EFFICACY OF JUVENILE OFFENDER ASSESSMENTS:

UTILIZATION OF RECOMMENDATIONS,

MEASUREMENT CONSTRUCTS,

AND RISK FACTORS

Barbara G. Van Drie, B.S.

Thesis Prepared for the Degree of

MASTER OF SCIENCE

UNIVERSITY OF NORTH TEXAS

August 2002

APPROVED:

Kenneth W. Sewell, Major Professor, Chair, and
    Director of Clinical Training
Randall J. Cox, Committee Member and
    UNT Psychology Clinic Director
Craig Neumann, Committee Member
Ernest Harrell, Chair of the Department of Psychology
C. Neal Tate, Dean of the Robert B. Toulouse School of
    Graduate Studies

Van Drie, Barbara G., <u>Efficacy of Juvenile Offender Assessments: Utilization of Recommendations, Measurement Constructs, and Risk Factors</u>. Master of Science (Psychology), August, 2002, 121 pp., 18 tables, references, 48 titles.

The purpose of this study was to explore the efficacy of juvenile offender assessments. Data from 104 juvenile offender assessments were analyzed and followed up with placement, subsequent offending, and outcome data from the juvenile and adult systems. Constructs consistently assessed included intellectual functioning, academic achievement, and personality functioning; however, under-diagnosis of intellectual deficits, learning disabilities, and personality disorders was found. Results indicated the assessment of family functioning, substance use, and social functioning should be included in comprehensive assessments, as they may result in alternative placement and treatment options of benefit to the juvenile offender. A juvenile offender typology proposed by DiCataldo and Grisso (1995) was successfully utilized and proved predictive of recidivism, future harm to others, and outcome.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

The psychological assessment of juvenile offenders began nearly one hundred

years ago following the establishment of the first U.S. juvenile court system in Cook

County, Illinois. Although psychology and the juvenile justice system have undergone

significant changes during the past century, psychologists continue to struggle with how

best to assess the juvenile's situation in an effort to intervene and alter the troubled

course. Since the late 1980s, the percentage of juveniles in the population has remained

fairly stable at approximately 26% (Office of Juvenile Justice and Delinquency

Prevention [OJJDP], 1999). During this same time, however, the total number of juvenile

delinquency cases increased by 48% (OJJDP, 1999). The largest percentage increases

were for drug law violations which increased 125% and person offenses, including

homicide, rape, robbery, and assault, which increased 97% (OJJDP, 1999). In view of the

increasing trend in the number and type of juvenile offenders, it is particularly important

to examine the efficacy of psychological assessments within the juvenile justice system.

In the past, the sole purpose of the juvenile court was rehabilitation. The role of

the psychologist was to evaluate the youth's dangerousness, their potential for

rehabilitation, and recommend effective rehabilitative strategies. During the past two

decades, the increase in serious and violent juvenile offenses brought about legislative

changes that altered the mandate of the juvenile justice system to include retribution with

rehabilitation (Mears, 1998). Today, psychologists conduct a broader range of evaluations for the juvenile courts including competence to stand trial, waiver to adult criminal court, waiver of Miranda rights, and risk of harm to others (Grisso, 1998). Although the legislative trend has been more punitive, "many juvenile court judges still make their decision based on what they believe may save the youth" (Grisso, 1998, p. 6). Amenability to rehabilitation and recommendation of disposition alternatives is still the primary focus of most juvenile offender assessments (Melton, Petrila, Poythress, & Slobogin, 1997).

The mental health professional assessing a juvenile offender encounters obstacles at each stage of the evaluation process. Difficulty establishing rapport, time constraints, unavailability of corroborating individuals, and a non-conducive testing environment may all be factors out of the psychologist's control. However, analyzing test data, assessing risk factors, and developing meaningful recommendations are within the control of the clinician. Effective communication of this information to the juvenile court professionals through a written report is essential. Once the report is submitted, whether or not the juvenile court utilizes the recommendations and ultimately, whether this leads to a positive outcome for the juvenile offender is largely unexplored. The efficacy of juvenile offender assessments cannot be determined without examining the flow of data through the assessment process and through the juvenile justice system. The present study examines the assessment of juvenile offenders at three different points in this process: following the completion of the report; when utilized by the juvenile court system; and when utilized by the juvenile offender's support system. The goal was to determine the

relations between assessment factors and the various outcomes for the juvenile offender. This introduction reviews the conceptual and empirical literature concerning the psychological assessment of juvenile offenders, the risk factors for juvenile offenders, and the utilization of psychological assessments by juvenile court professionals in their decision making.

Psychological Assessment of Juvenile Offenders

The psychological assessment of juvenile offenders involves knowledge and experience in several areas beginning with adolescent development, adolescent assessment, and adolescent psychopathology. No specific standards exist for the evaluation of juvenile offenders and the literature provides few guidelines for a thorough and comprehensive juvenile offender assessment. Stating that clinicians need to take a broad perspective, Melton et al. (1997) identified five specific areas for evaluation. These include evaluation of the juvenile's family , peer relations, community, academic and vocational skills, and personality functioning. Melton et al. (1997) highlighted intra-familial offenses, levels of aggression within the family, father absence, parental conflict, and gang involvement; he recommended interviewing neighbors, youth group leaders, and teachers as informants. The etiology of delinquent behavior and predictors for recidivism are briefly alluded to; however, the emphasis is on disposition recommendations. Although Melton et al. (1997) discussed important points, the scope of the recommended assessment seems inadequate and the process, as described, appears largely unsystematic.

Rosner (1989) emphasized the distinction between a juvenile assessment for legal versus clinical purposes and suggested that they may be at odds. A broad range of data collection through an unstructured interview is recommended which includes relationships with parents, siblings, peers and adults at school, behavior in structured and unstructured settings, leisure activities, physical health, sexual functioning, employment, religious involvement, and psychiatric symptoms. No emphasis is given to the systematic collection or interpretation of this data into meaningful recommendations. In his view, the primary element in an effective juvenile offender assessment is the education and training of the forensic psychiatrist involved.

In contrast to the informal and unstructured procedures frequently employed in the juvenile justice system, Hoge (1999) proposed that standardized tests and procedures be utilized. He argued that the wide discretion afforded to justice personnel and the heavy dependence on informal and unsystematic assessment is conducive to invalid inferences and irrational judgments about juvenile offenders. "Psychologists . . . have at their disposal a wide range of standardized assessment instruments capable of yielding valid information about youths and their circumstances, and the use of these tools will lead to more effective decision making in juvenile justice systems" (Hoge, 1999, p. 261). Advantages of using standardized instruments include known reliability and validity of the tests and increased consistency in the assessment and decision-making processes, resulting in more equitable treatment of juvenile offenders. Another important advantage includes having an explicit set of measurement constructs that may be used as a point of reference to justify the assessment and resulting decisions. Dispositions based on

standardized instruments are more defensible than those based on clinical impressions from an informal interview (Hoge & Andrews, 1996). Potential concerns include the lack of fit between psychological constructs and legal judgments, reduced flexibility in decision-making, and the suggestion that a more comprehensive assessment will more likely result in finding a problem (Hoge, 1999).

Hoge (1999) identified measurement constructs in the psychological assessment of juvenile offenders as intelligence, specialized aptitudes, academic achievement, vocational aptitudes and interests, and neuropsychological functioning. Other constructs include personality traits, behavioral characteristics, diagnosis of personality or behavioral disorders, and attitudes towards antisocial activities. Environmental factors including family, school, peers, and the community should also be considered.

In an effort to bridge the gap between psychology and forensic decision-making, diagnostic and classification systems have also been developed specifically for the juvenile justice system. These include personality-based or behaviorally-based diagnostic systems that classify juveniles for forensic decisions, and risk classification instruments to predict future criminal behavior and amenability to change (Hoge, 1999). An example includes the Interpersonal Maturity Level Classification System (I-Level; Warren, 1976) which uses the Jesness Inventory (Jesness & Wedge, 1985) or an interview to classify juveniles by personality type for diversion and treatment decisions. Another example is Quay's behavior-based typology (1987) which classifies juveniles using the Revised Behavior Problem Checklist (Quay & Peterson, 1987). Although the measurement constructs provided from these systems are directly relevant to the forensic decision-

making process, empirical studies of the systems have shown low levels of reliability and validity (Hoge & Andrews, 1996). The exception may be the Psychopathy Checklist-Revised (PCL-R; Hare, 1991) which demonstrated potential in identifying youths who fail to form attachments to others, lack feelings of remorse or guilt about their antisocial behaviors, and manifest other early signs of psychopathy (Brandt, Kennedy, Patrick, & Curtin, 1997; Forth, Hart, and Hare, 1990; Frick, O'Brien, Wootton, & McBurnett, 1994).

Grisso (1998) also posited a more comprehensive and standardized approach to juvenile offender assessment. Although he acknowledged that individual cases may require slightly different approaches, the measurement constructs to be considered across cases should be consistent. Grisso identified measurement constructs in the assessment of juvenile offenders to include eight specific areas for evaluation. First, the juvenile's health and medical history must be assessed including past and present medical problems and illnesses, past injuries, medications, psychiatric history, developmental disabilities, and substance use and dependency. Second, the youth's family and social background should be assessed including the history of the family constellation; the parent's ability to meet the juvenile's needs in early childhood; antisocial behavior, violence, or abuse in the family history; significant attachments and loss; and current family functioning. Third, academic and intellectual functioning should be evaluated including intelligence, aptitudes, academic achievement, neuropsychological functioning, or specific learning and perceptual difficulties. Fourth, a personality description should be provided including a description of psychosocial traits and behavioral predispositions. Fifth, a clinical

diagnostic description of any mental disorders or emotional disturbance should be included. Sixth, a history of school misbehavior, delinquent behavior, and legal involvement must be reviewed. Seventh, the evaluator should ascertain information regarding past responses to rehabilitation efforts. And finally, risk factors associated with future harm to others should be considered. Grisso expanded the standardized assessment described by Hoge and Andrews (1996) with these latter three areas for evaluation.

Grisso (1998) also delineated three steps to developing effective recommendations for juvenile offender assessments. Following the interpretation of the previous testing, the clinician must synthesize the information to determine the etiology of this juvenile's offenses and identify what needs to change in order to reduce future offending. This process necessitates a fit between the results of the juvenile offender assessment and an applicable theory of delinquency. Grisso (1998) separated the delinquency literature into theories that focus on enduring character traits and those that focus on more situational social and environmental circumstances. According to Grisso (1998), the individual assessment results should determine which theoretical framework best fits the recommendations for any particular juvenile offender.

In Grisso's (1998) next step for developing effective recommendations, the clinician needs to determine what interventions are relevant and available for this juvenile offender. Placement options can include within the home, a group or foster home, residential treatment programs in the community, residential rehabilitation programs outside the community (e.g., boot camp), a secure juvenile facility, or hospitalization in a psychiatric facility. Services provided can include medical and physical rehabilitation

services, psychopharmacological services, educational services, vocational services, contingency-based milieu services, individual and group psychotherapy, or family therapy. Recommending particular placement options or services is "complex, not formulaic, and often supported more by clinical experience and theory than by research evidence" (Grisso, 1998, p. 190). The research on matching juvenile offenders and types of rehabilitation options is limited. Grisso and Conlin (1984) stated that comprehensive outcome studies of this type are costly, rare, and may have limited use beyond the local jurisdiction; they recommended more modest studies be performed within local jurisdictions.

Grisso's (1998) final step in developing effective assessment recommendations included "the likelihood that rehabilitation objectives can be met, given the interventions that have been recommended, the nature of the youth, and the youth's social and legal circumstances" (Grisso, 1998, p. 191). He acknowledged that there is no systematic method for making this judgment in the literature; however, the clinician should be cognizant of what a successful outcome is for this juvenile offender. Possibilities include reduced risk of future harm to others, reduced likelihood that the youth will recidivate, adaptation to normal family and school functioning, or specific changes in personality traits, behavioral functioning, or clinical characteristics. This prognosis for a successful outcome may necessitate further recommendations to increase the likelihood for success.

The combination of standardized assessment instruments into a relevant battery for the evaluation of juvenile offenders provides an opportunity to systematically evaluate individual assessments and to compare assessments between juvenile offenders.

Although the juvenile justice system often depends on brief and unstructured assessments, the argument for systematic and standardized assessments is a compelling one (Grisso, 1998; Hoge, 1999; Hoge & Andrews, 1996). Although there is little empirical support for which specific measurement constructs should be included in a comprehensive and meaningful juvenile offender assessment, some of these constructs can be inferred from the literature on risk factors associated with juvenile violence and predictors of recidivism. At a minimum, the objective of a juvenile offender assessment is to identify this juvenile's risk for escalating their delinquent acts, particularly to more violent offenses, to evaluate the risk of becoming a chronic offender, and to recommend interventions that might mitigate these risks.

Risk Factors Associated with Juvenile Violence and Recidivism

An important component in the evaluation of a juvenile offender is an assessment of potential for future violence. The literature on predictors for juvenile violence and recidivism is substantial and complex. Conventional wisdom states that the best predictor for future behavior is past behavior. Grisso (1998) organized an assessment of past behavior by chronicity, recency, frequency, severity, and context. Chronicity refers to the age of onset and developmental pathways to violence and recidivism. Throughout adolescence, age correlates positively with delinquent behaviors. The prevalence of juvenile offending increases during early adolescence reaching a peak between ages 14 and 17 (Farrington, 1986) and drops off rapidly between ages 17 to 19 (Tolan & Loeber, 1993). Most juvenile delinquents cease offending by early adulthood (Elliott, 1994; Loeber & LeBlanc, 1990); however, this is less likely for early onset offenders. The early

onset of delinquency and violent behavior predicts more chronic and serious violence (Farrington, 1991; Thornberry, Huizinga, & Loeber, 1995; Tolan & Thomas, 1995). Self-report by male juvenile offenders who engage in chronic serious violence indicated an age of onset between ages 7 and 14 (Stouthamer-Loeber, Loeber, Huizinga, and Porter, 1997). Elliott (1994) found that violent behavior persisted in approximately half of the juveniles who committed their first violent act prior to age 11; violence persisted in 30% of juveniles whose first act was between ages 11 and 13; and only 10% of juveniles continued their violent behavior if their first act occurred during adolescence. Similar results were found by Farrington (1995); violent offending persisted into adulthood in 50% of the juveniles convicted for a violent offense between ages 10 and 16 compared with only 8% of those not convicted of a violent offense as juveniles. Early and persistent aggressive behavior observed in males from age 6 through age 13 consistently predicts later violence (Hawkins et al., 1998).

Moffitt's (1993) developmental taxonomy for delinquency described two types of juvenile offenders. The "life-course persistent" delinquents exhibited difficult temperaments and behavioral problems early on; they were typically younger at first arrest, and their delinquency remained consistent across time and circumstances. The "adolescent-limited" delinquents began offending in adolescence and desisted as they approach adulthood. During adolescence, the peak period for offending, it is difficult to discriminate the two types without knowledge of their childhood behavior.

Loeber and Hay (1994, 1997) proposed a model of three pathways to describe juveniles at the highest risk of becoming chronic offenders. The first, "overt pathway"

begins with minor aggression (bullying and annoying others), progresses to physical fighting, and results in violence (rape and attack). The second, "covert pathway" begins with minor covert behavior (shoplifting and lying), progresses to property damage (vandalism and firesetting), and results in moderate to serious delinquency (fraud, burglary, and serious theft). The third, "authority conflict pathway" has an early-onset, prior to age 12, and begins with stubborn behavior, followed by defiance and disobedience, and results in authority avoidance (truancy, running away, and staying out late). Earlier onset is related to further progress in any of the three pathways and an increased likelihood of involvement in all three pathways. The earlier the age of onset for the overt pathway, the more likely the juvenile will strictly follow the overt pathway. This pathway model points to the orderly development of juvenile violence and can assist in the prediction of future delinquency and violence.

In addition to chronicity, Grisso (1998) also recommended examining the recency, frequency, severity, and context of past violent behavior. He recommends giving less weight to aggressive behavior in the distant past if there is no indication of such behavior in the past few years (recency). Frequency refers to the elapsed time between violent acts. Megargee (1971) categorized violent offenders as "under-controlled" (impulsive, irritable, overly responsive to threat) and "over-controlled" (anxious, repressed, but angry). Under-controlled offenders engaged in violent behavior more frequently. Over-controlled offenders engaged in violent behavior less frequently; however, they tended to be less predictable, more explosive, and more likely to be

harmful. Risk estimates for future violence are higher for more frequent offenders; however, predicting future violence in over-controlled juveniles is quite difficult.

With the exception of sexual offending, there is no support linking the severity of the past offense alone with risk for future violence (Grisso, 1998). In some situations, such as juveniles who murder family members, the offender has no delinquent past and almost never engages in another violent behavior (Cormier & Markus, 1980). Juveniles charged with murder versus nonlethal assault typically had a less violent history (Cornell, Benedek, & Benedek, 1989). Finally, the clinician needs to understand the context of past behaviors in order to predict risk of future aggression. Grisso (1998) recommended examining the setting (e.g. school, home, away from adult supervision) and timing (e.g. family conflict occurring, summer versus winter) of the historical behaviors, looking for patterns.

