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Philadelphia College of Osteopathic Medicine

Department of Psychology

DEFINING THE PERSONALITY CHARACTERISTICS OF
DELINQUENT ADOLESCENT RECIDIVISTS

By Barbara J. Sulik

Submitted in Partial Fulfillment
Of the Requirements for the Degree of
Doctor of Psychology

August 2002

**PHILADELPHIA COLLEGE OF OSTEOPATIC MEDICINE
DEPARTMENT OF PSYCHOLOGY**

Dissertation Approval

This is to certify that the thesis presented to us by
Barbara J. Sulik on the 10th day of April, 2002, in partial
fulfillment of the requirements for the degree of
Doctor of Psychology, has been examined and is acceptable
in both scholarship and literary quality.

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Barbara J. Sulik

Dedicated to the memory of Jean and Frank B. Sulik

Acknowledgements

The Motown song, *It Takes Two*, sung by Marvin Gaye and Kim Weston, (Stevenson & Moy, 1966), says, it takes two to make a dream come true. In this case, it took many more but not a village. I would like to extend my sincerest thanks to my committee for their unending encouragement, Dr. Arthur Freeman who showed me how one could dream large, Dr. Robert DiTomasso my statistical wizard and patient mentor, also Dr. David Castro-Blanco part of the original team and Dr. Michael Ascher who picked up the baton.

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Abstract

This study was done to provide basic empirical data on the Millon Adolescent Clinical Inventory with the focus on establishing a personality profile for recidivistic juvenile offenders. The subjects of this study consisted of four groups of male and female adolescents between the ages of 15 and 17 years. The control group (n = 50) consisted of adolescents not adjudicated either delinquent or dependent. The dependent group (n = 50) consisted of adolescents not adjudicated delinquent and fitting the diagnosis of oppositional defiant disorder. The delinquent group (n = 50) consisted of adolescents that were diagnosed as conduct disorder and adjudicated delinquent with no felony convictions but with two adjudications. The last group, the recidivist offenders (n = 50) consisted of adolescents diagnosed as conduct disorder. These adolescents were also adjudicated delinquent with at least two felony convictions but no less than three arrests. Nine scales of the Millon Adolescent Clinical Inventory (MACI) that research had shown to be the

common characteristics prevalent in delinquents were used in this study. It was hypothesized that there would be a significant difference between the nine scale scores selected from the MACI between the recidivist group who were expected to score higher on all nine scales than the other groups. The results however showed that the control group scored significantly higher on the following scales of the MACI: unruly, forceful, oppositional, social insensitivity, family disorder and impulse propensity than the other three groups. The results give rise to questions regarding the implications for treatment of all adolescents involved in the court system. It also brings into question the usefulness of clinical data when subjects try to appear more benign or delinquent for self-serving reasons.

Introduction

In an attempt to predict future delinquents, we must always keep in mind that we are dealing with individuals who might resist many of the same pressures, which have caused others to become delinquent. Also, we must remember that there are an almost indefinite number of variables within the individual and his environment, which make it extremely difficult to categorize him [sic] or predict his [sic] future behavior. (Hahn, 1971 p. 228)

Nationwide, violent crimes by juveniles: murder, rape, robbery and aggravated assault, have increased 46% during the last decade, according to the FBI, even as violent crime rates for adults have decreased (Stahl, 2000). In relation to their proportion of the population, adolescents are responsible for more illegal and violent acts than are adults (Synder & Sickmund, 1999). In some cases, Grisso (1998) points out that over two thirds of male youths will have juvenile court records by the time they reach late adolescence. Stahl, (2000) reports that between 1987 and 1996, arrests for violent crimes by

juveniles murder, rape armed robbery and aggravated assault increased by 49%, according to FBI data. The Juvenile Court in the United States processed an estimated 1,757,400 delinquency cases in 1998, which was the latest year for which statistics were available (Office of Juvenile Justice and Delinquency (OJJDP, 2001). These statistics showed that there was a 44% increase between 1989 and 1998 in juvenile cases. It had been estimated that the total number of crimes committed by juveniles in the year 2000 were 2,369,400 of which adolescents less than the age of 15 committed 32%. It is also estimated that 28% of all juvenile crimes were committed by females, an increase of 83% (Stahl, 2001). The growth in cases involving females has outpaced the growth for males in all offender categories. The arrests of juveniles for possessing weapons shows a 10% increase for females and of the 142,000 arrests for runaways, 59% were females (Stahl, 2001). In 1998, approximately 79% of the juvenile population in the United States was white and 15% African American. However, African American adolescents were involved in 29% (508,200) of the delinquent cases handled by the Juvenile Courts. White

adolescents were involved in 67% (1,185,400) of the delinquent cases (OJJDP, 2001). With a surge expected in the teenage population to come after the new millennium, and as reported in the 1995 report for the National Center for Juvenile Justice, juvenile arrests for violent crimes are expected to double by the year 2010. This population growth will place added and varied demands on the juvenile justice system.

Violence As A Public Health Issue

The medical community has identified violence in the United States as a significant public health issue (Koop & Lundberg, 1992). Pediatricians and other primary care practitioners commonly see developmental and behavioral problems in their practices. According to recent estimates by the American Academy of Pediatrics, 12% to 16% of American children have developmental or behavioral disorders (Boyle, 1994). Grisso, Barnum, Fletcher, Cauffman and Peuschold (2001) and Teplin, Abram and McClelland (1998) cite that increase to 70% to 80% when conduct disorders are included and about 40% to

50% when these disorders are excluded. Martens (2000) study cites that children with conduct disorder, with or without attention deficit disorder, have an elevated risk for antisocial or psychopathic personality disorders in adolescence and adulthood. Violence, juvenile delinquency and related psychopathology are problems in which research, clinical practice, public policy and activism intersect (Steiner & Stone, 1999, p. 233).

It is, therefore, imperative that the Juvenile Justice System be able to identify as soon as possible those adolescents likely to be the perpetrators of aggressive and violent acts. The emphasis on earlier identification creates the opportunity to provide the benefits of early intervention but also poses greater challenges for the Psychologist and Probation Officer. Grisso et al, 2001 cite the need for routine screening of all youths at the front door of the juvenile system, allowing for better judgment about the youth's needs. Grenier and Roundtree (1987) and Wiebush, Baird, Krisberg and Onek (1995) point out the benefits of identifying high-risk offenders, as does Weary (1997), early in the delinquent process. By so doing, appropriate

interventions and services could be used more efficiently and, in turn, could impact the rate of recidivism. The benefits derived from early intervention are the prevention of antisocial behavior and violent behavior, monetary costs associated with both the commission of delinquent acts, as well as incarceration, and treatment are tremendous (Day, 1998; Kazdin, 1987). Juveniles report that they have committed, at least, one delinquent act before the age of 18 (Synder & Sickmund, 1995). Moffit, Caspi, Dickson, Silva & Stanton (1996), estimates that up to 60% of adolescent boys engage in some form of delinquency.

Offender Treatment

The traditional probationary approach to rehabilitation in the Juvenile Justice System has not been effective for the most part. According to Grenier and Roundtree (1987), it lacks scientific predictive tools that accurately classify juvenile offenders. It is, therefore, necessary, in order for the probationary period to be effective, that those juveniles likely to

commit aggressive acts, and those likely to be recidivists, are identified early in the process. Steiner, Cauffman and Duxbury (1999) make the point that it is imperative that personality measures be added to the assessment of juvenile offenders in order to understand how personality influences criminal activity and recidivism. Their research showed that personality traits are predictive of past criminal behavior but can also be used to predict future criminal activity. The purpose and intent of the juvenile courts and probationary services is to turn delinquents into productive citizens through treatment. The high rate of recidivism among delinquent offenders is a glaring consequence of the ineffectiveness of current rehabilitation approaches (Steiner & Stone, 1999). Prevention is intended to change individual behavior and is focused on reducing factors in the individual, family and environment (OJJDP 1999).

Delinquency and Externalizing Disorders

In a review of the literature, Loeber (1990) concluded that the greatest continuity in antisocial offending is found among children, who exhibit antisocial behavior the earliest. Cumulative evidence now indicates that chronic externalized problems are already present in the pre-school years (Bates, Bayon, Bennett, Ridge & Brown, 1991; Pianta & Caldwell, 1991). Rutter (1996) suggests that the roots of antisocial behavior may lie in a broad behavioral propensity rather than in any predisposition to commit illegal acts. They also felt that heritability estimates for criminal behavior leaves room for environmental contributions. Holcomb and Kashani (1991) found that the previous edition of the Millon Adolescent Clinical Inventory (MACI; Millon, 1993), the Millon Adolescent Personality Inventory (MAPI; Millon, 1982), showed that there were clear and statistical differences on the MAPI scales between conduct disordered adolescents and non-conduct disordered adolescents. It has not been able to identify early on those who would benefit from more intensive and individualized

interventions to prevent recidivistic behavior. The high-risk recidivist offender however is not as easily deterred and would therefore be in need of more individualized specific and structured interventions.

Causal Factors of Delinquency

Many factors contribute to the understanding of what causes delinquent behavior. Social factors need to be considered besides the psychological and biological factors. The following are three key theories for explaining crime and delinquency. The strain theory is a macro-level, normative theory that explains the prevalence of deviance in the lower socio-economic classes of American society (Leighninger & Popple, 1996). The theory looks at structural conditions in the culture of American society to understand the very high rates of deviance among America's poor. The theory, which is a basic continuance of the earlier structural functionalist perspective, states that the conditions in society that prevent an adolescent from attaining success can cause a defiance of socially accepted norms and morals, which

Leads to engagement of delinquent acts. The central ideas being that because of inadequate socialization, these adolescents are unable to effectively cope. This produces strain, which they seek to resolve through their delinquent behavior (Leighninger & Popple, 1996).

