JUVENILE WAIVER TO ADULT CRIMINAL COURTS: A PROTOTYPICAL
ANALYSIS OF DANGEROUSNESS, SOPHISTICATION-MATURITY,
AND AMENABILITY TO TREATMENT

DISSERTATION

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

For the Degree of

DOCTOR OF PHILOSOPHY

By

Randall T. Salekin, B.A., M.S.
Denton, Texas
August, 1998
Salekin, Randall T., *Juvenile Waiver to Adult Criminal Courts: A Prototypical Analysis of Dangerousness, Sophistication-Maturity, and Amenability to Treatment.*

Doctor of Philosophy (Clinical Psychology), August, 1998, 191 pp., 27 tables, references, 303 titles.

Psychological assessment of juveniles being considered for waiver to adult criminal courts often requires systematic evaluation of dangerousness, maturity-sophistication, and amenability to treatment (ATX). Despite the importance of these constructs to the evaluation of juveniles, little is known about the criteria that constitute these three constructs. This study was designed to assist in clarifying the constructs of dangerousness, maturity-sophistication, and ATX that typically guide juvenile transfers. Psychologists from Clinical Psychology-Child Section (n = 244) and Forensic Diplomates from the American Board of Professional Psychology (n = 75) rated the prototypicality of the three constructs that guide juvenile transfers. Factor analyses of the domains for each of the three constructs are reviewed. Generally, prototypicality ratings were aligned with the current literature on dangerousness, sophistication-maturity, and ATX. The interpretation of the results may facilitate evaluations by forensic psychologists on juvenile waivers to adult court.
JUVENILE WAIVER TO ADULT CRIMINAL COURTS: A PROTOTYPICAL
ANALYSIS OF DANGEROUSNESS, SOPHISTICATION-MATURITY,
AND AMENABILITY TO TREATMENT

DISSERTATION

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

For the Degree of

DOCTOR OF PHILOSOPHY

By

Randall T. Salekin, B.A., M.S.
Denton, Texas
August, 1998
Copyright by

Randall T. Salekin

1998
TABLE OF CONTENTS

LIST OF TABLES ........................................................................................................... vii

Chapter

I. INTRODUCTION ......................................................................................................... 1

Historical Overview of the Juvenile Court
Current Standard for Waiver to Adult Court
Prediction of Dangerousness
   Stability and Discontinuity of Childhood Aggression
   Developmental Pathways of Antisocial Behavior Including Violence
Family Factors
Current Risk/Dangerousness Assessment Technology
Summary
Assessing Sophistication and Psychological Maturity
   Stage Theories of Maturity
   Clinical Approaches to Interpersonal Maturity With Delinquents
Maturity of Judgement
Maturity and Sophistication Assessment Technology
Summary
Amenability to Treatment
   Degree of Disturbance and Related Variables to Outcome
   Ego Strength and Outcome
   Relationship of Anxiety and Stress to Treatment Outcome
   Affiliation and Hostility and Treatment Outcome
   Motivation for Treatment
   Expectations and Outcome
   Intelligence and Outcome
Family Factors and Outcome
Protective Factors
Amenability to Treatment Assessment Technology
Summary
The Current Study
   Sampling of the Domain
   Prototypical Analyses
   Prototype Methods
Research Questions
II. METHOD .................................................................................................................. 67

  Participants
  Measure
  Generation of Items
  Item Reduction
  Procedure
  Implementing the Mail Survey

III. RESULTS ............................................................................................................... 76

  Prototypical Ratings
  Factor Structure for Dangerousness
  Sophistication-Maturity Factor Structure
  Amenability to Treatment Factor Structure
  Juveniles Waived to Adult Court
  Forensic Diplomates' Ratings of Prototypical Items of Juveniles Who were Waived to Adult Court
  Comparison of the Two Samples With Regard to Factor Scale Scores
  Factor Structure of Dangerousness, Sophistication-Maturity, and Amenability to Treatment Dimensions for Juvenile Waiver Cases
  Experience with Dangerousness, Sophistication-Maturity, and Amenability to Treatment Evaluations
  Offense Data and Juvenile Waivers
  Relative Importance of Constructs to Juvenile Waivers

IV. DISCUSSION .......................................................................................................... 99

  General Conceptualization of Kent
  Dangerousness
  Sophistication-Maturity
  Amenability to Treatment
  Dangerousness, Sophistication-Maturity, and Amenability to Treatment Items as a Two Factor Construct
  Measurement of Psychological Criteria for Juvenile Waivers
  Dangerousness Assessment Technology
  Traditional Methods
  Proposed Methods
  Sophistication-Maturity Assessment Technology
  Traditional Methods
  Proposed Methods
  Amenability to Treatment
  Traditional Methods
Proposed Methods
Explication of Kent's Psychological Criteria
Dangerousness
Sophistication-Maturity
Amenability to Treatment
Current Limitations and Future Directions
Limitations of the Current Study
Proposed Research for the Clinical Assessment of Juvenile Waivers

FOOTNOTES.............................................................................................................. 141

APPENDICES............................................................................................................. 142

REFERENCES............................................................................................................. 156
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Accuracy of Farrington Adolescent Criteria Utilized in the Cambridge Study for Violent Offenders</td>
<td>13</td>
</tr>
<tr>
<td>2.</td>
<td>Developmental Models for Antisocial Behavior, Including Violence</td>
<td>22</td>
</tr>
<tr>
<td>3.</td>
<td>Robins (1966) Criteria for Children that were Later Found to be Sociopathic</td>
<td>26</td>
</tr>
<tr>
<td>5.</td>
<td>Greenberger and Sorensen’s (1974) Model of Psychosocial Maturity</td>
<td>39</td>
</tr>
<tr>
<td>8.</td>
<td>Sample Characteristics</td>
<td>67</td>
</tr>
<tr>
<td>9.</td>
<td>Guidelines for the Prototypical Analysis Study of Dangerousness, Sophistication-Maturity, and ATX</td>
<td>75</td>
</tr>
<tr>
<td>10.</td>
<td>Prototypical Dangerousness Items: Means and Standard Deviations</td>
<td>77</td>
</tr>
<tr>
<td>11.</td>
<td>Prototypical Sophistication and Maturity Items: Means and Standard Deviations</td>
<td>79</td>
</tr>
<tr>
<td>12.</td>
<td>Prototypical Items of ATX: Means and Standard Deviations</td>
<td>80</td>
</tr>
<tr>
<td>13.</td>
<td>Principal Axis Factoring with Varimax Rotation of Dangerousness Items</td>
<td>82</td>
</tr>
<tr>
<td>14.</td>
<td>Mean Prototypicality Scores for Dimensions of Dangerousness</td>
<td>83</td>
</tr>
<tr>
<td>Number</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>15</td>
<td>Principal Axis Factoring with Varimax Rotation of Sophistication-Maturity Items</td>
<td>84</td>
</tr>
<tr>
<td>16</td>
<td>Mean Prototypicality Scores for Dimensions of Sophistication-Maturity</td>
<td>85</td>
</tr>
<tr>
<td>17</td>
<td>Principal Axis Factoring with Varimax Rotation of ATX Items</td>
<td>86</td>
</tr>
<tr>
<td>18</td>
<td>Mean Prototypicality Scores for Dimensions of ATX</td>
<td>87</td>
</tr>
<tr>
<td>19</td>
<td>Demographic Information for Juveniles’ Waived to Adult Court</td>
<td>88</td>
</tr>
<tr>
<td>20</td>
<td>Means and Standard Deviations for Dangerousness, Sophistication-Maturity, and ATX Items</td>
<td>89</td>
</tr>
<tr>
<td>21</td>
<td>Prototypical Items of Juveniles Waived to Adult Court: Means and Standard Deviations</td>
<td>91</td>
</tr>
<tr>
<td>22</td>
<td>Comparison Between Clinical Psychology-Child Psychologists and Forensic Diplomates Ratings of Juvenile Waivers</td>
<td>92</td>
</tr>
<tr>
<td>23</td>
<td>Factor Structure of Dangerousness, Sophistication-Maturity, and ATX for the Child Clinical Sample</td>
<td>94</td>
</tr>
<tr>
<td>24</td>
<td>Factor Structure of Dangerousness, Sophistication-Maturity, and ATX for Juvenile Waiver Cases</td>
<td>94</td>
</tr>
<tr>
<td>25</td>
<td>MANOVA for Child Psychologists and Forensic Diplomates for Assessment of Dangerousness, Sophistication-Maturity, and ATX</td>
<td>96</td>
</tr>
<tr>
<td>26</td>
<td>Proposed Prerequisite Offense By Child Psychologists and Forensic Diplomates</td>
<td>97</td>
</tr>
<tr>
<td>27</td>
<td>MANOVA of Psychologists’ Beliefs About the Importance of Dangerousness, Sophistication-Maturity, and Amenability in Juvenile Waivers</td>
<td>98</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Psychologists and psychiatrists are often consulted by the juvenile justice system regarding adolescents' waiver to adult criminal courts (Ewing, 1990, Feld, 1984; Grisso, Tomkins, & Casey, 1988; Melton, Poythress, Petrilla, & Slobogin, 1997). Although waivers have existed almost since the inception of the juvenile justice system, reported trends of increasing violent crime among adolescents have resulted in legislators and their constituencies pressuring for increased utilization of such transfers (Grisso, 1996; Strasburg, 1984; Tate, Reppucci, & Mulvey, 1995). The rationale for such waivers is that adult criminal courts are able to impose more severe penalties than their juvenile counterparts on serious juvenile offenders. While mental health professionals are involved frequently in transfer evaluations, few studies address what criteria should be considered in such evaluations. Dangerousness, sophistication-maturity, and ATX have been put forth as broad issues to guide transfer decisions (Heilbrun, Leheny, Thomas, & Huneycutt, 1997). However, little is known about the application of these constructs to juveniles. Additionally, few studies address how such evaluations should be conducted.

The following literature review is divided into four major sections. The first section serves two purposes by addressing: (a) the historical roots of the juvenile justice
system, and (b) the current standards for juvenile waivers to adult criminal courts.¹ The second section provides a literature review of dangerousness and its predictors. In addition, the ethicality of dangerousness assessments and the importance of considering protective factors when making such assessments are addressed. The third section examines the sophistication-maturity literature including early stage theories and more recent conceptualizations of maturity including emotional intelligence (Goleman, 1995). The fourth section includes a review of the literature on ATX. The ATX section focuses on predictors of those likely to be rehabilitated.

Historical Overview of the Juvenile Court

Juvenile courts were originally established under the doctrine of parens patriae. Historically the King of England was symbolically the father of the country, and as such, he assumed almost absolute responsibility for all juvenile affairs (Black, 1979). Therefore, the King's chancellors adjudicated all matters involving youths with their decisions independent of English criminal courts. English common law also established degrees of criminal culpability by ages. Children under eighteen were considered juveniles because they were not as mature or responsible for their behavior as adults. Children under seven were presumed to be incapable of formulating criminal intent, regardless of the seriousness of the offense (Champion & Mays, 1991).

The parens patriae doctrine was adopted by the juvenile justice system and has been the foundation for justifying the juvenile courts' intervention with adolescents who violate certain laws or edicts (Feld, 1987). Its guiding principle is rehabilitation and treatment versus the criminal courts' emphasis on punishment and retribution. Although
the parens patriae model had a rehabilitative focus, it should be noted that youth could be incarcerated for long periods of time without much progress being made toward rehabilitation. Despite, the early philosophy of parens patriae and the rehabilitative focus of the juvenile justice system, most American jurisdictions have enacted laws providing that juveniles charged with serious personal crimes may be prosecuted and punished as adults (Heilbrun et al., 1997). These laws are known as certification, transfer, or waiver laws. In states where automatic transfers occur, decertification (transfer back to juvenile court) procedures are possible; this procedure is an option in 12 states.

Waiver statutes provide that juveniles who are older (i.e., > 12 years), and commit the most serious crimes may be prosecuted in adult criminal courts. Punishment for juveniles convicted as adults may include lengthy prison terms and, in many jurisdictions, the death penalty (Heilbrun, et al., 1997; Kruh & Brodsky, 1997).

Many observers (Champion & Mays, 1991; Feld, 1984, 1987; Grisso, 1996; Grisso et al., 1988) of the juvenile justice system contend that waivers fly in the face of the original purpose for establishing juvenile courts. The balance between protecting the community and protecting youth has led to considerable controversy and concern regarding the appropriate handling of juvenile matters. However, with increases in juvenile violent crime (e.g., juvenile arrest rate for homicide increased by 90% between 1987 and 1991; Snyder & Sickmund, 1995) pressure has mounted for juveniles to be held more responsible for their actions (Grisso, 1996).
Current Standard for Waiver to Adult Court

In most states, juvenile waivers require that a juvenile be found unsuitable for treatment, in addition to meeting the age and crime requirements. While the courts have wide discretion, judges are directed by statute or relevant case law to consider certain factors for juvenile waivers. Heilbrun et al. (1997) surveyed the statutes on juvenile transfer and decertification in the U.S. federal and 50 state jurisdictions, as well as the District of Columbia. They found that five relevant criteria to the mental, emotional, and developmental functioning of juveniles are used: (a) treatment needs and amenability, (b) risk assessment of future criminality, (c) sophistication-maturity, (d) the presence of mental retardation or mental illness, and (e) offense characteristics. Most state guidelines for juvenile waiver echo the factors delineated by the United States Supreme Court's landmark decision in Kent v. United States (1966)^2:

1. The seriousness of the alleged offense to the community and whether the protection of the community requires waiver;

2. Whether the alleged offense was committed in an aggressive, violent, premeditated, or willful manner;

3. Whether the alleged offense was against persons or property, greater weight being given to offenses against persons, especially if personal injury resulted;

4. The prosecutive merit of the complaint, i.e., whether there is evidence upon which a Grand Jury may be expected to return an indictment (to be determined by consultation with the United States Attorney);
5. The desirability of trial and disposition of the entire offense in one court when the juvenile's associates in the alleged offense are adults who will be charged with a crime;

6. The sophistication and maturity of the juvenile as determined by consideration of his home, environmental situation, emotional attitude, and pattern of living;

7. The record and history of the juvenile, including previous contacts with . . . law enforcement agencies, juvenile courts and other jurisdictions, prior periods of probation . . . or prior commitments of juvenile institutions;

8. The prospects for adequate protection of the public and the likelihood of reasonable rehabilitation of the juvenile (if he is found to have committed the alleged offense) by the use of procedures, services and facilities currently available to the Juvenile Court (pp. 566-567).

Three of these constructs are directly related to the juvenile's psychological functioning: (a) potential dangerousness, (b) sophistication and maturity, and (c) ATX. Based on the psychological nature of these components, the juvenile justice system has relied upon forensic psychologists and psychiatrists for the determination of juvenile transfers. Judge Fortas did not provide specific guidelines for weighing each of the factors mentioned above. Rather, legal and mental health professionals were to examine all factors and then to use their discretion in making waiver decisions. Thus, youth could meet only one of the criteria and be waived to adult court.

According to Melton et al. (1997), juveniles charged with serious crimes and eligible for transfers, are routinely evaluated by forensic mental health professionals.
Court-ordered evaluations are accorded substantial weight when considering whether to try adolescents as juveniles or adults. Given the importance of these evaluations, Ewing (1990) has contended that such evaluations are best performed by forensic clinicians. Moreover, he provided specific information regarding testing of juveniles for two of the constructs previously mentioned (ATX, and sophistication and maturity).

Despite the guidelines provided by Ewing (1990) and the widespread use of forensic experts for these purposes (Melton et al., 1997), little is known about the aforementioned constructs. Specifically, what constellations of personality traits and/or behavioral characteristics do psychologists and psychiatrists utilize to define dangerousness? Similarly, what criteria make a juvenile sophisticated and mature? Furthermore, what defining features constitute a juvenile who is unamenable to treatment?

Grisso et al. (1988) in their seminal article on psychosocial concepts in juvenile law surveyed 127 courts located in 34 states and provided relevant data to these constructs. Applicable to the present study, Grisso et al. asked juvenile court personnel to rate characteristics of juveniles who were and were not transferred to adult court. The sample consisted of 198 survey cases involving the ATX standard and 160 involving the “threat to the community” standard.

Grisso et al. (1988) conducted a factor analysis of 79 survey items for 1423 cases. Nine factors emerged from the overall sample: $F_1$, Motivation to Accept Intervention; $F_2$, Self Reliance and Autonomy; $F_3$, Prior Contacts with the Juvenile Justice System; $F_4$, Presence of Serious Mental Disorder; $F_5$, Family Caring and Resource
Grisso et al. (1988) found that juvenile waivers were associated negatively with $F_1$, Willingness to Accept Intervention; and positively with $F_2$, Adult-like Self Reliance; and $F_3$, a Greater Prior Offense Record. Additionally, individuals with $F_7$, unsocialized families, were associated with judgements that juveniles should be transferred because they posed a threat to the community. The correlations for these relations were low to moderate. Based on the ATX standard the following correlations were found: $F_1 = -0.49$; $F_2 = 0.17$; $F_3 = 0.35$; and $F_7 = 0.10$. When threat to the community was the standard, the following correlations were found: $F_1 = -0.43$; $F_2 = 0.23$; $F_3 = 0.29$; and $F_7 = 0.26$. This study provides a good starting point for understanding juvenile waivers to adult court. However, it has three major limitations to waiver evaluations. First, because other issues (e.g., detention evaluations) were included, the underlying dimensions of juvenile waivers cannot be examined separately. Second, most cases were rated by intake and parole officers rather than by mental health professionals. Furthermore, the authors did not attempt to clarify the constructs of dangerousness, sophistication-maturity, and ATX which very often guide juvenile waiver decisions.

As greater numbers of youthful offenders are waived to criminal court jurisdiction, questions arise about which juveniles truly require transfer. According to many researchers (e.g., Champion & Mays, 1991; Feld, 1984), some transferred juveniles
are not the most dangerous, sophisticated-mature, or untreatable. Potential errors may result from the absence of clear constructs guiding the transfers to adult courts.

Given the lack of clarity for these constructs, a major purpose of the current study was to build on the work of Grisso et al. (1988) by examining the previously used criteria for dangerousness, sophistication-maturity, and ATX. In the following sections, the literature is examined for each of the three constructs. The discussion emphasizes predictors and indicators of the three constructs.

Prediction of Dangerousness

Diverse views and unresolved controversies about clinical predictions of juvenile dangerousness and violent behavior have continued during the last decade (Capaldi & Patterson, 1996; Fisher, 1984; Grisso, 1996; Grisso & Applebaum, 1992, 1993; Heilbrun, 1997; Litwack, 1993; Loeber & Stouthamer-Loeber, 1998). Scholars have even disagreed on whether predictions of dangerousness can be considered ethical. Grisso and Applebaum (1992) contended that certain types of forecasts regarding future violence are, in fact, ethical if they are based upon adequate scientific support. Such scientific support counters the blanket condemnation of dangerousness testimony made by Ewing (1983, 1985, 1991) and Feld (1984).

Predictions of dangerousness can be organized by the form of the prediction and the degree of certitude. Predictions range from dichotomous (i.e., dangerous/not dangerous) to qualitative (e.g., weak or strong likelihood) to probability (e.g., percentage) statements. Grisso and Applebaum contend that "risk, class-based" statements of probability for dangerousness are likely to have utility, given that the probability
statement is based on the individual's characteristics (e.g., lack of empathy). Thus, the notion is that individuals with such characteristics have a certain probability of committing violent acts in the future.

With regard to juveniles, the courts have never required dichotomous predictions of dangerousness. For example, the New York state's statutes authorizing the pretrial detention of juveniles reviewed in Schall v. Martin (1984) required merely a qualitative judgement that "there was a serious risk" that the juvenile will commit a criminal act if not detained. Whether the same standard applies to waiver decisions remains unresolved.

The foundation of the predictive testimony (Capaldi & Patterson, 1996; Grisso & Applebaum, 1992) should be based upon empirical support, applicable to the specific case. That is, the individual for which dangerousness is assessed must be similar to research participants from which the predictive model is derived. It is important to note that no such groups exist at this time for juvenile offenders. In addition, the expert's evaluation process and methods must be sufficiently reliable to assure accurate classification of the relevant characteristics of the individual in question. Finally, the legal consequences of the prediction are thought to be important in dangerousness testimony. Grisso and Applebaum (1992) argued that it is important to strike a balance between the protection of society and the rights of assessed juveniles.

Litwack (1993) has countered Grisso and Applebaum's argument that dangerousness assessments are ethical because actuarial data are not available for most assessments of dangerousness. More specifically, clinicians are unlikely to have accurate data on the recidivism rate of specific groups (i.e., dangerous or non-dangerous), given
that many violent crimes go unreported or are unresolved. Additionally, most dangerous patients are not released and cannot be included in the recidivism rates.

Irrespective of these debates on the ethicality of dangerousness assessments, reports and testimony for waiver to adult criminal courts continue to be a reality (Ewing, 1990; Grisso, 1996; Melton et al., 1997). In line with the Grisso and Applebaum (1992) argument, dangerousness predictors for adolescents may be possible for at least two reasons: (a) substantial evidence exists that serious problem behaviors have a high degree of continuity over time, and (b) conduct problems particularly involving aggression for certain groups of youth tend to continue rather than abate (Ghodsian, Fogelman, Lambert, & Tibbenham, 1980; Loeber, 1982; Loeber & Stouthamer-Loeber, 1998; Moffitt, 1993; Olweus, 1979; Patterson, 1982; Robins, 1966; Werner & Smith, 1977; West & Farrington, 1973, 1977). Moffitt (1993) concluded that approximately 5% of conduct-disordered youth are persistently antisocial and violent.

The challenge is to identify the personality and/or behavioral characteristics that precede dangerousness and are subsequently predictive of its occurrence. In other words, what do dangerous juveniles look like? What characteristics are typical or common among these individuals? In addition, what situational characteristics increased the likelihood of dangerousness in youth? Elucidating such traits, behaviors, and situational factors is likely to improve the classification of youth at high risk for dangerousness.

For the purpose of this introduction, aggression is defined by those acts that inflict bodily or mental harm on others (Loeber & Hays, 1997). In contrast, violence is defined as those aggressive acts causing serious harm, such as aggravated assault, rape, robbery,
and homicide. These offenses comprise “serious delinquency” and include those offenses in Part I of the FBI Crime Index. Serious delinquency is likely to be considered more analogous to the dangerousness than general delinquency.