In addition to past behavior, Grisso (1998) identified eight other risk factors associated with future harm to others. These include substance use; association with violent peer groups; family aggression and intrafamily conflict; social stressors; specific personality traits, principally anger, impulsivity, and a lack of empathy; specific mental disorders in juveniles with aggressive histories; opportunity; and future residence. Grisso recommended that clinicians investigate the role that substance use played in past aggressive behavior; for example, whether violent behavior usually occurs when the juvenile is using substances (positively correlated), whether violent behavior occurs independent of substance use, or whether substance use is negatively correlated to violent behavior. Estimating this risk factor is also dependent on the type and amount of

substances used, and on the frequency and context of substance use (e.g., alone, on weekends, at parties). Finally, if the juvenile offender is involved in selling drugs, the risk for future violence is elevated. Selling drugs at ages 14 and 16 has been related to increased violent behavior at age 18 (Maguin et al., 1995).

Past aggression and current association with violent peer groups elevates the juvenile's risk of future violence (Grisso, 1998). The degree and nature of the juvenile's involvement with a delinquent peer group or a gang should be evaluated. Thornberry, Krohn, Lizotte, and Chard-Wierschem (1993) found support for their social facilitation model of gang involvement in which the norms and group processes of the gang facilitate increased violent delinquency. In other words, a high rate of offense occurs only when the offender is an active gang member and significantly drops off when the juvenile leaves the gang. Gang membership continues to have a significant effect even when other risk factors are held constant (Thornberry, 1998). Gang membership differs from association with other delinquent peer groups. Gang members have substantially higher rates of delinquency and are involved in more serious and violent offenses than are juvenile offenders who associate with highly delinquent peer groups but are not gang members (Thornberry, 1998). Involvement with antisocial or delinquent peers between ages 14 and 16 still elevated self-reported violent behaviors (Farrington, 1989; Maguin et al., 1995); however, this pattern is even more evident in gang members.

Family conflict and aggression contribute to increased risk for violence. Grisso (1998) described several family factors that elevate the risk for violence including antisocial families, in which criminal activity is accepted or encouraged. Juveniles who

13

have been victims of abuse and neglect by family members are at increased risk for harm to self and others. Families who model aggression between family members as a way to deal with interpersonal conflict may increase the juvenile's risk for violence. Finally, the increase in stress for the juvenile offender when coping with family conflict in the home increases the risk for future violence.

In their comprehensive review of the longitudinal literature, Hawkins et al. (1998) investigated the malleable risk and protective factors for juvenile violence. Family risk factors included parental criminality, favorable parental attitudes toward crime and violence, aggression within the family, exposure to high levels of marital or family conflict, and physical abuse and neglect. Poor family management practices, including failure to set clear expectations for children's behavior, inadequate supervision and monitoring, and excessively severe, harsh, or inconsistent punishment, predicted later delinquency and violence. Lack of parental interaction and involvement in their children's lives predicted delinquency and violence. Finally, a juvenile's separation from the parents or leaving home at an early age is predictive of future violence.

For juveniles with a history of aggression, an increase in psychosocial stressors can increase their potential for violence (Grisso, 1998). Examples include parental divorce, illness of a family member, changes in the family's economic status, changes in residence, and relationship difficulties. Increased stress on the juvenile's coping mechanisms, particularly for those without significant social support, increase the risk for harmful aggression. Grisso (1998) recommended evaluating the juvenile's relationship with parents and significant attachment figures, as the quality of these relationships and

14

the adults' ability to supervise and control the juvenile offender could mitigate an increase in psychosocial stressors. In contrast, Elliott (1994) found no relation between the number of stressful family events and violent behavior during adolescence and adulthood in juveniles without a known history of aggression.

Personality characteristics of anger, impulsivity, and deficient empathy that appear as enduring traits (rather than developmental events) predict an increase in future violence for previously aggressive juveniles (Grisso, 1998). Anger and hostility across time, including childhood, and in a variety of environments and situations predict future violence.

A persistent pattern of impulsivity, beyond the developmental norm for adolescents, is a risk factor for violence (Farrington, 1989). Risk taking and believing they are impervious to consequences is normal for most adolescents; however, "sensation seeking" adolescents will engage in risky behavior whether or not they are encouraged by peers (Farrington, 1989; Maguin et al., 1995).

An important consideration for most juvenile justice decision-makers is whether the juvenile experiences and expresses remorse or empathy. The characterological (vs. developmental) nature, as well as the truthfulness of empathic/remorseful expressions (or lack thereof) must be considered. Developmental egocentrism and a delay in an adolescent's ability to think abstractly or hypothetically can result in deficient empathy not associated with future risk to others. Detachment, denial, and numbing of affect can be misinterpreted as a lack of empathy, particularly immediately after the offense.

Conversely, dramatic displays of apparent remorse are common in juvenile offenders whose lack of empathy is an enduring personality trait.

Past aggression and the presence of certain mental disorders in juvenile offenders elevates the risk of future violence (Grisso, 1998). These disorders include depression, attentional and hyperactivity disorders, psychoses, trauma-related syndromes, and brain abnormalities. Juveniles with a history of aggression and a current depressive disorder who exhibit symptoms of anger, irritability, and demandingness are at increased risk for suicidal and assaultive behaviors (Holinger, Offer, Barter, & Bell, 1994). Juveniles with Attention-Deficit/Hyperactivity Disorder (ADHD) are at increased risk for aggression (Barkley, 1990). This may be due to their impulsive response to threats or the negative or aggressive reactions they engender from others. The early onset of ADHD and the resultant disruptive or aggressive behaviors may coincide with the early onset of aggression seen in high-risk juvenile offenders. This does not indicate that all juvenile offenders with ADHD are at increased risk. Lynam (1996) described "fledgling psychopaths" as a minority of delinquent youths with ADHD who were at increased risk of becoming habitual and violent offenders. Psychotic symptoms, such as hallucinations, delusional ideation, and thought disorganization, when combined with a history of aggression increases the risk of violence. Symptoms of Posttraumatic Stress Disorder (PTSD) such as irritability, anger outbursts, and reexperiencing the traumatic event increase the risk of aggressive behavior. Brain dysfunction due to head trauma or abnormal neurological development increases the juvenile's risk for future violence; the

dysfunction may be observed through increased impulsivity and anger or impaired judgment and self-constraint.

Finally, the risk of a juvenile offender engaging in future violence is dependent on opportunity and their future residence (Grisso, 1998). Opportunity refers to situational factors such as the availability of likely victims, alcohol/drugs, and weapons within the home or within the juvenile's peer group. Where the juvenile will reside in the future impacts the risk assessment. If there are several placement options under consideration, a risk estimate based on each option is appropriate. For example, a risk estimate based on the juvenile's placement in a secure detention facility may differ from placement in the home.

Hawkins et al. (1998) identified several additional risk factors related to the juvenile's behavior, attitudes, school and community environment. Male involvement in antisocial activities such as stealing, property destruction, and drug selling are associated with later violence. Both regular cigarette smoking and sexual intercourse by the of age 14 predicted future male violence (Farrington, 1989). Attitudinal measures consistently associate dishonesty, antisocial beliefs, favorable attitudes towards violence, and hostility towards police with future violence. Academic failure, low commitment to school, high truancy rates, leaving school prior to the age of 15, and frequent school transitions predict future violence. Neighborhood and community factors associated with later violence include poverty, community disorganization, availability of drugs, neighborhood adults involved in crime, and exposure to violence and racial prejudice.

Do these risk factors combine into any significant patterns? Lipsey and Derzon (1998) investigated the predictors of violent or serious delinquency in adolescence and early adulthood through a meta-analysis of the longitudinal research. The study examined the risk factors for juveniles between ages 6 and 14 that predict violent or serious delinquency in individuals between 15 and 25 years old. Predictor variables were categorized according to the juvenile's age at prediction and then ranked according to effect size. For children between 6 and 11 years old, the strongest predictor was prior nonserious delinquent acts: specifically, committing a general offense (0.38) and substance use (0.30), primarily tobacco or alcohol. The next highly ranked predictors for this age group included male gender (0.26), low family socioeconomic status (SES;0.24), antisocial parents (0.23), aggression (0.21), and minority race (0.20). The risk of engaging in subsequent violent or serious offenses is 5 to 20 times greater for juveniles positive on the five strongest variables. For juveniles between 12 and 14 years old, the strongest predictors were social factors: specifically, lack of strong social ties (0.39) and involvement with antisocial peers (0.37). The next highly ranked predictors for this age group included committing a general offense (0.26), aggression (0.19), poor school attitudes and performance (0.19), various psychological conditions (0.19), parent-child relations (0.19), male gender (0.19), and physical violence (0.18). The risk of engaging in subsequent violent or serious offenses is 3 to 20 times greater for juveniles positive on any of these variables. Although there is some overlap in the predictors, the strongest predictors are different between the two age groups. For example, early substance use (0.30) is a strong predictor; however, later substance use (0.06) is a weak predictor.

Likewise, interpersonal relationships are very strong predictors in the older group and weak predictors in the younger group (social ties [0.15] and antisocial peers [0.04]). The researchers noted the limited relevant research. The primary caution, to those involved in juvenile offender assessment, is the risk of "false positives" (i.e. erroneously identifying juveniles to be at risk who will not become violent or more serious offenders).

Utilization of Psychological Assessments by Juvenile Court Professionals

How are psychological assessments utilized by the juvenile court professionals? The role of the psychological assessment in the judicial decision making process is an important one. Gottfredson and Gottfredson (1988) described judicial decision making as a choice based on the goals of the justice system, alternatives available to the justice system, and information about the individual. The goal of the decision making process is that it will lead to a rational decision. If the information about the individual is incorrect, decisions will be based on invalid inferences and judgements, and this may lead to an inappropriate choice of alternatives, resulting in an irrational decision. The psychological assessment needs to be accurate, relevant, and understood by the juvenile court professionals.

Grisso, Tomkins, and Casey (1988) conducted descriptive and analytic research on the domain of information that juvenile court professionals used for decision making. Using court professionals' selection of variables and perceptions of the juvenile, Grisso et al. (1998) identified the relevant informational cues salient for the decision makers. In addition to categorical variables related to demographics and current offense classification, nine factors emerged as relevant to the decision making process. It should

be noted that the relative importance of each factor to the final decision was not studied; therefore, the order of the factors is not significant. The first factor, motivation to accept intervention, indicated juvenile offenders' willingness to change their behavior as inferred by variables such as motivation to change, sense of guilt, respect for authority, responsiveness to adult assistance, and insight into their own problems. Grisso et al. (1988) stated that this factor might describe the concept of "socialization" to conventional societal norms and values. The second factor, self-reliance and autonomy, was inferred by variables such as whether or not the juvenile appeared sophisticated, mature, self-confident, independent, and streetwise. This factor also included whether or not the juvenile had "adultlike" physical characteristics. The third factor, prior contacts with the juvenile justice system, included the chronicity and severity of the juvenile's prior delinquent behavior. Most of these variables could be found in the juvenile's court records. The fourth factor, presence of serious mental disorder, was inferred from variables such as severe mental illness, current suicidal assessment, psychosis, past suicide attempts, and frequency of inpatient treatment. More common psychological dysfunction such as depression, impulsivity, and aggressiveness were not highly relevant to juvenile court professionals. The fifth factor, family's caring and resource capability, was inferred from variables such as the family's acceptance and interest in the juvenile; the family's willingness to accept custody of the juvenile; the amount of daily contact between the juvenile and the parents; the quality of the family's communications; the family's coping abilities, the family's ability to supervise, control, and discipline the juvenile; and the juvenile's respect for the parents' authority and discipline. Grisso et al.

20

(1988) compared this factor to the "Cohesion" and "Conflict" dimension of the *Family Environment Scale* (Moos & Moos, 1981). The sixth factor, opportunity for delinquent peer influence, focused on the frequency of association with delinquent peers, older juveniles, young adults, and gangs, and the juvenile's perceived susceptibility to their influence. The seventh factor, unsocialized family, referred to variables such as a history of family violence, abuse, or neglect; family chaos and disorganization; and family involvement in crime. Grisso et al. (1988) suggested this factor focused on the family's lack of conformity to conventional societal norms and values. The eighth factor, degree of behavioral compliance in legal settings, focused on variables including juvenile offenders' conduct in court settings; their acceptance of judicial decisions; and their respect for authority, particularly the court. The final factor, functioning in academic or work settings, consisted of variables such as the juvenile's school attendance; academic functioning or grades; motivation to make progress in the academic or work environment; school misconduct; and use of leisure time.

Grisso et al. (1988) noted that common psychological constructs, such as cognitive functioning, did not emerge as a factor in the study. In addition, common psychological variables, such as intelligence, depression, and impulsivity, had relatively weak loadings on the nine factors. They speculated that the constructs used by psychologists to describe clinical populations for treatment decisions might differ from the constructs used to describe juvenile offenders for legal decisions. To bridge this gap, Grisso et al. (1988) recommended, "psychological constructs and assessment results simply might require 'translation,' if they are to provide effective assistance to others in

the juvenile court who must make use of the information to arrive at decisions (p. 434-435)."

DiCataldo and Grisso (1995) used the data and factors from the Grisso et al. (1988) study to explore whether a typology of juvenile offenders would emerge reflecting the schemas used by juvenile court professionals when making decisions. Using cluster analysis they analyzed the nine factors to determine if a typology, similar to that of Quay's (1987) classification system, would be reflected in the juvenile court professionals' schemas. In contrast to Quay's research, this study derived a typology based on juvenile court professional's perceptions (the Quay typology was derived directly from juvenile case file information). DiCataldo and Grisso (1995) found three clusters (indicating three types) and they were analogous to Quay's system. Cluster 1 contained juveniles referred to as "immature juvenile offenders." These juveniles were perceived as immature and child-like; they exhibited poor school attendance, lacked motivation, and had an increased incidence of school misconduct; their families were less accepting and they had less close contact with them; they were more emotionally disturbed than the juveniles in the other clusters; and although they had a delinquent history, their offenses were less violent. This group was similar to Quay's (1987) anxiety-withdrawn-dysphoria group and the attention deficit group. Cluster 2 contained juveniles referred to as "socialized juvenile offenders." These juveniles were characterized as having better academic functioning and more motivation; a greater willingness to change; respect for the court and increased behavioral compliance in the various legal settings; and the juvenile's family appeared caring and willing to take responsibility for the

juvenile. DiCataldo and Grisso (1995) described this schema as one that assumes the juvenile has been socialized to conventional societal norms and their delinquency is temporary and situational. This description corresponds to Quay's (1987) socialized-aggressive group. Cluster 3 contained juvenile offenders referred to as "mature delinquent juvenile offenders." These juveniles appeared to have an extensive history with the legal system; they were more self-reliant, autonomous, and adultlike; they did not appear motivated to accept intervention and were seen as lacking respect and a sense of guilt. Although the current offenses of the Cluster 3 juveniles were no more violent than the Cluster 2 juveniles, the Cluster 3 juveniles were perceived as less socialized. This group was similar to Quay's undersocialized-aggressive typology. The partial convergence of these different approaches for classifying juvenile offenders indicates increased validity for the typologies.

Taken together, a review of the literature suggests that formal and systematic assessment using standardized tests and procedures will yield more valid information about juvenile offenders. This is in contrast to the informal and unsystematic procedures common to most juvenile justice settings. Relevant measurement constructs to be considered in a comprehensive assessment varies within the literature and the development of effective recommendations often appears to depend more on clinical judgment than systematic methods. Still, the minimal objective of a juvenile offender assessment is to evaluate the juvenile's risk for future violence and chronic offending. In the end, the efficacy of a juvenile offender assessment must be measured through its utilization by the juvenile justice professionals in their decision making process; whether

utilization of the assessment report by the juvenile justice system leads to a positive

outcome for the juvenile offender is unexplored. More research is needed to investigate

the efficacy of the juvenile offender assessment throughout the entire assessment and

decision making process. The present study examines the efficacy of juvenile offender

assessments through evaluation at three different junctures. First, the data are investigated

within the context of the completed assessment report. Second, the assessment is

investigated when utilized by the juvenile court professionals. Third, the assessment is

investigated with regard to the eventual outcome for the juvenile offender.

Research Questions

This was an exploratory study to investigate the efficacy of juvenile offender

assessments through the following research questions:

Within the context of the assessment report:

1. What measurement constructs predict specific recommendations?

2. What information contained in the assessment data predicts specific diagnoses?

3. What information contained in the assessment data predicts specific

   recommendations?

4. What identified risk factors in the assessment predict specific recommendations?

   Within the context of the outcome:

5. What recommendations are associated with an increased probability of

   recommendation utilization by the juvenile court professionals?

6. Is recommendation utilization by the juvenile court professionals associated with a decreased probability for recidivism and violence (as measured by rearrest or probation violation)?

7. To what extent can the identified risk factors in the assessment predict the outcome?

8. What information contained in the assessment data predicts specific outcomes?

9. Is it possible to identify the nine factors described in the Grisso, Tomkins, and Casey (1988) study in either the assessment report or the juvenile's detention record? If so, can the juvenile offender be categorized according to the DiCataldo and Grisso (1995) typology?

CHAPTER 2

METHOD

Data Source

This research project is an archival study conducted in cooperation with the

University of North Texas (UNT) Psychology Clinic and Denton County Juvenile

Probation and Detention. Through a contract with Denton County Juvenile Probation and

Detention, the UNT Psychology Clinic conducted comprehensive assessments for

selected juvenile offenders. The juvenile offenders were at various stages in the juvenile

justice system including pre-adjudication, pre-disposition, and post-disposition. The

assessments were conducted between October 1996 and June 2000. Five assessments

were completed in 1996, 23 assessments were completed in 1997, 38 assessments in

1998, 34 assessments in 1999, and 8 in 2000.