Social learning theory (Leighninger & Popple, 1996), or the differential association theory, states that crime is learned in a process of communication and that this learning occurs within intimate personal groups such as peers. One engages in crime because of an excess of the definitions favorable to law violations over definitions unfavorable to law violation. This can vary in frequency, duration, priority and intensity. Learning criminal behavior involves all the mechanisms involved in any other learning situation. This theory shows how an adolescent can socially learn deviant behavior from those around him or her such as family, peers or anyone else that he or she comes in contact with. Therefore if an adolescent is around delinquent peers, they can learn the activities of their peers and, therefore, be more prone to engage in delinquent activities (Calhoun, Light & Keller 1989).

Labeling theory, also known as reaction theory, holds that social groups create deviance by making rules whose infraction constitutes deviance and by applying these rules to particular people and labeling them as outsiders (Leighninger & Popple, 1996). Deviance then is not a quality of the act that the person commits, but rather a consequence of the application by others of rules and sanctions to the offender. Deviant behavior is the behavior that people so label. If an adolescent is labeled as a delinquent, then his/her self-identity may develop as such, and he/she will be far more prone to engaging in criminal activity. Because of an adolescent's negative self-concept he or she will choose to engage in crime and associate with other delinquents (Becker, 1997).

Background Risk Factors

The key background risk factors during childhood for serious and chronic delinquent youths are: family conflict, economic deprivation, related community disorganization, and environmental factors. Also a

substantial body of research indicates that child maltreatment (physical and mental abuse) is associated with elevated levels of delinquency. Social control theorists contend that maltreatment disrupts important delinquency-inhibiting ties. The social learning theorist emphasizes the deviant values and patterns of behavior are learned from those that administer the maltreatment. The social psychological strain theorists emphasize the criminogenic emotions likely to arise among maltreated youths, such as anger and resentment. However, the research provided limited support for all three explanations and found that there needs to be a more general and complex understanding of the maltreatment-delinquency relationship (Brezina, 1998). The socioeconomic status of these youths would have caused them to learn definitions favorable to violence through interaction with parents and peers. Heimer (1997) points out that the joint contributions of social stratification and culture has to be taken into account in the formation of delinquent predisposition.

The importance has been emphasized by reports that Conduct Disorder represents a major health and social

problem and accounts for the largest portion of clinical references (Hart, 1993). Herbert (1995) cites that between one-half and two-thirds of all children and adolescents referred to mental health services are assessed as having a disruptive behavior disorder and this is not just a problem in the United States.

Assessment and Diagnosis of Conduct Disorder

Conduct Disorder, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, 2000), is a:

Repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criteria present in the past 6 weeks: aggression to people and animals, destruction of property, deceitfulness or theft, serious violations of rules. The disturbance in behavior causes clinically significant impairment in social,

academic, or occupational functioning. If the individual is 18 years or older, criteria are not met for Antisocial Personality Disorder (pp. 90-91).

Also these adolescents with Conduct Disorder are more likely to display antisocial behavior or other psychiatric problems as adults (Holcomb & Kashani, 1991). Kazdin (1995) reports that 40% of youths with Conduct Disorder do not continue along the path towards Adult Antisocial Personality Disorder. Robin & Rutter's (1990) research however points out that youths with childhood onset Conduct Disorder are twice as likely to progress to Adult Antisocial Personality Disorder. Efforts are being made to identify subtypes of antisocial children and adolescents that may vary their amenability to treatment (Kazdin, 1993).

Disruptive behavior disorders (Conduct Disorder and Oppositional Defiant Disorder) represent the largest group of referral for psychotherapy interventions (Abikoff & Klein, 1992). The essential feature of Oppositional Defiant Disorder (ODD) is a pattern of negative, hostile and defiant behavior, without the more serious violations of basic rights of others as seen in

Conduct Disorder. They are argumentative with adults, have frequent temper loss, swear and are often angry and resentful, defiant of adult rules and requests and have a tendency to blame others for own mistakes or difficulties (American Psychiatric Association, 2000). Loeber and Keenan (1994) reported in their research that 90% of the children with Conduct Disorder met the criteria for Oppositional Defiant Disorder prior to their development of Conduct Disorder. They also found that only one third of the children with Oppositional Defiant Disorder were found to eventually be diagnosed as having Conduct Disorder. Research has shown that conduct disorder and oppositional defiant disorder are developmentally related but that there is also a difference, in that Oppositional Defiant Disorder shows specific and high comorbidity with Attention Deficient Disorder (Loeber, Lahey & Thomas, 1991). Although much attention is given to Conduct Disorder adolescents, there is no commonly accepted, efficient, appropriate psychometric employed to identify and assess Conduct Disorder. As Grisso et al. (2001) cite in their research many of the best instruments for the comprehensive assessment of youth's mental disorders have

important limitations for routine screening of every youth entering the juvenile justice system, no matter at what level. An instrument cited in the literature that holds much promise in this area is the Millon Adolescent Clinical Inventory (MACI). The MACI is based upon Millon's theory, which proposes that both normal and abnormal personality styles can be derived by combining their polarities: pleasure-pain, active-passive and self-other (Millon, 1983; Millon & Davis, 1993). The premise being that humans are naturally driven to maximize pleasurable experiences and to minimize unpleasant or painful circumstances. Besides the underlying reinforcement motivators that guide human behavior, Millon's biopsychosocial model holds that individuals also develop instrumental strategies for attaining reinforcing experiences. He holds that people engage in pursuit of pleasurable and life-enriching experiences by interacting with the environment and generating activity that leads to reinforcement. He also held that people could passively accept various life experiences and wait for pleasurable life enhancing experiences to arise. One's passivity leads the

individual to adjust to and follow direction provided by the environment.

Millon Adolescent Clinical Inventory

The Millon Adolescent Clinical Inventory (MACI) was designed specifically for assessing juvenile personality characteristics and clinical syndromes. The MACI is the third version of Millon's Adolescent Inventories (Millon, 1993). It was designed to be used as an aid in identifying, predicting, and understanding a wide range of psychological difficulties that are characteristic of adolescents.

The scales of the MACI were empirically validated to identify personal problems, such as power difficulties, confusion about self and family problems. It is proposed as an aid to assist clinicians in determining those adolescents who are likely to exhibit acting out behaviors, anxious feelings and suicidal tendencies. It also assesses the juvenile's strengths, along with his/her weaknesses, thus giving a full perspective of the adolescent's personality. A strength of the MACI is the

length of the test, 160 questions, as compared to the Minnesota Multiphasic Personality Inventory for Adolescents' (MMPI-A) 478 items. (Butcher et al., 1992).

The MACI is intimately linked to the DSM-IV as virtually no other broad based self-report personality-measuring instrument. It is an objective method for assessing clinical symptomatology and personality disorders that have a direct bearing on legal issues involving juveniles (McCann & Dyer, 1996).

Although it holds promise, little research was found in the literature using the MACI with Conduct Disorder or Oppositional Defiant juveniles to identify recidivist offenders. There were a large handful of studies using the Millon Adolescent Personality Inventory (MAPI), the precursor of the MACI. Holcomb and Kashani (1991) found through their research on conduct-disordered adolescents that there were clear, statistically significant differences on the MAPI scales between conduct disordered and non-conduct disordered adolescents.

It was believed by McCann and Dyer (1996) that the MACI may be useful to predict major treatment concerns but no research exists regarding their assumption.

They feel that certain MACI indicators: the expressed concern scales (A through H) provide a reflector of those areas that the adolescent views or sees as a problem. They cite the example that if Scale G (Family Discord) is huge, and there are no other elevated scores, then the adolescent is projecting blame on others and is apt to take little responsibility for his/her own problems. Also, Scale F, Social Insensitivity, has some prognostic implications especially for conduct-disordered adolescents. They feel that an elevation in this area suggests a willingness on the part of the adolescent to admit that he/she violates the rights of others and takes advantage of those in weaker positions. Therefore, a heightened level on Scale F may show some motivation on the part of the adolescent to work on his/her social insensitivity. Some adolescents, however, may express no concern and thus would score low on the F Scale, reflecting minimal insight. McCann & Dyer further feel that low F - Scale adolescents will be generally difficult to treat with traditional therapies. The MACI holds many implications for court adjudicated, conduct disordered adolescents. The present study was designed to

expand upon the previous research by Holcomb and Kashani (1991) and Hart (1993). Holcomb and Kashani found in using the MAPI that there were significant differences in personality style, expressed concerns and behavioral correlates between conduct disordered and non-conduct disordered adolescents. Their results also supported the concurrent validity of the MAPI, as well as the use of self-report information with troubled youth. Their sample size, however, was seen as a fault because it was too small. The purpose of this study is to explore the personality characteristics of recidivist delinquent adolescents and whether the MACI is able to distinguish the personality differences between conduct disordered adolescents and dependent juveniles (non adjudicated but diagnosed as Oppositional Defiant Disorder juveniles) and recidivist offenders. The focus being that recidivistic juvenile offenders would have higher scores on the following nine scales of the MACI:

Scale 6a - Unruly: This scale corresponds to the antisocial personality disorder in the DSM-IV, and measures features of conduct disturbance. Higher scores are difficult to manage, especially

autonomous, and prone to seek revenge for perceived injustices or abuses they have experienced. Their behavior is often impulsive and irresponsible, they are insensitive toward others, and they can be quite ruthless.