Stability and Discontinuity of Childhood Aggression

Correlations between early and later aggression were reported by numerous researchers (e.g., Capaldi & Patterson, 1996; Caspi, Elder, & Beru, 1987; Farrington, 1991; Haapasalo & Tremblay, 1994; Loeber & Stouthamer-Loeber, 1998; Loeber, Tremblay, Gagnon, & Charlebois, 1989; Olweus, 1979; Pulkkinen, 1992). Olweus (1979, 1980) reviewed 16 longitudinal studies covering periods of up to 12 years and found a correlation of .63 which is similar to the stability of intelligence. Since then, many studies have replicated the finding that different forms of aggression are highly stable (e.g., Farrington, 1995; Loeber & Stouthamer-Loeber, 1998) over time. When antisocial behaviors are utilized, the correlations between early and later antisocial behavior often are higher (e.g., r = .92; Patterson, 1992). Moreover, studies have shown that early aggression predicts different manifestations of later violence, including frequent fighting by age 18, partner assault, and conviction for violent offenses by age 32 (Capaldi & Patterson, 1996; Farrington, 1994; Sattin & Magnusson, 1989).

Despite these high correlations, such correlations are poor indicators of the actual degree of stability and change. While correlations may be high, absolute prevalence, frequency, or seriousness may change over time. Probability data in these cases are more useful to determine (a) whether highly aggressive youth persist or desist, and (b) what the probabilities are that less aggressive boys persist or escalate. Thus, continuity and
desistance can best be understood by the periodic measurement of the severity of aggression. Several examples of large scale studies are reviewed below to shed light on this issue.

Farrington and West (Farrington, 1991, 1995, 1997; West, 1969; West & Farrington, 1977) assessed 411 8 to 10 year old boys from primary schools in London, England. Collateral sources from teachers and parents were included in the assessment interview process. Follow-up interviews occurred eight times across a 24 year period. The final interviews were held when the participants were 32 years old.

Farrington (1991) found that those youth, aggressive at 8-10 years of age, were more likely to be violent for the duration of the study. Specifically, they found that 49.4% of the highly aggressive versus 33.9% of the nonaggressive children were aggressive at age 32. Similarly, 20.4% of the aggressive youth were convicted as adults for violent offenses as compared to 9.8% of the non-aggressive youth. Interestingly, only 58% (29 of 50) of the convicted violent males were identified as aggressive in their youth; the remainder were from the non-aggressive youth indicating that the classification groups were not highly accurate. Farrington’s adolescent characteristics related to later violent offenses are presented in Table 1. Sensitivity averaged .40, with specificity at .72, PPP at .21, and NPP at .88. Thus, predictions of violence with either childhood or adolescent criteria were low. What is not known is whether a combination of criteria would improve the classification.
### Table 1

**Accuracy of Farrington Adolescent Criteria Utilized in the Cambridge Study for Violent Offenders**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Age</th>
<th>HR</th>
<th>Sens</th>
<th>Spec</th>
<th>PPP</th>
<th>NPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>low family income</td>
<td>14</td>
<td>51</td>
<td>.26</td>
<td>.78</td>
<td>.14</td>
<td>.88</td>
</tr>
<tr>
<td>poor housing</td>
<td>14</td>
<td>55</td>
<td>.29</td>
<td>.81</td>
<td>.21</td>
<td>.89</td>
</tr>
<tr>
<td>low social class</td>
<td>14</td>
<td>51</td>
<td>.35</td>
<td>.68</td>
<td>.14</td>
<td>.89</td>
</tr>
<tr>
<td>large family size</td>
<td>14</td>
<td>55</td>
<td>.36</td>
<td>.80</td>
<td>.20</td>
<td>.90</td>
</tr>
<tr>
<td>cruel parental attitude</td>
<td>14</td>
<td>51</td>
<td>.27</td>
<td>.77</td>
<td>.14</td>
<td>.89</td>
</tr>
<tr>
<td>parental disharmony</td>
<td>14</td>
<td>60</td>
<td>.44</td>
<td>.84</td>
<td>.28</td>
<td>.92</td>
</tr>
<tr>
<td>father doesn't join in</td>
<td>12</td>
<td>57</td>
<td>.52</td>
<td>.75</td>
<td>.22</td>
<td>.92</td>
</tr>
<tr>
<td>low nonverbal IQ</td>
<td>14</td>
<td>55</td>
<td>.44</td>
<td>.73</td>
<td>.19</td>
<td>.90</td>
</tr>
<tr>
<td>low verbal IQ</td>
<td>14</td>
<td>53</td>
<td>.30</td>
<td>.78</td>
<td>.16</td>
<td>.89</td>
</tr>
<tr>
<td>Poor school performance</td>
<td>11</td>
<td>55</td>
<td>.38</td>
<td>.79</td>
<td>.20</td>
<td>.90</td>
</tr>
<tr>
<td>low socializing</td>
<td>11</td>
<td>54</td>
<td>.44</td>
<td>.73</td>
<td>.18</td>
<td>.90</td>
</tr>
<tr>
<td>left school before</td>
<td>16</td>
<td>50</td>
<td>.80</td>
<td>.42</td>
<td>.16</td>
<td>.94</td>
</tr>
<tr>
<td>high truancy</td>
<td>12-14</td>
<td>60</td>
<td>.40</td>
<td>.86</td>
<td>.28</td>
<td>.91</td>
</tr>
<tr>
<td>high delinquency school</td>
<td>11</td>
<td>51</td>
<td>.24</td>
<td>.79</td>
<td>.14</td>
<td>.88</td>
</tr>
<tr>
<td>regular smoking before</td>
<td>14</td>
<td>55</td>
<td>.42</td>
<td>.75</td>
<td>.19</td>
<td>.90</td>
</tr>
<tr>
<td>first sex before</td>
<td>15</td>
<td>62</td>
<td>.32</td>
<td>.91</td>
<td>.32</td>
<td>.91</td>
</tr>
<tr>
<td>high SR delinquency</td>
<td>14</td>
<td>60</td>
<td>.52</td>
<td>.81</td>
<td>.27</td>
<td>.92</td>
</tr>
<tr>
<td>high SR violence</td>
<td>14</td>
<td>59</td>
<td>.52</td>
<td>.78</td>
<td>.25</td>
<td>.92</td>
</tr>
<tr>
<td>high aggressiveness</td>
<td>12-14</td>
<td>58</td>
<td>.60</td>
<td>.72</td>
<td>.23</td>
<td>.93</td>
</tr>
<tr>
<td>lacks concentration</td>
<td>12-14</td>
<td>59</td>
<td>.30</td>
<td>.88</td>
<td>.25</td>
<td>.93</td>
</tr>
<tr>
<td>high restlessness</td>
<td>12-14</td>
<td>58</td>
<td>.42</td>
<td>.82</td>
<td>.24</td>
<td>.91</td>
</tr>
<tr>
<td>high daring</td>
<td>12-14</td>
<td>58</td>
<td>.28</td>
<td>.89</td>
<td>.26</td>
<td>.90</td>
</tr>
<tr>
<td>hostile to police</td>
<td>14</td>
<td>59</td>
<td>.54</td>
<td>.78</td>
<td>.25</td>
<td>.92</td>
</tr>
<tr>
<td>hostile to police</td>
<td>16</td>
<td>61</td>
<td>.54</td>
<td>.81</td>
<td>.28</td>
<td>.93</td>
</tr>
<tr>
<td>high anxiety</td>
<td>12-14</td>
<td>52</td>
<td>.12</td>
<td>.91</td>
<td>.16</td>
<td>.88</td>
</tr>
<tr>
<td>high nervousness</td>
<td>14</td>
<td>51</td>
<td>.31</td>
<td>.72</td>
<td>.14</td>
<td>.88</td>
</tr>
<tr>
<td>unemployed</td>
<td>16</td>
<td>55</td>
<td>.36</td>
<td>.80</td>
<td>.20</td>
<td>.90</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td>55</td>
<td>.40</td>
<td>.72</td>
<td>.21</td>
<td>.88</td>
</tr>
</tbody>
</table>

**Note.** Age = youth met the criteria at assessment; CC = correct classification; HR = hit rate; Sens = sensitivity; Spec = specificity; PPP = positive predictive power; NPP = negative predictive power. SR = self report.
In a classic longitudinal study, Wolfgang and his colleagues (Tracy, Wolfgang, & Figlio, 1990; Wolfgang & Tracy 1982) investigated recidivism among delinquents. These investigators followed more than 38,000 Philadelphia youth from 1945 and 1958 birth cohorts. They reported that chronic delinquents were more likely to be involved in serious criminality including homicide, rape, robbery, aggravated assault, and injury to others. These conclusions, however, were based on a very low incidents of homicide (n = 4), and rape (n = 9) for whites. Non-whites had been involved in a substantially higher number of homicides (n = 51) and rapes (n = 92). Ethnicity appeared to play a major role in violent recidivism.

Despite differences between violent and less violent delinquents, their histories were not very successful at predicting future violence. However, in non-white offenders with a chronic history of arrest (operationally defined as five or more), the likelihood of future violent behavior averaged a PPP of .54. These differences, however, may be related to lower SES and poor living conditions which was shown to a factor with regard to chronic offending. Differences with regard to gender were not provided.

Hamparion (1987) examined 1,222 violent juvenile offenders and assessed their adult criminal history at a 10 year follow-up. She found that the following variables were likely to predict recidivism: (a) male gender, (b) age at first arrest (<12 years), (c) last arrest as a juvenile, (d) number of juvenile arrests, (e) violent juvenile history, (f) incarceration in a juvenile facility, and (g) repeat violent offenses. Prediction accuracy of which offenders would be charged with felonies was at 79 to 87%. A limitation of this study is that felonies include property crimes that do not constitute dangerousness.
Other studies on youthful offenders and dangerousness have been more disappointing. For instance, Wenk, Robinson, and Smith (1972) studied predictions of dangerousness in 4,146 youthful parolees. They utilized elaborate case histories, measures on emotional and mental functioning (e.g., intelligence, maturity level, grade achievement, MMPI, and CPI) and clinical prognosis as predictors of dangerousness. When examining a range of characteristics, they reported that their accuracy of prediction never exceeded a PPP of .14. However, these authors did not provide data for the psychological measures themselves and it is difficult to determine whether individual psychological measures were even evaluated in this study.

McCord (1979) reported on a 30 year follow-up of 201 boys from the Cambridge-Sommerville Youth Project between 1939 and 1945. She found that a 36% increase in adult violent criminality could be accounted for by boys (a) who lacked supervision, (b) whose mothers lacked self confidence, and (c) who had been exposed to parental conflict and aggression.

In summary, studies have correlated early aggression and later aggression but attempts to identify those who will be dangerous at a later stage in life has resulted in substantial misclassifications. In part, this problem may be related to the low base rate of violence and the difficulty in detecting future recidivism.

Loeber and Stouthamer-Loeber (1988) performed a comprehensive review of predictors for juvenile delinquency literature. They found the following predictors of serious delinquency improved classification rates:
1. early conduct problems (e.g., aggression, stealing, truancy, lying, and drug use)

2. continued aggressiveness past early adolescence

3. the seriousness of the juvenile offense

4. poor parental supervision and parental rejection of the child

5. parental criminality and aggressiveness, marital discord, and multiple family handicaps

6. conduct problems in elementary school

7. highly aggressive as children

Robins (1966) and Moffitt (1993) have echoed the importance of these findings by asserting that five factors increase the likelihood of persistent antisocial behavior and dangerousness in youth. These factors reflect antisocial behavior with the following features: early onset, high frequency, variety of problem behaviors, and problem behaviors occurring in multiple settings.

An important aspect of dangerousness is identifying youth who are likely to desist from antisocial behaviors. Several recent studies have examined desistance from antisocial or delinquent behavior (e.g., Fergusson, Lynskey, & Horwood, 1996; Hoge, Andrews, & Leschied, 1996; Loeber, Stouthamer-Loeber, 1998; Van Kammen, & Farrington, 1991; Mischkowitz, 1994; Moffitt, Caspi, Dickson, Silva, & Stanton, 1996; Mulvey & Larosa, 1986; Sampson & Laub, 1993). Unfortunately, none of these studies covered desistance from aggression or violence.
Moffitt's (1993) distinction between different onset patterns suggested desistance of antisocial behavior during adolescence for the late-onset group. Moffitt (1993) has elucidated this issue of continuance and desistance of antisocial behavior including violence by suggesting two distinct categories, of antisocial persons, each with a unique natural history and etiology: (a) life-persistent antisocial individuals, those who engage in antisocial behavior at every life stage, and (b) adolescent-limited antisocial individuals, whose antisocial behavior is circumscribed and time-limited. According to Moffitt, life-course-persistent offenders propagate a wider variety of offenses and more victim-oriented offenses (e.g., violence and fraud) than adolescent-limited offenders. According to Moffitt's theory, the stability of antisocial behavior is closely linked to its extremeness of expression.

Moffitt (1993) observed that the most persistent 5% or 6% of male offenders are responsible for about 50% of the known crimes (see also Farrington, Ohlin, & Wilson, 1986). Likewise, Wolfgang et al. (1972) studied 10,000 delinquents and found that 6% of the offenders accounted for more than half of the crimes; relative to other offenders, these offenders began their criminal careers at an earlier age and continued them for more years. These findings have been consistent throughout research on delinquency and dangerousness (Loeber & Dishion, 1982; Moffitt, 1993; Robins, 1966; Stouthamer-Loeber & Loeber, 1988).

More recently, Loeber and Stouthamer-Loeber's (1998) research revealed at least two important phases in the discontinuance of aggression: (a) preschool and (b) adolescence through early adulthood. Both Keenan and Shaw (1997) and Loeber and
Hay (1997) have shown that aggressive behaviors of preschool children is common.

Several studies have documented a decrease in the prevalence of aggression in children from preschool to elementary school (Goodenough, 1931; Haapasalo & Tremblay, 1994; Kingston & Prior, 1995; Loeber, Green, Lahey, & Stouthamer-Loeber, 1989; Trembley et al., 1996).

Haapasalo and Tremblay (1996) found a decrease in boys' physical fighting in a community sample by the ages 10 through 12. Moreover, the decreased prevalence of aggression was accompanied by lower frequency and duration of aggressive acts during that period (Cummings, Ianotti, & Zahn-Waxler, 1989). Adding support to Loeber and Stouthamer's (1998) notion, cross-sectional data (Tremblay et al., 1996) have shown that average physical aggression scores tend to decrease between ages 4 and 11.

Discontinuance of aggressive behavior continues to occur during adolescence and early adulthood (Elliott, 1994; Huizinga, 1995; Loeber & Stouthamer-Loeber, 1998).

Loeber and Hay (1997) followed a community sample of inner city boys and found that the prevalence of physical fighting started to decrease from ages 15 to 17. In a longitudinal study, Cairns, Cairns, Neckerman, Ferguson, and Gariepy (1989) showed a decrease in fighting among children from a small southern town, especially from grade 7 onward.

The probability of discontinuance is not the same for all youth. In studies on delinquency and antisocial behavior, the highest degree of stability can be found in those who are most deviant (Brennan, Elliott, & Knowles, 1981; Dunford, Elliott, & Huizinga, 1983; Farrington, 1973; Ghodsian, Fogelman, Lambert, & Tibbenham, 1980; Loeber,
Thus, desistance is more likely in less serious than more serious forms of aggression. Recently, Loeber and Farrington (1998) have shown that the prevalence of violence increases in late adolescence and early adulthood. Thus, they suggest that two developmental trajectories exist: while fighting decreases in one subgroup of boys, another subgroup escalates to violence.

The conceptualization of stability and desistance is easy to oversimplify. False positive errors in the prediction of stability are often considered evidence for desistance. However, this inference may be misleading because antisocial behavior and aggressive behavior are often episodic (Baiker-McKee, 1990; Lahey, Loeber et al., 1995; Loeber, 1991; Verhurst & Van der Ende, 1992), probably in response to individual motivations, provocations, incentives, and opportunities in juveniles’ social and physical environments (e.g., Le Blanc, 1996; Le Blanc & Frechette, 1989). It is not uncommon that juveniles temporarily cease displaying antisocial behavior including aggression, only to display the behavior again at a later point in time. Because most longitudinal studies do not regularly reassess participants over long periods of time, it is unclear whether youth who desist in aggression within a certain interval still run a substantial risk of adult violence.

Substantial evidence is available that desistance from physical fighting and aggression continues from childhood to adulthood. These findings concur with treatment studies showing aggressive behavior to improve with systematic interventions (Tate, Reppucci, & Mulvey, 1995; Wasserman & Miller, 1998). The literature on resilience has provided considerable information on the stability of aggression and the causes of desistance (Masten & Coatsworth, 1998); this literature will be reviewed in the ATX
section. Better knowledge about the causes of desistance from aggression will benefit those mental health professionals who are making dangerousness assessments with regard to youth in the juvenile justice system as well as provide further information as to the ATX construct.

Loeber and Stouthamer-Loeber (1998) have proposed a developmental pathway model to frame different age-of-onset groups of violence in one schema that builds on Moffitt's (1993; Moffitt et al., 1996) model. Specifically, two developmental pathways of violent individuals are proposed: (a) a life-course type, with two subtypes, (b) a limited duration type, and (c) a late-onset type.

Loeber and Stouthamer-Loeber (1998) described the life-course type as characterized by the development of aggression in children that persists and increases in severity from childhood to adulthood. These authors suggest that this type probably accounts for the largest proportion of violent individuals emerging later in life. Moffitt et al. (1996) offer supportive evidence of this typology. They found that 25 (71.3%) of those boys convicted of violent offenses prior to age 18 had developed a life-course persistent path characterized by extreme antisocial behavior across both childhood and adolescence. Very few (8 or 23.7%) of the violent offenders were classified as adolescent-limited. Interpretation of these findings are constrained by the small sample.

Loeber and Stouthamer-Loeber (1998) observed two subtypes of life-course type: a preschool onset subtype and a childhood-adolescent-onset subtype. The authors hypothesized that the preschool onset type might qualify for attention-deficit hyperactivity disorder (ADHD), which is implicated in the maintenance of antisocial
behavior and accelerates development of aggressive behaviors, conduct problems, and
substance use (see Bukstein, Brent, & Kaminer, 1989; Wilens, Biederman, Spencer, &
Frances, 1994). The second subtype of early onset cases usually does not qualify for the
diagnosis of ADHD. It is postulated that these boys show persisting oppositional
behavior early in life, which eventually spills over into aggression, covert problem
behavior, or both (Patterson, Reid, & Dishion, 1992).

The limited duration type is characterized by aggression that is outgrown by either
preschool-elementary school age period or in late adolescence-early adulthood. Loeber
and Stouthamer-Loeber (1998) proposed the late-onset type to account for the emergence
of violence in individuals during adulthood who do not have a prior history of aggression.
Two longitudinal studies (Farrington, 1978, 1994; Magnusson, Stattin, & Duner, 1983)
showed that a minority of adult violent offenders do not have an antecedent pattern of
aggressiveness early in life. Developmental models for violence have received
considerable attention since Moffitt. Reviewed below are the theories that exist regarding
developmental pathways toward violence.

**Developmental Pathways of Antisocial Behavior Including Violence**

In an effort to determine whether individuals’ development of antisocial behavior,
is orderly rather than haphazard, current models of developmental pathways are reviewed
for violence: An important question is whether a single pathway or multiple pathways
best capture individuals’ development of antisocial behavior (see Table 2). Researchers
(e.g., Farrington, 1991; Loeber et al., 1993; Patterson, 1992; Patterson et al., 1992;
1966) are divided as whether a single or multiple pathways to serious delinquent behavior have higher utility and validity.

Table 2

**Developmental Models for Antisocial Behavior, Including Violence**

<table>
<thead>
<tr>
<th>Theorist</th>
<th>Model</th>
<th>Childhood</th>
<th>Adolescence</th>
<th>Adulthood</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Covert</td>
<td>Minor covert Behavior</td>
<td>Property Damage</td>
<td>Moderate to Serious Delinquency</td>
</tr>
<tr>
<td></td>
<td>Authority Conflict</td>
<td>Stubborn behavior</td>
<td>Defiance/Disobedience</td>
<td>Authority Avoidance</td>
</tr>
<tr>
<td>Lynam (1996)</td>
<td>Psychopathy</td>
<td>Callous/Unemotional Traits</td>
<td>Antisocial behaviors/Physical Fighting</td>
<td>Violence</td>
</tr>
<tr>
<td>Moffitt (1993)</td>
<td>Life-course Persistent</td>
<td>Antisocial Behavior</td>
<td>Increase in Antisocial Behavior</td>
<td>Continuation Of antisocial Behavior Including Violence</td>
</tr>
<tr>
<td></td>
<td>Adolescent-limited</td>
<td>No antisocial Behavior</td>
<td>Antisocial Behavior in Adolescence</td>
<td>Discontinuation of Antisocial Behavior</td>
</tr>
<tr>
<td>Patterson (1992)</td>
<td>General Pathway</td>
<td>Disobedience</td>
<td>Physical Fighting</td>
<td>Stealing</td>
</tr>
<tr>
<td></td>
<td>Tantrums</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Specific ages are not provided for each of the stages of these theories. Rather, the developmental models are approximations of how children develop with tendencies to be violent.*
Some child researchers (e.g., Anderson, Hinshaw, Simmel, 1994; Frick et al., 1993; Loeber & Schmaling, 1985a, 1985b; Loeber et al., 1993; Stanger et al., 1997) advocate a distinction between overt and covert behavior problems, while others do not make such a distinction (Capaldi & Patterson, 1996). Overt problem behavior, such as aggression and violence, typically involves direct confrontation with victims and infliction or threat of physical harm. Covert problems, involve non-violent forms of delinquency, such as theft or fraud, that do not involve direct confrontation but rather involve clandestine and concealing behaviors.

Another important factor for the identification of single versus multiple pathways is whether developmental sequences of antisocial behavior can be established (Loeber & Stouthamer-Loeber, 1998). For example, Elliott (1994) documented a temporal model of escalation from minor to more major forms of violence. Moreover, Loeber et al. (1993) has shown developmental ordering with minor aggression (bullying and annoying others) showing the earliest age of onset, followed by physical fighting (including gangs), and finally violence (e.g., rape or robbery). Loeber and colleagues have proposed a triple pathway model that integrated both pre-delinquent behavior problems and delinquent acts, aimed at describing which youth are at highest risk of becoming chronic offenders. This model consists of: (a) an overt pathway, starting with minor aggression, followed by physical fighting, and then violence; (b) a covert pathway, consisting of a sequence of minor covert behaviors, followed by property damage (fire setting or vandalism), and moderate to serious forms of delinquency; and (c) an authority-conflict pathway prior to age 12, consisting of a sequence of stubborn behavior, defiance, and authority avoidance.
(truancy, running away, staying out late at night). These authors found preliminary support for their hypotheses with both African American and Caucasian boys. The developmental pathway in overt behavior was most closely followed by the youngest boys, whereas violent adolescents often appeared to start their overt behavior at the second step of the developmental pathway. This pathway model has been recently validated in two other longitudinal data sets (Tolan & Gorman-Smith, 1998).