The juvenile offender assessments were requested by and provided to the juvenile

offender's probation officer; the decision to request an assessment was at the probation

officer's discretion. There were 104 assessments completed by 49 graduate students

enrolled in the clinical and counseling psychology programs. The graduate students had

completed their training in assessment techniques and conducted the evaluations as a part

of their assessment practica. The maximum number of assessments completed by any one

clinician was eight; 90% of the assessments were completed by clinicians who conducted

one to three

assessments. The assessments were supervised by 14 doctoral-level licensed psychologists. Five psychologists each supervised 10 to 15 assessments (60% of the total). The remaining nine psychologists each supervised one to seven assessments.

At the time of their assessment, the majority of the juvenile offenders were confined in the county probation department's short-term detention facility (82.7%) and were typically assessed at the facility. The remaining juveniles resided at home and were assessed at the UNT Psychology Clinic.

The archival review of each juvenile's assessment data and report was completed at the UNT Psychology Clinic. Prior consent for use of the information contained in the assessment file for research purposes was obtained at the time of assessment from the juvenile's parent or guardian. Consent for the review of the UNT Psychology Clinic assessments was obtained from the Applied Training Unit Committee. The archival review of the probation records was completed at Denton County Juvenile Probation and Detention. Consent for the review of the probation records was obtained from Peggy Fox, Director of Denton County Juvenile Probation and Detention. The probation review provided adequate information regarding the juvenile offender's placement, subsequent offending, and outcome; therefore a follow-up phone interview with the juvenile's parent, which was originally proposed, was deemed to be unnecessary. For those juvenile offenders who were over 18 years of age at the time of follow-up, the Denton County criminal database (a public online database) was accessed to collect subsequent offending data and outcome.

Materials

The psychological assessment reports were used to investigate the constructs included in the assessment, testing instruments used, test data, diagnoses, recommendations, and identified risk factors. Each juvenile offender participated in a comprehensive psychological assessment that typically included assessment of intellectual abilities, academic achievement, personality functioning, and other constructs considered relevant. Variables collected from the archived psychological assessments are included in Form A in the Appendix.

Juvenile probation records located at Denton County Juvenile Probation and Detention and the Denton County criminal database (for adults) were reviewed to determine the juvenile offender's subsequent placement, utilization and relevance of other recommendations within the assessment, subsequent offending, and current outcome. Variables collected from the juvenile probation records and the Denton County criminal database are included in Form B in the Appendix.

Procedure

Data collection began with the juvenile offender's psychological assessment file located in the UNT Psychology Clinic. Over 300 variables were encoded from each juvenile offender's assessment. These data include: demographic information, identification of assessment instruments used, test scores, diagnostic criteria, recommendations, and identified risk factors. Each juvenile offender was assigned an ID number in order to protect confidentiality. No identifying information was kept with the extracted data forms.

Next, an archival file review was conducted of the juvenile offender's probation record. Data gathered included placement of the juvenile offender after the assessment, whether or not one or more of the assessment's recommendations were followed, whether or not the juvenile has recidivated since the evaluation was completed, subsequent offenses, and the current status of the juvenile offender. The prior and current offense information gathered from the assessment report was also validated and corrected. Finally, a review of the Denton County criminal database (for adults) was completed for subsequent offending information and current status.

CHAPTER 3

RESULTS

<u>Descriptive Statistics</u>

As this was an exploratory study of archival data, the descriptive statistics were numerous. The 104 juvenile offenders assessed included 79 males and 25 females who ranged from 12 to 17 years of age ($M = 14.79$, $SD = 1.17$). Over half of the juvenile offenders were Caucasian (54.8%); the remaining youths included those of Hispanic (18.3%), African-American (16.3%), Native American (2.9%), Asian-American (1.9%), and other or unknown (5.8%) ethnicity. One juvenile was married and none reported having any children. At the time of assessment, one juvenile was currently pregnant and another had a pregnant girlfriend. Complete demographic statistics are presented in Table 1.

Nearly half of the juvenile offenders lived with their mother alone (25%) or both parents (24%). Living with their mother and another adult accounted for another 26%. A living situation involving the juvenile's father alone or with another adult accounted for 15.4% of the family situations; less than 9% of the juveniles lived with other family members. A current status of employed and/or residing at home was more typical of the juvenile's biological mother (78.6%) than their biological fathers (53.4%). A current status of unknown or never known applied to 28.2% of the biological fathers compared to 4.9% of the biological mothers. The remaining biological parents were incarcerated

(13.6%), deceased (9.8%), or otherwise unavailable. Complete descriptive statistics concerning the juveniles' families are presented in Table 2.

The biological parents of 26.9% of the juvenile offenders were still married. For 20.2% of the juveniles their parents had never married. The majority of the biological parents had their marriages disrupted by divorce (38.5%), separation (7.7%), or death (2.9%). The juveniles were typically 6 to 7 years old when their parents marital status changed. Stepparents have been in the lives of nearly 40% of the juvenile offenders and nearly 17% of these stepparent marriages have resulted in separation or divorce.

The juvenile offenders had biological siblings in 82.7% of their families with a mean of 1.9 ($SD = 1.25$) siblings per family. Stepsiblings were a part of nearly 30% of the families with an average of 2.29 ($SD = 1.13$) siblings per family. Extended family members also resided with the families of 16.3% of the juvenile offenders.

The family histories of the juvenile offenders contained marked levels of stress and conflict. The death of a close family member (mother, father, grandparent, or sibling) was experienced by 24% of the juvenile offenders. Parental drug and alcohol abuse was reported in 32.7% of the assessments. Frequent changes in residence were reported by 49% of the juvenile offenders. A family history of criminal behavior was reported in 48.1% of the assessments. Physical abuse within the family was reported by 29.8% of the juveniles; sexual abuse within the family was reported in 14.4% of the families. Family functioning was characterized as poor in 61% of the assessments, average/good in 18% of the assessments, and could not be characterized in 21% of the assessments.

31

The juvenile offenders' current educational level at the time of assessment ranged between 6th and 11th grade ($M = 9.59$, $SD = 9.02$), with one individual having received his GED. The range of ages across grades pointed out difficulties with older juveniles in lower grades, for example, a 15-year-old attending seventh grade. Complete descriptive statistics concerning school functioning is presented in Table 3. Educational commitment was low in most juvenile offenders attending school (70.2%). The juveniles attended traditional schools (40.4%), attended non-traditional schools such as alternative educational programs (48.1%), or did not attend school (9.6%). Failure in one or more grades was experienced by 31.8% of the juveniles. They reported high rates of truancy (53.8%), suspension (51%), and expulsion (45.2%) as well as elementary and secondary school misbehavior. Current employment was reported by 18.3% of the juvenile offenders.

Associating with delinquent peers was reported by 52.9% of the juvenile offenders. Gang involvement was acknowledged by 21.2% of the juveniles and the average age reported for joining a gang was 10.8 years old ($SD = 1.92$). Positive peer relationships (friendships, best friend, romantic relationships) were typically not reported. Sexual activity was reported by 22.1% of the juvenile offenders with a mean age of inception at 11.07 years old ($SD = 2.87$) . Sexual activity was denied by 2.9% of the juveniles and not reported for 75% of the offenders. Peer statistics are presented in Table 4.

Developmental history was not reported in the majority of assessments (75%). In those assessments reporting developmental history, prenatal trauma and/or developmental

disabilities were positive in 8.33% of the juveniles (1.9% of the total sample) and

delivery complications were positive in 36% of the juvenile offenders (8.7% of the total

sample). Asthma and/or allergies were present in 20% of the juvenile offenders. Other

medical illnesses were present in 15.4% of the juvenile offenders and 17.3% were

currently on medications. The juvenile offenders' previous psychiatric history included

inpatient treatment (10.6%), outpatient individual therapy (30.8%), treatment for ADHD

(5.8%), and drug counseling (1%). Personal involvement in sexual crime was evidenced

by 22% of the juvenile offenders; these include perpetrator of sexual abuse (8.7%),

victim of sexual abuse (8.7%), both victim and perpetrator (1%), and rape victim (3.8%).

Information regarding substance use was inconsistent because explicit statements

regarding use and non-use were frequently not reported in the assessments. Also, age of

onset of substance use was typically not explored (see Table 5). Nicotine use or

avoidance was reported in only 32.7% of the assessments. When explicitly assessed,

nicotine use was acknowledged by 91.2% of the juveniles and denied by 8.8%. Age of

onset for nicotine use was only reported in 10% of the assessments, the mean age of onset

was 10.64 years of age ($SD = 1.91$). Alcohol use or avoidance was reported in 66.3% of

the assessments. When explicitly assessed, alcohol use was acknowledged by 89.9% of

the juvenile offenders with a mean age of onset of 12.16 years old ($SD = 1.86$). Marijuana

use or avoidance was reported in 77.9% of the assessments. When explicitly assessed,

91.4% of the juvenile offenders acknowledged marijuana use with a mean age of onset of

12.04 years old ($SD = 1.85$). Use or avoidance of drugs other than marijuana was reported

in 57.7% of the assessments. When explicitly assessed, other drug use was acknowledged by 83.3% of the juvenile offenders with a mean age of onset of 13.00 years old ($SD = 1.30$).

Offense history was gathered from the assessment reports and the probation files. Prior arrests were reported for 94.2% of the juvenile offenders and 26% had been previously confined in a juvenile detention facility. A total of 276 prior offenses were reported in 33 different categories of offense for 94 of the juvenile offenders. Prior offenses for the juveniles were then categorized by type according to severity (see Table 6). The juvenile offenders were subsequently categorized according to their most serious offense. Although multiple offenses might have been committed, multiple occurrences of the same offense were not included. Based on their prior offenses, the juvenile offenders were categorized as violent (10.6%), serious (58.7%), nonindex (15.4%), and status (5.8%) offenders. Over 69% of the juveniles would be classified as a serious or violent juvenile offender based on their prior offenses. Even so, the most common prior offense was runaway (15.6%), a status offense.

The current offense (at the time of assessment) was typically a violation of probation (93.3%). Based on their current offense, the juvenile offenders were categorized as violent (9.7%), serious (21.4%), nonindex (10.7%), and status (58.3%) offenders. Only 31.1% of the juveniles would be classified as serious or violent juvenile offenders based on their current offense. As was true for prior offenses, the most common current offense was runaway (21.4%) followed by a positive urinalysis for drug use (19.4%).

Further descriptive data regarding the juvenile offenders' assessment data will be presented with the research question results.

Research Question #1:

Within the context of the assessment report, which measurement constructs predict specific recommendations?

The measurement constructs assessed in each assessment report were categorized according to presence or absence and are presented in Table 7. Nearly every assessment addressed the constructs of intelligence, achievement, and personality through systematic assessment. Constructs less frequently addressed through standardized assessment included clinical diagnosis (47.1%), behavior (31.7%), psychopathy (27.9%), neuropsychological functioning other than screening (16.3%), vocational aptitudes and interests (7.7%), and self-concept (6.7%). Constructs frequently assessed through informal and unstructured means included family and school functioning, substance use, peers, and risk factors for future offending. Developmental, medical, and psychiatric history were inconsistently reported. Measurement constructs that were never systematically assessed included parenting skills, 'attitudes, values, and beliefs,' and adaptive functioning.

The test instruments utilized in the juvenile offender assessments can be seen in Table 8. On average, 7.24 tests were administered on the part of each juvenile offender assessment. The predominant test used to measure intelligence was the Wechsler Intelligence Scale for Children-Third Edition (WISC-III). The condensed achievement tests (the Woodcock-Johnson Mini Battery of Achievement [WJ-MBA] and the Wide

Range Achievement Test [WRAT]) were administered slightly more frequently than the more comprehensive achievement tests (the Wechsler Individual Achievement Test [WIAT] and Woodcock-Johnson Revised Tests of Achievement [WJ-R Ach]). Nearly all of the juveniles completed a structured self-report personality inventory. Two personality instruments were dominant, the Basic Personality Inventory (BPI; 50.5%) and the Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A; 47.5%). Personality testing also included tests of apperception (69.2%), incomplete sentence tests (65.4%), and drawings (29.8%). The Rorschach was administered in 26% of the assessments and nearly always in conjunction with a personality inventory.

Clinical diagnosis was assessed through a structured interview or self-report inventory in less than half of the assessments. The most frequently used structured interview was the Child Assessment Schedule (CAS) and the most frequently used self-report inventory was the Childhood Depression Inventory (CDI). Behavior was systematically assessed through the Child Behavior Checklist (CBCL) or the Behavior Assessment System for Children (BASC) in less than one-third of the assessments. Psychopathy was assessed through some form of the Hare Psychopathy Checklist (PCL) in less than one third of the assessments. Family functioning was systematically measured in less than 25% of the assessments using the Family Environment Scale (FES) or a Kinetic Family Drawing.

Neuropsychological functioning was screened in 45.2% of the juvenile offenders. Further neuropsychological testing was administered to 16.3% of the offenders. Within this group, the dominant test administered was Trail Making followed by the infrequent

use of the Wechsler Memory Scale-Revised (WMS-R). The juvenile's self-concept was systematically measured in less than 7% of the assessments through the Piers-Harris or the Tennessee Self-Concept Scales.

The assessment recommendations were coded according to ten potential placement options and nine potential service recommendations. The number of recommendations per assessment ranged from one to six with a mean of 3.46 recommendations ($SD = 1.21$). The placement recommendations were condensed into four placement categories. The most frequent placement recommendation was a "highly structured environment;" this recommendation was categorized as a secure juvenile facility and usually implied the county's post-adjudication facility. Other secure facilities included boot camps and the Texas Youth Commission (TYC). Group or foster homes and residential children's homes were categorized as residential facilities. Inpatient and substance abuse placements were categorized together. Approximately 17% of the assessments did not include a placement recommendation; these assessments were coded as a placement to the home. The placement recommendations were a secure juvenile facility (41.3%), home (22.1%), a residential facility (22.1%), or an inpatient or substance abuse facility (14.4%). The most frequent service recommendations included individual therapy (80.8%), educational services (53.8%), and family therapy (50%). Table 9 presents the full list of assessment recommendations.

A chi-square analysis was performed with each construct and recommendation. As anticipated, the high rate of consistency between tests administered and

recommendations yielded few significant results. The family functioning measurement construct was significantly associated with the placement recommendation [$\chi^2(3, N = 104) = 10.52, p = .015$]. More specifically, assessment of the family functioning measurement construct was associated with a higher rate of placement recommendation to the home or a residential facility than to a secure juvenile facility. The presence of the family functioning measurement construct was also significantly associated with a recommendation for family therapy [$\chi^2(1, N = 104) = 14.49, p < .001$]. Similarly, vocational testing was significantly associated with a vocational services recommendation [$\chi^2(1, N = 104) = 19.81, p < .001$].

Research Question #2:

What information contained in the assessment data predicts specific diagnoses?

The Axis I diagnoses were categorized according to American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (2000) classifications. Thirty-six different Axis I diagnostic classifications were given to the juvenile offenders for a total of 207 Axis I diagnoses (see Table 10). These diagnoses were categorized into six categories (see Table 11) and the juvenile offenders received Axis I diagnoses in the categories of CD and ODD (72.1%), mood disorders (26.9%), substance-related disorders (26%), ADHD (20.2%), intellectual and learning disabilities (11.5%), and other (14.4%). No multiaxial diagnoses or an Axis I diagnosis of "none" or "deferred" was given to 9.6% of the juvenile offenders. Dual diagnoses were given to 59.6% of the juvenile offenders; 9.6% of the juveniles received four Axis I diagnoses.

Contingency testing using chi-square analyses was performed between the dual diagnoses; no significant relationships were found.

An Axis III report of a general medical condition was positive in 6.8% of the assessments, although 15.4% of the assessments reported medical illness elsewhere in the report. An Axis IV report of psychosocial and environmental problems included those related to interaction with the legal system (77.9%), problems with primary support group (68.3%), educational problems (42.3%), and problems related to the social environment (7.6%). An Axis V global assessment of functioning (GAF) was reported in 90.4% of the assessments and ranged from 30 to 85 ($M = 56.45$, $SD = 11.30$).

The juvenile offenders' intellectual functioning, as presented in Table 12, was not normally distributed. Full Scale IQs were predominantly classified within the Average (56.9%) or Low Average (28.4%) range, although all IQ categories were represented. The mean of the Full Scale IQ was in the Average range ($M = 94.08$, $SD = 12.45$). The mean of the juveniles' IQ scores and factor scores all fell within the Average range of functioning, with the Perceptual Organization factor as the highest ($M = 101.13$, $SD = 13.77$) and the Verbal Comprehension factor as the lowest ($M = 91.13$, $SD = 11.95$). The mean of subtest scores ranged from a high in Picture Completion ($M = 10.74$, $SD = 2.85$) and Picture Arrangement ($M = 10.14$, $SD = 4.60$) to a low in Information ($M = 7.89$, $SD = 2.56$) and Vocabulary ($M = 7.83$, $SD = 2.55$). Achievement test results were also in the Average to Low Average range with Reading scores in the Average range ($M = 98.54$, $SD = 14.86$), Math scores in the Average range ($M = 92.88$, $SD = 13.10$), and Writing scores in the Low Average range ($M = 85.62$, $SD = 12.39$).