Scale 6b - Forceful: This scale is designed to measure features associated with the sadistic personality. These teenagers are strong-willed, tough minded, and in constant conflict with authority. They derive much satisfaction from humiliating and violating the rights of others. They are hostile and combative when confronted with the consequences of their actions.

Scale 8a - Oppositional: The features characterizing teenagers' elevations on this scale are intense resentment and irritability over having demands placed on one's self by others. Strong negative and oppositional attitudes prevail and there is a stubborn resistance to doing things that others ask of the adolescent.

Scale F - Social Insensitivity: High scores on the social insensitivity scale reveals a tendency to

view others with little or no empathy. The adolescent fails to see that other people have needs and feelings and the rights of others are readily ignored.

Scale G - Family Disorder: This scale indicates a concern over family tension and discord that is brought about either by perceived rejection by one's parents or because of one's inability to accept parental limits and directions. When scores are elevated, they suggest that an adolescent is in a family situation that is marked by strife, turmoil, strained relationships and conflicted interaction.

Scale H - Childhood Abuse: High scores reflect a concern over intrusive thoughts and memories about being the victim of physical, sexual or emotional abuse. The abuse can be either recent or remote, but intrusive and recurrent thoughts are the major concern.

Scale BB - Substance Proness: This scale measures tendencies in the adolescent to abuse alcohol and drugs. High scores are generally indicative of problems in school, relationship, or work that are

due to substance abuse. Also, the teenager usually endorses attitudes and beliefs that make him or her highly susceptible to substance abuse.

Scale CC - Delinquent Predisposition: The delinquent predisposition scale reflects behavioral patterns that demonstrate a general disregard for societal conventions and norms. There is little empathy or consideration for the rights of others and the adolescent who scores high on this scale either has or is at risk of getting into legal troubles because of illegal or rule-violating behavior.

Scale DD - Impulsive Propensity: Higher scores on this scale reflect a propensity toward erratic, impulsive actions that often lead to negative outcomes. Adolescents generally react to their impulses before thinking about the consequences of their actions. Impulsive acts can be found in any one of several activities, including sexuality, substance abuse, fighting, sensation seeking and other risky behaviors (McCann & Dyer, 1996 p. 27 - 29).

These scales were selected because they are

supported by Hare's (1991) research in which personality functioning was associated with psychopathy and antisocial personality disorders. In the field of delinquency they were cited to be the common characteristic prevalent in delinquent, Conduct Disordered, Oppositional Defiant and recidivist offenders. The selection of these particular scales were done to aid the forensic psychologists by clarifying the personality characteristics of the juvenile recidivist offenders they evaluate. It is felt that a better understanding of the personality traits of these adolescents would lead to more effective interventions and treatment.

Hypotheses

1. It was hypothesized that the recidivist juvenile offender would score significantly higher on the unruly scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

2. It was hypothesized that the recidivist juvenile offender would score significantly higher on the forceful scale of the Millon Adolescent Clinical

Inventory than the control, dependent and delinquent adolescent groups.

3. It was hypothesized that the recidivist juvenile offender would score significantly higher on the oppositional scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

4. It was hypothesized that the recidivist juvenile offender would score significantly higher on the social insensitivity scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

5. It was hypothesized that the recidivist juvenile offender would score significantly higher on the family disorder scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

6. It was hypothesized that the recidivist juvenile offender would score significantly higher on the childhood abuse scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

7. It was hypothesized that the recidivist

juvenile offender would score significantly higher on the substance proneness scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

8. It was hypothesized that the recidivist juvenile offender would score significantly higher on the delinquent predisposition scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

9. It was hypothesized that the recidivist juvenile offender would score significantly higher on the impulse propensity scale of the Millon Adolescent Clinical Inventory than the control, dependent and delinquent adolescent groups.

Method

Participants

The participants consisted of 100 male and 100 female adolescents between the ages of 15 and 17. This is the age group responsible for two-thirds of all juvenile arrests (OJJDP, 1999). Table 1 illustrates the gender composition once six invalid reports were removed from the results.

Table 1

Group Gender Composition

	N	Percent	Males	Females
Control Group	46	23.7	21	25
Dependent Group	50	25.8	25	25
Delinquent Group	48	24.7	23	25
Recidivist Group	50	25.8	25	25
Total	194	100.0	94*	100

* minus six invalid reports

Table 2 illustrates the breakdown of the ages of the group.

Table 2

Age of Subjects

	N	Percent
15	68	35.1
16	61	31.4
17	65	33.5
Total	194	100.0

According to Snyder and Patterson (1987), Tolan (1988) and Wolfgang (1972) the peak age for youths to be arrested is 15 to 17 years.

Table 3 illustrates the study's percentages of males and females within the group.

Table 3

Gender of Subjects

	N	Percent
Male	94	48.5
Female	100	51.5
Total	194	100.0

The delinquent group consisted of 25 males and 25 females, who were diagnosed as Conduct Disordered and adjudicated delinquents with no felony convictions and with two adjudications. They met the criteria of the DSM-IV-TR for this diagnosis. The dependent group consisted of 25 males and 25 females dependent adolescents, who were not adjudicated delinquent. They met the criteria of the DSM-IV-TR for the diagnosis of Oppositional Defiant Disorder. They could not, for the purpose of this study have ever been arrested. Since Adjustment Disorder with Disturbance of Conduct is seen as transient or an early form of Conduct Disorder, it was excluded for the nonconduct-disordered classification. Although Rutter and Tuma (1988) cited that Oppositional Defiant Disorder may be considered a mild form of Conduct Disorder, it was felt for the purpose of this study to be a diagnosis that best described the behavior and personality of the dependent adolescent group. The third group consisted of 25 recidivist male and 25 recidivist female offenders. The recidivist offender, for the purpose of this study, is defined as an adjudicated delinquent with at least two

felony convictions, but no less than three arrests. The control group consisted of 25 male and 25 female adolescents who had no previous involvement with the Courts either dependently or delinquently.

The groups were also matched for ethnicity and socioeconomic status to insure generalizability of the results. Table 4 illustrates the racial composition of the study and percentage of each racial group.

Table 4

Racial Composition

Group	African American	White	Hispanic	Other*
Control	22	11	11	2
Dependent	28	10	11	1
Delinquent	38	6	4	0
Recidivist	38	5	6	1
Total	126	32	32	4
Percent	64.9	16.5	16.5	2.1

* Participants who did not identify as part of the major racial groups

The adolescents were assigned to their particular group based upon their diagnosis or lack of court involvement.

Also, those adolescents who were involved with the court were told that participation would in no way lessen their probationary periods or have any effect on future court cases. Because this is a cross-section study, there was no need to control for attrition.

Procedure

The adolescents and their parents or guardians involved in this study were required to sign consent forms (Appendix A, B, C, and D). Membership in the criterion group was based upon a previous diagnosis of either Conduct Disorder for the delinquent and recidivist offenders or Oppositional Defiant Disorder for the dependent group. The diagnoses were made by a licensed psychologist during a previous assessment of these adolescents. An independent psychologist reviewed the adolescents' records, determining whether or not they met the criteria for their specific group.

The criteria for study entry was that 1) the adolescent be between 15 and 17 years of age; 2) the adolescent have no debilitating physical impairment or

mentally deficient findings on an IQ test, or a history of psychosis and was not receiving treatment at the time of the study; 3) the adolescent be conduct disordered or Oppositional Defiant Disordered as determined by a previous assessment by a licensed psychologist; and 4) the Oppositional Defiant adolescent may not have any previous arrests.

Instrument

The MACI is a 160-item inventory composed of statements that required either a true or false response. The MACI was administered via audiotape to the adolescent taking the test. The items are scored in such a manner that 31 scales make up the MACI profile (Appendix E), however for the purpose of defining a recidivist profile only the nine scales that match the characteristics of recidivists were used in this study. The MACI was administered to all but the control group at the time of their court ordered mental health assessment. The testing of each adolescent for all but the control group was done individually. To assure that the adolescent possessed adequate reading skills to comprehend the MACI, each

adolescent received an individual administration of the reading portion of the Wide Range Achievement Test - III. To insure that all adolescents were treated the MACI to compensate for any reading disabilities. Due to the constrictions made by the school district supplying the control group they were given the MACI in an audio taped group administration. A MANOVA was conducted on these scores to test for significant differences between groups using transformed base rate scores (Millon et al., 1984).

The MACI protocols were computer-scored with age appropriate norms through the service of the test distributor. Subjects were eliminated from the study if their MACI results were judged invalid by the following criteria: 1) the omission of 10 or more items; 2) if the two validity items (items 114 and 126) are endorsed. Endorsing items that have an extremely low endorsement rate indicates the adolescent may not have paid attention to the item content or had difficulty reading and understanding the items; 3) the raw score on Scale X disclosure is less than 201 or greater than 589. These extreme scores would indicate that the adolescent might be over or underreporting significant symptoms, so that

results cannot be interpreted; 4) none of the BR scores or the Personality Pattern scores (1 through 8B) is more than 59. Scores less than 59 were not given credence, as no clear personality pattern would emerge from the test data, and, therefore, no interpretation could be made (Millon, 1993).