Patterson and his colleagues (Patterson, 1992; Patterson et al., 1992) have postulated a single developmental pathway in antisocial behavior, starting with overt behaviors and transitioning to clandestine antisocial behavior. A common feature of the Loeber et al. and Patterson models is the worst cases engage in both overt and covert antisocial acts. Additionally, in both models many youth engage in less serious antisocial behaviors but that only a minority of youth progress to more serious behaviors. The two models also differ; Patterson et al.'s (1992) model, is largely concerned with pre-delinquent problem behavior and does not specify serious delinquent acts, such as robbery or burglary.

Psychopathy has emerged as a possible developmental pathway that eventually leads to violent behaviors. The most serious forms of antisocial behavior are apparently the result of psychopathy. The origins of aggression in psychopathy is thought to start early in childhood and result from callous and unemotional traits (e.g., Lynam, 1996; Moffitt et al., 1996; Thornberry, Huizinga, & Loeber, 1995).

Psychopathic traits have received relatively little systematic investigation as predictors of dangerousness. Frick, O'Brien, Wootton, and McBurnett (1994) proposed a
model for psychopathy and conduct problems in children. Similar to the adult construct for psychopathy (Hare, 1991), Frick et al.'s analysis revealed two dimensions: (a) impulsivity and conduct problems, and (b) interpersonal and motivational aspects of psychopathy. Unfortunately, no validation studies have been conducted on this two-factor model in relation to dangerousness.

In an early investigation, Robins (1966) followed Anglo American individuals seen 30 years prior at a childhood clinic for behavioral problems. The intent of the study was to search for childhood behavior patterns and environmental settings that, occurring together, predict enduring antisocial patterns. She found nineteen childhood behaviors/personality characteristics significantly related to sociopathic personality and persistent criminality in adulthood. Table 3 summarizes the percentage of youth who had each criteria and were later classified as sociopathic.

Robins found retrospectively that seven criteria were significantly high in only young sociopaths: (a) pathological lying, (b) lack of guilt, (c) recklessness, (d) sexual perversions, (e) incorrigibility, (f) staying out late, and (g) associating with "bad" companions. In addition, Robins found that the greater the frequency and variety of antisocial symptoms, the more likely the child would be classified sociopathic as an adult.4 Robins did not address the issue of dangerousness directly.

Utilizing a modified version of the Psychopathy Checklist (PCL; Hare, 1991), Forth, Hart and Hare (1990) investigated the relationship between adolescent psychopathy and institutional infractions and recidivism. Because the PCL was designed for the use with adult offenders, Forth et al. modified the PCL by dropping the items
Table 3

Robins (1966) Criteria for Children that were Later Found to be Sociopathic

<table>
<thead>
<tr>
<th>Criteria</th>
<th>PPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathological lying</td>
<td>.39</td>
</tr>
<tr>
<td>Lack of guilt</td>
<td>.38</td>
</tr>
<tr>
<td>Sexual perversion</td>
<td>.37</td>
</tr>
<tr>
<td>Impulsive behavior</td>
<td>.35</td>
</tr>
<tr>
<td>Truant</td>
<td>.34</td>
</tr>
<tr>
<td>Runaway behavior</td>
<td>.33</td>
</tr>
<tr>
<td>Physical Aggression</td>
<td>.32</td>
</tr>
<tr>
<td>Poor employment record</td>
<td>.32</td>
</tr>
<tr>
<td>Pre-marital intercourse</td>
<td>.31</td>
</tr>
<tr>
<td>Theft</td>
<td>.31</td>
</tr>
<tr>
<td>Incorrigible</td>
<td>.30</td>
</tr>
<tr>
<td>Stays out late</td>
<td>.30</td>
</tr>
<tr>
<td>'Bad' associates</td>
<td>.30</td>
</tr>
<tr>
<td>Reckless, irresponsible</td>
<td>.29</td>
</tr>
<tr>
<td>Sloveny</td>
<td>.34</td>
</tr>
<tr>
<td>Enuresis</td>
<td>.29</td>
</tr>
<tr>
<td>Average</td>
<td>.33</td>
</tr>
</tbody>
</table>

Note. PPP = positive predictive power.

"parasitic lifestyle" and "many short term marital relationships" due to their limited relevance to most juveniles. Forth et al. (1990) found that PCL-R scores were significantly related with the number of CD symptoms ($r = .64$), prior violent offenses ($r = .27$), and institutional infractions for violent and aggressive behavior ($r = .46$).

However, the PCL-R was poorly correlated with post-release violent offenses ($r = .26$).

Unfortunately, classification accuracy could not be calculated from the published data.

Rogers, Johansen, Chang, and Salekin (1997) examined ODD and CD symptoms as predictors of adolescent psychopathy for 81 adolescents from a residential treatment program for dually diagnosed offenders. They found that the number of aggressive CD
symptoms and total rate of deceit/theft symptoms were most predictive of adolescent psychopathy. Unexpectedly, Rogers et al. found that adolescent psychopathy was only modestly associated with institutional infractions. However, it is not known how these individuals performed once released into the community.

Knowledge of antisocial pathways can assist mental health professionals in predicting future criminal and violent behavior. A model with multiple developmental pathways seems most plausible, because of its specificity and comprehensiveness. Pathways allow clinicians to classify those participants that de-escalate, maintain a stable adjustment, and escalate to serious crime and violence. However, classification estimates will be required before the true efficacy of this method can be determined. An important step in this process will be sampling community youth to determine their performance based on developmental pathway knowledge. This will further our understanding of youth violence given that most samples utilized thus far already have violent histories.

Family Factors

Family factors are thought to affect levels of dangerousness in juveniles. Interactions between parents, children and their siblings often provide opportunities for children to acquire or inhibit antisocial behavior patterns. Loeber and Stouthamer-Loeber (1998) found that some family interactions are relevant specifically to overt and covert problem behavior.

Many children (especially boys) tend to be somewhat aggressive early in life. This aggression is mostly directed at siblings at home or at peers in preschool. Adults are thought to play a critical role in stemming this aggression and promoting prosocial
problem-solving strategies (Coe & Dodge, 1998). Patterson’s coercion theory
(Patterson, 1982; Patterson et al., 1992) has greatly improved the understanding of how
familial processes may foster aggressive behavior patterns in children. Patterson
demonstrated that adults’ responses to aggressive child behaviors follow an escape-
avoidance paradigm. To avoid escalation of children’s aggression, adults often fall into
the reinforcement trap of giving in to children’s aggression to reduce their own
discomfort. Children consequently are rewarded for aggression.

Several studies (e.g., McCord, 1979; Pulkkinen, 1983) have found that parental
conflict and aggression or a conflictual atmosphere in the home is related to offspring’s
personal or violent crimes rather than property crimes. Familial processes relevant to the
development of aggression in children may start even earlier in life. One study (Raine,
Brennan, & Mednick, 1994) reported that birth complications combined with maternal
rejection in the first year of life predicted violent offending at age 18, but the finding did
not hold for property offenders who had not committed violent crimes. It is also possible
for previously non-aggressive youth to acquire aggressive behavior patterns through
victimization by others within and outside of their families (Baumrind, 1991; Olweus,
1978).

Familial explanations of aggressive behavior do not necessarily extend to covert
acts. Patterson’s theory excluded the development of juvenile covert acts because these
“do not fit the coercion model based on escape-avoidance mechanisms” (Patterson et al.,
appear to be more relevant to the victims of the overt acts and the perpetrators of the
covert acts. For example, Pulkkinen (1983) found that physical punishment up to the teenage years was related to theft but not to violent offenses. It is assumed that physical punishment and authoritarian parenting enhance the likelihood of children becoming more clandestine in their actions.

Thus, the research indicates that some familial processes are related to overt problem behavior and violence whereas other familial processes are associated with covert problem behavior and property offenses. However, some of these relationships appear to be more complex than formerly thought. Despite family factors predictive power, using such criteria for the prediction of dangerousness is disconcerting given that additional punishment will result to individuals who have already been subjected to adverse conditions.

Current Risk/Dangerousness Assessment Technology

Risk assessment research on clinicians’ ability to predict dangerousness has yielded more optimistic results in recent years. What is referred to as the “second generation” of research focuses on the combination of actuarial and clinical approaches to prediction of violence and directly addresses the low base-rate problems inherent in these predictions (Barnum, 1996; Lidz, Mulvey, & Gardner, 1993; Monahan, 1982; Monahan & Steadman, 1994; Mossman, 1994; Rice, 1997). Current recommendations for risk assessments include (a) assessing probabilities and (b) addressing the type, severity, and frequency of the predicted violence (Barnum 1996, Grisso, 1995; Monahan, 1981, 1996; Steadman et al., 1993; Webster & Eaves, 1995). The use of standardized assessment instruments is an important element in efforts to improve the reliability and validity of
risk judgements. At a minimum, these measures serve as a checklist for clinicians to ensure that essential issues are evaluated. At best, they provide actuarial data on the probability of violence among juveniles with a given set of characteristics and circumstances. Thus far, most risk assessment research targets the dangerousness of adult psychiatric offenders (Barnum, 1996; Monahan, 1996; Rice, 1997).

Kruh and Brodsky (1997) have suggested that adult measures may be useful in the prediction of dangerousness for juveniles. They recommend the Violence Risk Assessment Guide (VRAG; Harris, Rice, & Quinsey, 1993; Rice, 1997; Webster, Harris, Rice, Cormier, & Quinsey, 1994). The VRAG provides standardized scoring for nine actuarial/demographic variables and three clinical variables. The twelve variables are composed of psychopathy, separation from parents by age 16, victim injury in index offense (negatively related), schizophrenia (negatively related), never married, elementary school maladjustment, female victim-index offense (negatively related), failure on prior conditional release, property offense history, age at index offense (negatively related), alcohol abuse history, and DSM-III personality disorder. Rice (1997) found the VRAG to be an effective measure for assessing risk in adult offenders. With an average follow-up period of 81.5 months, the VRAG had a PPP of 77%. This measure is untested in juveniles; moreover, it is difficult to know how several variables (e.g., schizophrenia, never married, and personality disorder) would apply to juveniles.

The HCL-20 (Webster, Douglas, Eaves, & Hart, 1997) is a newly developed instrument designed to predict risk of future violence, which may have some application to youth. The HCL-20 is a checklist of risk factors for adult violent behavior with 10
historical, 5 clinical, and 5 risk management variables. This measure has not been tested with youth but has shown some promise with adult offenders (Webster et al., 1997). A downward extension of the HCL-20 to juveniles would probably have limited effectiveness.

Measures of psychopathy might prove to be useful to risk assessments with juvenile offenders. Frick (1995) developed the Psychopathy Screening Device (PSD) for children aged 12 and under. No external validity studies have been conducted to date; its use with offenders in the juvenile justice system is unwarranted. Forth has developed a measure of psychopathy for adolescents, named the Psychopathy Checklist - Youth Version (PCL-YV). While the PCL-YV has undergone initial reliability and validity research, data are unavailable and the measure is reportedly still under development (Forth, personal communication, June 5, 1998).

Summary

Grisso and Tomkins (1996) stated that recent developments in the law have made risk assessment of violence a required professional ability for every clinical psychologist. This statement is particularly true for psychologists and psychiatrists involved in the assessment of juvenile waivers. Research has not yet elucidated criteria that are predictive of juvenile dangerousness. The two most compelling conceptualizations are (a) Moffitt's (1993) dual taxonomy of antisocial personality in youth and (b) Loeber and Stouthamer-Loeber's developmental pathways for violence. Moffitt highlighted the importance of preadolescent behavior for making differential diagnosis between the life-course-persistent and adolescent-limited types of antisocial teenagers. Yet the taxonomy
provides only vague indicators and personality traits relating to the typical antisocial child prone to more dangerous acts. Loeber and Stouthamer-Loeber’s model is promising, but further validation of predictors is required. Forth et al. (1991) have suggested that the classic psychopathic characteristics (e.g., manipulativeness, lack of empathy, and lack or remorse) are related to dangerousness but do not report the magnitude of this relationship.

Violent crime among juveniles is committed by a limited number of hard-core offenders. Less clear are personality, behavioral, and situational criteria to differentiate dangerous and non-dangerous offenders. Measurement of risk/dangerousness of juvenile offenders is in its early stages. No measures are sufficiently validated to identify adolescents at risk for future violence. As discussed, psychopathy as a construct appears to be moderately related to dangerousness in adults. With the development of child and adolescent measures, it will be useful to determine whether the use of psychopathy measures with juvenile offenders would be warranted.

Assessing Sophistication and Psychological Maturity

Juvenile waiver decisions rest on considerations of the adolescent's level of psychological maturity and sophistication. An element of the juvenile waivers indicates that adolescents who are thought to be mature or sophisticated, can be waived to the adult criminal courts. Despite the importance of "maturity" in waiver decisions, it remains a remarkably elusive and ill-defined construct among social scientists and legal scholars.

Ewing (1990) suggested that juveniles should be tested intellectually for sophistication and maturity utilizing IQ measures, such as the Wechsler's Intelligence
Scale for Children - Revised (WISC-R; Wechsler, 1981) and academic achievement measures such as the Wide Range Achievement Test - Revised (WRAT; Jastak & Wilkinson, 1984). In addition, he recommended the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & Mckinley, 1983), the Thematic Apperception Test (TAT; Murray, 1971), the Rorschach Inkblot, and the Millon Adolescent Personality Inventory (MAPI; Millon, Green, & Meagher, 1982).

Ewing avoided the most perplexing problems with sophistication-maturity: its definition and assessment. For assessment, what scales on the MMPI or the MAPI address sophistication-maturity? Similarly, what are the distinguishing features from the Rorschach and TAT responses for sophisticated and mature adolescents? Unfortunately, Ewing's recommendation does not advance our understanding of these constructs and may actually hinder sophistication-maturity evaluations, if they are not based upon theoretical and empirical evidence.

In psychological contexts, maturity has often been interchanged with mental health or social adjustment (Greenberger & Sorensen, 1974). Maturity has been considered the end product of personality development which emerges in benign familial or social environments. The best known theories of personality development are the stage theories of Freud (1958) and Erikson (1968) that emphasize a definite sequence to development. The following section briefly summarizes the main stage theories of maturity.
Stage Theories of Maturity

Freud (1958) provided one of the first stage theories for the development of personality. Freud developed a drive theory that was based on the emerging sexual and aggressive instincts, unavoidable frustrations, anxieties, and defenses centered around crucial pleasure-seeking, and tension-reducing prototypes at different ages. These stages consisted of the oral, anal, phallic, latency, and genital phases. Appropriate development required successfully mastering each phase of development.

According to Erikson's (1959) formulation of psychological development, a sequence of biological and closely associated psychological needs and impulses are met by varying social responses. In a favorable course of development, the individual achieves the following stages: a sense of basic trust, autonomy, initiative, industry, identity, intimacy, generativity, and integrity.

Erikson's definition of maturity appears dissimilar to what was propounded in Kent. However, the five Eriksonian stages of maturity may fit closely to juvenile waivers when slightly reconstrued. Specifically, the following stages may be related to sophistication and maturity for juvenile waivers: (a) autonomy (see Grisso et al., 1988), (b) initiative, (c) industry, (d) identity, and (e) ego integrity. Please refer to Table 5 for a description of Erikson's stages utilized in the Measures of Psychological Development (MPD; Hawley, 1988).
Table 4

Eriksonian Theory of the Development of Maturity as Described by Hawley (1988)

1. Autonomy:
- Good sense of, and command of, their will power
- Value themselves and control their own lives
- Are conscious of their ability to take independent action and exercise this ability with little hesitation
- Show a sense of pride at being able to do things their own way
- Take comfort in knowing that they are capable of making their own decisions
- Feel free to be themselves
- Are able to maintain their convictions even in the face of criticism
- Feel adequate in their sense of self control and power so they are not inclined to be controlled by others

2. Initiative:
- Believe they know how the world works and how to affect its workings
- Strong sense of purpose and a clear vision of what they want in life
- Action, competition, adventure, and experimentation are characteristic of these individuals
- Are generally models of effective self-initiated behavior, as demonstrated in projects and activities
- Portray a strong sense of motivation
- Characterized with ambition, energetic drive, a tendency to solve problems by planning and attacking, adventuromenness, and a tire-less "go-getting" quality

3. Industry:
- An active orientation toward learning, competence, and production
- Relish achievement in their work, skills, and abilities, which in its self is a source of pleasure and recognition
- Like to tackle tough jobs and see them to completion
- Demonstrate an eager absorption in the productive situation
- Determined striving toward the completion of activities

4. Identity:
- Have successfully examined their various roles and integrated them into one consistent identity
- Seek basic values and attitudes that cut across their roles as students, friends, workers, family members, and parents
- Are open to periods of re-evaluation of identity and effectively integrate their self-concepts with the way others see them
- Know who they are, where they are going, and what their goals and values are
- Have a sense of inner sameness and continuity over time
- Demonstrate a quality of psychosocial well-being - of being at home in one's body, work, family, affiliations, sex role
- An appreciation of their own uniqueness and individuality

5. Ego Integrity:
- Have a sense that their lives have had meaning and significance
- As they review their own histories, they experience a sense of integrity - dignity, practical wisdom, and belief in the order and community of life
- Accept the unique aspects of their own life cycles
- Are satisfied with their lives, work, and accomplishments
Erikson presented the five stages as progressive adaptation. However, it is also possible that youth could reach these levels of maturity in a more criminologic manner. By taking a few key descriptors from each stage, this picture becomes more clear. For example, autonomy could apply to juveniles "who have a good sense of, and command of their will power" in their choice to be involved in criminal activity.

Similarly, initiative could apply to criminals who "believe they know how the world works and how to affect its workings." They also may have "a strong sense of purpose and a clear vision of what they want in life." Psychologists may have different opinions of whether these facets equate to maturity.

Similar reconstructions could be made for other stages of Erikson’s model of maturity. Industry for the sophisticated-mature criminal may include "an active orientation toward learning, competence, and production" of criminal behavior. Identity for the sophisticated and mature criminal might mean that they "have successfully examined their various roles and integrated them into one consistent identity." However, ego-integrity may be unrelated to Kent because it occurs later in adulthood.

Piaget’s model of adolescent cognitive development emphasizes the development of abstract logical reasoning (Inhelder & Piaget, 1958). According to Piaget, the development of formal operational thinking enables the adolescent to engage in hypothetical, deductive, and abstract thinking at a level of sophistication not displayed before adolescence. As a result of these abilities associated with formal operational thinking, the adolescent is able to become less egocentric. This model appears to be unrelated to sophistication and maturity as delineated in Kent.
Derived partially from Piagetian theory, Kohlberg's (1964) model posits that individuals develop through qualitatively different stages of moral reasoning over the course of childhood and adolescence, from "preconventional" to "conventional" and finally "postconventional" thinking. In preconventional thinking, moral problems are understood in terms of immediate behavioral consequences. In conventional thinking, moral problems are understood by how actions are viewed by others, reflected in laws and social conventions. From a postconventional perspective, moral problems are viewed as abstract moral principles and matters of personal conscience. Kohlberg's model suggested that individuals who reason at higher levels of moral development are less likely to commit antisocial acts or conform to the pressures of others (Rest, 1983). Based on this evidence, those at the conventional level on Kohlberg's levels of maturity would not likely be in contact with the juvenile justice system at all.

Other stage theories of personality (e.g., Loevinger, 1968), also assume a fixed sequence of development. According to Loevinger, children progress through the following stages: (a) presocial, (b) symbiotic, (c) impulse-ridden, (d) opportunistic, (e) conformist, (f) conscientious, (g) autonomous, and (h) integrated. From this developmental theory, it is understandable that the majority of juvenile delinquents would not meet the criterion of maturity-sophistication, given that they are involved in more impulse-ridden and opportunistic behaviors.

Greenberger and Sorensen (1974) have developed a model of psychosocial maturity. According to these authors, maturity is defined as the capacity to function adequately on one's own, to contribute to social cohesion, and to interact adequately with others. Examples of the three models are presented in Table 5. The model has one
component that may be related to legal definitions of maturity-sophistication, namely individual adequacy. Addressing individual adequacy, self-reliance is the most basic characteristic that underlies adequate individual functioning. Self-reliance has three related facets: (a) absence of excessive reliance on others, (b) sense of control of one's own life, and (c) initiative.

1. **Absence of excessive need for social validation**, involves trust in one's own capacity to make judgements, and a reasonable willingness to take risks and make mistakes.

2. **Sense of control**, is a belief that one's own actions play a major role in manipulating the environment to serve one's own interests (Crandell, et al., 1965; Rotter, 1966).

3. **Initiative**, is defined as having a sense of control and the absence of excessive dependence of others.

The second component in the general classification of individual adequacy is **Identity**. Greenberger and Sorensen submit that mature individuals have a good sense of their beliefs and aspirations. The third component of Individual Adequacy is **Work Orientation**. Greenberger and Sorensen suggest that a Work Orientation is relevant to self-maintenance throughout the life span. Greenberger and Sorensen's model for psychosocial maturity is presented in Table 5. Specific criteria for each of the general classifications (e.g., identity and work orientation) are provided.
Table 5

**Greenberger and Sorensen's (1974) Model of Psychosocial Maturity**

**Individual Adequacy**

- Self reliance
  - Absence of excessive need for social validation
  - Sense of control
  - Initiative
- Identity
  - Clarity of self concept
  - Consideration of life goals
  - Self-esteem
  - Internalized values
- Work orientation
  - Standards of competence
  - Pleasure in work
  - General work skills

**Interpersonal Adequacy**

- Communication skills
  - Ability to encode messages
  - Ability to decode messages
  - Empathy
- Enlightened Trust
  - Rational dependence
  - Rejection of simplistic views of human nature
  - Awareness of constraints on trustworthiness
- Knowledge of Major Roles
  - Role appropriate behavior
  - Management of role conflict

**Social Adequacy**

- Social Commitment
  - Feelings of community
  - Willingness to work for social goals
  - Readiness to form alliances
  - Interest in long-term social goals
- Openness to Sociopolitical Change
  - General openness to change
  - Recognition of costs of status quo
  - Recognition of costs of change
- Tolerance of Individual and Cultural Differences
  - Willingness to interact with people who differ from the norm
  - Sensitivity to rights of people who differ from the norm
  - Awareness of costs and benefits of tolerance
Grisso et al. (1988) factor analyzed juvenile characteristics of juvenile offenders; they found a factor labeled "self-reliance and autonomy" was related to juvenile waivers to adult court. The items on this factor included: (a) sophistication, (b) maturity, (c) adult-like physical characteristics, (d) independence and self-reliance, (e) appearance of being cool and composed, and (f) knowledge of street survival. However, this factor does not delineate the criteria of sophistication and maturity. To clarify this point, Grisso et al. (1988) stated that these items should not be used as a simple checklist for juvenile waivers.