An analysis of the Full Scale IQ and achievement scores revealed a fifteen point discrepancy in 38.5% of the juvenile offenders. According to the education law in the state of Texas this would qualify them for a learning disability diagnosis. The juvenile offenders qualified for learning disabilities in the areas of reading (3.8%), math (13.5%), and writing (30.8%). Juvenile offenders had learning disabilities in one area (29.8%), two areas (7.7%), or all three areas (1%). Further analysis indicated that 72.5% of the individuals who qualified for a learning difference did not receive an Axis I diagnosis in the category of intellectual or learning disabilities. Juvenile offenders with Full Scale IQ scores in the Borderline or Intellectually Deficient range accounted for 7.7% of the total juveniles (n = 8). Of this group, only 25% (n = 2) received an Axis I or Axis II diagnosis indicating this disability.

The relations between personality tests' results and diagnoses were difficult to analyze as multiple tests results (including standardized and subjective results) were unsystematically combined to yield diagnostic conclusions. Analyses of the standardized test results of the MMPI-A, the BPI, and the Rorschach special indices were performed. The MMPI-A was administered to 47.5% of the juvenile offenders. Test results indicated that 76% of the juvenile offenders who completed this test had at least one valid Basic Scale elevation. Of the juveniles who completed the MMPI-A, those with moderate to clinically significant scale elevations included Psychopathic Deviate (Scale 4; 62.2%), Social Extroversion (Scale 0; 33.3%), Depression (Scale 2; 28.9%), Mania (Scale 9), possibly indicating impulsiveness (28.9%), Paranoia (Scale 6; 28.9%), Psychoasthenia (Scale 7), possibly indicating anxiety (24.4%), Hypochondriasis (Scale 1; 24.4%),

Schizophrenia (Scale 8; 22.2%), Hysteria (Scale 3; 15.6%), and Social Introversion (Scale 0; 6.6%). Within the Supplementary scales, clinically significant elevations were present on the alcohol and drug scales (MAC-R – 76.7% of the juveniles; PRO – 46.5% of the juveniles; ACK – 27.9% of the juveniles). As anticipated, a majority of the juveniles had authority problems (Pd2 – 75.6% elevated this scale), social alienation (Pd4 – 56.1% elevated this scale), and self-alienation (Pd5 – 61% elevated this scale). A listing of profile codetypes and scale elevations are presented in Table 13.

Contingency tests using chi-square analyses were performed to determine the relations between MMPI-A scale elevations and diagnoses. Significant associations were found between a diagnosis in the Mood category and elevations on five different scales: the Hypochondriasis scale [$\chi^2(1, N = 45) = 7.14, p = .008$], the Hysteria scale [$\chi^2(1, N = 45) = 9.91, p = .002$], the Psychoasthenia scale [$\chi^2(1, N = 45) = 7.14, p = .008$], the Depression scale [$\chi^2(1, N = 45) = 4.67, p = .031$] and the Schizophrenia scale [$\chi^2(1, N = 45) = 4.55, p = .033$]. Each of these analyses indicated an increased likelihood of a Mood Disorder diagnosis with scale elevations. Elevation of the Psychopathic Deviate scale was significantly associated with a CD or ODD diagnosis [$\chi^2(1, N = 45) = 11.92, p = .001$] and indicated an increased likelihood of diagnosis with elevation.

The BPI was administered to 50.5% of the juvenile offenders. Test results indicated that 86% of the juvenile offenders who completed this test had at least one scale elevation. Of the juveniles who completed the BPI, clinically significant scale elevations included Depression (38.8%), Persecutory Ideas (30.6%), Deviation (28.6%), Denial (28.6%), Hypochondriasis (24.5%), Alienation (22.4%), Interpersonal Problems (18.4%),

Impulse Expression (16.3%), Anxiety (14.3%), Social Introversion (14.3%), Thinking

Disorder (12.2%), and Self Deprecation (8.2%).

Chi-square analyses were performed to determine the relations between BPI scale

elevations and diagnoses. An association was found between the diagnosis of Mood

Disorder and elevation on two scales: Anxiety [$\chi^2(1, N = 49) = 3.93, p = .048$] and

Depression [$\chi^2(1, N = 49) = 3.86, p = .049$]. Each of these analyses indicated an increased

likelihood of a Mood Disorder diagnosis with elevations of these scales. An association

was found between the diagnosis of CD and ODD and elevations on two scales: Anxiety

[$\chi^2(1, N = 49) = 3.93, p = .048$] and Self Deprecation [$\chi^2(1, N = 49) = 5.25, p = .022$].

Each of these analyses indicated a decreased likelihood of a CD or ODD diagnosis with

elevations of these scales.

The low number of Rorschach administrations resulted in no significant

contingency tests. This was also true for the other standardized tests administered. The

CBCL test results were not analyzed due to frequent indications of incorrect scoring. A

cursory analysis of the sensitivity and specificity of the MMPI-A, BPI, and Rorschach

results was performed looking for diagnosis in the absence of scale elevations or no

diagnosis in the presence of scale elevations. These results indicated a tendency toward

under-diagnosis; for example, no diagnosis was given for Depression despite scale

elevations on the standardized self-report personality inventory and/or positive indices on

the Rorschach.

Contingency testing of the descriptive data resulted in a significant association

between acknowledgement of drug use other than marijuana and a substance-related

diagnosis [$\chi^2(1, N = 60) = 8.57, p = .003$]. Acknowledgment of other drug use was associated with an equal likelihood (50-50) of receiving a substance-related diagnosis. Acknowledgement of marijuana use was associated with a slightly increased likelihood of receiving a substance-related diagnosis [$\chi^2(1, N = 81) = 3.83, p = .05$].

Research Question #3:

What information contained in the assessment data predicts specific recommendations?

The assessment descriptive data and diagnoses were categorized and contingency testing with the assessment recommendations was performed using chi-square analyses. The Full Scale IQ was significantly associated with an educational recommendation [$\chi^2(3, N = 102) = 12.39, p = .006$]. Specifically, juvenile offenders whose intellectual functioning was in the Low Average range were more likely to receive educational recommendations. Juvenile offenders whose intellectual functioning was Average or higher were less likely to receive educational recommendations. Juveniles with Borderline or Intellectually Deficient IQ scores were associated with an equal likelihood (50-50) of receiving an educational recommendation.

The diagnosis of Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD) was significantly associated with the placement recommendation [$\chi^2(3, N = 104) = 10.52, p = .015$]. Specifically, these offenders were more likely to receive a recommendation outside of the home. A substance-related diagnosis was significantly associated with the recommendation for substance abuse treatment [$\chi^2(1, N = 104) = 49.99, p < .001$]. A diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) was associated with an increased likelihood for a recommendation for

a medication referral [$\chi^2(1, N = 104) = 12.00, p < .001$]. Similarly, a diagnosis in the

mood category was also associated with an increased likelihood for a recommendation

for a medication referral [$\chi^2(1, N = 104) = 28.61, p < .001$].

Research Question #4:

What identified risk factors in the assessment predict specific recommendations?

The risk factors (see Table 14) were categorized and contingency tests using chi

square analyses were performed to determine the relations between each risk factor and

the resulting recommendations. The risk factor for an antisocial family was significantly

associated with the placement recommendation [$\chi^2(3, N = 86) = 11.44, p = .010$].

Specifically, juvenile offenders whose families could be identified as antisocial were

more likely to receive a placement recommendation to a residential facility or group or

foster home. The parents' favorable attitude toward crime was weakly associated with the

recommendation for family therapy [$\chi^2(1, N = 79) = 4.09, p = .043$]. Specifically,

juvenile offenders whose parents appeared to have favorable attitudes toward crime were

less likely to receive a recommendation for family therapy.

Identifying the juvenile as having the personality trait of anger was significantly

associated with the recommendation for educational services [$\chi^2(1, N = 89) = 6.77$,

$p = .009$] and the recommendation for a medication referral [$\chi^2(1, N = 89) = 5.94$,

$p = .015$]. Specifically, juvenile offenders who were characterized with the personality

trait of anger were less likely to receive recommendations for educational services or

medication referrals. Lack of empathy in the juvenile offender was only identified in

7.2% of the assessments; it was associated with a recommendation for psychiatric

services [$\chi^2(1, N = 83) = 5.19, p = .023$]. Juvenile offenders who were reported to lack

empathy were more likely to receive a recommendation for psychiatric services.

Research Question #5:

What recommendations are associated with an increased probability of recommendation

utilization by the juvenile court professionals?

Analysis of recommendation utilization by the juvenile court professionals was

performed separately for placement recommendations and service recommendations. A

total of 29 different actual placement locations were identified in the juvenile probation

files. These were classified into ten categories and then further summarized into the four

placement categories used for the placement recommendations (see Table 15). The actual

placements were to the home (35.6%), a secure juvenile facility (34.6%), a residential

facility (19.2%), and an inpatient or substance abuse facility (10.6%). Contingency tests

using chi-square analyses were performed on the placement data. The placement

recommendations from the assessment were significantly associated with the actual

placements [$\chi^2(9, N = 104) = 44.38, p < .001$]. Actual placement was significantly

associated with the placement recommendation for the recommendation to home

[$\chi^2(1, N = 104) = 14.88, p < .001$] , secure juvenile facility [$\chi^2(1, N = 104) = 11.54, p =$

.001], and inpatient/substance abuse facility [$\chi^2(1, N = 104) = 24.14, p < .001$]. In each of

these analyses, actual placement corresponded to placement recommendation. Placement

recommendations to a residential facility were not associated with actual placement

[$\chi^2(1, N = 104) = 2.39, p = .122$]. Placement recommendations to a residential facility

resulted in an actual placement in a secure juvenile facility (39.1%), a residential facility

(30.4%), and a return to the home (26.1%). Although the majority of those who were recommended to a secure juvenile facility were actually placed there, 25.6% of those recommended to a secure juvenile facility were instead returned to the home (91% of this group had a placement recommendation for a "highly structured environment").

The service recommendations were problematic to analyze as it proved difficult to ascertain whether or not any particular service recommendation was being utilized. Given that 64.4% of the juvenile offenders were placed outside of the home, it is likely they were receiving psychiatric, medical, and educational services in their placement situation; however, this was not reflected in their detention file. The low frequency of many of the service recommendations combined with low knowledge as to whether or not they were utilized resulted in low rates of service recommendation utilization. The recommendation for individual psychotherapy was the most frequently utilized. Individual psychotherapy was recommended for 80.8% of the juvenile offenders; yet this recommendation was known to be utilized in less than half of the assessments when it was recommended (45.8%). A total of 36.5% of the juveniles (n = 38) were known to be in individual psychotherapy after the assessment. Recommendation utilization rates were quite low for psychiatric services (16.7%, n = 1), medication referral (11.1%, n = 2), educational services (11.1%, n = 6), vocational services (15.4%, n = 2), group psychotherapy (9.1%, n = 1), family psychotherapy (11.5%, n = 6), and parent training (6.7%, n = 1).

Research Question #6:

Is recommendation utilization by the juvenile court professionals associated with a decreased probability for recidivism and violence?

Because the placement recommendation was the primary recommendation utilized by the juvenile court professionals, this question was reframed to examine the relations between actual placement, recommended placement, and the probability for recidivism and violence. Of the 104 juvenile offenders, 75% were rearrested or violated probation (two juveniles were sent directly to TYC and were unable to recidivate). 159 subsequent offenses were reported in thirty-one different categories of offense for the group of recidivating juveniles. Subsequent offenses were categorized in the same manner as prior and current offenses (see Table 16). The recidivating juvenile offenders were categorized as violent (6.6%), serious (38.2%), nonindex (31.6%), and status (23.7%) offenders. Again, the most common offense was runaway. Of the 104 juvenile offenders, 21.2% engaged in physical harm to others (this differs slightly from the violent crime category because assault causing bodily injury is not classified as a violent crime, but does cause physical harm).

Contingency tests using chi-square analyses were performed on the actual placement and recidivation data. There was no significant association between actual placement and recidivism [$\chi^2(3, N = 102) = 3.04, p = .386$] or between actual placement and physical harm to others [$\chi^2(3, N = 104) = 1.80, p = .614$]. Further analyses were performed on the relations between recidivism and whether or not actual placement corresponded to recommended placement. Actual placement corresponded to recommended placement in 51% of the assessments. There was no demonstrable association between the correspondence of actual and recommended placement and

recidivism [$\chi^2(1, N = 102) = 2.72, p = .099$] or physical harm to others [$\chi^2(1, N = 104) =$ 2.38, $p = .123$].

Research Question #7:

To what extent can the identified risk factors in the assessment predict the outcome?

The outcome of the juvenile offender was classified in three different ways. First a "final" current status was determined for each juvenile offender. Eighteen different status options were classified into four categories. The offenders who were currently free or had turned 18 and were presumed free because they did not fall into any of the other categories accounted for 51.9% of the original group. Offenders who were currently incarcerated in the juvenile system (TYC), the adult system [Texas Department of Corrections (TDC)], the county jail, or were an escapee accounted for 29.8% of the original group. Offenders who were currently on probation, had a trial in progress, or outstanding warrants accounted for 10.6% of the original group. Finally, 7.7% of the original offenders were still in placement, were runaways, or were deceased. Following the assessment, 4.8% of the juvenile offenders threatened harm to self. Of this group at follow-up, two of the juvenile offenders were deceased due to suicide and suspected suicide, two were in TYC, and one was free.

.   Another post-assessment outcome categorized the juvenile offender by whether or not they had a placement subsequent to the initial placement. Juveniles with no further placements accounted for 34.6% of the original group. Juveniles who were subsequently placed in the county post-adjudication facility, TYC, or TDC accounted for 56.7% of the original group. Juveniles who received other placements accounted for 8.7% of the

48

original group. The two different outcomes allowed for situations where the offender was free (or temporarily free), but was incarcerated subsequent to their initial placement. As would be anticipated, recidivism, post-assessment outcome, and final status were all significantly associated with one another.

Contingency tests using chi-square analyses were performed on recidivism, outcome and the identified risk factors. Intrafamily conflict was associated with recidivism [$\chi^2(1, N = 84) = 8.30, p = .004$] and indicated an increased likelihood of recidivism in the presence of such conflict. Substance use was associated with the post-assessment outcome [$\chi^2(2, N = 89) = 7.04, p = .03$]. Specifically, reported substance use indicated an increased likelihood of incarceration or other subsequent placement. An antisocial family was associated with a higher likelihood of recidivism [$\chi^2(1, N = 84) = 5.19, p = .023$]. Depression (diagnosed or not) was associated with final status [$\chi^2(3, N = 89) = 8.65, p = .034$] and indicated a slightly increased likelihood that the depressed juvenile was currently free.

Research Question #8:

What information contained in the assessment data predicts specific outcomes?

Contingency tests using chi square analyses were performed to determine the relations between recidivism, outcome, and the assessment data. Gender was significantly associated with final status [$\chi^2(3, N = 104) = 12.21, p = .007$]. Specifically, females were much less likely than males to currently be incarcerated; females were more likely than males to be runaway or currently in placement. Ethnicity was significantly associated with physical harm to others [$\chi^2(3, N = 102) = 10.17, p = .017$]. Specifically, African-

American offenders were more likely to be caught later engaging in physical harm to others. Full Scale IQ was significantly associated with recidivism [$\chi^2(3, N = 100) = 12.67, p = .005$] and post-assessment outcome [$\chi^2(6, N = 102) = 15.23, p = .019$]. Specifically, juveniles with an IQ above the Average range of functioning were less likely to recidivate or receive further placements; those with a Low Average IQ had a slightly higher rate of recidivism than the other ranges. An intellectual or learning difference diagnosis was associated with final status [$\chi^2(3, N = 104) = 10.32, p = .016$]. Specifically, juveniles with such a diagnosis were less likely to be incarcerated currently, but were more likely to be a runaway, deceased, or in placement. The marital status of the biological parents was significantly associated with recidivism [$\chi^2(2, N = 98) = 9.39, p = .009$]. Specifically, juvenile offenders whose biological parents were married had a lower rate of recidivism than those whose parents were never married, divorced, or deceased. A death in the family was significantly associated with recidivism [$\chi^2(2, N = 101) = 3.73, p = .05$] and the post-assessment outcome [$\chi^2(2, N = 103) = 7.95, p = .019$]. Specifically, higher rates of recidivism and incarceration were associated with having had a death in the family. Delinquent peers were significantly associated with a higher rate of recidivism [$\chi^2(1, N = 58) = 9.94, p = .002$]. Gang involvement was associated with a higher rate of physical harm to others [$\chi^2(1, N = 49) = 4.82, p = .028$]. Commitment to school was associated with recidivism [$\chi^2(2, N = 94) = 8.55, p = .014$]. Specifically, a higher commitment to school was associated with a lower rate of recidivism.

Is it possible to identify the nine factors described in the Grisso, Tomkins, and Casey (1988) study in either the assessment report or the juvenile's detention record? If so, can the juvenile offender be categorized according to the DiCataldo and Grisso (1995) typology?