Results

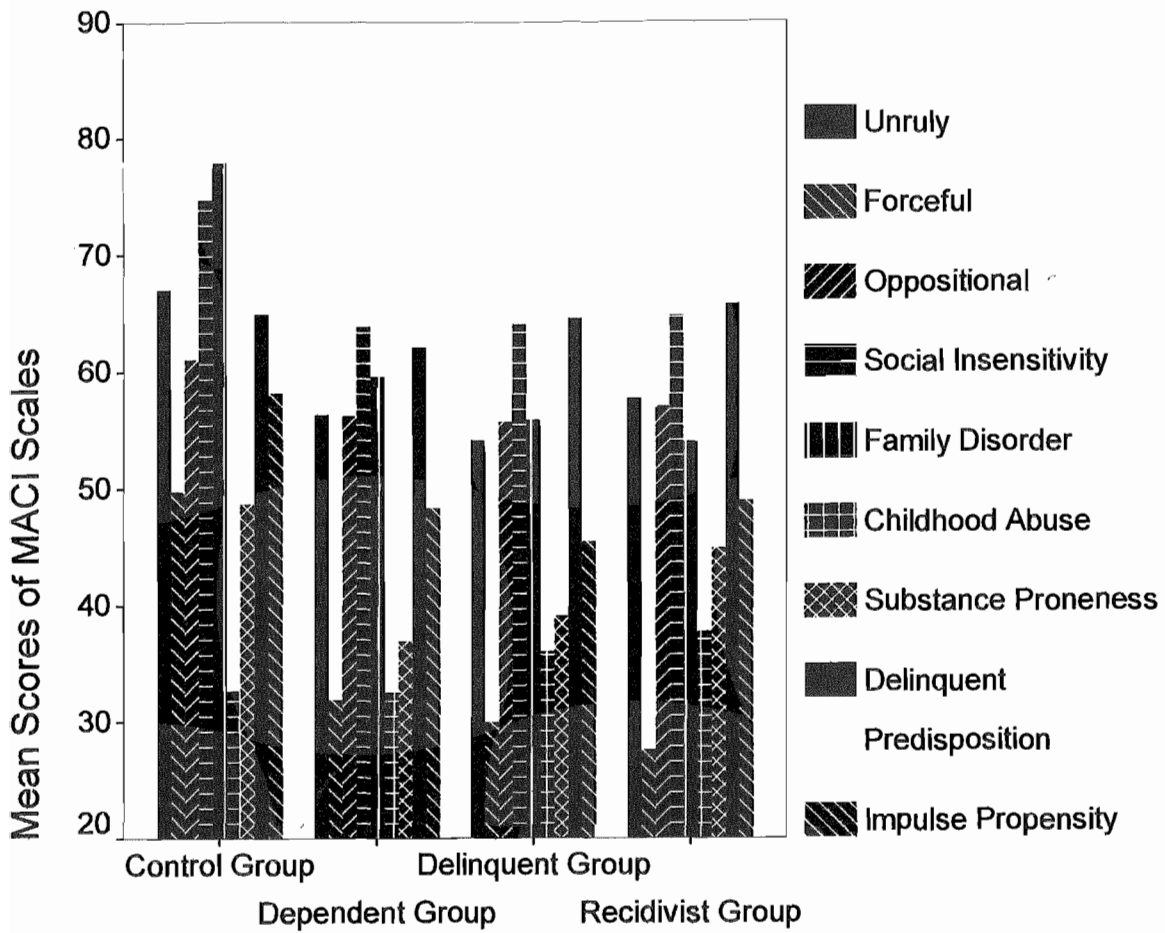
The results of the analysis of the data obtained from the 200 adolescents resulted in the elimination of six reports, four from the male control group and two from the male delinquent group because they were rated invalid by the computerized scoring system. These profiles were considered invalid for two reasons: The two "validity items" (114 and 126) were endorsed. The MACI manual indicates that the endorsement of these items that have an extremely low endorsement rate indicates the adolescent may not have paid sufficient attention to the content or may have had difficulty reading and understanding the items. Even the endorsement of one of these items would make the validity of the results questionable. The second reason is that the raw score on Scale X (Disclosure) is less than 201, thus the adolescent was underreporting significant symptoms to such a degree that the results could not be interpreted.

Descriptive Statistics

Descriptive statistics for the nine scales of the MACI for the total group (control n = 46, dependent n = 50, delinquent n = 48 and recidivist n = 50) are presented in Figure 1. The figure shows the comparison of the four groups on the nine MACI scales. The control group scored higher on seven of the nine MACI scales: unruly, forceful, oppositional, social insensitivity, family disorder, childhood abuse, substance proneness, delinquent predisposition and impulse propensity. The control group was composed of students from a local public high school enrolled in a Law, Criminal Justice and Public Administration module. This control group was used because it closely matched the other three groups on racial composition and socioeconomic status. The control group tended to agree with such statements on the MACI as, "Punishment never stopped me from doing whatever I wanted." The recidivist group did not score higher, as was hypothesized on the nine MACI scales. They did score higher than the dependents and delinquents on the

Figure 1.

Group Mean Scores on MACI Scales



Following seven scales: unruly, oppositional, substance proneness, delinquent predisposition, impulse propensity, social insensitivity and childhood abuse. The dependent group scored highest on family disorder. This was expected, as they are basically involved with the court because of truancy or incorrigibility, which stem from a dysfunctional family situation.

The mean scores and standard deviations for the total sample, control, dependent, delinquent and recidivist group can be seen in Table 5.

Pearson Correlation

Pearson Correlations were conducted in order to measure the relationship among the individual scales of the MACI. In the Pearson Correlation in Table 6, the correlation between two MAI scores can be seen. The results indicate a significant correlation between the following scales: unruly correlates at the .730 ($p < .01$) level with forceful; the .487 ($p < .01$) level

Table 5

Descriptive Statistics of MACI scales for Control, Dependent, Delinquent and Recidivist Adolescents

MACI Scales	Total Adolescents			Control Group			Dependent Group			Delinquent group			Recidivist Group		
	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Unruly	194	58.72	17.84	46	67.08	14.46	50	56.36	19.32	48	54.16	16.18	50	57.76	18.55
Forceful	194	34.57	23.85	46	49.80	23.24	50	31.90	24.03	48	30.04	18.97	50	27.58	22.95
Oppositional	194	57.48	17.49	46	61.10	14.53	50	56.26	17.11	48	55.72	17.46	50	57.08	20.21
Social Insecurity	194	66./75	17.73	46	72.76	22.66	50	63.90	15.20	48	64.06	16.14	50	64.82	14.37
Family Disorder	194	61.61	23.01	46	77.93	15.73	50	59.64	24.43	48	55.91	20.37	50	54.04	22.77
Childhood Abuse	194	34.78	22.96	46	32./67	23.07	50	32.54	19.31	48	36.06	24.80	50	37.74	24.59
Substance Proneness	196	42.31	24.94	46	48.69	26.23	50	36.92	22.45	48	39.14	24.97	50	44.90	25.14
Delinquent Predisposition	194	64.36	14.16	46	65.00	17.20	50	62.10	14.64	48	64.58	12.48	50	65.84	12.08
Impulse Propensity	194	49.79	22.00	46	58.26	17.95	50	47.76	23.39	48	45.50	19.75	50	48.18	24.44

The mean is significant at the .05 level

Table 6

Pearson Correlation

Scale	Unruly	Forceful	Oppositional	Social In-sensitivity	Family Disorder	Childhood Abuse	Substance Proneness	Delinquent Predisposition	Impulse Propensity
Unruly	1.000	.730**	.487**	.554**	.599**	.073	.604**	.625**	.740**
Forceful	.730**	1.000	.466**	.525**	.580**	.147*	.634**	.531**	.748**
Oppositional	.487**	.466**	1.000	.166*	.518**	.537	.650**	.202**	.627**
Social Insensitivity	.554**	.525**	.166*	1.000	.255**	-.187**	.279**	.702**	.385**
Family Disorder	.599**	.580**	.518**	.255**	1.000	.420**	.579**	.263**	.639**
Childhood Abuse	.073	.147**	.537**	-.187**	.420**	1.000	.488**	-.127	.250**
Substance Proneness	.604**	.634**	.650**	.279**	.579**	.488**	1.000	.434**	.720**
Delinquent Predisposition	.625**	.531**	.202**	.702**	.263**	-.127	.434**	1.000	.460**
Impulse Propensity	.740**	.748**	.627**	.385**	.639**	.250**	.720**	.460**	1.000

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

with oppositional; .554 ($p < .01$) with social insensitivity; .599 ($p < .01$) with family disorder; .604 ($p < .01$) with substance proneness; .625 ($p < .01$) with delinquent predisposition; and .740 ($p < .01$) with impulse propensity. The forceful scales correlated at the .466 ($p < .01$) level with oppositional; .525 ($p < .01$) on social insensitivity; .580 ($p < .01$) on family disorder; .634 ($p < .01$) on forceful; .531 ($p < .01$) on delinquent predisposition; and .74 ($p < .01$) on impulse propensity. The oppositional scale correlated at the .166 ($p < .05$) level with social insensitivity; .518 ($p < .01$) with family disorder; .650 ($p < .01$) on substance proneness; .202 ($p < .05$) on delinquent predisposition; and .627 ($p < .01$) on impulse propensity. Social insensitivity correlated at the .255 ($p < .01$) level with family disorder; .279 ($p < .01$) level with delinquent predisposition, and .385 ($p < .01$) with impulse propensity. Family disorder correlated at the .579 ($p < .01$) level with substance proneness; .263 ($p < .01$) with delinquent predisposition; and .639 ($p < .01$) with impulse propensity. Childhood abuse correlated at the

.488 ($p < .01$) level with substance proness; -1.27 on delinquent predisposition; and .250 ($p < .01$) on impulse propensity. Substance abuse correlates at the .434 ($p < .01$) level with delinquent predisposition; and at the .720 ($p .01$) level with impulse propensity. Delinquent predisposition correlates with impulse propensity at the .460 ($p < .01$) level.