Clinical Approaches to Interpersonal Maturity With Delinquents

I reviewed juvenile maturity models and their relationship to juvenile waivers. Despite their focus on juvenile maturity, they offer little practical understanding of maturity regarding juvenile waivers. One clinical system has received considerable empirical research is the California I-Level (CIL) System. The CIL was conceptualized in relation to stages of personality development; it was subsequently elaborated upon by extensive clinical observation of delinquents (Sullivan, Grant, & Grant, 1957; Warren, 1969; Palmer, 1974).

The CIL is intended to differentiate three commonly occurring levels of interpersonal maturity among delinquents. Within these three maturity levels the system recognizes nine delinquent subtypes. The subtypes occurring at the most prevalent maturity levels (II, III, and IV) and their principal reaction patterns are set out in Table 6. Although nine subtypes are differentiated, according to the data provided by Jesness and DeRisi (1971) and Warren (1969), the two neurotic subtypes, the Immature Conformist,
Table 6
The Nine Delinquent Subtypes of the California I-Level System (Warren, 1969)

<table>
<thead>
<tr>
<th>Maturity Level 2</th>
<th>Maturity Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asocial, Aggressive</td>
<td>Immature Conformist</td>
</tr>
<tr>
<td>Responds with active demands and open hostility when frustrated</td>
<td>Responds with immediate compliance to whomever seems to have the power at the moment</td>
</tr>
<tr>
<td>Asocial, Passive</td>
<td>Cultural Conformist</td>
</tr>
<tr>
<td>Responds with whining, complaining, and withdrawal when frustrated</td>
<td>Responds with conformity to a specific reference group of delinquent peers</td>
</tr>
<tr>
<td></td>
<td>Manipulator</td>
</tr>
<tr>
<td></td>
<td>Operates by attempting to undermine the power of authority figures and/or usurp the power role</td>
</tr>
<tr>
<td></td>
<td>Neurotic, Acting-out</td>
</tr>
<tr>
<td></td>
<td>Responds to underlying guilt with attempts to escape or avoid conscious anxiety and condemnation of self</td>
</tr>
<tr>
<td></td>
<td>Neurotic, Anxious</td>
</tr>
<tr>
<td></td>
<td>Responds with symptoms of emotional disturbance to conflict produced by feelings of inadequacy and guilt</td>
</tr>
<tr>
<td></td>
<td>Situational Emotional Reaction</td>
</tr>
<tr>
<td></td>
<td>Responds to immediate family or personal crisis by acting-out</td>
</tr>
<tr>
<td></td>
<td>Cultural Identifier</td>
</tr>
<tr>
<td></td>
<td>Responds to identification with a deviant value system by living out his or her delinquent beliefs</td>
</tr>
</tbody>
</table>

the Cultural Conformist, and the Manipulator comprise about 85% of the delinquent population.
The CIL System appears to have little relevance to the sophistication-maturity construct. It may have more relevance to the dangerousness and ATX constructs, because it measures levels of passivity, compliance, aggression, and manipulation. The system does have one level of its maturity (cultural identifier) which considers the degree to which a youth identifies with a deviant value system by living out his/her delinquent beliefs.

Jesness (1974) attempted to categorize juvenile offenses under three basic levels. See Table 7 for a description of Jesness's levels of maturity. Rogers and Mitchell (1991) criticized the Jesness model questioning whether these three levels capture increasingly higher levels of maturity. This criticism is true for all the juvenile-specific measures of maturity. Rather than levels of maturity, these measures address antisocial personalities and manipulation. Again, the problem with the Jesness model is that compliance and manipulation do not necessarily relate to the Kent sophistication-maturity construct.

Maturity of Judgement

Maturity of judgement is an important construct, recently examined in the law-psychology arena. What makes it relevant to juvenile waivers is its focus on the maturity of decision making. Steinberg and Cauffman (1996) suggested essentially two important components to maturity of judgement: (a) cognitive maturity and (b) social/emotional maturity. While cognitive factors were studied, little research has been conducted on the psychosocial aspects of maturity. Steinberg and Cauffman suggested three important components of emotional maturity including: the development of responsibility, temperance, and perspective.
Table 7

**Jesness (1974) Levels of Maturity for Juvenile Delinquents**

<table>
<thead>
<tr>
<th>Maturity Level 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Perceive the world in an egocentric manner.</td>
</tr>
<tr>
<td>2.</td>
<td>Are unsocialized with impulsive behavior.</td>
</tr>
<tr>
<td>3.</td>
<td>Are concerned mostly with the satisfaction of their own needs.</td>
</tr>
<tr>
<td>4.</td>
<td>Delinquency seems to stem from poor impulse control or inability to cope with external pressures, including those exerted by peers.</td>
</tr>
<tr>
<td>5.</td>
<td>Individuals at this level are divided into those who act out in a hostile or aggressive manner and those who complain and passively withdraw</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maturity Level 3</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Seek structure in terms of roles and formulas, and perceive conflicts between him/herself and the environment.</td>
</tr>
<tr>
<td>2.</td>
<td>Attempt to meet their needs either through outwardly conforming to authority or by &quot;conning&quot; and manipulation.</td>
</tr>
<tr>
<td>3.</td>
<td>Typically there is a denial of personal problems which is externalized onto the immediate environment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maturity Level 4</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Have internalized a standard for their and others' behavior.</td>
</tr>
<tr>
<td>2.</td>
<td>Many experience guilt and internal conflicts over their deviant behavior.</td>
</tr>
<tr>
<td>3.</td>
<td>Others within this category avoid such conflict through identification and adoption of delinquent models of behavior.</td>
</tr>
<tr>
<td>4.</td>
<td>For some, delinquency is a form of acting out of either a family problem or a long-standing conflict.</td>
</tr>
<tr>
<td>5.</td>
<td>Others experience less conflict in their display of deviant behavior which is either situationally based for consistency with the values of a delinquent subculture.</td>
</tr>
</tbody>
</table>

Steinberg and Cauffman described responsibility as related to healthy autonomy, self-reliance, and clarity of identity that provide insight into decision making processes. Temperance includes the ability to limit impulsivity, avoid extreme decision making, and to evaluate a situation thoroughly before acting. Perspective is the ability to acknowledge the complexity of a situation and to frame it within a larger context. Little research has been conducted on these three components.
Related to maturity of judgment is what Goleman (1995) has referred to as "emotional intelligence." He argued that emotional intelligence is at least as important as cognitive intelligence. Emotional intelligence includes such items as (a) the ability to identify, experience, and manage feelings, (b) impulse control, (c) reading social cues, and (d) identifying alternative actions before acting. The relationship of emotional intelligence to transfer evaluations is not established. Individuals high in emotional intelligence may engage in more planned crimes. Weighing alternatives before committing an antisocial act is likely a sign of maturity.

Maturity and Sophistication Assessment Technology.

No standardized measures exist for the assessment of maturity and sophistication in the legal context. This lack of measurement for the sophistication-maturity construct is not surprising because the construct is not well understood. Moreover, most conceptualizations of maturity include prosocial items that are counter to delinquents' behavior.

Kruh and Brodsky (1997) and Ewing (1990) have suggested the following measures to assess cognitive and behavioral maturity: (a) intelligence tests, (e.g., Wechsler Intelligence Scale for Children - Third Edition; Wechsler, 1991), (b) achievement tests, (e.g., Kaufman Test of Educational Achievement or K-TEA; Kaufman & Kaufman, 1985), and (c) behavioral measures (e.g., Vineland Adaptive Behavior Scales; Sparrow, Bala, & Cached, 1984). While useful to assess, intelligence and achievement are only marginally related to the Kent criteria of sophistication-maturity.
Kruh and Brodsky (1997) recommended the Jesness Inventory (Jesness, 1983, 1997) as a measure of adolescent maturity but did not state how its results might inform maturity judgements. The authors also suggested that assessments of maturity might also include Kohlberg’s (1981, 1984) moral reasoning framework or Selman’s (1980) perspective taking model. Again, lower levels of maturity on these measures would paradoxically be more indicative of transfer to adult court than higher levels of maturity.

Jesness (1974) model of maturity has very little relevance to the sophistication-maturity construct. One issue is the stability of the construct; Jesness (1974) found only modest evidence of test-retest reliability (51% agreement) for the subtypes. The test-retest period ranged from 3 to 12 months.

Jesness's (1974) tested the construct validity of his measure with Campbell and Fiske’s (1959) multitrait-multimethod approach. However, he provided no justification for the measures used to validate his construct. For example, Maturity level correlated with level of I.Q. at $r = .36$ while internal locus of control at $r = -.38$. Other psychometric measures, such as the California Personality Inventory (CPI; Gough, 1957), the Eysenck Personality Inventory (EPI; Eysenck & Eysenck, 1975), the Progressive Matrices, and a Behavior Checklist did not show substantial evidence of construct validity. More specifically, discriminant validity coefficients often exceeded that of convergent validity coefficients.

A similar model to Jesness was developed and tested by Reitsma-Street (1984, 1988); the Conceptual Level Matching Model (CLMM) measures maturity via a semi-projective measures referred to as the Paragraph Completion Method (Hunt, Butler, Noy,
& Rossor, 1978) or the Paragraph Completion Test (Sechrest, White, & Brown, 1979).

Conceptually, levels of maturity are most closely aligned with that of Loevinger ego
development and Kohlberg's moral development. With both methods, juveniles' responses to incomplete phrases are scored on predetermined criteria. The methods appear to have good inter-rater reliability and has been shown to be useful in the placement of young offenders. According to Rogers and Mitchell (1991), the CLMM model appears to be the most appropriate at providing some standardized measure of maturity. While CLMM may provide further information regarding morality, it does not capture other aspects of maturity, such as self identity and autonomy.

Ewing (1990) subdivides maturity assessment into cognitive and emotional maturity. For the cognitive evaluation, he suggested standard IQ testing. Cognitive deficits and learning disabilities may disrupt knowledge acquisition and contribute to immaturity. For emotional maturity, he calls for a detailed psychosocial history, an assessment of current functioning, and mental status through interviews with the juvenile and his/her family, and projective and self-report personality measures. The goal is to obtain “useful indications of the juvenile's internal controls, ability to organize thoughts coherently, and reality testing” (p. 9).

Benedeck (1985) has stressed the need to include an extensive evaluation of the family in the maturity assessment. While her suggestions are useful in thinking about maturity for juvenile waivers, they were not tested empirically. Predictive validity must be established for the maturity-sophistication construct to improve courtroom decision-making. While the aforementioned approaches are important, equally important from an
ethical standpoint, is the assessment of the juvenile’s maturity in the context of his/her ability to understand and appreciate his or her wrongdoing and participate adequately in the proceedings of the criminal justice system.

Summary

Sophistication—maturity in the legal sense is not well understood. Many psychological theories are stage theories that focus on healthy development of people. According to Rogers and Mitchel (1991), grappling with the maturity, treatability and dangerousness constructs is a difficult and possibly paradoxical dilemma. That is, the least mature individuals would be viewed favorably and less likely to be transferred to adult court because of their "childlike" presentation. However, this lack of maturity may make the individual less treatable and possibly more dangerous. Alternately, older and more mature juveniles, despite greater treatment potential, may be viewed as "adults" and transferred to a system where treatment resources are unavailable or scarce. Moreover, these individuals may be less dangerous, due to their maturity and ATX. Despite this line of thinking, it should not be concluded that individuals who continue to commit crimes also mature. In this situation, the individual is accepting of their involvement in crime and thus higher levels of maturity might indicate less ATX. In addition, these individuals might also be more dangerousness.

Amenability to Treatment

Transfers to adult criminal courts require consideration of whether a juvenile is unamenable for treatment. Because ATX is not well defined, prediction of treatment effects with juvenile offenders is thwarted. As it stands, an important step in the ATX
construct is understanding what client characteristics are predictive of positive and negative treatment outcomes.

Kazdin's (1985; 1987; 1994) successive reviews of interventions with antisocial youth found little research that systematically examined client characteristics as they relate to treatment outcome. While some studies have taken into account demographic variables (e.g., age, ethnicity, and IQ) or behavioral characteristics (e.g., number of convictions), less research has been conducted on attitudinal factors and personality characteristics related to ATX.

Kazdin, Bass, Ayers, and Rodgers (1990) reviewed 223 studies spanning a 19-year period (1970-1988) with regard to treatment outcome for both internalizing and externalizing disorders. Overall, the bulk of child and adolescent psychotherapy literature has focused on evaluating some facet of treatment approach or technique and have rarely investigated the predictiveness of youth characteristics.

Several other reviews of treatment are related more specifically to delinquency (Basta & Davidson, 1988; Garrett, 1985; Izzo & Ross, 1990). They offer quantitative treatment-outcome summaries but do not address patient characteristics and ATX. A meta-analysis by Izzo and Ross (1990) of 46 delinquency intervention studies concluded that factors, such as cognition, self-evaluation, expectations, understanding and appraisal of the world, and values are important to treatment. However, Izzo and Ross did not indicate whether these characteristics differentiated ATX. They recommended that teaching offenders to think logically, objectively, and rationally without over
generalization, distorting the facts, or externalization of blame may be an important step toward improving adolescents' outcome.

Lipsey (1992) found that 64% of the 443 adolescent studies of institutional and community-based treatment programs showed a reduction in recidivism relative to comparison groups. A literature review by the National Council on Crime and Delinquency (OJJDP, 1995, p. 141) concluded that “the most effective programs are those that address key areas of risk in the youth’s life, those that seek to strengthen the personal and institutional factors that contribute to healthy adolescent development, those that provide adequate support and supervision, and those that offer youth a long-term stake in the community.”

Garrett (1985) also conducted a meta-analysis of 111 delinquency studies and found that treatment resulted in an improvement in institutional adjustment, psychological adjustment, and educational attainment. Moreover, recidivism was modestly reduced. Garrett found no consistent evidence on the relative efficacy of behavioral versus psychodynamic approaches. However, the average effect size ($d = .37$) was small suggesting that many juveniles did not benefit from treatment. Unfortunately, the review did not investigate characteristics which improved ATX.

Several studies not reviewed in the aforementioned meta-analyses provide some information that advances the ATX construct. Adams (1970) conducted a study with 400 young offenders held by the California Youth Authority in which the clinical staff evaluated the clients with regard to their ATX. Amenable youth were described as being intelligent, verbal, anxious, insightful, and aware of their difficulties, and wanting to
overcome them. Carlson, Barr, and Young (1994) investigated 84 youth diagnosed with CD to determine whether staff assessments of ATX and other predictors were associated with favorable treatment outcomes. The authors found that amenable clients were cooperative and complied with rules. Grisso et al. (1988) suggested that ATX in juvenile transfers was most often associated with a lack of motivation to change and prior offenses. According to court personnel, treatability was not distinct from that of public safety issues.

Given the paucity of research on juvenile offenders and ATX, information from the adult literature will be utilized to provide a more comprehensive review. Numerous prognostic and personality variables have been investigated: the degree of the disturbance, life situations, support systems, expectancies for improvement, motivation for treatment, and ego strength.

Degree of Disturbance and Related Variables to Outcome.

Personality disturbance and psychopathology are the most frequent client variable evaluated in relation to treatment outcome. In general, these studies have indicated that individuals with more serious levels of disturbance have poorer outcomes (Barron, 1953; Beckham, 1989; Kazdin, 1987; Shea, Pilkonis, Beckham, Collins, Eklin, Sotsky, & Docherty, 1990; Sloane, Staples, Cristol, Yorkston, & Whipple, 1975; Steinmetz, Lewinsohn, & Antonuccio, 1983; Sullivan, Miller, & Smelzer, 1958).

Severe conduct problems including aggression have been considered difficult to treat (Loeber & Stouthamer-Loeber, 1998; Kazdin, 1987, 1994). Researchers have noted the stability of severe conduct problems, poor prognosis, and the continuation of the
dysfunction across generations (IOM, 1989; Kazdin, 1987). Severe conduct behavior appears to be related to aggression (Loeber & Stouthamer-Loeber, 1998; Moffitt, 1993). The research on aggressive and antisocial behavior in adolescents has identified processes that may underlie aggressive behavior. For example, Dodge and his colleagues identified an empathy problems in adolescents, which they refer to as “attributional bias” (Dodge, Price, Bachorowski, & Newman, 1990; Dodge & Somberg, 1987). Aggressive youth appear to be unable to understand ambiguous situations and tend to view them as hostile. This lack of cognitive empathy and their attributional bias can lead to aggression. These maladaptive cognitions tend to be difficult to treat.

Youth who engage in antisocial behavior and their families may be classified in subgroups by their ATX. As described in the Dangerousness Section, studies have tested different subtypes of conduct disorder: (a) aggression versus theft (Patterson, 1982); (b) reactive versus proactive aggression (Dodge, 1991); and (c) overt versus covert aggression (Loeber & Stouthamer-Loeber, 1998). With regard to severe conduct problems, coercive parent-child interactions are likely to occur in their homes (Dodge, 1991); therefore, these youth are likely to be less amenable in situations where treatment did not include home/parent interventions. To date, few studies have attempted (a) to match patterns of antisocial behavior and various treatments or (b) to test predictions of child characteristics and treatment interactions.

The factors that predispose children and adolescents to antisocial behavior and affect their ATX have been studied extensively in the context of community samples, clinical referrals, and adjudicated delinquents (see Pepler & Rubin, 1991; Robins &
Diverse factors (see Kazdin, 1987) were identified related to the child (e.g., temperament, early onset of unmanageable behavior, empathy), parents (e.g., criminal behavior and harsh child rearing practices), and family (large family size, and marital discord).

As mentioned in the section on dangerousness, not all individuals at risk will show later dysfunction. Protective factors refer to influences that may cancel or attenuate the influence of known risk factors (Rogers, 1998). Researchers have identified protective factors by studying groups known to be at risk because of several risk factors and by identifying a subgroup that does not later evince the disorder. For example, in a longitudinal study from birth through young adulthood, youth were identified as at risk for delinquency, based on risk factors (Werner, 1987; Werner & Smith, 1992). Protective factors for those at-risk youth were the following: (a) first born, (b) perceived by their mothers as affectionate, (c) show high self-esteem and internal locus of control, (d) have caretakers in the family other than the parents, and (e) have a supportive same-sex model who provided structure.

The personality construct of psychopathy has been identified by Lyyken (1995) as a serious form of antisocial psychopathology. Psychopathy, as measured by the Psychopathy Checklist - Revised (PCL-R; Hare, 1991) has differentiated between negative and positive treatment responders in adult offenders (Harris, Rice, & Cormier, 1994). Extrapolating from the adult literature, research with juveniles might also show that high scorers are not amenable to treatment. Indirect evidence of this lack of treatability can be found in the psychopathy literature. Wootton, Frick, Shelton, and
Silverthorn (1997) found that callous-unemotional traits resulted in conduct problems irrespective of parenting effectiveness. Treatment of those with callous-unemotional traits may hamper intervention. Callous and unemotional traits include: (a) absence of empathy, (b) a lack of guilt, (c) callous use of others, (d) manipulativeness, (e) bragging, and (f) emotional constrictiveness. Again, outcome studies have not addressed these traits in relation to treatability.

Other research (e.g., Patterson, 1986; Patterson, Capaldi, & Bank, 1991) has shown that family influences have a significant impact on the development of antisocial behavior. Separate models have been developed to explain how (a) parents train antisocial behavior in the home; (b) the impact of the child’s coercive interactions and noncompliance on self-esteem, peer relations, and academic performance; and (c) the impact of stressors on maternal discipline practices. They found, for example, that inept discipline practices and coercive parent-child interactions foster increasingly aggressive child behavior.

Elliott, Huzinga, and Ageton (1985) conducted a longitudinal study of delinquency and drug use in the United States. The sample included youth ages 11-17 who were evaluated annually in an attempt to predict self-reported delinquency and drug use three years later. Key findings included (a) bonding to deviant peers resulted in later delinquency and (b) weak conventional bonding (i.e., poor connections with family and school) contributed to deviant bonding. Thus, one antecedent to delinquency is a breakdown in connections at home, school, and family that affect level of psychopathology and ATX.
Ego Strength and Outcome

Ego strength is mentioned frequently by psychodynamically oriented therapists as a correlate of positive treatment outcome. In a long-term study of psychoanalytic methods, clinical appraisals of ego strength showed a small positive correlation with a measure of global improvement ($r = .35$) (Kernberg et al., 1972). From an entirely different perspective, Barron (1953) also noted a relation between ego strength and treatment outcome based on the ES scale of the MMPI. However, research has generally failed to replicate these findings with Barron's MMPI scale (Fiske, Cartwright, & Kirtner, 1964; Gallagher, 1954; Getter & Sundland, 1962; Gottschalk, Fox, & Bates, 1973).

Klopfer, Kirkner, Wisham, and Baker (1951) developed the Rorschach Prognostic Rating Scale (RPRS) for examining ego strength. In a review of the RPRS and treatment outcome, Garfield (1978) found 8 studies with positive and 3 with negative results. In a more recent review, Luborsky, Crits-Christoph, Alexander, Margolis, & Cohen (1988) found that 6 studies with positive results and 3 with nonsignificant results. No published studies have been conducted with juveniles with the RPRS. Despite more positive than negative findings, no conclusions can be drawn about its applicability to juvenile treatability. Even with adults, results have considerable variability with substantial overlaps between improved and unimproved clients.