The juveniles offenders were rated on the nine factors following the review of the assessment data. A classification was given according to the juvenile offender typology (refer to Table 17). The juvenile offenders were classified as immature juvenile offenders (38.5%), socialized juvenile offenders (23.1%), or mature delinquent juvenile offenders (38.5%). Chi-square analyses were performed on each of the nine factors and the juvenile offender type. Significant associations were found for six of the nine factors. Motivation to accept intervention was significantly associated with juvenile offender type $[\chi^2(4, N = 90) = 20.98, p < .001]$. The mature delinquent offenders were more frequently associated with low motivation to accept intervention; the socialized and immature offenders were more frequently associated with average motivation to accept intervention. Self-reliance/autonomy was significantly associated with juvenile offender type $[\chi^2(4, N = 94) = 22.58, p < .001]$. High self-reliance/autonomy was more frequently associated with mature delinquent offenders and low self-reliance/autonomy was more frequently associated with immature offenders. The family's caring and resource capability was significantly associated with juvenile offender type $[\chi^2(4, N = 98) = 13.80, p = .008]$. Mature delinquent offenders were characterized by low family caring and resource capability. Socialized offenders were characterized by average/high family

caring and resource capability. Immature offenders were nearly evenly split between low and average family caring and resource capability. Academic functioning was significantly associated with juvenile offender type [χ^2(4, $N = 103$) = 22.35, $p < .001$]. Poor academic functioning characterized the majority of mature delinquent (97.5%) and immature (71.8%) offenders. Socialized offenders were split between average/high (54.2%) and low (45.8%) academic functioning. Opportunity for delinquent peer influence was significantly associated with juvenile offender type [χ^2(4, $N = 90$) = 7.36, $p = .025$]. The rate of delinquent peer influence within each juvenile offender type was as follows: mature delinquent (94.4%), immature (75%), and socialized (68.2%) juvenile offenders. Unsocialized families were significantly associated with juvenile offender type [χ^2(2, $N = 98$) = 6.87, $p = .032$]. Socialized juvenile offenders were more likely to have socialized families (70.8%) than unsocialized families (29.2%). Unsocialized families were slightly more likely for mature delinquent (63.2%) and immature (52.8%) offenders.

Contingency tests using chi-square analyses were performed on the juvenile offender typology and outcomes. The juvenile offender typology was significantly associated with recidivism [χ^2(2, $N = 102$) = 6.24, $p = .044$]. While recidivism occurred more frequently than not in all categories, the mature delinquent was much more likely to recidivate. The juvenile offender typology was significantly associated with physical harm to others [χ^2(2, $N = 104$) = 13.87, $p = .001$]. Of those engaging in physical harm to others, the most common juvenile offender type was the mature delinquent offender (72.7%). The juvenile offender typology was significantly associated with post-assessment outcome [χ^2(4, $N = 104$) = 12.50, $p = .014$]. Specifically, the socialized

juvenile offender was more likely to have received no further placements, whereas the mature delinquent was more likely to have been incarcerated. The juvenile offender typology was significantly associated with final status [$\chi^2(6, N = 104) = 13.54, p = .035$]. Again, the immature and socialized juvenile offenders were more likely to be free at last follow-up; the mature delinquent was more likely to be incarcerated. For a summary listing of significant chi-square statistics refer to Table 18.

CHAPTER 4

DISCUSSION

Overall, the results of this exploratory study identified ways in which the psychological assessments of juvenile offenders can contribute to effective decision making within the juvenile justice system and be informative to the familial system and the various treatment facilities. At the same time, inconsistencies and omissions were identified in the assessments that might have hindered the effectiveness of the information communicated to the juveniles' intervention systems.

Within the context of the assessment, three constructs were consistently assessed through standardized tests: intelligence, academic achievement, and personality functioning. Constructs generally assessed through informal or unsystematic methods included family functioning, school functioning, peer relationships, risk factors, and substance use. Constructs infrequently assessed through standardized tests or informal assessment included clinical diagnosis, behavioral characteristics, psychopathy, neuropsychological functioning, vocational aptitudes, self-concept, developmental history, health and medical history, community factors, and delinquent history.

Whether systematic or informal, the assessment of family functioning was associated with a higher rate of placement recommendation to facilities other than secure juvenile facilities and recommendations for family therapy. Juvenile offenders identified as having antisocial families had an increased likelihood of receiving a placement

recommendation to a residential facility, group home, or foster home. Juveniles whose parents were identified as having a favorable attitude towards crime were less likely to receive a recommendation for family therapy. Intra-family conflict, antisocial families, and marital disruption were associated with an increased likelihood that the juvenile would recidivate. The death of a close family member was associated with a higher rate of recidivism and incarceration.

The recommendation findings indicate the assessment of measurement constructs beyond intelligence, achievement, and personality may result in alternative placement and treatment recommendations of benefit to the juvenile offenders. An assessment that produces an understanding of the juveniles in the context of their personal and environmental difficulties may result in alternative placement and treatment recommendations. Poor family functioning may serve as a mitigating factor in the clinicians' selection of placement and service recommendations for the juvenile offenders. The juveniles' outcome findings indicate that family functioning is associated with recidivism and subsequent incarceration and confirms the importance of assessing the family functioning construct. Hoge (1999) and Grisso (1998) support this position: that consistent use of an explicit set of measurement constructs and the use of standardized tests are more likely to yield valid information and result in equitable treatment of the juvenile offender. The clinical implications of these findings for the juvenile offender assessments indicate the need for consistent assessment of a comprehensive set of measurement constructs using standardized tests when reasonable. Potential concerns that a more comprehensive assessment will result in a more negative

characterization of the juvenile offender must stand against the likelihood that a more comprehensive assessment will recommend alternative placements and/or treatments of benefit to the juvenile. Due to the lack of consistent assessment of many of the constructs, the findings cannot show their full impact on the recommendation process. Future research should compare the results of more consistent and comprehensive juvenile offender assessments to the results of this study to determine the efficacy of consistently assessing those measurement constructs infrequently assessed in this study. Subsequent research could also focus on using standardized tests for the assessment of those constructs informally and unsystematically assessed in this study.

Intellectual test results placed the juvenile offenders mean IQ in the Average range of intellectual functioning. Intellectual and achievement score discrepancies indicated over a third of the juveniles qualified for a learning disability diagnosis. Of those who apparently qualified for a learning disability diagnosis, nearly three-quarters did not receive such a diagnosis in the assessment report. Intellectual deficits were under-diagnosed at the same rate. Juvenile offenders who actually received an intellectual or learning disability diagnosis had a reduced likelihood of being incarcerated at final review, but an increased likelihood of being a runaway, deceased, or in placement. Although the exact relations between intellectual or learning disabilities and the subsequent outcome for the juvenile offender is unclear, the high rate of under-diagnosis is unequivocal. Diagnosis of learning disabilities and recommendation of school accommodations might enhance the educational commitment of the juvenile offenders through mastering remedial resources and lowering their frustration with learning. A

higher commitment to school was found to be associated with lower recidivism. This finding is indirectly supported by previous research; Hawkins et al. (1998) found low commitment to school and academic failure predictive of future violence. Therefore, early diagnosis and treatment of learning disabilities might help prevent future offending. Intellectual and achievement functioning are two of the three most consistently assessed constructs in the present study, and these constructs are only assessed through standardized tests. Therefore, it is imperative that the results of this testing be reflected in the diagnostic impression contained in the assessment report. Subsequent recommendations and/or school referrals are also necessary. Clinical implications also include the need for assessment of neuropsychological functioning and adaptive functioning in juveniles identified as intellectually deficient. Juvenile assessments should contain explicit statements regarding academic risk factors including grade failure, truancy, school suspension, expulsion, and elementary or secondary school misbehavior. Further analysis of the relations between learning disabilities, academic failure, truancy, and expulsion should be further explored with the data in this study. Additional research should explore the prevalence and effect of placement in an age-inappropriate grade.

Substance use was not assessed in nearly one-quarter of the juvenile offenders. Explicit statements regarding use and non-use of nicotine, alcohol, marijuana, and other drugs were inconsistent, and age of onset was infrequently explored. Subsequent to the post-assessment placement, substance use was associated with an increased likelihood for the juvenile to have been incarcerated or to have received another placement outside of the home. In contrast, the diagnosis of a substance-related disorder was associated with

an increased likelihood of receiving a recommendation for substance abuse treatment. Acknowledgment of drug use other than marijuana was associated with an equal likelihood of actually receiving a substance-related diagnosis. Thorough assessment and diagnosis of substance use appears to benefit the juvenile offender by pointing treaters toward more targeted interventions. Clinical implications include the need to assess all substance use, age of onset, type and amount of substances used, frequency and context of substance use, and whether or not the juvenile is involved in drug delivery. Substance use information is needed both for diagnostic purposes and evaluation of risk factors. Early substance use, particularly tobacco or alcohol, is predictive for later serious or violent juvenile offending (Lipsey & Derzon, 1998). Future research should compare the results of more comprehensive assessment of substance use in juvenile offenders with the results of this study and the implications of under-diagnosis. Additional research regarding the efficacy of an unstructured interview, structured interview, or juvenile self-report to assess this construct should be explored.

Social functioning was inconsistently assessed and reported. Delinquent peers were associated with higher recidivism. Gang involvement was associated with harm to others. These peer relationship findings were supported by the literature (Grisso, 1998; Thornberry, 1998; Maguin et al., 1995). The degree and nature of the juvenile's involvement with a delinquent peer group or gang should routinely be evaluated, including age of onset. Prosocial relationships and sexual activity were rarely assessed, although they are relevant to future offending in the literature (Lipsey & Derzon, 1998). Prosocial relationships include friendships, best friends, and romantic relationships and

should be reported in the assessment. Again, further research should focus on the efficacy of more comprehensive assessment of this construct.

Personality test results from self-report inventories included the MMPI-A and the BPI. MMPI-A Psychopathic Deviate (Scale 4) elevations were associated with a CD or ODD diagnosis. Elevations of Scales 4, 6, and 9 and 4-9 codetypes are common in juvenile offender populations; elevations of scale 4 and 4-9 codetypes are typical of substance abusing juveniles (Archer, 1997; Archer & Krishnamurthy, 2002). Elevation of the MAC-R supplementary scale was the most frequent in this study and is consistent with studies of delinquent males (Pena et al., 1996). A CD or ODD diagnosis was associated with an increased likelihood for a placement recommendation outside of the home; therefore, accurate diagnosis is essential. BPI scale elevations of the Anxiety or Self Deprecation scales were associated with a reduced likelihood of receiving a CD or ODD diagnosis. An increased likelihood of Mood Disorder diagnoses was associated with MMPI-A scale elevations of the Hypochondriasis (Scale 1), Hysteria (Scale 3), Psychoasthenia (Scale 7), Depression (Scale 2), and Schizophrenia (Scale 8) scales, and also with BPI scale elevations of the Anxiety and Depression scales. Elevations of Scales 2 and 7 are consistent with acute emotional distress (Archer & Krishnamurthy, 2002). Mood Disorder and ADHD diagnoses were associated with an increased likelihood for medication referrals. Although the findings indicated associations for certain scale elevations and CD, ODD, and Mood Disorders, the results were indeterminate due to high frequencies of scale elevations coupled with low rates of diagnosis. Analysis of sensitivity and specificity of the MMPI-A and BPI test results indicated a prevalence

59

toward under-diagnosis. An indication of depression within the assessment (diagnosed or not) was associated with juveniles who were free at the time of last review. This finding indicates that identifying a mood disturbance is associated with outcome. Anger noted in the juvenile offender was related to a reduced likelihood for "helpful" recommendations such as medication referrals or educational services. Lack of empathy noted in the juvenile offender was related to an increased likelihood for a recommendation for psychiatric services. These findings affirm the necessity of assessing psychopathy and personality traits as accurately as possible. Accurate and thorough diagnosis is consistently needed to fully explore the relations among presentation, placement, and outcome. Further research should explore these relations with additional cases. More extensive research on the sensitivity and specificity of the self-report inventories should also be conducted.

The low frequency of standardized test administration for other measurement constructs resulted in no significant findings. Indications of scoring errors on behavioral testing demonstrated the need for further training. The computerized CBCL test results frequently indicated scoring errors due to entering data on the wrong form (Youth Self-Report information entered under the Parent reporting form).

A thorough reporting of the juvenile's delinquency history was infrequently conducted, yet is recognized in the literature as a necessity for assessment (Grisso, 1998). Higher rates of serious and violent offending were found in juveniles' prior offense categorizations than in their current offense categorizations. The differences in severity between the juveniles' prior offense categorizations and their current offense

categorizations points out the need for prior offense history during assessment. Identification of serious and violent juvenile offenders should be a factor in placement and treatment recommendations.

Assessment of the juvenile's attitude toward antisocial activities is recommended through structured procedures (Hoge, 1999; Grisso, 1998); this measurement construct was never formally assessed in the juvenile offenders in this study. Personal involvement in a sexual crime (as victim or perpetrator) was evidenced by nearly one-quarter of the juvenile offenders, yet sexual offender assessments were rarely conducted. These findings indicate potential oversight in the assessment process. Clinical implications would be to add these measurement constructs to the assessments when appropriate. Future research should explore the relations between assessment of these constructs and outcome for the juvenile offender.

The juvenile offenders were successfully rated and categorized according to the DiCataldo and Grisso (1995) typology. Factors associated with the typology classifications included motivation to accept intervention, self-reliance and autonomy, family caring and resource capability, academic functioning, opportunity for delinquent peer influence, and an unsocialized family. The juveniles were classified as immature, socialized, or mature delinquent juvenile offenders. The mature delinquent offender was more likely to recidivate, engage in physical harm to others and be incarcerated. The immature offender was more likely to be free at the time of final review and the socialized offender was unlikely to receive any further placements. If other clinicians can successfully replicate these ratings and typology classifications in future juvenile

offender assessments and find similar associations, this may be an additional data point to assist the juvenile justice system in making decisions. These findings evidence a rich area for future research. Further exploration of the juvenile offender typology should be conducted and compared with the findings from this study.

Utilization of recommendations by juvenile justice professionals occurred for placement recommendations. Actual placement corresponded to placement recommendations to the home, secure juvenile facilities, and inpatient/substance abuse facilities. Placement recommendations to residential facilities had more scattered results. The analysis of service recommendations was inconclusive due to low frequency of recommendations and difficulty ascertaining their level of utilization by juvenile justice professionals. These findings support the importance of placement recommendations in the juvenile offender assessment. Tracking utilization of recommendations could be accomplished through an addendum to the assessment that would then be included in the juvenile's detention record. This addendum would follow the format of the file review Form B in the Appendix and include the recommendations from the assessment and space for the probation officer to indicate utilization. Future research should further explore the utilization of service recommendations.

Subsequent to their initial placement, three-quarters of the juvenile offenders were rearrested or had violated their probation and nearly two-thirds received another placement. At the last time of review, a little over half of the original group were free or presumed free. Of the original group, less than 5% threatened harm to self; of these, two

individuals are deceased due to suicide or suspected suicide. Ultimately, these findings reflect the outcome of the juvenile offender assessments.

Study Limitations

A serious limitation of this study is the lack of complete data in the juvenile offender assessments, whether due to not assessing specific measurement constructs, lack of diagnosis, lack of specific recommendations, an inability to ascertain recommendation utilization, or an inability to determine outcome. Due to the archival nature of this study, information was limited to the sources previously described. The collection of subsequent offending and current outcome information was limited if the juvenile offender left Denton County or the state of Texas. The experience level of the clinicians conducting the assessment might have impacted the results, although the assumption was that the supervising psychologist mitigated their experience level. Grisso and Conlin (1984) recommended outcome studies should be performed within local jurisdictions, but have limited use beyond the local jurisdiction. The generalizability of the specific findings of this study may be limited to the Denton County juvenile justice system. The exploratory nature of this study limited statistical analysis to contingency testing; therefore, results indicate associations rather than cause and effect analyses.

Directions for Future Research

Numerous directions for future research were proposed in the previous discussion. These proposals can be coalesced into a research project incorporating the recommendations of this study into a juvenile offender assessment template, utilizing that template for future assessments, and replicating this study. Outcome data would

subsequently be collected and the efficacy of these more comprehensive assessments

would be analyzed. The assessment template would cover the measurement constructs of

intelligence, academic achievement, personality traits and functioning, clinical diagnosis,

behavioral functioning, psychopathy, self-concept, substance use, family functioning,

and attitudes towards antisocial behavior through structured and standardized tests. Those

tests requiring self-report could be left with the juvenile offender, following the initial

testing session, to be completed during detention. The further assessment of

neuropsychological functioning, vocational aptitudes, adaptive functioning, or sexual

offending would be conducted where appropriate. A clinical interview or semi-structured

interview would be developed to ensure adequate assessment of measurement constructs

informally assessed; specifically, demographic information, developmental history,

health and medical history, psychiatric history, family constellation, school history and

functioning, peer relationships, risk factors, employment, religious involvement, and

delinquent history. Family involvement in the assessment process ideally would be

mandated by the juvenile justice system. Additional training would be provided to

clinicians and supervising psychologists to include an overview of the juvenile justice

system, risk factors for juvenile offending, intervention recommendations, and the results

of the present study. Additional areas for review would include Texas education law and

learning disabilities, the determination of accurate diagnoses and prognoses, and risk

assessment. The DiCataldo and Grisso (1995) juvenile offender typology would be

formally added to the assessment process for future research consideration. Outcome data

would continually be updated at regular intervals. The results of the present study would then be compared to the results of this subsequent outcome study.

<u>Summary and Conclusions</u>

In summary, the present study explored ways the psychological assessment of juvenile offenders can contribute to effective decision making within the juvenile justice system. The efficacy of juvenile offender assessments was related to obtaining relevant and correct information about the juvenile offender, assessment of appropriate measurement constructs, identification of pertinent risk factors, and utilization of recommendations by juvenile justice professionals. The subsequent outcome of the juvenile offender was related to the information presented in their assessment. At the same time, inconsistencies and oversights were identified in the assessments that might have hindered the effectiveness of the information communicated to the juvenile justice professionals. Thus, it is important that information from the present study be disseminated to those likely to provide future assessments for juvenile offenders.