MANOVA

A MANOVA was conducted to test differences across the groups on all nine dependent variables. A significant Wilks Lambda (Wilks Lambda = .775, $p < .00$) was found. Post hoc univariant ANOVA's were calculated to compare the group differences on each dependent variable. The Scheffe post hoc tests were conducted to determine where significant differences were.

Table 7 shows the mean difference between the control and dependent groups of 10.7270, which was significant at the .029 level. Also there was a significant difference of 12.9203 between the control

and the delinquent groups, which was significant at the .005 level.

Table 7

Scheffe Unruly Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Unruly	Control	Dependent	10.7270*	.029
		Delinquent	12.9203*	.005
		Recidivist	9.3270	.077
	Dependent	Control	-10.7270*	.029
		Delinquent	2.1933	.941
		Recidivist	-1.4000	.983
	Delinquent	Control	-12.9203*	.005
		Dependent	-2.1933	.941
		Recidivist	-3.5933	.788
	Recidivist	Control	-9.3270	.077
		Dependent	1.4000	.983
		Delinquent	3.5933	.788

*Based on observed means

The control group was also significantly different than the dependent group (17.9043 on the forceful scale, which was significant at the .002 level). The control group showed a significant difference from the delinquent

Table 8

Scheffe Forceful Scale

Scale	(I)Group	(J)Group	Mean Difference (I-J)	Sig.
Forceful	Control	Dependent	17.9043*	.002
		Delinquent	19.7627*	.001
		Recidivist	22.2243*	.000
	Dependent	Control	-17.9043*	.002
		Delinquent	1.8583	.982
		Recidivist	4.3200	.818
	Delinquent	Control	-19.7627	.001
		Dependent	-1.8583	.982
		Recidivist	2.4617	.961
	Recidivist	Control	-22.2243*	.000
		Dependent	-4.3200	.818
		Delinquent	-2.4617	.961

*Based on observed means

group, with a means difference of 19.7627, which was significant at the .001 level. The control group was also significantly higher than the recidivist group on this scale, showing a means difference of 22.2243. As can be seen in Table 8 there was no significant difference between the groups on the oppositional scale.

On the social insensitivity scale the control group had a mean difference from the dependent group of 10.8609, which was significant at the .027 level. The control group also scored significantly higher than the delinquent group, with a mean difference of 10.6984, which was significant at the .032 level.

On the family disorder scale (see Table 11), the control Group scored significantly higher than the dependent group 18.2948, the delinquent group at 22.0181 and the recidivist group at 23.8948.

The childhood abuse scale showed that there was no significant difference although the control group scored slightly higher than the other three groups, see Table 12.

Table 9

Scheffe Oppositional Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Oppositional	Control	Dependent	4.8487	.608
		Delinquent	5.3795	.530
		Recidivist	4.0287	.737
	Dependent	Control	-4.8487	.608
		Delinquent	.5308	.999
		Recidivist	-.8200	.997
	Delinquent	Control	-5.3795	.530
		Dependent	-.5308	.999
		Recidivist	-1.3508	.986
	Recidivist	Control	-4.0287	.737
		Dependent	.8200	.997
		Delinquent	1.3508	.986

*Based on observed means

Table 10

Scheffe Social Insensitivity Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Social Insensitivity	Control	Dependent	10.8609	.026
		Delinquent	10.6984*	.032
		Recidivist	9.9409	.051
	Dependent	Control	-10.8609*	.026
		Delinquent	-.1625	1.000
		Recidivist	-.9200	.995
	Delinquent	Control	-10.6984	.032
		Dependent	.1625	1.000
		Recidivist	-.7575	.997
	Recidivist	Control	-9.9409	.051
		Dependent	.9200	.995
		Delinquent	.7575	.997

*Based on observed means

Table 11

Scheffe Family Disorder Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Family Disorder	Control	Dependent	18.2948*	.001
		Delinquent	22.0181	.000
		Recidivist	23.8948*	.000
	Dependent	Control	-18.2948*	.001
		Delinquent	3.7233	.860
		Recidivist	5.6000	.628
	Delinquent	Control	-22.0181*	.000
		Dependent	-3.7233	.860
		Recidivist	1.8767	.979
	Recidivist	Control	-23.8948*	.000
		Dependent	-5.6000	.628
		Delinquent	-1.8767	.979

*Based on observed means

Table 12

Scheffe Childhood Abuse Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Childhood Abuse	Control	Dependent	.1339	1.000
		Delinquent	-3.3886	.917
		Recidivist	-5.0661	.763
	Dependent	Control	-.1339	1.000
		Delinquent	-3.5225	.902
		Recidivist	-5.2000	.735
	Delinquent	Control	3.3886	.917
		Dependent	3.5225	.902
		Recidivist	-1.6775	.988
	Recidivist	Control	5.0661	.763
		Dependent	5.2000	.735
		Delinquent	1.6775	.988

*Based on observed means

On the Substance proneness, the control group again scored higher than the three other groups but there was no significant difference between the groups (see Table 13).

Table 13

Scheffe Substance Proneness Scale

Scale	(I)Group	(J)Group	Mean Difference (I-J)	Sig.
Substance Proneness	Control	Dependent	11.7757	.146
		Delinquent	9.5498	.323
		Recidivist	3.7957	.904
	Dependent	Control	-11.7757	.146
		Delinquent	-2.2258	.978
		Recidivist	-7.9800	.458
	Delinquent	Control	-9.5498	.323
		Dependent	2.2258	.978
		Recidivist	-5.7542	.723
	Recidivist	Control	-.7957	.904
		Dependent	7.9800	.458
		Delinquent	5.7542	.723

*Based on observed means

The Delinquent Predisposition Scale showed that there was no significant difference between the means of all four groups (See Table 14).

Table 14

Scheffe Delinquent Predisposition Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Delinquent Predisposition	Control	Dependent	2.9000	.801
		Delinquent	.4167	.999
		Recidivist	-.8400	.994
	Dependent	Control	-2.9000	.801
		Delinquent	-2.4833	.862
		Recidivist	-3.7400	.630
	Delinquent	Control	-.4167	.999
		Dependent	2.4833	.862
		Recidivist	-1.2567	.979
	Recidivist	Control	.8400	.994
		Dependent	3.7400	.630
		Delinquent	1.2567	.979

The final scale, Impulse Propensity, showed the control group to have a significant mean difference of 12.7609 at the .046 level, showing the control to be more impulsive than all the other groups (see Table 15).

Table 15

Scheffe Impulse Propensity Scale

Scale	(I)Group	(J)Group	Mean Difference (I-J)	Sig.
Impulse Propensity	Control	Dependent	10.5009	.134
		Delinquent	12.7609*	.046
		Recidivist	10.0809	.162
	Dependent	Control	-10.5009	.134
		Delinquent	2.2600	.966
		Recidivist	-.4200	1.000
	Delinquent	Control	-12.7609*	.046
		Dependent	-2.2600	.966
		Recidivist	-2.6800	.945
	Recidivist	Control	-10.0809	.162
		Dependent	.4200	1.000
		Delinquent	2.6800	.945

*Based on observed means

They scored significantly higher than the delinquent group.

Modifying Indices

The three modifying indices--disclosure, desirability, and debasement--were analyzed in order to determine their effect on the groups' results (see Tables 16, 17, and 18, respectively). The Scheffe post hoc test was also conducted on the three indexes and shows the mean difference between the groups.

The disclosure scale measures how open and self-revealing or defensive and guarded the groups were in responding to the MACI items. There was no significant difference between the groups on this scale (see Table 16).

The desirability scale measures to what extent the group members may have attempted to make themselves appear more self-confident, socially well adjusted and morally sound. In this area, the control group scored significantly lower than the recidivists on this scale (see Table 17).

Table 16

Scheffe Disclosure Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Disclosure	Control	Dependent	4.9296	.682
		Delinquent	5.9112	.549
		Recidivist	2.0296	.968
	Dependent	Control	-4.9296	.682
		Delinquent	.9817	.996
		Recidivist	-2.9000	.909
	Delinquent	Control	-5.9112	.549
		Dependent	-.9817	.996
		Recidivist	-3.8817	.813
	Recidivist	Control	-2.0296	.968
		Dependent	2.9000	.909
		Delinquent	3.8817	.813

*Based on observed means

Table 17

Scheffe Desirability Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Desirability	Control	Dependent	-6.8478	.216
		Delinquent	-8.4103	.087
		Recidivist	-9.3478*	.042
	Dependent	Control	6.8478	.216
		Delinquent	-1.5625	.971
		Recidivist	-2.5000	.890
	Delinquent	Control	8.4103	.087
		Dependent	1.5625	.971
		Recidivist	- .9375	.993
	Recidivist	Control	9.3478*	.042
		Dependent	2.5000	.890
		Delinquent	.9375	.993

*Based on observed means

The debasement scale assesses to what extent the group members may deprecate or devalue themselves. The

control group scored lower than the recidivist group on debasement approaching significance, at the .064 level (see Table 18).