Relationship of Anxiety and Stress to Treatment Outcome

The presence of anxiety at the initiation of therapy has been noted as a positive prognostic sign (Kernberg, Burstein, Coyne, Appelbaum, Horwitz, & Voth, 1972; Luborsky, Singer, & Luborsky, 1975). However, the type and severity of anxiety should
also be considered, as well as the stimuli that influence it. Smith, Sjoholm, and Nielsen (1975) found patients who manifest anxiety in relation to their current situation or stress appear to have a better treatment outcome. Similarly, Moras and Strupp (1982) found that positive responders to treatment showed high levels of subjective distress whereas negative responders showed low levels of subjective distress. This observation might be true for juvenile waivers, although no empirical research directly addresses this issue.

Affiliation and Hostility and Treatment Outcome

Filak, Abeles, and Norquist (1986) investigated whether clients’ affiliation-hostility dimension would have a significant impact on therapy outcome. They found that an affiliative stance often had a highly successful outcome when compared to a hostile interpersonal stance. This is a particularly important issue with juveniles given that they may have more hostility than those who seek treatment in the community because their treatment is mandated rather than voluntary.

Motivation for Treatment

Motivation for treatment has been emphasized both in terms of treatment continuation and outcome. Keithly, Samples, and Strupp (1980) found significant relationships between motivation and treatment outcome. Grisso et al. (1988) found this to be one of the items that was indicative of amenability to treatment in their survey although they did not have any specific data on outcome. Other research (e.g., Butcher & Koss, 1978; Malan, 1963, 1976; Sifneos, 1972), has not supported the importance of motivation to treatment. Moreover, only one juvenile study (Carlson et al., 1994) reviewed earlier in this section, found motivation for treatment to be an important factor.
Expectations and Outcome

Frank and his colleagues were among the earliest to call attention to client expectancies and their relation to symptom change (Frank, 1959; Frank, Gliedman, Imber, Stone, & Nash, 1959; Rosenthal & Frank, 1956). They asserted that the (a) expectations about psychotherapy may influence the results of therapy, and (b) the greater the distress, the greater the expectancy of such relief. To my knowledge, only the Carlson et al. (1994) study has found that expectancies were an important factor with regard to the amenability of the juvenile for treatment.

Other studies (Goldstein, 1960; Lennard & Bernstein, 1960) have found significant correlations between expectancies of improvement in patients and perceived improvement. Friedman (1963) observed a direct relationship between expectancy and symptom reduction. Subsequently, additional studies and critical reviews appeared (Lick & Bootzin, 1975; Morgan, 1973; Wilkins, 1971, 1973, 1979) that underscored deficiencies in previous studies. In summary, the mixed results do not address juvenile expectations and treatment outcome.

Intelligence and Outcome

No minimum requirement of intelligence has been established for successful psychotherapy. However, certain types of therapy may require more highly intelligent clients. Psychoanalysis is one such example (Garfield, 1994; Reder & Tyson, 1980; Weber, Solomon, & Bachrach, 1985). On the other hand, behavioral therapists have not been concerned with this matter.
In the review by Luborsky et al., (1975), 10 of 13 studies evidenced a positive correlation between intelligence and outcome in psychotherapy. Where reported, these correlations were modest ranging from .26 to .46. The Meltzoff and Komrech (1970) review yielded very different results: 7 positive and 8 non-significant findings.

In summary, psychotherapy is a learning process with some minimum level of intelligence required. As yet no precise estimate has been established. This relationship has not been explored with adolescents in the juvenile justice system. It is possible that younger patients might be more malleable and susceptible to change although this has not been systematically investigated.

**Family Factors and Outcome**

This section is brief because the dangerousness section covers much of the family factors that contribute to the chronicity of antisocial behavior in youth. Similarly, the earlier section on Severity of Psychopathology addressed the importance of protective factors and resilience (Masten & Coatsworth, 1998). In essence, parents' resistance to viewing a youth's problems, at least in part, as a symptom of family difficulties can be a negative factor for ATX. Kazdin (1985) and Roberts (1989) concluded that assessment of parents' expectations of treatment for their adolescent children may be useful clinical information regarding ATX.

Parent's expectations of their children's socialization might also be important. Specifically, some children have never been socialized by their parents to be honest and respect the property of others. This lack of socialization is common among neglectful parents or parents who hold an indistinct or a weak moral stance. The promotion of
honesty and respect for others’ property can be best instilled by parents’ teaching and modeling prosocial alternatives to dishonesty and theft. At the same time, it should be recognized that some covert acts, especially lying, often evolve from prior problem behavior, overt or covert. Children’s lying, in these instances, resembles an escape behavior that serves to minimize the chances of detection and punishment by adults.

**Protective Factors**

Despite the emphasis on predictive factors of violence in juvenile waivers, an equally important issue is the identification of protective factors for both the prediction of dangerousness and ATX. Protective factors are those that decrease the likelihood of violent behavior (Rogers, 1998). Recently, many researchers (e.g., Hoge et al., 1994; Luthar 1993, Rae-Grant, Thomas, Offord, & Boyle, 1989) have focused on resilience. These research efforts have focused on factors that reduce or ensure that the same risk conditions do not produce negative outcomes such as violence. Luthar (1993) and Masten et al. (1988) have suggested that the term “compensatory factor” be used where their is a main effect and the term “protective factor” be used in those cases where there is an interaction. Thus, researchers have searched for protective or compensatory factors that serve to ameliorate or otherwise modify the effects of risk factors.

In studies of general clinical dysfunction, Masten and Coatsworth (1998) have identified factors that increase resilience to risk and foster competence and adaptive outcomes. Salient factors that promote resilience of high-risk youth include (a) stable care from a competent adult, (b) good learning and problem solving skills, (c) good academic achievement, (d) social responsiveness to others, (e) self regulation, and (f)
competence and perceived self-efficacy. In general, the study of risk and protective factors is important not only for describing the characteristics of ATX but also for providing the framework for the design of prevention efforts.

Stouthamer-Loeber, Loeber, Farrington, Zhang, van Kammen, and Maguin (1993) explored a broad range of risk and protective factors in relation to various indices of delinquency of boys between 7 and 14 years of age. Family variables such as supervision/disciplinary practices, parent-child relations, and parental stress were examined. They found that the supervision/disciplinary practices and parent-child relation factors served as protective factors for youth at high risk.

Other research has also examined protective factors and found that some variables work toward protecting children who are at risk. For instance, Rae-Grant et al. (1989) found that social competence worked as a protective factor. Luthar (1991) found that intelligence and personality attributes were protective factors for at risk youth.

Hoge et al. (1996) explored risk and protective factors with regard to how they affect outcome of juvenile offenders. The three risk factors were family relationship problems, problems of parenting and parental problems. The authors found that positive peer relations, good educational performance and effective use of leisure time served as buffers in the presence of risk factors. In addition, positive response to authority also served as a protector. These findings suggest that attitudinal variables constitute important factors in criminal activity and should also be considered in the development of the ATX construct.
ATX Assessment Technology

Little empirical support and no assessment tools exist for the assessment of juveniles' ATX. Suggestions for structuring the evaluation of ATX are based on clinical experience (Kruh & Brodsky, 1997). Barnum (1987) suggested that clinicians measure ATX using (a) signs of low risk for career criminality and (b) treatable violence-related psychopathology, such as depression and post-traumatic stress. Grisso (1996) and Kinscherff and Tobey (1995) have also supported this approach. Melton et al. (1997) recommended assessing four broad domains for ATX including family, community, academic/vocational, and personality functioning.

Grisso (1995) suggested that clinicians develop a diagnostic and dynamic conceptualization of the offense causes from the juvenile's history, family functioning, and psychological test results. Assessment issues include: (a) previous trauma or threatening life situations, (b) situational details of the crime, and (c) positive relationships with significant others, including gangs (Kinscherff & Tobey, 1995). According to Grisso (1995), through careful consideration of the juvenile's traits that might facilitate or hamper treatment, empirically and clinically supported interventions should guide the ATX recommendation.

Summary

A pervasive problem in ATX research is that studies do not adequately define adolescents who are amenable or not amenable to treatment. The few exceptions have investigated a very narrow range of characteristics (e.g., motivation for treatment and expectancies). These studies lack long-term follow-up data across multiple assessments.
to address the ATX question. Given the lack of data, Mulvey's (1984) conclusion is well taken, "clinicians are placed in the role of 'expert' knowing all too well that their expertise is frequently based more on intuitive hunch and personal values than on empirical evidence" (p. 195).

Basta and Davidson (1988) suggested that future research address the question of "what works with which juveniles under which conditions?" Empirical investigation could guide ATX determinations that are now solely based on clinical experience and intuition. The development of the ATX construct might also include characteristics that represent both its presence and absence. Previous treatment efforts have focused on socialization. It would also be useful to develop and examine treatment efforts that focused directly on recidivism. Further protective and compensatory factors are important considerations in this construct development. The development of a valid and reliable offender treatment methods matched to specific delinquent subgroups should be considered the primary long-term goal. However, as indicated by Kruh and Brodsky (1997), this research effort is massive in scope.

The Current Study

A primary goal of the present study is the clarification of three "fuzzy" constructs that are utilized in juvenile waivers: (a) the dangerousness of juveniles; (b) their sophistication and maturity; and (c) their ATX. A second purpose of this study is to determine which characteristics are found to be most typical of actual juvenile waivers. Establishment of the item domain is the first step required in construct validation (Clark & Watson, 1995; Foster & Cone, 1995; Messick, 1995). Comparisons can then be made
between the three constructs intended to guide juvenile waivers and the characteristics typically found in those youth actually transferred. One method for determining the core criteria of fuzzy constructs is through prototypical analysis (Rosch, 1978). Before describing the process of prototypical analysis, a brief description of the item generation is provided below.

Sampling of the Domain

Clark and Watson (1995) present a cogent analysis of construct validity in relation to scale development. When developing constructs, they recommend that the basic construct be defined as clearly and thoroughly as possible via relevant literature and previously used methodology. The review should include previous attempts to conceptualize and assess both the construct in question and related constructs.

In the current study, this process was conducted for dangerousness, sophistication-maturity, and ATX. For example, the literature review included investigations of (a) dangerousness, (b) related disorders, such as ODD, CD, and psychopathy, but also (c) less violent constructs related to human development (Masten & Coatsworth, 1998). The same expansion of items with regard to sophistication-maturity and immaturity were conducted. For example, the search included sophistication-maturity, psychological stage theories of maturity, moral development, and newer constructs, such as maturity of judgement and emotional intelligence (Goleman, 1994; Steinberg & Cauffman, 1995). As pointed out by Clark and Watson (1995), a good theory articulates not only what a construct is, but also what it is not. The importance of a comprehensive literature review can not be overstated. First, a comprehensive review serves to clarify the nature and
range of the content of the target constructs. Second, a literature review may help to identify problems with existing measures.

Creation of the item pool is a crucial stage that involves sampling systematically all content potentially relevant to the target construct. Loevinger (1957) suggested that the initial pool should (a) be broader and more comprehensive than one’s own theoretical view of the construct, and (b) include content that ultimately will be shown to be tangential or even unrelated to the core construct. The logical underpinning of this system is that subsequent analyses can identify unrelated or weak items that should be dropped. If undersampling occurs, researchers are powerless to detect potentially relevant items.

**Prototypical Analyses**

Prototype theory (Rosch, 1973, 1978) is applied in psychological practice to address ambiguous clinical constructs (see Broughton, 1990). According to Rosch (1973), prototypical analysis addresses the core or central elements of a construct by asking respondents, normally experts, to identify the most representative attributes. This approach has been successfully applied to such diagnostic categories as antisocial personality disorder (Rogers, Duncan, Lynett, & Sewell, 1994), malingering (Rogers, Goldstein, Sewell, 1994; Rogers, Salekin, Sewell, & Goldstein, 1996), and depression (e.g., Horowitz, Post, French, Wallis, & Seigelman, 1981). In addition, Broughton, Trapnell, and Boyes (1991), and de Jong (1988) have utilized this approach for improving upon personality inventories and predictor measures.
The idea behind prototypical analysis is that by identifying the most typical or clear case of a construct (e.g., dangerousness, sophistication-maturity, and ATX), individuals can be assessed on this prototype. Rosch (1973) used color as an example for which prototypes can determine the most clear and representative color. For instance, many different types of reds exist, but through prototypes the most typical red can be determined. Similarly, it is important to know with juvenile transfers what psychologists and psychiatrists believe to be the most prototypical cases of dangerousness, maturity-sophistication, and ATX.

**Prototype methods.** Two basic methods are available for examining prototypes. The first method involves establishing a domain of characteristics related to a given construct with expert ratings of these criteria’s prototypicality. The second method, described by Broughton (1986, 1990, 1993), involves a template-matching system of personality measurement called distance from the prototype (DISPRO). In this system, personality assessment is based on multidimensional scaling analyses of subjects' judged similarity to the prototypical persons presented in a story format. The hypothetical cases serve as trait stimuli to demarcate each of the categories under study (e.g., dangerous, sophisticated-mature, and untreatable juveniles).

Broughton has suggested that the DISPRO approach has several advantages over expert ratings; similarity ratings are (a) easier to establish; (b) viewed by raters as simple and non-threatening; and (c) require very little instruction. In addition, ratings are putatively independent of researchers' criteria; each participant determines which qualities of the stimuli to compare for similarity.
While DISPRO purports to have advantages over expert-rating prototypical analysis, the advantages are not completely clear. First, it is not clear that the ratings are independent. Because the stories are created by the experimenters, implicit decisions are made regarding the prototypicality of a trait. Second, the similarity approach may not be easier than expert-ratings of individual items. Prototypical analysis of expert-ratings may be advantageous in some cases, because it allows for a broad sampling of criteria without taxing respondents with lengthy stories.

DISPRO offers a unique approach to prototypical analysis, but seems most appropriate for constructs that are relatively well defined prior to the analysis so that prototypic stories can be developed. Ideally, both approaches utilized together may enhance the ability to determine the prototypicality of a given construct.

Prototypical analysis of expert ratings was selected for the present study as an initial method of evaluating prototypicality. This method was chosen for two reasons. First, because the constructs were ill-defined, expert-ratings appeared to be a more effective method of clarifying the construct than developing stories of juveniles that may not cover the entire domain of characteristics. Second, expert-ratings allowed for the inclusion of a wider domain of characteristics that were rated more easily than requiring individuals read a story and judge the prototypicality of its elements.
Research Questions

1. What criteria do mental health professionals consider to be important for determinations of dangerousness?

2. What criteria do mental health professionals consider to be important for determinations of sophistication-maturity?

3. What criteria do mental health professionals consider to be important for determinations of ATX?

4. What criteria are descriptive of the juveniles who are actually transferred to adult criminal courts?

5. What factor or combinations of factors are most common among juveniles who have been transferred?

6. Do prototypical ratings for each of the three constructs differ between experienced and more experienced experts?
CHAPTER II

METHOD

Participants

The current study was conducted with two separate samples in two distinct phases. The first sample consisted of 244 psychologists from the Division of Clinical Psychology - Child Clinical (i.e., Division 12 - Section 1) members. For simplicity, this group will be referred to as the Child Clinical Sample. The second sample consisted of primarily Diplomates in Forensic Psychology from the American Board of Professional Psychology (see Table 8).

Table 8

Sample Characteristics

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>%M</th>
<th>Post-Doctoral Experience</th>
<th>Clinical</th>
<th>Forensic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child-clinical psychologists</td>
<td>244</td>
<td>50.8</td>
<td>15.5 (10.0)</td>
<td>72.5 (32.7)</td>
<td>5.9 (12.0)</td>
</tr>
<tr>
<td>Forensic diplomats</td>
<td>75</td>
<td>86.7</td>
<td>21.7 (7.90)</td>
<td>37.1 (28.4)</td>
<td>53.8 (31.4)</td>
</tr>
</tbody>
</table>

Note. n = number of participants; %M = % of male participants; Clinical = percentage of time in non-forensic clinical practice; Forensic = percentage of time in forensic practice.
The Child Clinical sample was composed of 124 (50.8%) males and 114 (46.7%) females with missing data on the gender of 6 participants. Participants varied widely in their years of clinical practice (M = 15.49; SD = 10.03) with a range from 1 to 47 years. The sample spent most of its time in clinical practices (M = 72.50%; SD = 32.67) with very little time devoted to forensic practice (M = 5.85%; SD = 12.03).

The forensic diplomate sample was composed of 65 (86.7%) males and 10 (13.3%) females with a mean age of 49.39 (SD = 7.81). The M years of postdoctoral experience for this sample was 21.71 (SD = 7.90). The participants spent slightly more than one-half their time in clinical-forensic practice (53.77%; SD = 31.43).

**Measure**

Two separate versions of prototypicality measures were developed in the current study. The first version was designed to refine the three psychological constructs that guide juvenile waivers. Version 1 consisted of 135 juvenile characteristics in three groups: dangerousness (45 items), sophistication-maturity (44 items), and ATX (45 items). The purpose of Version 1 was to have psychologists identify the core characteristics of each of the three constructs (See Appendix A).

Version 2 consisted of the same 135 items found in Version 1; the only difference was that they were randomly ordered in a single group rather than by the three domains as in Version 1 (see Appendix B). The purpose of this measure was to establish the prototypes for juveniles waived to adult court.
Both prototypical analysis measures included three sections: (a) an introduction and set of instructions, (b) a listing of prototypical variables, and (c) descriptive information regarding the responding psychologists. For Version 2, an additional section provided descriptive information on juveniles waived to adult court. A cover letter identified the researchers and asked experts for their assistance on the project. A more detailed description of the survey materials is summarized below:

1. Section 1 of the survey stated the purpose of the research.
   a. For Version 1: further define the three decisions for transfer;
   b. For Version 2: examine the core characteristics of juveniles that are actually transferred to adult criminal courts).

2. Section 2 is composed of the prototypical ratings.
   a. For Version 1, experts judged the prototypicality of items separately for dangerousness, sophistication-maturity, and ATX.
   b. For Version 2, prototypicality was assessed for the juvenile waivers, not the specific constructs.

Dillman’s (1975) guidelines were generally followed in the construction of the measures. These guidelines include: (a) a booklet format, (b) no double-sided pages, (c) fewer pages produced in reduced form, and (d) high-quality printing on white paper to improve readability. For the current study, the survey was printed on one side of the pages with high quality printing. Because of cost considerations, standard pages were stapled together rather than constructed as a booklet.
Dillman's (1975) recommendation for the formatting of the survey were followed. First, questions were typed in lower case letters and answers were in upper case letters for improved readability. Second, specific directions were provided on how to answer each question. Third, the ratings were on a seven-point Likert-type scale with anchors for "highly related" to the construct (i.e., "7") to "not at all related" (i.e., "1").

**Generation of Items**

As the first step, a broad sampling of descriptors were collected regarding dangerousness, sophistication and maturity, and ATX of delinquent youths. Descriptors for juveniles and their families were assembled from four main sources: (a) statutes were utilized to determine what criteria are considered in different states; (b) appellate cases yielded descriptors and phrases referring to characteristics of juvenile waivers (successful and unsuccessful); (c) research (both psychological and law reviews) included content related to the waiver decision; and (d) a forensic research team provided input with respect to the appropriateness of items for each of the three constructs.

Appellate cases and relevant research were reviewed by the primary investigator and compared to a comprehensive list of descriptors from the legal cases and social science research literature. For dangerousness, much of the literature came from researchers/theorists who examined serious juvenile delinquency longitudinally (e.g., Farrington, 1997; Loebel & Loebel-Stouthamer, 1998; Moffitt, 1993; Patterson, 1992). Items from theories of aggression and serious juvenile delinquency were incorporated into the pool of dangerousness items. Related constructs, such as ODD, CD, and
psychopathy were also added because of their suspected relation to violence (Lynam, 1997). Case law and statutes provided criteria for juvenile waivers. Case law also included information from psychological reports which furnished criteria and rationale for the criteria for juvenile waivers. Reassuringly, many of these items overlapped with the research on dangerousness (e.g., psychopathy, lacks empathy, lacks conscience, and violent history).

With regard to the sophistication-maturity items, little information from statutes is provided regarding what specifically is meant by these terms. Similarly in Kent, Judge Fortas did not state the full purpose of this construct. Items in Kent generally refer to adult-like thinking and increased criminal sophistication. This sampling of items was broad; items were included from the early literature on maturity to the more contemporary conceptualizations of maturity (Goleman, 1994; Steinberg & Cauffman, 1995). Additionally, researchers have provided models specific for conceptualizing juvenile maturity (e.g., Jesness, 1974). These items were also included in the pool for sophistication-maturity.

For ATX, items were included from the juvenile literature that specifically addressed the treatability construct. Given the paucity of juvenile research, adult ATX literature was incorporated. Freud's early description of treatment responders was included as well as more contemporary theories. Additionally, studies which focused on specific constructs, associated with amenability, were also included (e.g., ego strength, and motivation for treatment).
Upon completion of item lists for all three constructs, a forensic research team was utilized to screen for missed, irrelevant, or redundant items. This 2-hour meeting was devoted to reducing the items. Team members (two psychologists and 6 doctoral students) independently reviewed lists for item overlap in the items and possible missing items. No additional items were identified as having been missing for the list.

**Item Reduction**

A comprehensive list of descriptors were developed regarding the three criteria. The original list consisted of 676 juvenile characteristics. In addition, an independent rater reviewed juvenile statutes for the 50 states and the District of Columbia as well as relevant case law.

Variables were deleted on the basis of the forensic research teams' ratings as redundant with other items or irrelevant to the three constructs. The reduction was based on an agreement rate (75%) that items be dropped from the pool. This item-reduction procedure resulted in 48 dangerousness items, 61 items for sophistication and maturity, and 64 ATX items.

The next step in item-reduction was to reduce marginally relevant items to produce item-pools for each construct with no more than 45 items. Rare or anomalous items were deleted by inspection of items that 5 of 8 raters deemed irrelevant or substantially redundant. This process yielded three constructs, each composed of 45 items.
Procedure

A sample of psychologists were sent one of the two versions of the prototypical analysis measure. They were mailed at two different points in time. Version 1 was mailed during the first phase of the study and Version 2 was mailed approximately 3 months later. The Child-Clinical sample received Version 1. Thus, these respondents were asked to rate the most prototypical items for each of the three constructs in juvenile waivers: (a) dangerousness, (b) sophistication and maturity, and (c) ATX.

The Forensic-Diplomate Sample received Version 2. These psychologists were asked to describe a juvenile who they had evaluated. Version 2 was utilized to target prototypical characteristics of juveniles transferred to adult courts. These ratings would then be based on the expert's direct experience with juvenile waiver decisions.