APPENDIX

TABLES AND FORMS

Juvenile Offender Assessment File Review Form

ID Number	
Date of Review	
Intake Date	
Dates of Assessment	
Report Date	
Demographics:	
Age	
Gender	1 = Male 2 = Female
Ethnicity	1 = African-American 2 = Hispanic 3 = Caucasian 4 = Asian
Level of Education	
Current Residence	1 = Home 2 = With extended family 3 = With friends 4 = Detention
Marital Status	1 = Single (never married) 2 = Married 3 = Divorced
Children?	
Employed?	
Religious Affiliation	
Offense Information:	
Current Offense	
First Offense?	
Previous Arrest?	
Previous Violence?	
Referral Question:	
Full Battery	
Specific Question?	
Describe:	

Measurement Constructs:	
	Yes or No
Intelligence	
Academic Achievement	
Specific Aptitudes	
Vocational Aptitudes	
Neuropsychological Functioning	
Personality Traits	
Behavioral Characteristics	
Personality Disorders	
Behavioral Disorders	
Self-Concept	
Attitudes, Values, & Beliefs	
Family	
School	
Peers	
Community	
Risk Factors	
Psychopathy	
Health & Medical History	
Past Responses to Rehabilitation	
History of Delinquent Behavior	

Assessment Instruments Used:	
Intellectual	1 = WISC-III 8 = Bender Gestalt 2 = WAIS-R 3 = WAIS=III 4 = KABC 5 = SB; 6 = WJ-R-Cog; 7= KAIT
Achievement	1 = WIAT 6 = MBA 2 = WJ-R–Ach 3 = WRAT 4 = KTEA 5 = PIAT
Vocational Skills	1 = CAPS/COPS 2 = Strong-Campbell Interest Inventory 3 = Career Assessment Inventory
Personality	1 = MMPI-A 8 = SSCT (Sacks) 2 = MACI 9 = HAAK Sentence Completion 3 = BPI 10 = Rotter Incomplete Sentence Blank 4 = Rorschach (High School Form) 5 = TAT 6 = MAPI 7 = House-Tree-Person Drawings (HTP)
Psychopathy	1 = PCL-R
Behavioral Functioning	1 = Revised Child Behavior Checklist- Parent Report Form 2 = Revised Child Behavior Checklist – Youth Self Report 3 = Behavior Assessment System for Children 4 = CBCL – Direct Observation Form
Clinical Diagnosis	1 = K-SADS-III-R 5 = DICA-R-C 2 = DISC 6 = Child Depression Inventory (CDI) 3 = DICA-R-A 7 = State Trait Anger Expression (STAXI) 4 = CAS 8 = RCMAS
Family Functioning	1 = Family Environment Scale 2 = Kinetic Family Drawing 3 = Family Adaptability and Cohesion Evaluation 4 = Family Assessment Device 5 = Family Beliefs Inventory 6 = Family Events Checklist

Parenting	1 = Parent-Child Relationship Inventory
	2 = Parent-Adolescent Relationship Questionnaire
	3 = Parent Practices Scale
	4 = Parenting Risk Scale
	5 = Weinberger Parenting Inventory
Self-Concept	1 = Piers-Harris Children's Self-Concept Scale
	2 = Multidimensional Self-Concept Scale
	3 = Self-Esteem Index
	4 = Self-Description Questionnaire
	5 = Tennessee Self Concept Scale
Attitudes, Values, Beliefs	1= Criminal Sentiments Scale
	2 = Attitude Toward Institutional Authority
	3 = Attitude Toward Legal Agencies
	4 = Pride in Delinquency Scale
Peer Relations	1 = Revised Child Behavior Checklist
	2 = TAT
	3 = CAT
Risk Assessment	1 = PCL-R
	2 = Arizona Juvenile Risk Assessment Form
	3 = Firesetting Risk Interview
School Functioning	1 = Child Behavior Checklist – Teacher Report Form
	2 = Conners Teacher Rating Scale
Neuropsychological Functioning	1 = Halstead Reitan Neuropsyc Test Battery for Older Children
	2 = Quick Neurological Screening Test
	3 = Wechsler Memory Scale – Revised (WMS-R)
	4 = Mini Mental Status Exam (MMSE)
	5 = Trail Making
Adaptive Functioning	1 = Vineland Adaptive Behavior Scales
Malingering	1 = SIRS

Medical & Psychiatric History:	
Prenatal trauma	
Delivery complications	
Developmental Disabilities	
Chronic illness	
Medical illness	
Current or Past Pregnancy	
Current Medications	
Past Injury	
Head Injury	
Psychiatric History	
Age of Onset of Nicotine Use	
Nicotine Use	
Age of Onset of Alcohol Use	
Alcohol Use	
Marijuana Use	
Other Drug Use Specify:	
Other Drug Dependence Specify:	
Sensory or Neurological Deficits:	
Visual	
Auditory	
Speech	
Neuropsychological Functioning:	
Halstead Reitan	
Quick Neuro Screening	
Adaptive Functioning:	
Vineland Adaptive Behavior Scales	

Intellectual Functioning:	
Full Scale IQ	1 = Very Superior 2 = Superior 3 = High Average 4 = Average 5 = Low Average 6 = Borderline 7 = Mentally Retarded
Verbal IQ	
Performance IQ	
Verbal Comprehension	
Perceptual Organization	
Freedom from Distractibility	
Processing Speed	
Picture Completion	
Information	
Coding (Digit Symbol)	
Similarities	
Picture Arrangement	
Arithmetic	
Block Design	
Vocabulary	
Object Assembly	
Comprehension	
Symbol Search	
Digit Span	
Mazes	
Matrix Reasoning	
Letter-Number Sequencing	
VIQ-PIQ split	
Strengths	
Weaknesses	

Academic Achievement:	Standard Score	G-E	A-E
Reading Percentile			
Math Percentile			
Writing Percentile			
Language Percentile			

Personality:	
MMPI-A	
MACI	
BPI	
Rorschach	
TAT	
MAPI	
House-Tree-Person Drawings	
Self-Concept:	
Piers-Harris	
Self-Esteem Index	
Behavioral Functioning:	
Revised Child Behavior Checklist – Parent 1	
Revised Child Behavior Checklist – Parent 2	
Revised Child Behavior Checklist – Youth Self-Report	
Behavior Assessment System for Children	
Clinical Diagnostic Description:	
Axis I Diagnosis – 1	
Axis I Diagnosis – 2	
Axis I Diagnosis – 3	
Axis II Diagnosis - 1	
Axis II Diagnosis – 2	
Axis III Diagnosis - 1	
Axis III Diagnosis – 2	
Axis IV Diagnosis – 1	
Axis IV Diagnosis – 2	
Axis IV Diagnosis – 3	
Current GAF	
Highest GAF past year	

Family Functioning:	
Current Family Constellation:	
Parents:	
Siblings:	
Others:	
Changes in Family Constellation & Age of Juvenile:	
Death in Family	
Divorce in Family	
Parents Separated	
Remarriage	
Daily contact with parents?	
Changes in residence	
Extended family:	
Contact?	
Individual:	
Level of Support:	
Family history:	
Criminal Behavior	
Neglect	
Physical Abuse	
Sexual Abuse	
Needs met in early childhood	
Family functioning	
Religious Affiliation	
Family SES	
Change in family SES	
Family Environment Scale	
Parenting:	
Parent-Child Relationship Inventory	
Peer Relations/Social Background:	
Delinquent Peers	
Gang Involvement	
Friendships	
Best Friend	
Romantic relationship	
Sexually active	
Onset of sexual intercourse	

Attitudes, Values, & Beliefs:	
Criminal Sentiments Scale	
Risk Assessment:	
PCL-R	
Age of onset for delinquent behaviors	
Age of onset for violent behaviors	
Overt pathway	
Covert pathway	
Authority conflict pathway	
Recency – time since last known offense	
Frequency – elapsed time between offenses	
Severity of offense	
Context of offense	
Substance use	
Association with violent peer groups	
Family aggression	
Antisocial family	
Intrafamily conflict	
Parental attitude toward crime and violence	
Family management practices	
Personality trait – anger	
Personality trait – impulsivity	
Personality trait - lack of empathy	
Depression	
ADHD	
Psychoses	
Trauma-related symptoms	
Brain dysfunction	
Opportunity	
Future Residence	

Delinquent Behaviors & Offense History:	
Elementary School Misbehavior	
Secondary School Misbehavior	
Delinquent Behavior	
Previous Arrest	
Previous Detention	
Offense History	
Response to Past Rehabilitation Efforts:	
Discipline in the home	
School programs	
Court rehabilitation	
Employment:	
Type	
# of hours per week	
Compensation	
School Functioning	
Revised Child Behavior Checklist – Teacher Report Form	
Conners Teachers Rating Scale	
Highest grade completed	
Attending school?	
Type of school	
Age left school	
Commitment to school	
Frequent school transitions	

Recommendations:	
Recommendation #1	
Recommendation #2	
Recommendation #3	
Recommendation #4	
Recommendation #5	
Recommendation #6	
Recommendation #7	
Recommendation #8	
Recommendation #9	
Recommendation #10	

Placement Options:	
Return to the Home	1
Group or Foster Home	2
Residential Treatment In the Community	3
Residential Treatment Outside the Community	4
Secure Juvenile Facility	5
Inpatient Treatment	6

Service Options:	
Medical Services	7
Rehabilitation Services	8
Medication	9
Educational Services	10
Vocational Services	11
Contingency-Based Milieu Services	12
Individual Psychotherapy	13
Group Psychotherapy	14
Family Psychotherapy	15
Treatment for Substance Use	16

Outcome Prognosis:	
Reduced risk of future harm to others	
Reduced likelihood of recidivism	
Adaptation to normal family & school functioning	
Changes in personality traits, behavioral functioning, or clinical characteristics	

Juvenile Court Professionals Factors (from Grisso, Tompkins, & Casey (1988) study:	
Motivation to accept intervention	
Self-reliance and autonomy	
Prior contacts with juvenile justice system	
Presence of serious mental disorder	
Family's caring and resource capability	
Opportunity for delinquent peer influence	
Unsocialized family	
Degree of behavioral compliance in legal settings	
Functioning in academic or work settings	

DiCataldo & Grisso (1995) Juvenile Offender Typology:	
Immature juvenile offender	
Socialized juvenile offender	
Mature delinquent juvenile offender	

Form B

Juvenile Offender Probation Record File Review Form

ID Number	
Date of Review	
Probation Officer:	
Recommendation #1	
Referenced?	
Acted on?	
Recommendation #2	
Referenced?	
Acted on?	
Recommendation #3	
Referenced?	
Acted on?	
Recommendation #4	
Referenced?	
Acted on?	
Recommendation #5	
Referenced?	
Acted on?	
Recommendation #6	
Referenced?	
Acted on?	
Recommendation #7	
Referenced?	
Acted on?	
Recommendation #8	
Referenced?	
Acted on?	

Court Disposition:	
Recommendation #1	
Referenced?	
Acted on?	
Recommendation #2	
Referenced?	
Acted on?	
Recommendation #3	
Referenced?	
Acted on?	
Recommendation #4	
Referenced?	
Acted on?	
Recommendation #5	
Referenced?	
Acted on?	
Recommendation #6	
Referenced?	
Acted on?	
Recommendation #7	
Referenced?	
Acted on?	
Recommendation #8	
Referenced?	
Acted on?	

Current status of juvenile:	
Youth Authority	
Detention	
Probation	
Inpatient Treatment	
Outpatient Treatment	
Deceased	
Outcome:	
Physical harm to self	
Harm to others	
Recidivate	1 = Rearrest 2 = Probation Violation
Adaptation to normal family functioning	
Adaptation to normal school functioning	
Change in personality traits, behavioral functioning, or clinical characteristics	

Table 1

Demographics

	n	% of juveniles	M	SD
Gender				
Male	79	76.0%		
Female	25	24.0%		
Ethnicity				
Caucasian	57	54.8%		
Hispanic	19	18.3%		
African-American	17	16.3%		
Native American	3	2.9%		
Asian-American	2	1.9%		
Biracial	2	1.9%		
Egyptian	1	1.0%		
Cambodian	1	1.0%		
Unknown	2	1.9%		
Age			14.79	1.17
12 years old	3	2.9%		
13 years old	15	14.4%		
14 years old	20	19.2%		
15 years old	30	28.8%		
16 years old	35	33.7%		
17 years old	1	1.0%		
Education			9.59	9.02
6th grade	3	2.9%		
7th grade	14	13.5%		
8th grade	25	24.0%		
9th grade	30	28.8%		
10th grade	26	25.0%		
11th grade	3	2.9%		
GED	1	1.0%		
Unknown	2	1.9%		

(table continues)

Table 1 *(continued)*

Demographics

	n	% of juveniles	M	SD
Religious Identification				
Christian	5	4.8%		
Christian - Catholic	4	3.8%		
Christian - Protestant	6	5.8%		
Christian - Other	4	3.8%		
Witchcraft/devil worship	1	1.0%		
Atheist	1	1.0%		
None identified	83	79.8%		

Table 2

Family

	n	% of juveniles
Current living situation:		
Biological parents	25	24.0%
Mother alone	26	25.0%
Mother and stepfather	19	18.3%
Mother and boyfriend	6	5.8%
Mother and grandparents	2	1.9%
Father alone	12	11.5%
Father and stepmother	3	2.9%
Father and girlfriend	1	1.0%
Grandparents	4	3.8%
Adoptive parents	2	1.9%
Aunt and uncle	1	1.0%
Sister and her boyfriend	1	1.0%
Husband	1	1.0%
Biological parents marital status		
Divorced	40	38.5%
Married	28	26.9%
Never married	21	20.2%
Separated	8	7.7%
Parent deceased	3	2.9%
Unknown	3	2.9%

(table continues)

Table 2 *(continued)*

Family

	n	% of juveniles	M	SD
Mother's current status				
Employed or in the home	81	78.6%		
Currently unknown	5	4.9%		
Incarcerated	5	4.9%		
Deceased	5	4.9%		
Out of state	3	2.9%		
Inpatient or drug rehab	2	1.9%		
Other	2	1.9%		
Father's current status				
Employed and/or in the home	55	53.4%		
Currently unknown	18	17.5%		
Never known	11	10.7%		
Incarcerated	9	8.7%		
Deceased	5	4.9%		
Out of state	2	1.9%		
Terminated parental rights	1	1.0%		
Other	2	1.9%		
Stepparents				
None	62	59.6%		
Stepfather	25	24.0%		
Stepparents divorced	7	6.7%		
Stepmother	5	4.8%		
Stepparents separated	3	2.9%		
Stepfather and stepmother	1	1.0%		
Siblings				
Biological	86	82.7%	1.90	1.25
Stepsiblings	31	29.8%	2.29	1.13
Adopted siblings	2	1.9%	1.50	0.71

Table 3

School

	n	% of juveniles	M	SD
Current grade			9.59	9.02
Type of school				
Traditional	42	40.4%		
Alternative education program (AEP)	26	25.0%		
Juvenile justice AEP	13	12.5%		
Home school	5	4.8%		
Treatment in traditional school	4	3.8%		
Other	2	1.9%		
Not attending school	10	9.6%		
Unknown	2	1.9%		
Commitment to school				
Low	73	70.2%		
Average	17	16.3%		
High	5	4.8%		
Unknown	9	8.7%		
Grades failed				
None	66	63.5%		
One grade	21	20.2%		
Two grades	11	10.6%		
Three grades	1	1.0%		
Unknown	5	4.8%		

(table continues)

Table 3 *(continued)*

School

	n	% of juveniles
Truancy		
Positive	56	53.8%
Negative	29	27.9%
Not assessed	19	18.3%
School suspension		
Positive	53	51.0%
Negative	30	28.8%
Not assessed	21	20.2%
Expulsion from school		
Positive	47	45.2%
Negative	42	40.4%
Not assessed	15	14.4%
Elementary school misbehavior		
Positive	43	41.3%
Negative	15	14.4%
Not assessed	46	44.2%
Secondary school misbehavior		
Positive	44	42.3%
Negative	2	1.9%
Juvenile too young	40	38.5%
Not assessed	18	17.3%

Table 4

Peers

	n	% of juveniles	Mean age of onset	SD
Delinquent peers				
Positive	55	52.9%		
Negative	3	2.9%		
Not assessed	46	44.2%		
Gang involvement			10.80	1.92
Positive	22	21.2%		
Negative	27	26.0%		
Not assessed	55	52.9%		
Friendships				
Positive	47	45.2%		
Negative	2	1.9%		
Not assessed	55	52.9%		
Best friend				
Positive	12	11.5%		
Negative	7	6.7%		
Not assessed	85	81.7%		
Romantic relationship				
Positive	24	23.1%		
Negative	6	5.8%		
Not assessed	74	71.2%		
Sexually active			11.07	2.87
Positive	23	22.1%		
Negative	3	2.9%		
Not assessed	78	75.0%		

Table 5

Substance Use

	n	% of total juveniles	% of juveniles assessed	Mean age of onset	SD
Nicotine use				10.64	1.91
Positive	31	29.8%	91.2%		
Negative	3	2.9%	8.8%		
Not assessed	70	67.3%			
Alcohol use				12.16	1.86
Positive	62	59.6%	89.9%		
Negative	7	6.7%	10.1%		
Not assessed	35	33.7%		.	
Marijuana use				12.04	1.85
Positive	74	71.2%	91.4%		
Negative	7	6.7%	8.6%		
Not assessed	23	22.1%			
Other drug use				13.00	1.30
Positive	50	48.1%	83.3%		
Negative	10	9.6%	16.7%		
Not assessed	44	42.3%			