Table 18

Scheffe Debasement Scale

Scale	(I) Group	(J) Group	Mean Difference (I-J)	Sig.
Debasement	Control	Dependent	-7.5948	.216
		Delinquent	-3.9764	.751
		Recidivist	-9.7148	.064
	Dependent	Control	7.5948	.216
		Delinquent	3.6183	.790
		Recidivist	-2.1200	.947
	Delinquent	Control	3.9764	.751
		Dependent	-3.6183	.790
		Recidivist	-5.7383	.455
	Recidivist	Control	9.7148	.064
		Dependent	2.1200	.947
		Delinquent	5.7383	.455

Discussion

The present study was designed to investigate the personality characteristics that might differentiate the Conduct Disordered and Oppositional Defiant Disordered adolescents from recidivist juvenile offenders. This was done in the hope of developing a personality profile of delinquent adolescents at risk for recidivism using 9 of the 27 scales of the Millon Adolescent Clinical Inventory (MACI). The 9 scales were: unruly, forceful, oppositional, social insecurity, family disorder, childhood abuse, substance proneness, delinquent predisposition and impulse propensity.

The statistical analysis of the data suggests that the control group scored higher on seven of the nine MACI scales: unruly, forceful, oppositional, social insensitivity, family disorder, substance proneness and impulse propensity. The Scheffe post hoc test showed the following: (a) The control group scored significantly higher than the dependent and delinquent groups. This was basically to be expected as the control group was given its test in a group administration. This caused the

group members to show a need for immediate gratification and short-sightedness. Basically, they wanted to impress their peers by showing defiance for the authority figure giving the test. Because this test had no consequential effect on their lives, they seemingly did not feel the need to reveal their personality pattern. They choose instead to present themselves as defiant adolescents, showing a need for autonomy and independence that corresponds with appropriate developmental stages. In other words, they were performing for the evaluator.

The control group also scored significantly higher than the dependent, delinquent, and recidivist adolescents on the forceful scale. This is also reflective of the wiseguy stance (tough and intimidating) assumed by the adolescents in the control group. McCann (1999) cites that from his research there can be an absence of symptomology in adolescents who score high on this scale. The adolescents, according to McCann, may be sophisticated and elude getting arrested. Another possibility is that the adolescent has, again according to McCann, a strong identification with an aggressive peer group. The control group was part of the Law and Order Academy in a local public high school. Although not

significant there is a difference incrementally between the dependent, delinquent and recidivist offenders. It can be seen as the adolescent progresses through the system that there is an increase in their score on the forceful scale.

On the oppositional scale there was no significant difference between the groups. This is not unusual, as this scale was not designed as a direct measure of oppositional defiant disorder but reflective of an adolescent with a passive aggressive personality.

The control group scored significantly higher than the dependent and delinquent groups on the social insensitivity scale. The control group again showed that it was unconcerned about being portrayed as callous and indifferent. The other groups, who were Court involved, wanted to be seen as less ego-syntonic in the possible hope of avoiding residential placement through the Court. On the family disorder scale, the control group scored significantly higher than the other three groups. This is seen in the context of this research as reflective of the control group's rebellion toward his or her family,

tending to see them as rejecting and unsupportive. Again there is an incremental difference between the other groups. This increment is not significant but shows that the more involved with the court system, the higher the score.

The childhood abuse scale showed there was no significant difference between the groups. The lack of significance on the scale, according to McCann (1999), may be reflective of the adolescents' attempts at denying and minimizing the abuse, as well as to avoid dealing with it.

There was no significant difference between the groups on substance abuse proneness. The control group did, however, score slightly higher on this scale. This can be seen as reflective of the fact that they had nothing to lose by revealing their substance proneness. The court-involved adolescents, however, could be cited for violation of their probation.

There was also no significant difference among the groups on the mean of the delinquent predisposition scale. The findings reveal that none of the adolescents wanted to be viewed as being predisposed for delinquency.

This scale needs to be viewed in context with the unruly, social insensitivity and impulse propensity scales because of their high correlations.

On the final scale, impulse propensity, the control group scored higher than the other three groups, and significantly higher than the delinquent group. One would expect that the control group would score higher on this scale as its members appeared to have difficult time controlling their impulses. Basically, they showed little concern or thought as to the consequences of their behavior. This is also reflected in their higher scoring on most scales of the MACI.

The three modifying indices of the MACI were also analyzed and showed that on the disclosure scale there was no significant difference between the groups. What was seen across the groups of adolescents was little revealing or self-disclosure about themselves or their problems. On the part of the court-involved adolescents, it was a reflection of their attempt to appear well-adjusted and emotionally healthy. The desirability scale showed that there was a significant difference between the control group and the recidivist group. This

was reflective of the recidivist adolescents' need to be seen as well-adjusted. Also, it could be an attempt to be seen in an unrealistically favorable light, according to McCann (1999). The debasement scale analysis revealed that the control group scored lower than the recidivist group on this scale. This is a reflection of the recidivist group's members underlying depressive state, due to their present and possible future confinement.

These findings concurred with McCann and Dyer's (1996) speculation that adolescents, who had a high F scale (social insensitivity) score would be difficult to treat by traditional means. The implication is that these high-scoring adolescents would require more personalized interventions than are commonly given to adjudicated youngsters, even if they were not recidivist offenders as defined by this study.

The implications of this study, then, would be that we could identify earlier those adolescents in need of more intensive and differentiated treatment. Hopefully, the earlier discovery of this propensity could lead to more suitable interventions sooner. Overloaded probation officers cannot make the system work, nor can they, in

the field, differentiate the recidivist from the "aging out" delinquent reported by Jones and Sims (1997).

As stated previously, the need to identify the recidivist adolescent on arrival in the system is imperative. The MACI continues to hold many implications for identification of those adolescents.

Clinicians who perform delinquency evaluations need to be familiar with the criteria for childhood mental disorders that are prevalent in the delinquent population such as: Attention Deficit Disorder, Hyperactive Disorder, Substance abuse and Dependency, Affective Disorders, Personality Disorders, Learning Disability and Post-Traumatic Stress Disorder. According to Otto, Greenstain, Johnson & Friedman (1992) the prevalence of mental disorders in the juvenile justice system is as follows: Conduct Disorder 50% to 60%; Substance abuse/Dependency 25% to 50%; Attention Deficit Hyperactive Disorder more than 20%; Affective Disorders 30% to 75%; and Post-Traumatic Stress Disorder 10% to 40%.

The MACI is a useful screening device for all delinquent and dependent adolescents within the court

system. It can provide information that is relevant in formulating plans for these adolescents, and also to identify in them the prevalence of mental disorders. The MACI, in the long run, would be more cost-effective. The MACI has the potential to address treatment amenability, evaluation of sex offenders, juvenile victims, and mental status at the time of the offense, violence potential, capacity to testify and emotional maturity related to competency. The interpretation of the MACI scores, however, should be limited until norms for juvenile court samples are published.

Diverting young people from the system is the key concept in prevention and reduction. There needs to be more community-based programs available for social control or treatment, along with community resources to help meet the needs and resolve the problems that are seemingly inherent to the development of delinquent behavior. Further studies comparing possible treatment interventions would be seen as a logical next step to study. Those involved in the criminal justice field need to lose the "one-size-fits-all" probationary treatment plan for adolescents, and view each based on his or

he/her unique personality. It must be kept in mind that those diverted from the system avoid future involvement, provided they receive the necessary interventions early on. This premise is based on the fact that the juvenile justice system has a negative effect on young people. The juvenile justice system needs a greater number of dispositional alternatives for each component. This would also require differential diagnosis and care. The management of the system must play a more active role in the development of programs that achieve these objectives

Limitations

A factor not taken into consideration when devising the variables was age at first offense. Many offenders are not arrested, and many arrests are not referred to the juvenile courts. As such they are not captured in court data, and as a result, official records underreport juvenile delinquency (OJJDP, 1999). Based on the studies of Loeber (1991), and White, Moffitt, Earls & Robbins, (1990) children who develop conduct problems in preschool are at high risk for continuing this behavior and can quite possibly become a recidivist offender.

Also not taken into consideration with the control group were possible auditory processing and comprehension deficits. The fact that the control group were given a group administration of the test differed from the other three other. This type of administration did not allow for individual observations of the participants in order to gauge language or auditory processing issues. As a result their motivation or attention during testing jeopardizes the validity of the results Grisso (1998).

Although the participants were mostly minorities, the problem of overrepresentation of these groups in the juvenile justice population is well documented. Synder and Sickmund (1999) report that 7 out of 10 youths in custody were from a minority background.

Acculturational issues were also overlooked, and they can have a tremendous effect on the interpretation of the MACI questions.

Implications

The questions still remain as to why some adolescents become delinquent and others faced with the

same circumstances do not. Why do some adolescent's criminal activities burn out and other go on to become the recidivist offender? Most delinquents, according to Moffitt (1993) are said to represent adolescent limited offenders. Their offending behavior usually begins in adolescence as an adaptive response to the social world they face (i.e., pressure to assert maturity and independence and then declines as they move into adulthood.