For Version 2, psychologists were asked to think of the most typical case in the last two years, on whom they had performed a juvenile waiver evaluation and recommended transfer. The expert was also instructed that the critical issue was his/her opinion about the waiver, not the legal outcome. Experts focused on this prototypical case while completing the ratings. In addition, respondents were asked to describe the juvenile in terms of demographic information as well as current offense information. Experts were encouraged to utilize clinical records and relevant files from the case.

Implementing the Mail Survey

The first mailing for each version included the prototypical analysis measure and a cover letter. A second follow-up was sent to psychologists exactly three weeks after the
original mailing. It consisted of a letter that thanked those who had already returned the questionnaire and reminded those who had not yet completed the questionnaire to please do so. The letter included a restatement of its importance from the original cover letter, a replacement questionnaire, and a return envelope.

All mailing occurred on Tuesdays in accordance with the Dillman (1975) guidelines; this day of the week avoided weekend delays and was intended to have the mail arrive before the end of the week. Also, no mailings occurred in December to increase the likelihood that the survey would be answered. Using this approach it is typically expected that approximately 40% of the psychologists would return completed questionnaires. Given the more specialized focus of this study a more conservative return rate of 25% was expected. Thus, the number of psychologists and psychiatrists expected to return surveys would be 230.

Participation by 922 Child-Clinical Psychologists (Division 12 - Section 1) was solicited in the initial and subsequent mailings. In addition, participation by 198 Forensic Diplomates was solicited. Of the Child-Clinical sample 46 members were returned by the post office as undeliverable. A total of 244 completed surveys were returned resulting in a response rate of 27.9%. Of the Forensic Diplomate sample 7 members were returned by the post office as undeliverable. A total of 75 completed surveys were returned resulting in a response rate of 39.3%. Table 9 provides an overview of the methodology of the current study.
Step 1. **Item Development.** A broad sampling of the descriptors for dangerousness, sophistication-maturity, and ATX of delinquent youths were gathered.

Searches included:
1. empirical research (e.g., psychological literature)
2. appellate case reports and statutes

Step 2. **Item Reduction.** This step involved examining items for their redundancy with other items. Consultation with a graduate forensic research team was utilized for this process. Items that were thought to be redundant by 75% or more of the research team were deleted. The list was then further reduced to 45 items in one of two ways:

1. Items were eliminated if they were marginally relevant items to produce item pools of 45 items for each construct.

2. Rare or anomalous items were deleted by inspection of items that 5 of 8 raters deemed were irrelevant or substantially redundant.

Step 3. **Final Review.** The prototypical analysis measure was reviewed by a research team to proof the wording of each item.

Step 4. **First Mailing.** A sample of psychologists were sent the prototypical analysis measure with a pre-addressed and stamped envelope. Version 1 was mailed out to Child Clinical Sample and Version 2 was mailed to the Forensic Diplomate Sample.

Step 5. **Second Mailing.** Three weeks after the original mailing, psychologists were sent a second follow-up letter and replacement questionnaire. The letter thanked those who had already returned the survey and made a second appeal to those who had not yet completed the questionnaire.
CHAPTER III

RESULTS

Alpha coefficients of reliability were used to estimate the internal consistency of the scales. Very high composite alphas were found for the dangerousness items (alpha = .96), sophistication-maturity items (alpha = .96), and ATX items (alpha = .95) across the 244 psychologists in Version 1 of the prototype measure. This demonstrates that there was high consistency within each of the scales.

Prototypical Ratings

Most of the 45 dangerousness criteria were rated to be moderately high in importance with regard to the transfer decision (M = 4.80, SD = 0.86; range of 1.69-7.00). The 45 items are summarized in Table 10 in descending order with the most prototypical items first. High items included use of deadly weapons, extreme unprovoked violence, severe antisocial behavior, violent history and leadership role in the crime. Seven comparatively low (< 3.5) items were also identified: (a) hyperactivity, (b) lacks realistic long term goals, (c) involved in promiscuous sexual behavior, (d) runaway behavior, (e) glib/superficial charm, (f) need for stimulation/proneness to boredom, and (g) narcissistic.
Table 10

Prototypical Dangerousness Items: Means and Standard Deviations

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use of deadly weapons</td>
<td>6.37</td>
<td>.90</td>
</tr>
<tr>
<td>2. Extreme unprovoked violence</td>
<td>6.18</td>
<td>.99</td>
</tr>
<tr>
<td>3. Engages in severe antisocial behavior</td>
<td>6.04</td>
<td>1.01</td>
</tr>
<tr>
<td>4. Generally carries a weapon</td>
<td>5.98</td>
<td>1.18</td>
</tr>
<tr>
<td>5. Had discussed a plan (premeditated)</td>
<td>5.90</td>
<td>1.24</td>
</tr>
<tr>
<td>6. Has a violent history</td>
<td>5.90</td>
<td>1.19</td>
</tr>
<tr>
<td>7. Played a leadership role in crime</td>
<td>5.90</td>
<td>1.17</td>
</tr>
<tr>
<td>8. Has a high frequency of criminal behavior</td>
<td>5.75</td>
<td>1.28</td>
</tr>
<tr>
<td>9. Conduct Disorder-Aggressive Subtype</td>
<td>5.78</td>
<td>1.27</td>
</tr>
<tr>
<td>10. Extreme or serious conduct disorder</td>
<td>5.61</td>
<td>1.29</td>
</tr>
<tr>
<td>11. Crime was premeditated</td>
<td>5.50</td>
<td>1.30</td>
</tr>
<tr>
<td>12. Showed volition by attempts to cover up</td>
<td>5.45</td>
<td>1.33</td>
</tr>
<tr>
<td>13. Lacks remorse or guilt</td>
<td>5.30</td>
<td>1.65</td>
</tr>
<tr>
<td>14. Is involved in fire setting</td>
<td>5.23</td>
<td>1.41</td>
</tr>
<tr>
<td>15. Brags about current or past violence</td>
<td>5.23</td>
<td>1.38</td>
</tr>
<tr>
<td>16. Has a history of violence toward animals</td>
<td>5.20</td>
<td>1.51</td>
</tr>
<tr>
<td>17. Callous/lack of empathy</td>
<td>5.17</td>
<td>1.58</td>
</tr>
<tr>
<td>18. Easily angered and physically aggressive</td>
<td>5.17</td>
<td>1.42</td>
</tr>
<tr>
<td>19. Is generally cruel</td>
<td>5.09</td>
<td>1.34</td>
</tr>
<tr>
<td>20. Early onset antisocial behavior (before 11)</td>
<td>5.09</td>
<td>1.47</td>
</tr>
<tr>
<td>21. Surrounds self with those involved in crime</td>
<td>5.07</td>
<td>1.37</td>
</tr>
<tr>
<td>22. Engages in a wide variety of crime</td>
<td>5.07</td>
<td>1.39</td>
</tr>
<tr>
<td>23. Aware of the wrongfulness of the crime</td>
<td>4.92</td>
<td>1.44</td>
</tr>
<tr>
<td>24. Knowledge of the consequences of behavior</td>
<td>4.76</td>
<td>1.38</td>
</tr>
<tr>
<td>25. Is involved in physical fighting</td>
<td>4.74</td>
<td>1.56</td>
</tr>
<tr>
<td>26. Behavior problems in multiple settings</td>
<td>4.71</td>
<td>1.46</td>
</tr>
<tr>
<td>27. Has a previous criminal record</td>
<td>4.66</td>
<td>1.36</td>
</tr>
<tr>
<td>28. Conduct disorder - Destructive type</td>
<td>4.64</td>
<td>1.40</td>
</tr>
<tr>
<td>29. Conduct disorder - Serious rule violation</td>
<td>4.59</td>
<td>1.45</td>
</tr>
<tr>
<td>30. Poor impulse control</td>
<td>4.54</td>
<td>1.45</td>
</tr>
<tr>
<td>31. Pathological liar</td>
<td>4.52</td>
<td>1.52</td>
</tr>
<tr>
<td>32. Is involved in selling drugs</td>
<td>4.45</td>
<td>3.81</td>
</tr>
<tr>
<td>33. Conduct disorder - Deceitfulness/theft</td>
<td>4.40</td>
<td>1.38</td>
</tr>
<tr>
<td>34. Parents involved in crime and aggression</td>
<td>4.21</td>
<td>1.82</td>
</tr>
<tr>
<td>35. Uses drugs and alcohol regularly</td>
<td>4.10</td>
<td>1.62</td>
</tr>
<tr>
<td>36. Fails to accept responsibility for actions</td>
<td>4.07</td>
<td>1.46</td>
</tr>
<tr>
<td>37. Conning and manipulative</td>
<td>4.02</td>
<td>1.65</td>
</tr>
<tr>
<td>38. Reckless and irresponsible</td>
<td>3.81</td>
<td>1.46</td>
</tr>
<tr>
<td>39. Narcissistic</td>
<td>3.47</td>
<td>1.69</td>
</tr>
<tr>
<td>40. Need for stimulation/proneness to boredom</td>
<td>3.42</td>
<td>1.44</td>
</tr>
<tr>
<td>41. Ghlib/superficially charming</td>
<td>3.26</td>
<td>1.59</td>
</tr>
<tr>
<td>42. Runaway behavior</td>
<td>2.87</td>
<td>1.52</td>
</tr>
<tr>
<td>43. Promiscuous sexual behavior</td>
<td>3.83</td>
<td>1.50</td>
</tr>
<tr>
<td>44. Lacks realistic, long term goals</td>
<td>2.71</td>
<td>1.40</td>
</tr>
<tr>
<td>45. Hyperactivity</td>
<td>2.63</td>
<td>1.50</td>
</tr>
</tbody>
</table>
Prototypical ratings for the 44 sophistication-maturity items were also in the moderately high range with regard to their importance in the waiver decision (M = 4.26, SD = 1.08; range of 1.39-7.00). As reported in Table 11, the highest items were related to criminal sophistication and planned and premeditated crimes. In addition, two other items high on prototypicality were an understanding of the behavioral norms, and the ability to identify alternative actions. Two comparatively low (< 3.5) prototypical items were identified: makes clear requests and has good academic achievement.

ATX items were also in the moderately high range with regard to their importance to the waiver to adult court decision (M = 4.96, SD = 0.74; range of 2.36-7.00) (see Table 12). A very high rating (6.22) was found for motivated to engage in treatment. A total of 22 items had high prototypicality (≥ 5.00); they centered on acknowledgment of problems, responsibility, motivation to change, and acceptance of help from others. Only one comparatively low (< 3.5) rating was found for “does not seem to be attention seeking.”

In addition to the prototypical ratings, this study examined the dimensions of dangerousness, sophistication-maturity, and ATX. Toward this objective, three separate factor analyses were performed (i.e., dangerousness, sophistication-maturity, and ATX) with principal axis factoring (PAF) rotated to a varimax solutions. Inspection of eigenvalues and scree plots for the three constructs’ items suggested four-factor solutions for Dangerousness and ATX.
<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has criminal sophistication</td>
<td>5.64</td>
<td>1.46</td>
</tr>
<tr>
<td>2. Capable of planned or premeditated crime</td>
<td>5.52</td>
<td>1.44</td>
</tr>
<tr>
<td>3. Has an understanding of behavioral norms</td>
<td>5.11</td>
<td>1.41</td>
</tr>
<tr>
<td>4. Able to identify alternative actions</td>
<td>5.08</td>
<td>1.53</td>
</tr>
<tr>
<td>5. Able to give thoughts to consequences</td>
<td>4.61</td>
<td>1.48</td>
</tr>
<tr>
<td>6. Has decision making skills</td>
<td>4.59</td>
<td>1.50</td>
</tr>
<tr>
<td>7. Intentionality - act upon with competence</td>
<td>4.57</td>
<td>1.47</td>
</tr>
<tr>
<td>8. Capable of getting others to comply</td>
<td>4.53</td>
<td>1.76</td>
</tr>
<tr>
<td>9. Delays gratification in pursuit of goals</td>
<td>4.51</td>
<td>1.76</td>
</tr>
<tr>
<td>10. Resist pressures from others</td>
<td>4.47</td>
<td>1.55</td>
</tr>
<tr>
<td>11. Maintains convictions even when criticized</td>
<td>4.45</td>
<td>1.54</td>
</tr>
<tr>
<td>12. Internalized standard for own/others behavior</td>
<td>4.42</td>
<td>1.57</td>
</tr>
<tr>
<td>13. Has future time perspective (project)</td>
<td>4.39</td>
<td>1.58</td>
</tr>
<tr>
<td>14. Outwardly conforming but manipulative</td>
<td>4.35</td>
<td>1.73</td>
</tr>
<tr>
<td>15. Is able to think abstractly</td>
<td>4.33</td>
<td>1.63</td>
</tr>
<tr>
<td>16. Is able to regulate own emotions</td>
<td>4.32</td>
<td>1.63</td>
</tr>
<tr>
<td>17. Ability to analyze/understand relations</td>
<td>4.31</td>
<td>1.55</td>
</tr>
<tr>
<td>18. Skill of managing emotions in others</td>
<td>4.30</td>
<td>1.65</td>
</tr>
<tr>
<td>19. Is clear about values and priorities</td>
<td>4.28</td>
<td>1.56</td>
</tr>
<tr>
<td>20. Engages in cost benefit analysis</td>
<td>4.27</td>
<td>1.70</td>
</tr>
<tr>
<td>21. Aware of mood and thoughts about mood</td>
<td>4.21</td>
<td>1.60</td>
</tr>
<tr>
<td>22. Is able to cope with frustrations</td>
<td>4.19</td>
<td>1.66</td>
</tr>
<tr>
<td>23. Knows and manages their feelings well</td>
<td>4.17</td>
<td>1.60</td>
</tr>
<tr>
<td>24. Is able to consult others for advice</td>
<td>4.17</td>
<td>1.65</td>
</tr>
<tr>
<td>25. Has goal setting behaviors</td>
<td>4.16</td>
<td>1.55</td>
</tr>
<tr>
<td>26. Psychological insight</td>
<td>4.15</td>
<td>1.69</td>
</tr>
<tr>
<td>27. Internal locus of control</td>
<td>4.15</td>
<td>1.72</td>
</tr>
<tr>
<td>28. Effective self-initiated behavior</td>
<td>4.14</td>
<td>1.57</td>
</tr>
<tr>
<td>29. Open to reevaluation and incorporation</td>
<td>4.13</td>
<td>1.80</td>
</tr>
<tr>
<td>30. Clarity of self concept</td>
<td>4.12</td>
<td>1.57</td>
</tr>
<tr>
<td>31. Develops realistic expectations for self</td>
<td>4.12</td>
<td>1.58</td>
</tr>
<tr>
<td>32. Ability to switch goals</td>
<td>4.11</td>
<td>1.56</td>
</tr>
<tr>
<td>33. Assertive and skilled at communicating</td>
<td>4.09</td>
<td>1.56</td>
</tr>
<tr>
<td>34. Aware of personal strengths and weaknesses</td>
<td>4.08</td>
<td>1.57</td>
</tr>
<tr>
<td>35. Values own independence and autonomy</td>
<td>4.03</td>
<td>1.54</td>
</tr>
<tr>
<td>36. Absence of excessive need for social validation</td>
<td>3.97</td>
<td>1.53</td>
</tr>
<tr>
<td>37. Deals with others feelings effectively</td>
<td>3.92</td>
<td>1.64</td>
</tr>
<tr>
<td>38. Consideration of life goals</td>
<td>3.90</td>
<td>1.68</td>
</tr>
<tr>
<td>39. Resourceful</td>
<td>3.83</td>
<td>1.55</td>
</tr>
<tr>
<td>40. Generally open to change</td>
<td>3.74</td>
<td>1.67</td>
</tr>
<tr>
<td>41. Intelligent</td>
<td>3.67</td>
<td>1.55</td>
</tr>
<tr>
<td>42. High self esteem</td>
<td>3.53</td>
<td>1.74</td>
</tr>
<tr>
<td>43. Makes clear requests</td>
<td>3.44</td>
<td>1.57</td>
</tr>
<tr>
<td>44. Good academic achievement</td>
<td>3.14</td>
<td>1.63</td>
</tr>
</tbody>
</table>
### Table 12

**Prototypical Items of ATX: Means and Standard Deviations**

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Motivated to engage in treatment</td>
<td>6.22</td>
<td>.97</td>
</tr>
<tr>
<td>2. Aware of own difficulties/wants to overcome them</td>
<td>5.97</td>
<td>1.01</td>
</tr>
<tr>
<td>3. Takes responsibility for their problems</td>
<td>5.86</td>
<td>1.08</td>
</tr>
<tr>
<td>4. Feels guilt about the crime</td>
<td>5.79</td>
<td>1.18</td>
</tr>
<tr>
<td>5. Admits he/she has a problem</td>
<td>5.64</td>
<td>1.46</td>
</tr>
<tr>
<td>6. Receptiveness/responsiveness to adult help</td>
<td>5.59</td>
<td>1.03</td>
</tr>
<tr>
<td>7. Has empathy</td>
<td>5.54</td>
<td>1.24</td>
</tr>
<tr>
<td>8. Believes that he/she has good chance of change</td>
<td>5.54</td>
<td>1.23</td>
</tr>
<tr>
<td>9. Open to change</td>
<td>5.52</td>
<td>1.23</td>
</tr>
<tr>
<td>10. Remorseful</td>
<td>5.49</td>
<td>1.30</td>
</tr>
<tr>
<td>11. Insight into problems</td>
<td>5.46</td>
<td>1.31</td>
</tr>
<tr>
<td>12. Extent of positive involvement by parents</td>
<td>5.41</td>
<td>1.35</td>
</tr>
<tr>
<td>13. Plans to change lifestyle from criminal to noncriminal</td>
<td>5.36</td>
<td>1.30</td>
</tr>
<tr>
<td>14. Family acceptance and interest in juvenile</td>
<td>5.29</td>
<td>1.38</td>
</tr>
<tr>
<td>15. No or limited police/court/probation involvement</td>
<td>5.27</td>
<td>1.47</td>
</tr>
<tr>
<td>16. Family cooperation with the courts</td>
<td>5.24</td>
<td>1.39</td>
</tr>
<tr>
<td>17. Is not callous or unemotional</td>
<td>5.24</td>
<td>1.28</td>
</tr>
<tr>
<td>18. Has had good conduct in prior placements</td>
<td>5.23</td>
<td>1.32</td>
</tr>
<tr>
<td>19. Has knowledge of right from wrong</td>
<td>5.12</td>
<td>1.37</td>
</tr>
<tr>
<td>20. Willing to participate in psychological evaluation</td>
<td>5.06</td>
<td>1.33</td>
</tr>
<tr>
<td>21. Considers consequences</td>
<td>5.04</td>
<td>1.15</td>
</tr>
<tr>
<td>22. Had a secure, stable home life</td>
<td>5.00</td>
<td>1.57</td>
</tr>
<tr>
<td>23. Generally tells the truth (not chronic liar)</td>
<td>4.86</td>
<td>1.28</td>
</tr>
<tr>
<td>24. Motivation for academic/work progress</td>
<td>4.84</td>
<td>1.35</td>
</tr>
<tr>
<td>25. Has control of immediate impulses</td>
<td>4.82</td>
<td>1.24</td>
</tr>
<tr>
<td>26. Able to tolerate frustrations</td>
<td>4.81</td>
<td>1.39</td>
</tr>
<tr>
<td>27. Capacity to make future plans</td>
<td>4.78</td>
<td>1.42</td>
</tr>
<tr>
<td>28. Not manipulative</td>
<td>4.74</td>
<td>1.44</td>
</tr>
<tr>
<td>29. Psychologically minded</td>
<td>4.69</td>
<td>1.39</td>
</tr>
<tr>
<td>30. Not rebellious toward authority figures</td>
<td>4.64</td>
<td>1.22</td>
</tr>
<tr>
<td>31. Daily contact with family</td>
<td>4.64</td>
<td>1.68</td>
</tr>
<tr>
<td>32. Good school attendance</td>
<td>4.44</td>
<td>1.41</td>
</tr>
<tr>
<td>33. Not unemotional</td>
<td>4.44</td>
<td>1.32</td>
</tr>
<tr>
<td>34. Realistic chance of being placed in program</td>
<td>4.40</td>
<td>1.54</td>
</tr>
<tr>
<td>35. Logical thinker</td>
<td>4.25</td>
<td>1.41</td>
</tr>
<tr>
<td>36. Has not engaged in school misconduct</td>
<td>4.22</td>
<td>1.42</td>
</tr>
<tr>
<td>37. Prosocial conduct in court settings</td>
<td>4.14</td>
<td>1.47</td>
</tr>
<tr>
<td>38. Alcohol or drug related crime</td>
<td>4.13</td>
<td>1.53</td>
</tr>
<tr>
<td>39. Has good academic performance</td>
<td>4.12</td>
<td>1.52</td>
</tr>
<tr>
<td>40. Demonstrates social competence</td>
<td>4.10</td>
<td>1.52</td>
</tr>
<tr>
<td>41. Not self centered</td>
<td>3.98</td>
<td>1.40</td>
</tr>
<tr>
<td>42. Susceptible to peer influence</td>
<td>3.97</td>
<td>1.53</td>
</tr>
<tr>
<td>43. Increase in the seriousness of crime</td>
<td>3.97</td>
<td>2.04</td>
</tr>
<tr>
<td>44. Good self concept</td>
<td>3.92</td>
<td>1.66</td>
</tr>
<tr>
<td>45. Not attention seeking</td>
<td>3.48</td>
<td>1.34</td>
</tr>
</tbody>
</table>
Employing the over- and under-factoring procedures of Pedazur (1982), both five- and six-factor solutions had very weak final factors for dangerousness, and ATX. Four-factor solutions were chosen since they yielded clearly identifiable dimensions with minimal cross-loadings.

For Sophistication-maturity, a two-factor solution was selected, based on an inspection of eigenvalues and scree plots. Again, employing the over- and under-factoring procedures, both three- and four-factor solutions had very weak final factors for sophistication-maturity and a preponderance of cross-loadings. A two-factor solution yielded clearly identifiable dimensions with minimal overlapping criteria.