Table 6

Prior Offenses

	n	% of total offenses	% of total juveniles
Violent			10.6%
Aggravated Assault	7	2.5%	
Robbery	3	1.1%	
Aggravated sexual assault of a child	2	0.7%	
Serious			58.7%
Assault causing bodily injury	38	13.8%	
Theft	25	9.1%	
Burglary	16	5.8%	
Breaking and entering	1	0.4%	
Arson	1	0.4%	
Weapons violations	3	1.1%	
Drug delivery	1	0.4%	
Terroristic threat	1	0.4%	
Nonindex			15.4%
Cruelty to animals	4	1.4%	
Firesetting	8	2.9%	
Prostitution	2	0.7%	
Unauthorized use of motor vehicle	14	5.1%	
Unlawful weapon	4	1.4%	
Resisting arrest	2	0.7%	
Graffiti	3	1.1%	
Possession of a controlled substance	7	2.5%	
Possession of marijuana	13	4.7%	
Criminal trespass	10	3.6%	
Disorderly conduct	6	2.2%	
Criminal mischief	11	4.0%	
Possession of drug paraphernalia	1	0.4%	
Shoplifting	5	1.8%	
Vandalism	5	1.8%	

(table continues)

Table 6 *(continued)*

Prior Offenses

	n	% of total offenses	% of total juveniles
Status/probation violations			5.8%
Runaway	43	15.6%	
Truancy	17	6.2%	
Curfew violation	11	4.0%	
Disrupting school	4	1.4%	
Positive urinalysis	7	2.5%	
Probation – failure to report	1	0.4%	
Total Offenses	276		90.4%

Table 7

Measurement Construct

	% of assessments		
	Formally assessed	Informally assessed	Not assessed
Intelligence	99.0%		1.0%
Academic achievement	97.1%		2.9%
Personality	99.0%		1.0%
Vocational aptitudes	7.7%		92.3%
Neurological screening	45.2%		54.8%
Neurological functioning	16.3%		83.7%
Clinical diagnosis	47.1%		52.9%
Behavior	31.7%		68.3%
Self-concept	6.7%		93.3%
Psychopathy	27.9%		72.1%
Family	21.2%	60.5%	18.3%
School commitment		91.3%	8.7%
Peers		72.1%	27.9%
Risk factors		88.5%	11.5%
Developmental history		25.0%	75.0%
Medical history		26.0%	74.0%
Substance use		78.0%	22.0%

Table 8

Testing Instruments Used

	n	% of construct	% of assessments
Intelligence			99.0%
WISC-III	88	85.4%	
WAIS-III	8	7.8%	
WAIS-R	4	3.9%	
Kaufman Adult Intelligence Test (KAIT)	2	1.9%	
Shipley Intelligence Test	1	1.0%	
Achievement			97.1%
WJ-MBA	46	45.5%	
WJ-R Achievement	30	29.7%	
WIAT	13	12.9%	
WRAT	12	11.9%	
Personality			
Self-Report Inventory:			95.2%
Basic Personality Inventory (BPI)	50	50.5%	
Minnesota Multiphasic Personality Inventory - Adolescent (MMPI-A)	47	47.5%	
Personality Assessment Inventory (PAI)	1	1.0%	
Personality Inventory for Children (PIC)	1	1.0%	
Apperception tests:			69.2%
Thematic Apperception Test (TAT)	65	90.3%	
Roberts Apperception Test	6	8.3%	
Adolescent Apperception Test	1	1.4%	
House-Tree-Person Drawings (H-T-P)	31		29.8%
Rorschach	27		26.0%
Robert and Mary Stories	1		1.0%
Incomplete Sentences			65.4%
Sack's Sentence Completion	28	41.2%	
Rotter Sentence Completion	24	35.3%	
HAAK Sentence Completion	11	16.2%	
Conger-Fagen or Girls Sentences	2	2.9%	
Other Sentences	3	4.4%	

(table continues)

Table 8 *(continued)*

Testing Instruments Used

	n	% of construct	% of assessments
Clinical Diagnosis			
Structured Interview			28.9%
Child Assessment Schedule (CAS)	21	65.6%	
Schedule of Affective Disorders and Schizophrenia for School Age Children (K-SADS)	6	18.8%	
Diagnostic Interview for Children and Adolescents-Revised (DICA-R)	2	6.3%	
Structured Interview of Reported Symptoms (SIRS)	2	6.3%	
Personality Diagnostic Questionnaire (PDQ-R)	1	3.1%	
Self-report Inventory			23.0%
Childhood Depression Inventory (CDI)	17	58.6%	
Suicide Probability Scale	4	13.8%	
State-Trait Anxiety Inventory (STAXI)	4	13.8%	
Beck Depression Inventory (BDI)	3	10.3%	
State-Trait Anxiety Inventory for Children (STAIC)	1	3.4%	
Behavior			31.7%
Child Behavior Checklist (CBCL):			
Youth Self Report and Parent Report	14	73.7%	
Youth Self Report	11	57.9%	
Parent Report	3	15.8%	
CBCL - Direct Observation	2	10.5%	
Behavior Assessment System for Children (BASC)	3	15.8%	

(table continues)

Table 8 *(continued)*

Testing Instruments Used

	n	% of construct	% of assessments
Neurological Screening			45.2%
Bender Gestalt	26	47.3%	
Benton Visual Retention	18	32.7%	
Mini-Mental Status Exam (MMSE)	6	10.9%	
Cognitive Capacity Screening Exam (CCSE)	5	9.1%	
Neurological Functioning			16.3%
Trail Making	13	59.1%	
Wechsler Memory Scale - Revised	4	18.2%	
Wisconsin Card Sort	1	4.5%	
Ravens Progressive Matrices	1	4.5%	
Special 77	1	4.5%	
Special 44	1	4.5%	
Special 56	1	4.5%	
Vocational			7.7%
Self-Directed Search	4	50.0%	
California Occupational Preference System (COPS)	3	37.5%	
Strong-Campbell Interest Inventory	1	12.5%	
Psychopathy			
Hare Psychopathy Checklist	29	100.0%	
Family			21.2%
Kinetic Family Drawing	15	68.2%	
Family Environment Scale	7	31.8%	
Self Concept			6.7%
Piers Harris Self-Concept Scale	4	57.1%	
Tennessee Self-Concept Scale	3	42.9%	

Table 9

Assessment Recommendations

	n	% of assessments	Total
Placement Recommendation			
Home	23	22.1%	22.1%
Secure Juvenile Facility			41.3%
Highly Structured Environment	38	36.5%	
Secure Juvenile Facility	5	4.8%	
Residential Facility			22.1%
Group or Foster Home	5	4.8%	
Residential facility	18	17.3%	
Inpatient or substance abuse			14.4%
Inpatient treatment	4	3.8%	
Substance abuse	11	10.6%	
Service Recommendations			
Individual therapy	84	80.8%	
Educational services	56	53.8%	
Family therapy	52	50.0%	
Medication	18	17.3%	
Parenting training	15	14.4%	
Substance abuse treatment	14	13.5%	
Vocational services	13	12.5%	
Group therapy	11	10.6%	
Psychiatric services	7	6.7%	
Total service recommendations	270		

Table 10

Diagnosis

	n	% of juveniles
Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD)		
Conduct Disorder, Childhood Onset	3	2.9%
Conduct Disorder, Adolescent Onset		
CD, Adolescent, Mild	9	8.7%
CD, Adolescent, Moderate	42	40.4%
CD, Adolescent, Severe	5	4.8%
Oppositional Defiant Disorder (ODD)	17	16.3%
Disruptive Behavior Disorder	2	1.9%
Adolescent Antisocial Behavior	1	1.0%
Attention Deficit Hyperactivity Disorder	21	20.2%
Mood, Anxiety, and Adjustment Disorders		
Major Depression, Single, Moderate	6	5.8%
Major Depression, Single, Chronic	1	1.0%
Major Depression, Recurrent, Moderate	1	1.0%
Dysthymia	8	7.7%
Depression, NOS	1	1.0%
Adjustment, Acute with Depressed Mood	11	10.6%
Bipolar Disorder, Mixed, Rapid Cycling	1	1.0%
Generalized Anxiety Disorder	1	1.0%
Substance-Related Disorders		
Polysubstance Dependence	5	4.8%
Hallucinogen	1	1.0%
Cocaine Abuse	4	3.8%
Amphetamine Abuse	1	1.0%
Cannibus Abuse with Hallucinations	1	1.0%
Cannibus Abuse	12	11.5%
Cannibus Abuse without Physiological Dependence	6	5.8%
Alcohol Abuse	7	6.7%
Nicotine Dependence with Physiological Dependence	1	1.0%

(table continues)

Table 10 *(continued)*

Diagnosis

	n	% of juveniles
Intellectual and Learning Disability Disorders		
Reading Disorder	2	1.9%
Math Disorder	3	2.9%
Disorder of Written Expression	5	4.8%
Academic problems	1	1.0%
Borderline IQ	1	1.0%
Mild Mental Retardation	1	1.0%
Other Disorders		
Parent-Child Relational Problems	12	11.5%
Sexual Abuse of a Child	1	1.0%
Sexual Abuse of a Child - Victim	2	1.9%
Physical Abuse of a Child - Victim	1	1.0%
Diagnosis deferred or none	10	9.6%

Table 11

Diagnosis Summary

	n	% of juveniles
Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD)	75	72.1%
Attention Deficit Hyperactivity Disorder	21	20.2%
Mood, Anxiety, and Adjustment Disorders	28	26.9%
Substance-Related Disorders	27	26.0%
Intellectual and Learning Disability Disorders	12	11.5%
Other Disorders	15	14.4%
Diagnosis deferred or none	10	9.6%

Table 12

Intellectual Functioning and Academic Achievement

	n	% of juveniles	M	SD
Full Scale IQ			94.08	12.45
Very Superior	1	1.0%		
Superior	2	1.9%		
High Average	4	3.8%		
Average	58	55.8%		
Low Average	29	27.9%		
Borderline	5	4.8%		
Intellectually Deficient	3	2.9%		
Unknown	2	1.9%		
Verbal IQ			91.51	12.60
Performance IQ			98.57	13.46
Factor Scores				
Verbal Comprehension			91.13	11.95
Perceptual Organization			101.13	13.77
Processing Speed			96.22	14.54
Freedom from Distractibility			94.14	14.54
Subtest Scaled Scores				
Information			7.89	2.56
Similarities			9.15	2.85
Arithmetic			8.51	2.89
Vocabulary			7.83	2.55
Comprehension			8.57	2.83
Digit Span			9.24	3.16
Picture Completion			10.74	2.85
Coding			8.36	3.41
Picture Arrangement			10.14	3.17
Block Design			9.43	2.73
Object Assembly			9.69	2.96
Symbol Search			9.84	2.69
Mazes			9.94	2.82
Letter-Number Sequencing			10.14	4.60
Matrix Reasoning			10.00	2.89

(table continues)

Table 12 *(continued)*

Intellectual Functioning and Academic Achievement

	n	% of juveniles	M	SD
Academic Achievement				
Standard Scores				
Reading			98.54	14.86
Mathematics			92.88	13.10
Writing			85.62	12.39
Possible Learning Differences:				
Reading	4	3.8%		
Mathematics	14	13.5%		
Writing	32	30.8%		
Number of Possible Learning Differences:				
One	31	29.8%		
Two	8	7.7%		
Three	1	1.0%		
None	64	61.5%		

Table 13

MMPI-A Results

	n	% of MMPI-A	% of juveniles
Profile Codetype			
Code 1-4-6	1	2.2%	1.0%
Code 1-7-2	1	2.2%	1.0%
Code 2	1	2.2%	1.0%
Code 2-3-4	1	2.2%	1.0%
Code 3	1	2.2%	1.0%
Code 4	9	20.0%	8.7%
Code 4-2	2	4.4%	1.9%
Code 4-5	1	2.2%	1.0%
Code 4-6-8	2	4.4%	1.9%
Code 4-7-1	1	2.2%	1.0%
Code 4-9	3	6.7%	2.9%
Code 4-9-7	1	2.2%	1.0%
Code 6-2-9	2	4.4%	1.9%
Code 6-4	1	2.2%	1.0%
Code 7-1-6	1	2.2%	1.0%
Code 8-4-3	1	2.2%	1.0%
Code 8-6-1	1	2.2%	1.0%
Code 8-7-3	1	2.2%	1.0%
Code 9	1	2.2%	1.0%
Code 9-4-7	1	2.2%	1.0%
Code 9-7-2	1	2.2%	1.0%
None	11	24.4%	10.6%
Elevations			
Scale 1 = Hypochondriasis	11	24.4%	10.6%
Scale 2 = Depression	13	28.9%	12.5%
Scale 3 = Hysteria	7	15.6%	6.7%
Scale 4 = Psychopathic Deviate	28	62.2%	26.9%
Scale 6 = Paranoia	13	28.9%	12.5%
Scale 7 = Psychasthenia	11	24.4%	10.6%
Scale 8 = Schizophrenia	10	22.2%	9.6%
Scale 9 = Mania	13	28.9%	12.5%
Scale 0 = Social Extroversion	15	33.3%	14.4%
Scale 0 = Social Introversion	3	6.6%	2.9%

(table continues)

Table 13 *(continued)*

MMPI-A Results

	n	% of MMPI-A
Supplementary Scales		
MacAndrew Alcoholism (MAC-R)	33	76.7%
Alcohol/Drug Problem Acknowledgement (ACK)	12	27.9%
Alcohol/Drug Problem Proneness (PRO)	20	46.5%
Immaturity (IMM)	9	20.9%
Welsh's Anxiety (A)	11	25.6%
Welsh's Repression (R)	6	14.0%
Content Scales		
Anxiety (A-anx)	10	23.3%
Obsessiveness (A-obs)	10	23.3%
Depression (A-dep)	7	16.3%
Health Concerns (A-hea)	6	14.0%
Alienation (A-Aln)	9	20.9%
Bizarre Mentation (A-biz)	10	23.3%
Anger (A-ang)	9	20.9%
Cynicism (A-cyn)	13	30.2%
Conduct Problems (A-con)	15	34.9%
Low Self-Esteem (A-lse)	8	18.6%
Low Aspirations (A-las)	6	14.0%
Social Discomfort (A-sod)	6	14.0%
Family Problems (A-fam)	11	25.6%
School Problems (A-sch)	13	30.2%
Negative Treatment Indicators (A-trt)	8	18.6%

(table continues)

Table 13 *(continued)*

MMPI-A Results

	n	% of MMPI-A
Harris-Lingoes and Si Subscales		
Subjective Depression (D1)	12	30.8%
Psychomotor Retardation (D2)	8	20.5%
Physical Malfunctioning (D3)	16	41.0%
Mental Dullness (D4)	11	28.2%
Brooding (D5)	14	35.9%
Denial of Social Anxiety (Hy1)	18	46.2%
Need for Affection (Hy2)	7	17.9%
Lassitude-Malaise (Hy3)	8	20.5%
Somatic Complaints (Hy4)	13	33.3%
Inhibition of Aggression (Hy5)	0	0.0%
Familial Discord (Pd1)	12	29.3%
Authority Problems (Pd2)	31	75.6%
Social Imperturbaility (Pd3)	20	48.8%
Social Alienation (Pd4)	23	56.1%
Self-Alienation (Pd5)	25	61.0%
Persecutory Ideas (Pa1)	21	52.5%
Poignancy (Pa2)	10	25.0%
Naivete (Pa3)	9	22.5%
Social Alienation (Sc1)	7	17.9%
Emotional Alienation (Sc2)	5	12.8%
Lack of Ego Mastery-Cognitive (Sc3)	9	23.1%
Lack of Ego Mastery - Conative (Sc4)	12	30.8%
Lack of Ego Mastery0Defective Inhibition (Sc5)	8	20.5%
Bizarre Sensory Experiences (Sc6)	11	28.2%
Amorality (Ma1)	10	25.6%
Psychomotor Acceleration (Ma2)	6	15.4%
Imperturbability (Ma3)	14	35.9%
Ego Inflation (Ma4)	8	20.5%
Shyness/Self-Consciousness (Si1)	2	5.1%
Social Avoidance (Si2)	8	20.5%
Alienation - Self and Others (Si3)	13	33.3%

Table 14

Risk Factors

	n	% of juveniles	Mean age of onset	SD
Delinquent behavior	97		12.19	1.84
Violent behavior	46		12.65	1.62
Substance use				
Positive	80	76.9%		
Negative	9	8.7%		
Not assessed	15	14.4%		
Violent peer group				
Positive	85	81.7%		
Negative	24	23.1%		
Not assessed	74	71.2%		
Family aggression				
Positive	40	38.5%		
Negative	43	41.3%		
Not assessed	21	20.2%		
Antisocial family				
Positive	48	46.2%		
Negative	38	36.5%		
Not assessed	18	17.3%		
Intrafamily conflict				
Positive	73	70.2%		
Negative	12	11.5%		
Not assessed	19	18.3%		
Parental attitude toward crime				
Positive	29	27.9%		
Negative	50	48.1%		
Not assessed	25	24.0%		

(table continues)

Table 14 *(continued)*

Risk Factors

	n	% of juveniles
Family management practices		
Positive	66	63.5%
Negative	15	14.4%
Not assessed	23	22.1%
Personality trait of anger		
Positive	66	63.5%
Negative	23	22.1%
Not assessed	15	14.4%
Personality trait of impulsivity		
Positive	62	59.6%
Negative	30	28.8%
Not assessed	12	11.5%
Lack of empathy		
Positive	6	5.8%
Negative	77	74.0%
Not assessed	21	20.2%
Depression		
Positive	26	25.0%
Negative	63	60.6%
Not assessed	15	14.4%
Attention Deficit Hyperactivity Disorder		
Positive	20	19.2%
Negative	72	69.2%
Not assessed	12	11.5%