According to the research of Akers (1985) people are first introduced to deviant behavior by differential association with peers. It is through this differential reinforcement that many learn to reap rewards and avoid punishment for their delinquent behavior. Imitation is the oldest social learning theory and derives from the work of Tarde (1969), a sociologist who said "that crime begins as a fashion and later becomes a custom."

If criminal behavior is learned, then it can be unlearned if there is no is the "payoff" for the delinquent. The Millon Adolescent Clinical Inventory could possibly help discover what that payoff is.

Future research with this population should be done using a larger, representative sample across the

country. Onset of delinquency should be taken into consideration, as well as the severity of the crimes. An instrument such as Descher, Plain, Terhune and Williamson's (1981) Depth of Delinquency Index should be used to rate the arrest history of the delinquent and recidivist offenders. Drug dealers should be removed from eligibility in future studies, as they tend to skew the results and, in most cases, it is an economic crime that usually lessens with age. Many drug dealers are not users; it is just a job and a means to an end for them.

Conclusion

Although it was hypothesized that the nine scales of the Millon Adolescent Clinical Inventory (MACI) would be able to discriminate between recidivist and nonrecidivist adolescents, this study failed to prove it. Previous research using the Millon Adolescent Personality Inventory (MAPI) done by Holcomb and Kashani (1991) was able to discern the conduct disordered adolescent from the non-conduct disordered adolescent. By reducing this instrument down to nine basic scales, it was not able to produce the results that the complete test is capable of

achieving. The MACI, in its entire form, would, be a valuable resource if given to all adolescents involved in the court system.

As Jensen and Watanabe (1999) point out, pending the availability of robust markers for recidivism, the tendency to reify diagnostic categories or engage in arcane debates about the superiority of one assessment tool or approach over another must be resisted. Scales are often assumed to be useful as screeners to identify those persons most likely to be diagnosed, thus meriting clinical intervention; alternatively scales can be viewed as an indicator of severity within a given construct. Concerns, however, are raised that scales are imprecise, that they should not be used as a proxy for diagnosis, and that high scores on such scales may simply reflect a "false-positive" finding (Cantwell, 1996; and Jensen & Watanabe, 1999).

There are types of information such as duration, age at onset, severity of crimes, and cooccurrence of multiple symptom patterns, which could result in misattributing psychopathology in certain cases. A sizeable body of evidence suggests that much delinquency can be interpreted as a form of problem-solving behavior

in response to the pressures adolescents experience. Delinquency is usually seen as engaging in criminal and delinquent activities without forethought.

As you can see, the causes of recidivism are difficult to fully identify at this time. The juvenile court system, however, needs to make a greater effort to tailor probation and interventions to the specific needs of the adolescent. Society cannot allow the recidivist offender to go undetected because it feels that young children don't need court involvement when they commit crimes. There should be screening of these children at the time of their first offense, not after their first arrest or several. I still believe Early identification and intervention could very well be the answer.

The findings of this study underscore the importance of longitudinal data in understanding psychopathology and recidivism in youths.

References

- Akers, R. L. (1985) *Deviant behavior: A social learning approach*. Belmont, CA: Wordsworth.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders (fourth edition, text revised)*. Washington, DC: Author.
- Bates, J. E., Bayon, K., Bennett, D. S., Ridge, B. G. & Brown, M. M. (1991). Origins of externalized problems at eight years of age. In D. Pepler, G. & K. Rubin (Eds.), *The development of childhood aggression* (pp. 93-120). Hillsdale, NJ: Erlbaum.
- Becker, H. (1997). *Outsiders: Studies in the sociology of deviance*. New York: Simon & Schuster.
- Boyle, C. A., Decoufle, P. & Yeargin-Allsoop, M. Y. (1994). Prevalence and health impact of developmental disabilities. *Pediatrics*, 93, 863-865.
- Brezina, T. (1998). Adolescent maltreatment and delinquency: The question of intervening processes. *Journal of Research in Crime and Delinquency*, 35, 71-99.

- Butcher, J., William, C., Graham, J., Archer, R.,
Tellegran, A., Bev-Porath, Y., Kaenner, B. (1992).
MMPI-A manual for administration, scoring and
Interpretation.
- Calhoun, C., Light, D. & Keller, S. (1989).
Sociology (5th ed.). New York: Knopf.
- Cantwell, D. P. (1996). Classification of child and
adolescent psychopathology. *Journal of Child
Psychology and Psychiatry*, 37, 3-12.
- Day, D. M. (1998). Risk for court contact and predictors of
early age for first court contact among a sample of
high-risk youth: A survival analysis approach.
Canadian Journal of Criminology, 10, 567-573.
- Descher, J. P., Plain, M. D., Terhune, G. K., & Williamson,
C. (1981). Development of the DDI: A serious scale of
delinquency. *Evaluation Review*, 5, 788-809.
- Grenier, C. & Roundtree, G. (1987). Predicting recidivism
among adjudicated delinquents: A model to identify
high-risk offenders. *Journal of Offenders Counseling
Services and Rehabilitation*, 12(1), 101-112.

Grisso, T. (1998). *Forensic Evaluation of Juveniles*.

Sarasota, FL: Professional Resource Exchange, Inc.

Grisso, T., Barnum, R., Fletcher, K., Cauffman, E., and

Preschool, D. (2001). Massachusetts youth screening instrument for mental health needs of juvenile justice youths. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 541- 555.

Hahn, P. (1971). *The Juvenile Offender and the Law*.

Cincinnati, OH: Anderson.

Hare, R. (1991). *The Hare Psychopathy Checklist - Revised*.

Tonawanda, NY: Multi-Health Systems.

Hart, L. (1993). Diagnosis of disruptive behavioral

disorders using the Millon adolescent personality inventory. *Psychological Reports*, 13, 895-914.

Herbert, M., (1995). A collaborative model of training for parents of children with disruptive behavior

disorders. *British Journal of Clinical Psychology*, 34, 325-342.

Holcomb, W., & Kashani, J. (1991). Personality

characteristics of a community sample of adolescents with conduct disorder. *Adolescence*, 26(103), 579-586.

- Jensen, P. & Watanabe H. (1999). Sherlock Holmes and child psychopathology assessment approach: The case of the false positive. *Journal American Academy of child and Adolescent Psychiatry*, 38, 138-146.
- Jones, M. & Sims, B. (1997). Recidivism of offenders released from prison in North Carolina: A gender comparison. *Prison Journal*, 77, 335-349.
- Kazdin, A. E. (1987). *Conduct disorder in childhood and adolescence*. Newbury Park, CA: Sage.
- Kazdin, A. E. (1993). *Psychotherapy for children and adolescents: Current progress and future research*. *American Psychologist*, 48, 644-657.
- Kazdin, A.E. (1995). *Conduct disorder in childhood and adolescents*. Thousand Oaks, CA: Sage.
- Koop, C. E. & Lundberg, C. D. (1992). Violence in America: A public health emergency. *Journal of the American Medical Association*, 267, 3075-3076.
- Leighninger, L. & Popple, P. R. (1996). *Social work, social welfare in American society* (3rd ed.) Needham Heights, MA: Allyn and Bacon.

- Loeber, R. (1990). Development and risk factors of juvenile antisocial behavior and delinquency. *Clinical Psychology Review, 10*, 1-41.
- Loeber, R. (1991). Antisocial behavior: More enduring than changeable? *Child and Adolescent Psychiatry, 30*, 393-397.
- Loeber, R. & Keenan, K. (1994). Interaction between conduct disorder and its comorbid conditions; effects of age and gender. *Clinical Psychology, Review, 14*, 497-523.
- Loeber, R., Lahey, B., & Thomas, C. (1991). Diagnostic conundrum of oppositional defiant disorder and conduct disorder. *Journal of Abnormal Psychology, 100*, 379-390.
- Martens, W. (2000). Antisocial and psychopathic personality disorders: Causes, course, and remission. *Journal of Offender Therapy and Comparative Criminology, 44*, 406-430.
- McCann, J. & Dyer, F. (1996). *Forensic assessment with the Millon Inventories*. New York, NY: Guilford.
- McCann, J. (1999). *Malingering and deception in adolescents*. Washington, DC: American Psychological Association.

Millon, T. (1982). Millon adolescent personality inventory (MAPI) manual. Minneapolis, MN: National Computer Systems.

Millon, T. (1993). Millon adolescent clinical inventory (MACI) manual. Minneapolis, MN: National Computer Systems.

Millon, T. & Davis, R. (1993). The Millon personality inventory and the Millon adolescent personality inventory. *Journal of Counseling and Development*, 71, 570-574.

Moffitt, T. (1993). Adolescent limited and life course persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 1000, 673-701.

Moffitt, T., Caspi, A., Dickson, N., Silva, P., & Stanton, W. (1996). Childhood onset versus adolescent onset antisocial conduct problem in males: Natural history from ages 13 to 18. *Development and Psychopathology*, 8, 399-424.

