelings in mediating action. |

| Level 4 | Expanded appreciation of the role of mental processes in generating thoughts, feelings, behaviors, and interpersonal interactions. |

| Level 5 | Complex appreciation of the role of mental processes in generating thoughts, feelings, behaviors, and interpersonal interactions; understanding of unconscious motivational processes. |
APPENDIX C

SAMPLE TAT RESPONSES
The following TAT responses were given by subjects in the study and have been scored according to the Object Relations and Social Cognition: TAT Scoring Manual (Westen, Lohr, Silk, Kerber, & Goodrich, 1985). Refer to Appendix B for a more specific explanation of scores.

**TAT Card 2**

(violent)

They working. That girl going to school. At the end, finally finishing their job and that all. (Thinking/Feeling?) They feeling happy, thinking about being richer.

**Scoring**

\[
\begin{array}{cccc}
\text{CR} &=& 1 & \text{AT} = 4 \\
\text{CEI} &=& 2 & \text{USC} = 2 \\
\end{array}
\]

**TAT Card 1**

(violent)

He’s wondering what he should play at the concert with the violin, but he’s too shy to play. Should he play or should he hide and say he can’t find it. (Feeling?) Just wondering, confused. (End?) He knows he’s good but he just pulls ahead and plays it with his eyes closed.

**Scoring**

\[
\begin{array}{cccc}
\text{CR} &=& 4 & \text{AT} = 3 \\
\text{CEI} &=& 1 & \text{USC} = 3 \\
\end{array}
\]
TAT Card 6BM
(nonviolent)

Looks Like something bad just happened and they’re surprised. He’s telling her and she’s looking out the window surprised. That’s all. (Happens?) To make them sad? Her son died and after that she commits suicide. (Man?) Detective.

Scoring
CR = 2      AT = 1      CEI = 2      USC = 2

---

TAT Card 6BM
(nonviolent)

A lady and her son talked and the mother tells her son that she’s going to die of cancer and he doesn’t know how to take it and he’s a doctor and he’s trying to think of a way to help her. (Happens?) Later on, a week or so later he finds a solution or medicine to help her. (Feeling?) They’re feeling great.

Scoring
CR = 2      AT = 5      CEI = 3      USC = 2
TAT Card 7BM
(violent)

Two men in court. Man losing and at the end probably win or lose. Thinking about killing the person he’s going up against or committing suicide b/c he don’t want to go to jail.

Scoring
CR = 2  AT = 1  CEI = 1  USC = 2

TAT Card 1
(nonviolent)

He’s looking at his violin thinking when is someone going to teach me how to play it. Then he just shines it up. (end?) Him putting it back in the case and wondering when someone’s going to teach him how to play. (Feeling?) Sad.

Scoring
CR = 2  AT = 3  CEI = 1  USC = 2
TAT Card 7BM

(nonviolent)

His father is telling him that his family heritage and secret way to make the wine the family has a wine business. And he's telling him the secret formula. And he's turning over the wine business to his son. He's feeling proud of his son and his son is not sure if he's going to be able to hold up and take care of the wine business. (End?) They walk back home.

Scoring

\[
\begin{align*}
\text{CR} &= 2 \\
\text{AT} &= 5 \\
\text{CEI} &= 4 \\
\text{USC} &= 3
\end{align*}
\]

TAT Card 6BM

(violent)

Man telling Mom something like he probably tellin' her something gonna happen to her. At the end something happen to her. He scared something happen to his mama and that's what he is thinking.

Scoring

\[
\begin{align*}
\text{CR} &= 2 \\
\text{AT} &= 3 \\
\text{CEI} &= 2 \\
\text{USC} &= 1
\end{align*}
\]
Tat Card 7BM
(violent)

The father and the son, and they're having a man to man talk. Son is wondering if he should get married or not. The dad is just giving advice about the good and bad things that happen when you get married. At the end, he just decides to get married. (H F?) His dad feels happy because he's getting married, but he's a little disappointed because of the bad things his dad is telling him.

Scoring
CR = 4 AT = 3 CEI = 3 USC = 3

TAT Card 1
(violent)

This is a story about little Freddy. He stares at his deceased father's violin set and wonders if he ever will be as good as his father was. But also he feels that he's alone since his father is gone. That's all. (End?) So now Freddy began to realize he can be as good as his father was and he practiced every day to play the violin. He becomes very good.

Scoring
CR = 3 AT = 3 CEI = 1 USC = 3
REFERENCES