Table 15

Actual Placement

	n	% of juveniles	Total
Home	37	35.6%	35.6%
Secure facility			34.6%
Post adjudication facility	23	22.1%	
Boot camp	11	10.6%	
Texas Youth Commission (TYC)	2	1.9%	
Residential facility			19.2%
Therapeutic camp	8	7.7%	
Child care center	2	1.9%	
Children's home	8	7.7%	
Boarding or military school	2	1.9%	
Inpatient or substance abuse facility			10.6%
Inpatient treatment	5	4.8%	
Substance abuse	6	5.8%	

Table 16

Subsequent Offense

	n	% of total	% of juveniles
Violent			6.6%
Aggravated Assault	2	1.3%	
Robbery	1	0.6%	
Aggravated sexual assault of a child	2	1.3%	
Serious			38.2%
Assault causing bodily injury	14	8.8%	
Theft	5	3.1%	
Burglary	12	7.5%	
Breaking and entering	1	0.6%	
Drug delivery	1	0.6%	
Terroristic threat	2	1.3%	
Nonindex			31.6%
Unauthorized use of motor vehicle	7	4.4%	
Unlawful weapon	3	1.9%	
Resisting arrest	3	1.9%	
Possession of a controlled substance	4	2.5%	
Possession of marijuana	10	6.3%	
Criminal trespass	3	1.9%	
Disorderly conduct	3	1.9%	
Criminal mischief	3	1.9%	
Possession of drug paraphernalia	2	1.3%	
Shoplifting	1	0.6%	
Driving while intoxicated	2	1.3%	
Indecency with a child	3	1.9%	
Status/probation violations			23.7%
Runaway	32	20.1%	
Truancy	12	7.5%	
Curfew violation	8	5.0%	
Disrupting school	2	1.3%	
Positive urinalysis	12	7.5%	
Probation – failure to report	3	1.9%	
Probation violations - program	6	3.8%	
Total	159		73.1%

Table 17

Juvenile Offender Type

	n	% of juveniles
Immature Juvenile Offender	40	38.5%
Socialized Juvenile Offender	24	23.1%
Mature Delinquent Juvenile Offender	40	38.5%
Factors		
Motivation for intervention		
Low	36	34.6%
Average	46	44.2%
High	8	7.7%
Unknown	14	13.5%
Self reliance and autonomy		
Low	40	38.5%
Average	39	37.5%
High	15	14.4%
Unknown	10	9.6%
Prior contact with the juvenile justice system		
Yes	98	94.2%
No	6	5.8%
Presence of serious mental disorder		
Yes	5	4.8%
No	96	92.3%
Unknown	3	2.9%
Family's caring and resource capability		
Low	58	55.8%
Average	37	35.6%
High	3	2.9%
Unknown	6	5.8%

(table continues)

Table 17 *(continued)*

Juvenile Offender Type

	n	% of juveniles
Opportunity for delinquent peer influence		
Yes	73	70.2%
No	17	16.3%
Unknown	14	13.5%
Unsocialized family		
Yes	50	48.1%
No	48	46.2%
Unknown	6	5.8%
Degree of behavioral compliance in legal settings		
Low	23	22.1%
Average	71	68.3%
High	5	4.8%
Unknown	5	4.8%
Functioning in academic or work settings		
Poor	78	75.0%
Average/Good	25	24.0%
Unknown	1	1.0%

Table 18

Significant Chi-Square Statistics

	df	*N*	Value	*p*	Page
Substance-Related Diagnosis * Recommendation for substance abuse treatment	1	104	49.99	<.001	43
Placement recommendation * Actual placement	9	104	44.38	<.001	45
Mood Disorder Diagnosis * Recommendation for a medication referral	1	104	28.61	<.001	44
Placement recommendation to an inpatient or substance abuse facility * Actual placement	1	104	24.14	<.001	45
Vocational Measurement Construct * Vocational Services Recommenedation	1	104	19.81	<.001	38
Placement recommendation to the home * Actual placement	1	104	14.88	<.001	45
Family Functioning Measurement Construct * Family Therapy Recommendation	1	104	14.49	<.001	38
ADHD Diagnosis * Recommendation for a medication referral	1	104	12.00	<.001	43
Juvenile offender type * Physical harm to others	2	104	13.87	.001	52
Placement recommendation to a secure juvenile facility * Actual placement	1	104	11.54	.001	45
Gender * Final status	3	104	12.21	.007	49
Juvenile offender type * Post-assessment outcome	4	104	12.50	.014	52

(table continues)

111

Table 18 *(continued)*

Significant Chi-Square Statistics

	df	N	Value	p	Page
Family Functioning Measurement Construct * Placement Recommendation	3	104	10.52	.015	38
CD or ODD Diagnosis * Placement Recommendation	3	104	10.52	.015	43
Learning Disability/Intellectually Deficient Diagnosis * Final status	3	104	10.32	.016	50
Juvneile offender type * Final status	6	104	13.54	.035	53
Academic functioning * Juvenile offender type	4	103	22.35	<.001	52
Death in the family * Post-assessment outcome	2	103	7.95	.019	50
Full Scale IQ * Recommendation for educational services	3	102	12.39	.006	43
Ethnicity * Physical harm to others	3	102	10.17	.017	49
Full Scale IQ * Post-assessment outcome	6	102	15.23	.019	50
Juvenile offender type * Recidivism	2	102	6.24	.044	52
Death in the family * Recidivism	2	101	3.73	.050	50
Full Scale IQ * Recidivism	3	100	12.67	.005	50
Family's caring and resource capability * Juvenile offender type	4	98	13.80	.008	51
Biological parents marital status * Recidivism	2	98	9.39	.009	50
Unsocialized family * Juvenile offender type	2	98	6.87	.032	52

(table continues)

Table 18 *(continued)*

Significant Chi-Square Statistics

	df	*N*	Value	*p*	Page
Self reliance and autonomy * Juvenile offender type	4	94	22.58	<.001	51
Commitment to school * Recidivism	2	94	8.55	.014	50
Motivation to accept intervention * Juvenile offender type	4	90	20.98	<.001	51
Opportunity for delinquent peer influence * Juvenile offender type	4	90	7.36	.025	52
Risk factor - Personality trait of anger * Recommendation for educational services	1	89	6.77	.009	44
Risk factor - Personality trait of anger * Recommendation for a medication referral	1	89	5.94	.015	44
Substance use * Post-assessment outcome	2	89	7.04	.030	49
Depression (diagnosed or not) * Final status	3	89	8.65	.034	49
Risk factor - Antisocial Family * Placement Recommendation	3	86	11.44	.010	44
Risk factor - Intrafamily Conflict * Recidivism	1	84	8.30	.004	49
Risk factor - Antisocial Family * Recidivism	1	84	5.19	.023	49
Risk factor - Lack of empathy * Recommendation for psychiatric services	1	83	5.19	.023	45
Substance-Related Diagnosis * Acknowledgment of marijuana use	1	81	3.83	.050	43
Risk factor - Parents' favorable attitude toward crime * Recommendation for family therapy	1	79	4.09	.043	44

(table continues)

Table 18 *(continued)*

Significant Chi-Square Statistics

	df	*N*	Value	*p*	Page
Substance-Related Diagnosis * Acknowledgement of other drug use	1	60	8.57	.003	43
Delinquent peers * Recidivism	1	58	9.94	.002	50
CD or ODD Diagnosis * BPI Self Deprecation Scale	1	49	5.25	.022	42
Gang involvement * Physical harm to others	1	49	4.82	.028	50
Mood Disorder Diagnosis * BPI Anxiety Scale	1	49	3.93	.048	42
CD or ODD Diagnosis * BPI Anxiety Scale	1	49	3.93	.048	42
Mood Disorder Diagnosis * BPI Depression Scale	1	49	3.86	.049	42
CD or ODD Diagnosis * MMPI-A Psychopathic Deviate Scale (Scale 4)	1	45	11.92	.001	41
Mood Disorder Diagnosis * MMPI-A Hysteria Scale (Scale 3)	1	45	9.91	.002	41
Mood Disorder Diagnosis * MMPI-A Hypochondriasis Scale (Scale 1)	1	45	7.14	.008	41
Mood Disorder Diagnosis * MMPI-A Psychoasthenia Scale (Scale 7)	1	45	7.14	.008	41
Mood Disorder Diagnosis * MMPI-A Depression Scale (Scale 2)	1	45	4.67	.031	41
Mood Disorder Diagnosis * MMPI-A Schizophrenia Scale (Scale 8)	1	45	4.55	.033	41

REFERENCES

Archer, R.P. (1997). *The MMPI-A: Assessing adolescent psychopathology* (2nd ed.). Mahwah, NJ: Erlbaum.

Archer, R. P. & Krishnamurthy, R. (2002). *Essentials of MMPI-A Assessment.* New York: John Wiley & Sons.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Barkley, R. A. (1990). *Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment.* New York: Guilford.

Brandt, J. R., Kennedy, W. A., Patrick, C. J., & Curtin, J. J. (1997). Assessment of psychopathy in a population of incarcerated adolescent offenders. *Psychological Assessment, 9,* 429-435.

Cormier, B., & Markus, B. (1980). A longitudinal study of adolescent murderers. *Bulletin of the American Academy of Psychiatry and the Law, 8,* 240-260.

Cornell, D., Benedek, E., & Benedek, D. (1989). A typology of juvenile homicide offenders. In E. Benedek & D. Cornell (Eds.), *Juvenile Homicide* (pp. 61-84). Washington, DC: American Psychiatric Press.

DiCataldo, F., & Grisso, T. (1995). A typology of juvenile offenders based on the judgments of juvenile court professionals. *Criminal Justice and Behavior, 22,* 246-262.

Elliott, D. S. (1994). Serious violent offenders: Onset, developmental course, and termination—The American Society of Criminology 1993 presidential address. *Criminology, 32,* 1-21.

Farrington, D. P. (1986). Age and crime. In M. Tonry & N. Morris (Eds.), *Crime and justice: An annual review of research* (Vol. 7, pp. 189-250). Chicago: University of Chicago Press.

Farrington, D. P. (1989). Early predictors of adolescent aggression and adult violence. *Violence and Victims, 4,* 79-100.

Farrington, D. P. (1991). Childhood aggression and adult violence: Early precursors and later-life outcomes. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 5-29). Hillsdale, NJ: Lawrence Erlbaum.

Farrington, D. P. (1995). Key issues in the integration of motivational and opportunity-reducing crime prevention strategies. In P.-O. H. Wikström, R. V. Clarke, & J. McCord (Eds.), *Integrating crime prevention strategies: Propensity and opportunity* (pp. 333-357). Stockholm, Sweden: National Council for Crime Prevention.

Forth, A. E., Hart, S. D., & Hare, R. D. (1990). Assessment of psychopathy in male young offenders. *Psychological Assessment, 2,* 342-344.

Frick, P. J., O'Brien, B. S., Wooton, J. M., & McBurnett, K. (1994). Psychopathy and conduct problems in children. *Journal of Abnormal Psychology, 103,* 700-707.

Gottfredson, M. R., & Gottfredson, D. M. (1988). *Decision making in criminal justice: Toward a rational exercise of discretion.* New York: Plenum.

Grisso, T. (1998). *Forensic evaluation of juveniles.* Sarasota, FL: Professional Resource Press.

Grisso, T., & Conlin. M. (1984). Procedural issues in the juvenile justice system. In N. D. Reppucci, L. A. Weithorn, E. P. Mulvey, & J. Monahan (Eds.), *Children, mental health, and the law* (pp.171-193). Beverly Hills, CA: Sage Publications.

Grisso, T., Tomkins, A., & Casey, P. (1988). Psychosocial concepts in juvenile law. *Law & Human Behavior, 12,* 403-437.

Hare, R. D. (1991). *The Hare Psychopathy Checklist-Revised manual.* Tonawanda, NY: Multi-Health Systems.

Hawkins, J. D., Herrenkohl, T., Farrington, D. P., Brewer, D., Catalano, R. F., & Harachi, T. W (1998). A review of predictors of youth violence. In R. Loeber & D. P. Farrington (Eds.), *Serious & violent juvenile offenders: Risk factors and successful interventions* (pp. 106-146). Thousand Oaks, CA: Sage Publications.

Hoge, R. D. (1999). An expanded role for psychological assessments in juvenile justice systems. *Criminal Justice and Behavior, 26,* 251-266.

Hoge, R. D., & Andrews, D. A. (1996). *Assessing the youthful offender: Issues and techniques.* New York: Plenum Press.

Holinger, P., Offer, D., Barter, J., & Bell, C. (1994). *Suicide and homicide among adolescents.* New York: Guilford.

Jesness, C. F., & Wedge, R. F. (1985). Jesness Inventory classification system: supplementary manual. Palo Alto: CA: Consulting Psychologists Press.

Lipsey, M. W., & Derzon, J. H. (1998). Predictors of violent or serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber & D. P. Farrington (Eds.), *Serious & violent juvenile offenders: Risk factors and successful interventions* (pp. 106-146). Thousand Oaks, CA: Sage Publications.

Loeber, R., & Hay, D. F. (1994). Developmental approaches to aggression and conduct problems. In M. Rutter & D. F. Hay (Eds.), *Development through life: A handbook for clinicians* (pp. 488-515), Oxford: Blackwell Scientific.

Loeber, R., & Hay, D. F. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology, 48,* 371-410.

Loeber, R., & Le Blanc, M. (1990). Toward a developmental criminology. In M. Tonry & N. Morris (Eds.), *Crime and justice: A review of research* (Vol. 12, pp. 375-473), Chicago: University of Chicago Press.

Lynum, D. (1996). Early identification of chronic offenders: Who is the fledgling psychopath? *Psychological Bulletin, 120,* 209-234.

Maguin, E., Hawkins, J.D., Catalano, R. F., Hill, K., Abbott, R., & Herrenkohl, T. (1995, November). *Risk factors measured at three ages for violence at age 17-18.* Paper presented at the American Society of Criminology, Boston.

Mears, D. P. (1998). Evaluation issues confronting juvenile justice sentencing reforms: A case study of Texas. *Crime & Delinquency, 44,* 443-463.

Megargee, E. I. (1971). The role of inhibition in the assessment and understanding of violence. In J. Singer (Ed.), *The Control of Aggression and Violence,* New York: Academic Press.

Melton, G. B., Petrila, J., Poythress, N. G., & Slobogin, C. (1997). *Psychological evaluations for the courts: A handbook for mental health professionals and lawyers* (2nd ed.). New York: Guilford.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100,* 674-701.

Moos, R. H., & Moos, B. S. (1981). *The Family Environment Scale manual.* Palo Alto, CA: Consulting Psychologists Press.

Office of Juvenile Justice and Delinquency Prevention (OJJDP) Statistical Briefing Book. Online. (1999, September 30). Available: http://www.ojjdp.ncjrs.org/ojstatbb.

Quay, H. C. (1987). Patterns of delinquent behavior. In H. C. Quay (Ed.), *Handbook of juvenile delinquency* (pp. 118-138). New York: John Wiley.

Quay, H. C., & Peterson, D. R. (1987). *Manual for the Revised Behavior Problem Checklist.* Miami, FL: University of Miami.

Pena, L.M., Megargee, E. I., & Brody, E. (1996). MMPI-A patterns of male juvenile delinquents. *Psychological Assessment, 8,* 388-397.

Rosner, R. (1989). Assessment of juvenile psychopathology for legal purposes. In R. Rosner & H. I. Schwartz (Eds.), *Juvenile psychiatry and the law (*pp.183-197). New York: Plenum Press.

Stouthamer-Loeber, M., Loeber, R., Huizinga, D., & Porter, P. (1997*). The early onset of persistent serious offending.* Unpublished report to the office of Juvenile Justice and Delinquency Prevention, Washington, DC. In R. Loeber & D. P. Farrington (Eds.),

Serious & violent juvenile offenders: Risk factors and successful interventions. Thousand Oaks, CA: Sage Publications.

Thornberry, T. P., Huizinga, D., & Loeber, R. (1995). The prevention of serious delinquency and violence: Implications from the Program of Research on the Causes and Correlates of Delinquency. Cited in J. C. Howell, B. Krisberg, J. D. Hawkins, & J. J. Wilson (Eds.), *Sourcebook on serious, violent, and chronic juvenile offenders* (pp. 213-237). Thousand Oaks, CA: Sage.

Thornberry, T. P., Krohn, M. D., Lizotte, A. J., & Chard-wierschem, D. (1993). The role of juvenile gangs in facilitating delinquent behavior. *Journal of Research in Crime and Delinquency, 30,* 55-87.

Thornberry, T. P. (1998). Membership in youth gangs and involvement in serious and violent offending. In R. Loeber & D. P. Farrington (Eds.), *Serious & violent juvenile offenders: Risk factors and successful interventions* (pp. 106-146). Thousand Oaks, CA: Sage Publications

Tolan, P. H., & Loeber, R. (1993). Antisocial behavior. In P. H. Tolan & B. J. Cohler (Eds.), *Handbook of clinical research and practice with adolescents* (pp. 207-331). New York: John Wiley.

Tolan, P. H., & Thomas, P. (1995). The implications of age of onset for delinquency risk: II. Longitudinal data. *Journal of Abnormal Child Psychology, 23,* 157-181.

Warren, M. (1976). Intervention with juvenile delinquents. In M. Rosenheim (Ed.), *Pursuing justice for the child.* Chicago: University of Chicago Press.