Otto, R., Greenstain, J., Johnson, M. & Friedman, R. (1992). Prevalence of mental disorders among youth in the juvenile justice system. In J. Coccozza (Ed.), *Responding to the Mental Health needs of Youths in the*

- Juvenile Justice System (pp. 7 -48). Seattle, WA: National Coalition for the Mentally Ill in the Criminal Justice System.
- Pianta, R. C. & Caldwell, C. B. (1990). Stability of externalizing symptoms from kindergarten to first grade and factors related to instability. *Developmental Psychopathology*, 2, 247-258.
- Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage in Primary prevention of psychopathology, Vol. 3 Social competence in children. Edited by M. Kent, J. Roff, NH, University Press of New England.
- Rutter, M. (1996). Introduction: Concepts of antisocial behavior, of cause and of genetic influence. In G. Bock, & J. Goode (Eds.) *Genetics of Criminal Antisocial Behavior*, New York: Wiley.
- Rutter, M. & Tuma, A. (1988). Diagnosis and classification some outstanding issues. In M. Rutter, A. Tuma & I. S. Lann (Eds.), *Assessment and diagnosis in child psychology*. (pp. 437-452). New York: Guilford

Stahl, A. L. (2001). Delinquency cases in juvenile court, 1998. Office of Juvenile Justice Prevention (OJJP Fact Sheet), United States Department of Justice, Washington, DC.

Steiner, H., Cauffman, E., & Duxbury, E. (1999). Personality traits in juvenile delinquents: Relation to criminal behavior and recidivism. *Journal American Academy of Child and Adolescent Psychiatry*, 38, 256-262.

Steiner, H. & Stone, L.A. (1999). Introduction: violence and related psychopathology. *Journal American Academy Child Adolescent Psychiatry*, 38, 232-234.

Snyder, H. & Sickmund, M. (1999). Juvenile offenders and victim: 1999 national report. Office of Juvenile Justice and Delinquency Prevention (OJJDP), Washington, DC

Snyder, J. & Patterson, G. (1995). Individual differences in social aggression: A test of a reinforcement model of socialization to the natural environment. *Behavior Therapy*, 26, 371-391.

- Tolan, P., Ryan, K., & Jaffe, C. (1988). Adolescent's mental health service use and provider, process, and recipient characteristics. *Journal of Child Clinical Psychology*, 7(3), 229-236.
- U. S. Department of Justice Office of Justice Programs. (2001). Office of Juvenile Justice and Delinquency Prevention annual report 1999. Washington, DC: Author.
- Weary, J. (1997). Severe conduct disorders-some key issues. *Canadian Journal of Psychiatry*, 42, 577-583.
- Wiebush, R., Baird, C., Krisburg, B., & Onek, D. (1995). Risk assessment and classification for serious, violent and chronic juvenile offenders. In J. Howell, B. Krisberg, D. Hawkins, & J. Wilson (eds). *A Sourcebook: Serious, violent and chronic juvenile offenders*, Thousand Oaks, CA: Sage.
- Wilkinson, G. (1993). *The wide range achievement test-3 administration manual*. Wilmington, DE: Jastak Associates.
- White, J. L., Moffitt, T., Earls F., & Robbins, G. (1990). How early can we tell? Predictors of child conduct disorder and adolescent delinquency. *Criminology*, 28, 507-533.

Wolfgang, M., Figlio, R., & Stellin, T. (1972). Delinquency in a birth cohort. Chicago: University of Chicago Press.

Appendix A

Parental Permission Form

Today's Date _____

Student's Name: _____ Grade: _____

Dear Parent:

My name is Barbara Sulik and I am completing my doctoral studies in Clinical Psychology at the Philadelphia College of Osteopathic Medicine. I am doing a study, which will look at the difference between high school students and those involved in the Juvenile Court system. With your permission, your son or daughter will be asked to complete the Millon Adolescent Clinical Inventory (MACI). This inventory consists of 160 True/False items. It will take approximately 45 minutes to complete this inventory and there are no known risks.

<p>No names will be put on the inventory. Your son's/daughter's name or any other information to identify him or her WILL NOT be used for this study or for any reports that are written</p>
--

If you have any questions regarding the study, please contact me at (215) 686-4186. I will be present during the entire testing. If you want to know more about Barbara Sulik's background, or the rights of research subjects, you can call Dr. John Simelaro, Chairperson, PCOM Institutional Review Board at (215) 871-6337. Participation in this study is voluntary and you may withdraw at any time. There are no penalties for withdrawing.

Your son's or daughter's participation in this study will help the court system understand the characteristic of a non-court involved adolescent. Therefore, if your son or daughter has had any involvement with the court, as a delinquent or for truancy, they are not eligible for this study.

Please indicate below whether or not your son or daughter has permission to participate in this study. Your cooperation in this research is greatly appreciated.

Sincerely,

Barbara Sulik

I understand the nature of the study and the time involved.

I _____ do not give permission to have my child participate in the current study.

I _____ do give permission to have my child participate in the current study.

Parent Signature

Appendix B

Student Assent

Today's Date _____

Student's Name: _____ Grade _____

My name is Barbara Sulik and I am completing my doctoral studies in Clinical Psychology at the Philadelphia College of Osteopathic Medicine. I am doing a study, which will look at the difference between high school students and adolescents who are involved in the Juvenile Court system.

If you agree to be in the study, you will be asked to complete the Millon Adolescent Clinical Inventory (MACI). This inventory consists of 160 True/False items and will take approximately 45 minutes to complete. These questions will ask you about how you see yourself and the world.

No names will be put on the inventory. Any information that could identify you WILL NOT be used for this study or for any reports that are written.

If you have any questions regarding the study, please contact me at (215) 686-4186. I will be present during the

entire testing. If you want to know more about Barbara Sulik's background or the rights of research subjects, you can call Dr. John Simelaro, Chairperson, PCOM Institutional Review Board at (215) 871-6337. Participation in this study is voluntary and you may withdraw from the study at any time. There are no penalties for withdrawing.

I would really appreciate it if you would help me out, but if for some reason you do not feel comfortable being in the study just let me know. This study is completely voluntary and you may quit at any time.

Please sign your name and check below whether or not you agree to be in the study. Your cooperation in this research is greatly appreciated.

No, I do not want to be in the study.

Yes, I agree to be in the study.

I understand the study and the amount of time involved.

Student Signature

Appendix C

INFORMED CONSENT FORM

TITLE OF STUDY

DEFINING THE PERSONALITY CHARACTERISTICS OF DELINQUENT
ADOLESCENT RECIDIVISTS

PURPOSE

The purpose of this research is to determine the personality characteristics of delinquent and nondelinquent adolescents. You are being asked to participate in this research study because your participation will help to create a profile. This profile will be used to help identify recidivist offenders, thus ensuring that earlier intensive intervention and treatment will be given to those adolescents identified as recidivist offenders.

INVESTIGATOR

Name: Barbara J. Sulik M.A.

Department: Medical Department - First Judicial District of
Pennsylvania

Address: 1801 Vine Street Room 149 MC

Phone: (215) 686-4186

The testing you are being asked to volunteer for is part of a research project. If you have any questions about this

research, you can call Dr. Arthur Freeman at (215) 871-6442.

If you have any questions or problems during the study, you can ask, Barbara J. Sulik M.A. who will be present during the entire testing. If you want to know more about Barbara J. Sulik's background, or the rights of research subjects, you can call Dr. John Simelaro, Chairperson, PCOM/DVMC Institutional Review Board at (215) 871-6337.

DESCRIPTION OF THE PROCEDURES

The administration of the Millon Adolescent Clinical Inventory (MACI), which consists of 160 True/False items

POTENTIAL BENEFITS

The results of the study may allow you and others to receive counseling that is more likely to help you and others in the future.

RISKS AND DISCOMFORTS

There are no known risks and the procedure takes approximately 30 minutes to administer.

ALTERNATIVES

The alternative is to not participate in this study and have the standard Court Mental Health Assessment done.

COMPENSATION

You will not receive any payment for participation in this study.

CONFIDENTIALITY

All information and psychological records relating to your participation will be kept in a locked file. Only the investigators and members of the Institutional Review Board will be able to look at these records. If the results of this study are published, your name or other identifying information will not be used.

VOLUNTARY PARTICIPATION

You may refuse to participate in this study. You voluntarily consent to participate in this study with the understanding of the known uses for the information obtained. You may withdraw from this study at any time. You also understand that if you withdraw from this study, there will be no penalty or effect on any present or future court hearings.

I have had adequate time to read this form and I understand its contents. I have been given a copy for my personal records.

I agree to participate in this research study.

Signature of Subject:

Date: ___/___/___ Time: _____ am/pm

Signature of Witness:

Date: ___/___/___ Time: _____ am/pm

Signature of Investigator:

Date: ___/___/___ Time: _____ am/pm

Signature of Parent/Guardian:

Date: ___/___/___ Time: _____ am/pm

Signature of

Judge: _____

Date: ___/___/___ Time: _____ am/pm

Signature of Counselor/Responsible Party:

Date: ___/___/___ Time: _____ am/pm

Appendix D

MACI SCALES

Personality Patterns

1. Introversive
- 2a. Inhibited
- 2b. Doleful
3. Submissive
4. Dramatizing
5. Egotistic
- 6a. Unruly*
- 6b. Forceful*
7. Conforming
- 8a. Oppositional*
- 8b. Self-Demeaning
9. Borderline Tendency

Expressed Concerns

- A. Identity Diffusion
- B. Self-Devaluation
- C. Body Disapproval
- D. Sexual Discomfort
- E. Peer Insecurity
- F. Social Insensitivity*
- G. Family Discord*
- H. Childhood Abuse*

Clinical Syndromes

- AA. Eating Dysfunction
- BB. Substance-Abuse Proneness*
- CC. Delinquent Predisposition
- DD. Impulsive Propensity*
- EE. Anxious Feelings
- FF. Depressed Affect
- GG. Suicidal Tendency

* Scales used to evaluate recidivism