**Factor Structure for Dangerousness**

Four relatively distinct factors emerged for dangerousness that accounted for 55.7% of the variance (see Table 13). This solution resulted in 37 (86.1%) unique and 6 (13.9%) cross loadings. The first factor (38.1% of the variance), Irresponsible, Reckless, and Sensation-Seeking Behavior consists of 9 items with unique and substantial factor loadings (≥ .40) that assess irresponsibility, recklessness, and impulsivity in the context of relationships and life goals. The second factor (6.7% of the variance), Violence and Aggressive Tendencies, is composed of 12 unique and substantial loadings that assess the degree to which one is easily angered, use of unnecessary violence, violent history, and lack of remorse about violent acts either toward people or animals. The third factor (5.5% of the variance), Planned and Extensive Criminality, consists of 11 unique and substantial loadings that assess whether the adolescent planned, willingly committed the
Table 13

Principal Axis Factoring with Varimax Rotation of Dangerousness Items

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Runaway behavior</td>
<td>.77</td>
</tr>
<tr>
<td>Promiscuous sexual behavior</td>
<td>.69</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>.69</td>
</tr>
<tr>
<td>Uses drugs and alcohol regularly</td>
<td>.67</td>
</tr>
<tr>
<td>Lack of realistic, long term goals</td>
<td>.65</td>
</tr>
<tr>
<td>Need for stimulation/prone to boredom</td>
<td>.63</td>
</tr>
<tr>
<td>Has parents involved in crime/aggression</td>
<td>.50</td>
</tr>
<tr>
<td>Is reckless and irresponsible</td>
<td>.59</td>
</tr>
<tr>
<td>Surrounds with those involved in crime</td>
<td>.48</td>
</tr>
<tr>
<td>Fails to accept responsibility for act</td>
<td>.45</td>
</tr>
<tr>
<td>Involved in selling drugs</td>
<td>.31</td>
</tr>
<tr>
<td>Easily angered and physically aggressive</td>
<td>.31</td>
</tr>
<tr>
<td>Extreme unprovoked violence</td>
<td>.05</td>
</tr>
<tr>
<td>Violent history</td>
<td>.11</td>
</tr>
<tr>
<td>Played a leadership role in crime</td>
<td>.01</td>
</tr>
<tr>
<td>Use of deadly weapons</td>
<td>.26</td>
</tr>
<tr>
<td>Has been involved in fire setting</td>
<td>.20</td>
</tr>
<tr>
<td>History of violence toward animals</td>
<td>.19</td>
</tr>
<tr>
<td>Noted to be bragging about violence</td>
<td>.17</td>
</tr>
<tr>
<td>Generally cruel</td>
<td>.32</td>
</tr>
<tr>
<td>Conduct Disorder-Aggressive</td>
<td>.19</td>
</tr>
<tr>
<td>Involved in physical fighting</td>
<td>.27</td>
</tr>
<tr>
<td>Early onset of antisocial behavior (&lt;12)</td>
<td>.31</td>
</tr>
<tr>
<td>Generally carries a weapon</td>
<td>.28</td>
</tr>
<tr>
<td>Knowledge of consequences of behavior</td>
<td>.26</td>
</tr>
<tr>
<td>Showed volition and premeditation</td>
<td>.10</td>
</tr>
<tr>
<td>Premeditated crime in the past</td>
<td>.14</td>
</tr>
<tr>
<td>Had discussed with others a plan</td>
<td>.01</td>
</tr>
<tr>
<td>Aware of the wrongfulness of the crime</td>
<td>.23</td>
</tr>
<tr>
<td>Engages in a wide variety of crime</td>
<td>.33</td>
</tr>
<tr>
<td>High frequency of criminal behavior</td>
<td>.20</td>
</tr>
<tr>
<td>Conduct Disorder-Destructive type</td>
<td>.40</td>
</tr>
<tr>
<td>Behavior problems in multiple settings</td>
<td>.38</td>
</tr>
<tr>
<td>Conduct Disorder-Serious violations of rules</td>
<td>.39</td>
</tr>
<tr>
<td>Conduct Disorder-Deceitfulness and theft</td>
<td>.39</td>
</tr>
<tr>
<td>Previous criminal record</td>
<td>.32</td>
</tr>
<tr>
<td>Engages in severe antisocial behavior</td>
<td>.17</td>
</tr>
<tr>
<td>Lacks remorse/guilt</td>
<td>.08</td>
</tr>
<tr>
<td>Callous/lacks empathy</td>
<td>.09</td>
</tr>
<tr>
<td>Glib/superficial charm</td>
<td>.26</td>
</tr>
<tr>
<td>Conning/manipulative</td>
<td>.16</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>.19</td>
</tr>
<tr>
<td>Pathological liar</td>
<td>.22</td>
</tr>
<tr>
<td>Extreme or serious CD</td>
<td>.25</td>
</tr>
<tr>
<td>Variance accounted for</td>
<td>38.1</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>16.7</td>
</tr>
</tbody>
</table>

Note. Substantial loadings (≥.40) are underlined. Overall variance accounted for by the PAF of dangerousness is 55.7%.
act, and whether he/she understood the wrongfulness of that act. The fourth factor (5.3% of the variance), Psychopathic Personality, contains 6 unique and substantial loadings that assess psychopathic characteristics, such as lack of empathy, lack of remorse, pathological lying, and manipulation (Cleckley, 1941; Hare, 1991).

Mean prototypicality scores were computed to assist in our understanding of each factor's relative importance of dangerousness to the transfer decision (see Table 14). Multiple paired t-tests that controlled for family-wise error using the Bonferroni procedure revealed highly significant differences. Violence and Aggressive Tendencies was significantly higher than all other factors. In contrast, Irresponsible, Reckless, and Sensation-Seeking Behavior was significantly lower than all other factors. Finally, Planned and Extensive Crimes was significantly higher than Psychopathic Personality.

Table 14

Mean Prototypicality Scores for Dimensions of Dangerousness

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1-Irresponsible/Sensation Seeking</td>
<td>3.66^a</td>
<td>(1.14)</td>
</tr>
<tr>
<td>D2-Violent and Aggressive Tendencies</td>
<td>5.94^b</td>
<td>(1.01)</td>
</tr>
<tr>
<td>D3-Planned and Extensive Crimes</td>
<td>5.16^c</td>
<td>(0.97)</td>
</tr>
<tr>
<td>D4-Psychopathic Personality</td>
<td>4.50^d</td>
<td>(1.21)</td>
</tr>
</tbody>
</table>

^abcd all factors are significantly different from one another (p < .0001).

Sophistication-Maturity Factor Structure

Sophistication-maturity resulted in a distinct two-factor solution that accounted for 60.6% of the variance (see Table 15). The first factor (44.0% of the variance), Emotional and Intellectual Maturity, is composed of 35 items with unique and substantial
Table 15

Principal Axis Factoring with Varimax Rotation of Sophistication-Maturity Items

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develops realistic expectations of self</td>
<td>.83</td>
</tr>
<tr>
<td>Effective at coping with frustrations</td>
<td>.82</td>
</tr>
<tr>
<td>Delays gratification in pursuit of goal</td>
<td>.81</td>
</tr>
<tr>
<td>Aware of personal strengths/weaknesses</td>
<td>.80</td>
</tr>
<tr>
<td>Knows and manages own feelings well</td>
<td>.79</td>
</tr>
<tr>
<td>Aware of mood and thoughts about mood</td>
<td>.77</td>
</tr>
<tr>
<td>Deeds with others feelings effectively</td>
<td>.77</td>
</tr>
<tr>
<td>Goal setting behaviors</td>
<td>.77</td>
</tr>
<tr>
<td>Psychological insight</td>
<td>.76</td>
</tr>
<tr>
<td>Has future time perspective</td>
<td>.76</td>
</tr>
<tr>
<td>Able to regulate emotions</td>
<td>.75</td>
</tr>
<tr>
<td>Clear about values and priorities</td>
<td>.74</td>
</tr>
<tr>
<td>Generally open to change</td>
<td>.73</td>
</tr>
<tr>
<td>Open to periods of reevaluation</td>
<td>.72</td>
</tr>
<tr>
<td>Gives thoughts to consequences</td>
<td>.72</td>
</tr>
<tr>
<td>Clarity of self concept</td>
<td>.72</td>
</tr>
<tr>
<td>Has the ability to switch goals</td>
<td>.72</td>
</tr>
<tr>
<td>Consideration of life goals</td>
<td>.71</td>
</tr>
<tr>
<td>Effective self initiated behavior</td>
<td>.71</td>
</tr>
<tr>
<td>Identifies alternative actions/consequences</td>
<td>.71</td>
</tr>
<tr>
<td>Heightened ability to analyze relations</td>
<td>.71</td>
</tr>
<tr>
<td>Engages in cost benefit analysis</td>
<td>.70</td>
</tr>
<tr>
<td>Is able to consult others for advice</td>
<td>.65</td>
</tr>
<tr>
<td>Maintain convictions under criticism</td>
<td>.64</td>
</tr>
<tr>
<td>Resourceful</td>
<td>.63</td>
</tr>
<tr>
<td>Assertive and skilled at communicating</td>
<td>.62</td>
</tr>
<tr>
<td>Decision making skills</td>
<td>.61</td>
</tr>
<tr>
<td>Absence of need for social validation</td>
<td>.61</td>
</tr>
<tr>
<td>Good academic achievement</td>
<td>.60</td>
</tr>
<tr>
<td>Able to think abstractly</td>
<td>.59</td>
</tr>
<tr>
<td>Able to resist pressures from others</td>
<td>.57</td>
</tr>
<tr>
<td>High self esteem</td>
<td>.57</td>
</tr>
<tr>
<td>Values own independence/autonomy</td>
<td>.57</td>
</tr>
<tr>
<td>Internalized standard for their and others' behavior</td>
<td>.56</td>
</tr>
<tr>
<td>Has internal locus of control</td>
<td>.55</td>
</tr>
<tr>
<td>Makes clear requests</td>
<td>.53</td>
</tr>
<tr>
<td>Understanding of behavioral norms</td>
<td>.36</td>
</tr>
<tr>
<td>Intelligent</td>
<td>.35</td>
</tr>
<tr>
<td>Has intentionality and acts upon with persistence</td>
<td>.31</td>
</tr>
<tr>
<td>Able to get others to do what they want</td>
<td>.15</td>
</tr>
<tr>
<td>Outwardly conforming but manipulative</td>
<td>.10</td>
</tr>
<tr>
<td>Skilled at managing emotions in others</td>
<td>.10</td>
</tr>
<tr>
<td>Criminal sophistication</td>
<td>.00</td>
</tr>
<tr>
<td>Capable of planned/premeditated crime</td>
<td>.00</td>
</tr>
</tbody>
</table>

Variance accounted for: 44.0 and 6.6
Eigenvalues: 19.3 and 2.5

Note. Substantial loadings (≥.40) are underlined. Overall variance accounted for by the PAF of sophistication-maturity is 60.6%.
factor loadings (> .40) that assess self concept, autonomy, absence of need for social validation, resourcefulness, awareness of strengths and weaknesses, and insightfulness.

The second factor (6.6% of the variance), Criminal Sophistication, assesses the juvenile’s ability to manipulate others even when being outwardly conforming, criminal sophistication, and premeditated crimes.

Mean prototypicality scores for the two factors were computed in order to assist in understanding of their relative importance to sophistication-maturity (see Table 16). A paired t-test revealed a highly significant difference (p < .001) with Criminal Sophistication significantly higher than Emotional and Intellectual Maturity.

Table 16

Mean Prototypicality Scores for Dimensions of Sophistication-Maturity

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1-Emotional and Intellectual Maturity</td>
<td>4.18$^a$</td>
<td>(1.19)</td>
</tr>
<tr>
<td>S2-Criminal Sophistication</td>
<td>4.87$^b$</td>
<td>(1.23)</td>
</tr>
</tbody>
</table>

$^a$ significantly lower than Factor 2 (p < .0001).

ATX Factor Structure

Four distinct factors emerged for ATX prototypicality ratings that accounted for 48.5% of the variance (see Table 17). The first factor (31.5% of the variance), Considerate and Tolerant of Others, consists of 11 unique and substantial factor loadings (≥ .40) that assess whether the individual is self centered, able to tolerate frustrations, truthful, and caring and empathic of others.
Table 17

Principal Axis Factoring with Varimax Rotation of ATX Items

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considers others (not self centered)</td>
<td>0.67</td>
<td>0.30</td>
<td>0.14</td>
<td>0.12</td>
</tr>
<tr>
<td>Has a good self concept</td>
<td>0.61</td>
<td>0.30</td>
<td>0.10</td>
<td>0.27</td>
</tr>
<tr>
<td>Self control of immediate impulses</td>
<td>0.60</td>
<td>0.25</td>
<td>0.21</td>
<td>0.28</td>
</tr>
<tr>
<td>Does not seem to be attention seeking</td>
<td>0.59</td>
<td>0.31</td>
<td>0.00</td>
<td>0.10</td>
</tr>
<tr>
<td>Demonstrates competence</td>
<td>0.59</td>
<td>0.29</td>
<td>0.07</td>
<td>0.25</td>
</tr>
<tr>
<td>Tolerates frustrations</td>
<td>0.58</td>
<td>0.28</td>
<td>0.16</td>
<td>0.32</td>
</tr>
<tr>
<td>Generally tells truth (not chronic liar)</td>
<td>0.54</td>
<td>0.34</td>
<td>0.21</td>
<td>0.08</td>
</tr>
<tr>
<td>Empathetic/dious not lack emotion</td>
<td>0.52</td>
<td>0.32</td>
<td>0.23</td>
<td>0.03</td>
</tr>
<tr>
<td>Genuine intentions/not manipulative</td>
<td>0.51</td>
<td>0.23</td>
<td>0.18</td>
<td>0.09</td>
</tr>
<tr>
<td>Generally cares about others/not callous</td>
<td>0.51</td>
<td>0.23</td>
<td>0.36</td>
<td>0.17</td>
</tr>
<tr>
<td>Empathic</td>
<td>0.46</td>
<td>0.14</td>
<td>0.19</td>
<td>0.15</td>
</tr>
<tr>
<td>Feels remorse</td>
<td>0.43</td>
<td>0.07</td>
<td>0.42</td>
<td>0.03</td>
</tr>
<tr>
<td>Psychologically minded</td>
<td>0.33</td>
<td>0.09</td>
<td>0.15</td>
<td>0.09</td>
</tr>
<tr>
<td>Insightful and has insights into their problem</td>
<td>0.32</td>
<td>0.00</td>
<td>0.22</td>
<td>0.13</td>
</tr>
<tr>
<td>Good academic performance</td>
<td>0.34</td>
<td>0.07</td>
<td>0.01</td>
<td>0.08</td>
</tr>
<tr>
<td>No school misconduct</td>
<td>0.37</td>
<td>0.00</td>
<td>0.00</td>
<td>0.09</td>
</tr>
<tr>
<td>Good school attendance</td>
<td>0.36</td>
<td>0.09</td>
<td>0.03</td>
<td>0.17</td>
</tr>
<tr>
<td>Logical thinker</td>
<td>0.40</td>
<td>0.28</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Good conduct in prior placements</td>
<td>0.35</td>
<td>0.25</td>
<td>0.25</td>
<td>0.19</td>
</tr>
<tr>
<td>Motivation for academic or work progress</td>
<td>0.34</td>
<td>0.25</td>
<td>0.29</td>
<td>0.07</td>
</tr>
<tr>
<td>Capacity to make future plans</td>
<td>0.28</td>
<td>0.50</td>
<td>0.37</td>
<td>0.08</td>
</tr>
<tr>
<td>Realistic chance of placement in program</td>
<td>0.15</td>
<td>0.50</td>
<td>0.26</td>
<td>0.14</td>
</tr>
<tr>
<td>Is not rebellious toward authority</td>
<td>0.23</td>
<td>0.49</td>
<td>0.32</td>
<td>0.20</td>
</tr>
<tr>
<td>Pro social conduct in court setting</td>
<td>0.16</td>
<td>0.48</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>No/limited previous court contact</td>
<td>0.13</td>
<td>0.47</td>
<td>0.08</td>
<td>0.27</td>
</tr>
<tr>
<td>Considers consequences</td>
<td>0.34</td>
<td>0.47</td>
<td>0.36</td>
<td>0.22</td>
</tr>
<tr>
<td>Receptive and responsive to adult attempts to help</td>
<td>0.02</td>
<td>0.44</td>
<td>0.43</td>
<td>0.19</td>
</tr>
<tr>
<td>Susceptible to peer influence</td>
<td>0.14</td>
<td>0.40</td>
<td>0.05</td>
<td>0.18</td>
</tr>
<tr>
<td>Engaged in drug and alcohol causing criminality</td>
<td>0.23</td>
<td>0.34</td>
<td>0.00</td>
<td>0.21</td>
</tr>
<tr>
<td>Has shown an increase in seriousness of offenses</td>
<td>0.11</td>
<td>0.21</td>
<td>0.09</td>
<td>0.04</td>
</tr>
<tr>
<td>Aware of difficulties and will overcome</td>
<td>0.14</td>
<td>0.00</td>
<td>0.76</td>
<td>0.18</td>
</tr>
<tr>
<td>Takes responsibility for their problem</td>
<td>0.27</td>
<td>0.04</td>
<td>0.70</td>
<td>0.08</td>
</tr>
<tr>
<td>Highly motivated to engage in treatment</td>
<td>0.00</td>
<td>0.06</td>
<td>0.69</td>
<td>0.11</td>
</tr>
<tr>
<td>Admits that he/she has a problem</td>
<td>0.24</td>
<td>0.05</td>
<td>0.68</td>
<td>0.00</td>
</tr>
<tr>
<td>Believe they have a good chance of rehabilitation</td>
<td>0.20</td>
<td>0.19</td>
<td>0.52</td>
<td>0.14</td>
</tr>
<tr>
<td>Plans to change lifestyle from crime to non-crime</td>
<td>0.07</td>
<td>0.31</td>
<td>0.50</td>
<td>0.00</td>
</tr>
<tr>
<td>Feels guilt about the crime</td>
<td>0.39</td>
<td>0.08</td>
<td>0.48</td>
<td>0.00</td>
</tr>
<tr>
<td>Is open to change</td>
<td>0.31</td>
<td>0.13</td>
<td>0.46</td>
<td>0.09</td>
</tr>
<tr>
<td>Willing to participate in psychological examination</td>
<td>0.00</td>
<td>0.35</td>
<td>0.44</td>
<td>0.10</td>
</tr>
<tr>
<td>Has knowledge of right from wrong</td>
<td>0.20</td>
<td>0.25</td>
<td>0.43</td>
<td>0.15</td>
</tr>
<tr>
<td>Has family interest and acceptance</td>
<td>0.21</td>
<td>0.19</td>
<td>0.14</td>
<td>0.84</td>
</tr>
<tr>
<td>Secure stable home life</td>
<td>0.33</td>
<td>0.21</td>
<td>0.08</td>
<td>0.72</td>
</tr>
<tr>
<td>Family is cooperative with the courts</td>
<td>0.23</td>
<td>0.30</td>
<td>0.10</td>
<td>0.76</td>
</tr>
<tr>
<td>Daily contact with family</td>
<td>0.22</td>
<td>0.29</td>
<td>0.07</td>
<td>0.73</td>
</tr>
<tr>
<td>Extent of positive involvement of family</td>
<td>0.13</td>
<td>0.26</td>
<td>0.24</td>
<td>0.62</td>
</tr>
<tr>
<td>Variance accounted for</td>
<td>31.5</td>
<td>7.2</td>
<td>5.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>14.5</td>
<td>3.3</td>
<td>2.3</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Note. Substantial loadings (≥.40) are underlined. Overall variance accounted for by the PAF of ATX is 48.5%.
The second factor (7.2% of the variance), Academic/Work Success and Prosocial Behavior, is composed of 11 unique factors that assess goal oriented and prosocial behavior in school and prior placements. The third factor (5.1% of the variance), Responsibility and Motivated to Change, is comprised of 8 items that assess the juvenile’s awareness of their difficulties, assumption of responsibility for their problem(s), a motivation to engage in treatment, and general plans to change their lifestyle. The fourth factor (4.7% of the variance), Family Cooperation, contains 5 items that assess the family’s interest and acceptance of the youth, the stability of the juvenile’s home life, the family’s cooperation with the courts, and the extent of contact the juvenile has with the family. Mean prototypicality scores were calculated for each of the four factors to assist in our understanding of each factor’s relative importance to ATX (see Table 18).

Table 18

Mean Prototypicality Scores for Dimensions of ATX

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1-Considerate and Tolerant of Others</td>
<td>4.55(^a) (0.95)</td>
</tr>
<tr>
<td>A2-Academic/Work Success/Prosocial</td>
<td>4.63(^a) (0.93)</td>
</tr>
<tr>
<td>A3-Responsibility and Motivated to Change</td>
<td>5.74(^b) (0.80)</td>
</tr>
<tr>
<td>A4-Family Cooperation</td>
<td>5.12(^bc) (1.30)</td>
</tr>
</tbody>
</table>

Note. Means with different superscripts are significantly different from one another (p < .0001)

Paired t-tests with Bonferroni correction to control for family-wise error revealed highly significant differences, with Responsibility and Motivated to Change significantly higher
than all other factors ($p < .001$). Family Cooperation was the second highest, greater than Considerate and Tolerant of Others and Academic/Work Success and Prosocial Behavior. Finally, Considerate and Tolerant of Others was the lowest factor and was significantly lower than all other factors ($p < .001$).

**Juveniles Waived to Adult Court**

Forensic diplomates ($n = 75$) were asked to provide information on a juvenile waived to adult court. The average age of transferred juveniles in this sample was 15.94 (SD = 1.10). Almost all cases were male (94.3%) while a few were females (2.9%) and missing gender data (2.9%). The racial composition of the juveniles waived to adult court was 54.3% Anglo Americans, 25.7% African Americans, and 11.4% Hispanic Americans (see Table 19). Average years of education was 9.16 (SD = 1.83).

**Table 19**

**Demographic Information for Juveniles’ Waived to Adult Court**

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Anglo-A</th>
<th>African-A</th>
<th>Hispanic-A</th>
<th>$\chi^2$ / F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juvenile waivers</td>
<td>42 (56.0%)</td>
<td>24 (32.0%)</td>
<td>9 (12.0%)</td>
<td>---</td>
</tr>
<tr>
<td>Male</td>
<td>40 (95.2%)</td>
<td>23 (95.8%)</td>
<td>9 (100.0%)</td>
<td>---</td>
</tr>
<tr>
<td>Age</td>
<td>16.04 (1.11)</td>
<td>15.46 (0.97)</td>
<td>16.40 (0.55)</td>
<td>1.79</td>
</tr>
<tr>
<td>Education</td>
<td>9.43 (1.94)</td>
<td>8.77 (1.64)</td>
<td>9.60 (1.40)</td>
<td>0.84</td>
</tr>
<tr>
<td>Prior Violations</td>
<td>2.52 (2.98)</td>
<td>3.25 (2.80)</td>
<td>2.00 (1.58)</td>
<td>1.07</td>
</tr>
<tr>
<td>Residing with Family</td>
<td>38 (90.0%)</td>
<td>20 (83.3%)</td>
<td>8 (88.8%)</td>
<td>.91</td>
</tr>
<tr>
<td>Previous Employment</td>
<td>18 (42.9%)</td>
<td>6 (25.0%)</td>
<td>2 (22.2%)</td>
<td>2.04</td>
</tr>
<tr>
<td>Competency to Stand Trial</td>
<td>42 (100.0%)</td>
<td>24 (100.0%)</td>
<td>9 (100.0%)</td>
<td>---</td>
</tr>
</tbody>
</table>

*Note.* No significant race differences were found for any of the above variables. Anglo-A = Anglo American; African-A = African American; Hispanic-A = Hispanic American.
Interestingly, the majority of the juveniles lived with their family (88.6%). Three-quarters (74%) of the juveniles had previous violations with an average number for the entire sample of 2.53 (SD = 2.88). Approximately one-third (29%) of the sample had been employed at some time prior to their arrest. Interestingly, when asked whether or not the juvenile was competent to stand trial at the adult level, psychologists reported all juveniles (100.0%) were competent to stand trial.

**Forensic Diplomates' Ratings of Prototypical Items of Juveniles Who were Waived to Adult Court**

Of the three components, Dangerousness was significantly higher in prototypicality (M = 4.08, SD = 1.11) than sophistication-maturity (M = 3.13, SD = 0.69) or ATX items (M = 3.26, SD = 0.73; p < .001). In addition when compared to Version 1, the juveniles received significantly less high prototypical ratings than when Child-Clinical psychologists rated to be prototypical of those raised to adult court.

**Table 20**

**Means and Standard Deviations for Dangerousness, Sophistication-Maturity and ATX Items**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Child-Clinical Mean (SD)</th>
<th>Forensic Diplomates Mean (SD)</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>4.80* (0.86)</td>
<td>4.08* (1.11)</td>
<td>13.93</td>
<td>.000</td>
</tr>
<tr>
<td>Sophistication-Maturity</td>
<td>4.26* (1.08)</td>
<td>3.13 (0.69)</td>
<td>35.49</td>
<td>.000</td>
</tr>
<tr>
<td>Amenability to Treatment</td>
<td>4.96* (0.74)</td>
<td>3.26b (0.73)</td>
<td>107.72</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Note.* Different superscripts indicate significantly different means (p < .0001).
Additionally, juveniles received significantly lower prototypical ratings on sophistication-maturity than Child-Clinical Psychologists. Finally, as expected juveniles who were transferred were significantly lower in ATX than what Child-Clinical Psychologists had rated to be prototypical of those who were ATX. A MANOVA revealed highly significant differences $F [2, 125] = 5.58, p < .001$; Wilks’ lambda was .94. When inspecting high ratings ($\geq 4.50$) for juvenile waivers, 19 were dangerousness, 2 were sophistication-maturity, and 3 were ATX items. Because item overlap across domains, the 20 dangerousness items may also reflect sophistication-maturity and ATX. For instance, premeditation could indicate dangerousness and sophistication. A listing of the most highly prototypic items for juveniles raised to adult court are provided in Table 21 in descending order. The most highly prototypic items included: (a) use of deadly weapons, (b) behavioral problems in multiple settings, (c) knowledge of consequences of behavior, and (d) a crime of extreme unprovoked violence. These items indicate that the youth engaged in extreme unprovoked violence but also that they had knowledge and awareness of their actions as well as the consequences of their actions. This finding is particularly important in light of the parens patriae model which assumes that youth are not able to form criminal intent and thus are placed in juvenile courts with a rehabilitative focus. This finding suggests that youth waived to adult court had a knowledge of the consequences of their behavior and are held more accountable for their actions. As a result, these youth are raised to adult courts where crime control models rather than rehabilitation are the focus.
Table 21

Prototypical Items of Juveniles Waived to Adult Court: Means and Standard Deviations

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use of deadly weapons</td>
<td>5.43</td>
<td>2.15</td>
</tr>
<tr>
<td>2. Behavior problems in multiple settings</td>
<td>5.23</td>
<td>1.40</td>
</tr>
<tr>
<td>3. Knowledge of consequences of behavior</td>
<td>5.21</td>
<td>1.45</td>
</tr>
<tr>
<td>4. Crime of extreme unprovoked violence</td>
<td>5.18</td>
<td>2.15</td>
</tr>
<tr>
<td>5. Poor impulse control</td>
<td>5.14</td>
<td>1.26</td>
</tr>
<tr>
<td>6. Capable of planned/premeditated behavior</td>
<td>5.06</td>
<td>1.30</td>
</tr>
<tr>
<td>7. Lacks realistic, long term goals</td>
<td>5.03</td>
<td>1.64</td>
</tr>
<tr>
<td>8. Fails to accept responsibility</td>
<td>5.03</td>
<td>1.00</td>
</tr>
<tr>
<td>9. Has knowledge of right from wrong</td>
<td>4.86</td>
<td>1.40</td>
</tr>
<tr>
<td>10. Is narcissistic</td>
<td>4.79</td>
<td>1.67</td>
</tr>
<tr>
<td>11. Need for stimulation/proneness to boredom</td>
<td>4.76</td>
<td>1.30</td>
</tr>
<tr>
<td>12. Values own independence and autonomy</td>
<td>4.74</td>
<td>1.77</td>
</tr>
<tr>
<td>13. Uses drugs and alcohol regularly</td>
<td>4.74</td>
<td>1.58</td>
</tr>
<tr>
<td>14. Is callous/lacks empathy</td>
<td>4.74</td>
<td>1.85</td>
</tr>
<tr>
<td>15. Engages in severe antisocial behavior</td>
<td>4.69</td>
<td>2.00</td>
</tr>
<tr>
<td>16. Has prosocial conduct in court settings</td>
<td>4.68</td>
<td>1.68</td>
</tr>
<tr>
<td>17. Is susceptible to peer influence</td>
<td>4.65</td>
<td>1.50</td>
</tr>
<tr>
<td>18. Engages in wide variety of illegal acts</td>
<td>4.63</td>
<td>1.57</td>
</tr>
<tr>
<td>19. Understood wrongfulness of the crime</td>
<td>4.60</td>
<td>1.88</td>
</tr>
<tr>
<td>20. Showed volition and premeditation by covering up evidence</td>
<td>4.57</td>
<td>2.10</td>
</tr>
<tr>
<td>21. Willing to participate in psychological evaluation</td>
<td>4.54</td>
<td>1.38</td>
</tr>
<tr>
<td>22. Easily angered and physically aggressive</td>
<td>4.54</td>
<td>1.63</td>
</tr>
<tr>
<td>23. Lacks remorse of guilt</td>
<td>4.53</td>
<td>2.12</td>
</tr>
</tbody>
</table>

Note. Only high ratings (≥ 4.50) are presented.

Comparison of The Two Samples with Regard to Factor Scale Scores

There were significant differences in the factor scale scores for Clinical Psychology - Child Psychologists ratings of Dangerousness, Sophistication-Maturity, Amenability to Treatment and Forensic Diplomates actual ratings of juveniles who were waived to adult court. Specifically, juveniles who were waived to adult court tended to be average on dangerousness factors and low on sophistication-maturity and ATX factors (see Table 22).
Table 22

**Comparison Between Clinical Psychology-Child Psychologists and Forensic Diplomates**

**Ratings of Juveniles Waivers**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Child Psychologists</th>
<th>Forensic Diplomates</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1-Irresponsible/Sensation Seeking</td>
<td>3.66 (1.44)</td>
<td>4.19 (1.02)</td>
<td>1.10</td>
<td>.296</td>
</tr>
<tr>
<td>D2-Violent and Aggressive Tendency</td>
<td>5.53 (0.91)</td>
<td>3.87 (1.38)</td>
<td>56.23</td>
<td>.000</td>
</tr>
<tr>
<td>D3-Planned and Extensive Crimes</td>
<td>5.16 (0.96)</td>
<td>4.18 (1.47)</td>
<td>21.32</td>
<td>.000</td>
</tr>
<tr>
<td>D4-Psychopathic Personality</td>
<td>4.50 (1.21)</td>
<td>4.37 (1.36)</td>
<td>1.57</td>
<td>.211</td>
</tr>
<tr>
<td>S1-Emotional and Intellectual IQ</td>
<td>4.18 (1.16)</td>
<td>2.93 (0.71)</td>
<td>33.84</td>
<td>.000</td>
</tr>
<tr>
<td>S2-Criminal Sophistication</td>
<td>4.87 (1.22)</td>
<td>4.20 (1.12)</td>
<td>16.02</td>
<td>.000</td>
</tr>
<tr>
<td>A1-Considerate and Tolerant</td>
<td>4.55 (0.95)</td>
<td>3.03 (0.73)</td>
<td>44.41</td>
<td>.000</td>
</tr>
<tr>
<td>A2-Acadademic/Work Success and Prosocial Behavior</td>
<td>4.63 (0.93)</td>
<td>3.19 (0.65)</td>
<td>52.67</td>
<td>.000</td>
</tr>
<tr>
<td>A3-Responsibility and Motivation</td>
<td>5.74 (0.80)</td>
<td>2.69 (1.20)</td>
<td>221.04</td>
<td>.000</td>
</tr>
<tr>
<td>A4-Family Cooperation</td>
<td>5.12 (1.30)</td>
<td>3.39 (1.21)</td>
<td>41.20</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note. A = ATX Factor; D = Dangerousness Factor; S = Sophistication-Maturity Factor.

F for overall MANOVA = 32.11; Wilks = .35; Power = 1.00; effect = .66

Interestingly, Child-Clinical Psychologists believed that average to high average dangerousness and sophistication-maturity scores would indicate waiver and high scores on the amenability factor would indicate that the juvenile should remain in juvenile court.
Factor Structure of Dangerousness, Sophistication-Maturity, and ATX Dimensions for Juvenile Waiver Cases

Second-order factor analyses were conducted separately for each of the samples to determine the relationship among the factors. Two principal axis factor analyses with varimax rotations were performed. Inspection of eigenvalues and scree plots for the two samples suggested a two factor solution for the Forensic Diplomates and Child Clinical samples. When conducting the second-order factor analysis for the Child-Clinical Sample two relatively distinct factors resulted: Dangerousness (44.3% of the variance) and Amenability to Treatment (12.5% of the variance) (see Table 23). One dimension from the Sophistication-maturity domain, Emotional and Intellectual Maturity, had substantial cross loadings. In general, Dangerousness was composed of the dangerousness factors with the addition of the sophistication-maturity item Criminal Sophistication. The ATX items composed the second factor (see Table 23).

The second-order factor analysis for the Forensic Diplomate Sample produced a highly similar factor structure. The two distinct factors that resulted were: Amenability to Treatment (50.8% of the variance) and Dangerousness (20.4% of the variance) (see Table 24). Factor 1 had a mean score of 3.04 (SD = 0.78) and Factor 2 had a mean score of 4.05 (SD = 1.05). There was a significant difference between the two factors (t = -2.53, p < .02) with Factor 2 being significantly higher than Factor 1. Thus, juveniles who were waived to adult had higher dangerousness scores than ATX scores (see Table 24).
Table 23

**Factor Structure of Dangerousness, Sophistication-Maturity, and Amenability to Treatment for the Child Clinical Sample**

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3-Planned and Extensive Criminality</td>
<td>.81</td>
<td>.21</td>
</tr>
<tr>
<td>D2-Violent and Aggressive Tendencies</td>
<td>.80</td>
<td>.21</td>
</tr>
<tr>
<td>D1-Irresponsible, Reckless, and Sensation-Seeking Behavior</td>
<td>.79</td>
<td>.31</td>
</tr>
<tr>
<td>D4-Psychopathic Personality</td>
<td>.72</td>
<td>.04</td>
</tr>
<tr>
<td>S1-Emotional and Intellectual Maturity</td>
<td>.56</td>
<td>.42</td>
</tr>
<tr>
<td>S2-Criminal Sophistication</td>
<td>.40</td>
<td>.36</td>
</tr>
<tr>
<td>A2-Academic/Work Success and Prosocial Behavior</td>
<td>.21</td>
<td>.83</td>
</tr>
<tr>
<td>A1-Considerate and Tolerant of Others</td>
<td>.33</td>
<td>.81</td>
</tr>
<tr>
<td>A4-Family Cooperation</td>
<td>.09</td>
<td>.61</td>
</tr>
<tr>
<td>A3-Aware of Problems/Assumes Responsibility/willing to change</td>
<td>.14</td>
<td>.59</td>
</tr>
</tbody>
</table>

**Variance Accounted For**  
44.3  12.5

**Eigenvalues**  
4.40  1.23

*Note.* A = ATX Factor; D = Dangerousness Factor; S = Sophistication-Maturity Factor.

Table 24

**Factor Structure of Dangerousness, Sophistication-Maturity, and Amenability to Treatment for Juvenile Waiver Cases**

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1-Considerate and Tolerant of Others</td>
<td>.89</td>
<td>-.08</td>
</tr>
<tr>
<td>S1-Emotional and Intellectual Maturity</td>
<td>.82</td>
<td>-.11</td>
</tr>
<tr>
<td>A3-Aware of Problems/Assumes Responsibility/willing to change</td>
<td>.78</td>
<td>-.23</td>
</tr>
<tr>
<td>A2-Academic/Work Success and Prosocial Behavior</td>
<td>.76</td>
<td>-.20</td>
</tr>
<tr>
<td>A4-Family Cooperation</td>
<td>.55</td>
<td>-.33</td>
</tr>
<tr>
<td>D2-Violent and Aggressive Tendencies</td>
<td>-.18</td>
<td>.91</td>
</tr>
<tr>
<td>D4-Psychopathic Personality</td>
<td>-.16</td>
<td>.82</td>
</tr>
<tr>
<td>D3-Planned and Extensive Criminality</td>
<td>-.14</td>
<td>.82</td>
</tr>
<tr>
<td>S2-Criminal Sophistication</td>
<td>-.28</td>
<td>.54</td>
</tr>
<tr>
<td>D1-Irresponsible, Reckless, and Sensation-Seeking Behavior</td>
<td>-.68</td>
<td>.47</td>
</tr>
</tbody>
</table>

**Variance Accounted For**  
50.8  20.4

**Eigenvalues**  
5.18  1.94

*Note.* A = ATX Factor; D = Dangerousness Factor; S = Sophistication-Maturity Factor.
Experience with Dangerousness, Sophistication-Maturity, and ATX Evaluations

It was important to gain some information regarding the level of experience that the psychologists had with regard to dangerousness, sophistication, and ATX assessments (see Table 25). As expected, forensic diplomates had more experience with these evaluations. Specifically, forensic diplomates conducted approximately 69.10 non-forensic dangerousness evaluations, 140.13 maturity evaluations, and 133.30 ATX evaluations. Forensic Diplomates had a significant amount of experience in the forensic assessment of dangerousness ($M = 156.97$), sophistication-maturity ($M = 174.07$), and ATX ($M = 186.35$).

Child-Clinical Psychologists had significantly less experience. Specifically, they conducted an average of 36.56 dangerousness assessments, 151.17 sophistication-maturity assessments, and 116.87 ATX evaluations. For forensic evaluations, Child-Clinical psychologists conducted 12.35 dangerousness assessments, 14.44 sophistication-maturity assessments, and 15.72 ATX assessments.

Forensic diplomates had a significant amount of direct experience conducting juvenile waiver evaluations ($M = 54.69$, $SD = 70.28$). As expected, Child Psychologists had little experience with assessing juvenile waivers; only 12.8% had direct experience with these evaluations. Table 25 provides the means and standard deviations for child and forensic psychologists experience at dangerousness assessments, sophistication-maturity assessments, and ATX assessments.
Table 25

MANOVA For Child Psychologists and Forensic Diplomates for Assessment of Dangerousness, Sophistication-Maturity, and ATX

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Child Psychologists</th>
<th>Forensic Diplomates</th>
<th>( F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Forensic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dangerousness</td>
<td>36.56(189.75)</td>
<td>69.10(122.94)</td>
<td>.62</td>
<td>.43</td>
</tr>
<tr>
<td>Sophistication-Maturity</td>
<td>151.17(681.75)</td>
<td>140.13(242.84)</td>
<td>.84</td>
<td>.84</td>
</tr>
<tr>
<td>Amenability to Treatment</td>
<td>116.87(713.98)</td>
<td>133.30(251.79)</td>
<td>.00</td>
<td>.98</td>
</tr>
<tr>
<td><strong>Forensic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dangerousness</td>
<td>12.35 (52.73)</td>
<td>156.97 (311.18)</td>
<td>41.51</td>
<td>.00</td>
</tr>
<tr>
<td>Sophistication-Maturity</td>
<td>14.44 (55.07)</td>
<td>174.07 (325.09)</td>
<td>47.00</td>
<td>.00</td>
</tr>
<tr>
<td>Amenability to Treatment</td>
<td>15.72 (62.10)</td>
<td>186.35 (332.33)</td>
<td>44.99</td>
<td>.00</td>
</tr>
<tr>
<td>Waiver Evaluations</td>
<td>1.87 (0.33)</td>
<td>52.57 (65.06)</td>
<td>136.71</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note. MANOVA \( F = 8.19; \) Wilks = .83; \( p < .0001 \).

**Offense Data and Juvenile Waivers**

Psychologists were asked whether they believed certain charges should be a prerequisite for a juvenile waiver. The majority of forensic diplomates (68.6%) believed that there should be certain charges (e.g., assault and rape). For Child-Clinical Psychologists, the results were similar. Most (83%) believed that a certain charge is necessary for a juvenile waiver. Table 26 summarizes the prerequisite offenses for each sample.
Table 26

Proposed Prerequisite Offense By Child Psychologists and Forensic Diplomates

<table>
<thead>
<tr>
<th>Offense Type</th>
<th>Child Psychologist</th>
<th>Forensic Diplomate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent offense</td>
<td>212 87</td>
<td>68 91</td>
</tr>
<tr>
<td>Felony</td>
<td>156 64</td>
<td>50 67</td>
</tr>
<tr>
<td>Person offense</td>
<td>124 51</td>
<td>57 76</td>
</tr>
<tr>
<td>Violation of court order</td>
<td>32 13</td>
<td>5 7</td>
</tr>
<tr>
<td>Property offense</td>
<td>10 4</td>
<td>3 4</td>
</tr>
<tr>
<td>Status offense</td>
<td>10 4</td>
<td>0 0</td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>2 1</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Note. Numbers (%) for psychologists who believed that the particular charge was necessary before being considered for waiver; percentages are column percentages.

Relative Importance of Constructs to Juvenile Waivers

Psychologists were asked to rate how important they thought each of the three constructs were with regard to guiding waiver to adult court. Child psychologists rated Dangerousness to be the most highly related ($M = 6.13$, $SD = 1.31$, range of 1-7), with amenability being moderately highly related ($M = 5.38$, $SD = 1.54$, range of 1-7), followed by sophistication-maturity ($M = 4.32$, $SD = 1.75$, range of 1-7). When forensic diplomats were asked of the importance of the three constructs they rated ATX as the most important construct ($M = 5.91$, $SD = 1.46$), dangerousness to be the next most important construct ($M = 5.74$, $SD = 1.93$) and sophistication and maturity to be only moderately related ($M = 4.97$, $SD = 1.99$). A MANOVA revealed significant differences [$F (3, 261) = 3.98$, Wilks' $\lambda = .95$, $p < .05$] between Forensic Diplomates and Child-
Clinical Psychologists. Specifically, Forensic Diplomates rated both the ATX and the sophistication-maturity constructs to be more important in the evaluation of juveniles to adult court than did Child-Clinical Psychologists (see Table 27).

Table 27

MANOVA of Psychologists' Beliefs About the Importance of Dangerousness, Sophistication, and Amenability in Juvenile Waivers

<table>
<thead>
<tr>
<th>Construct</th>
<th>Child Psychologists</th>
<th>Forensic Diplomates</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerousness</td>
<td>6.13 (1.31)</td>
<td>5.74 (1.93)</td>
<td>0.17</td>
<td>.69</td>
</tr>
<tr>
<td>Sophistication-Maturity</td>
<td>4.32 (1.75)</td>
<td>4.97 (1.99)a</td>
<td>9.81</td>
<td>.00</td>
</tr>
<tr>
<td>Amenability to Treatment</td>
<td>5.38 (1.54)</td>
<td>5.91 (1.46)b</td>
<td>7.80</td>
<td>.01</td>
</tr>
</tbody>
</table>

a = Forensic Diplomates rated sophistication-maturity to be significantly more important to the waiver decision than the Child-Clinical Psychologists.

b = Forensic Diplomates rated ATX to be significantly more important to the waiver decision than the Child-Clinical Psychologists.
CHAPTER IV

DISCUSSION

Juvenile waivers to adult court have serious ramifications for youth including the potential for long-term incarceration and the possibility of the death penalty. However, society's growing concern with the increasing rates of violent juvenile crime has called for more punitive sanctions of adult court to protect the public. In the last two decades, a shift has occurred from a parens patriae model to an emphasis on crime-control models.

In the landmark case of Kent, Judge Fortas was concerned about the arbitrariness of juvenile waivers. As a result, he outlined criteria that were intended to structure juvenile waivers. Based on these criteria, psychologists and psychiatrists have been increasingly utilized to inform the courts with regard to juvenile's suitability for waiver to adult court. The three main constructs with a psychological basis that guide these decisions are the youth's dangerousness, sophistication-maturity and treatment amenability. Despite frequent expert participation in these evaluations, the three constructs have received little conceptual or empirical attention.

This study is an initial and critical step in understanding the constructs guiding juvenile transfers. At present, forensic clinicians rely on clinical experience and intuition when conducting juvenile evaluations. In augmenting clinicians' judgment, further attempts to fine-tune and structure forensic assessments are paramount because
evaluations requested by the courts are given substantial weight when considering whether to try adolescents as juveniles or adults (Melton et al., 1997).

General Conceptualization of Kent

The current study produced four dimensions for dangerousness, two dimensions for sophistication-maturity, and four dimensions for ATX that Child-Clinical Psychologists believed were key in juvenile waiver evaluations. An important aspect of this study was to determine whether the criteria that Child-Clinical psychologists believed were relevant would align with the general conceptualization of Kent. Because Child-Clinical Psychologists did not have direct access to Kent criteria, examining this alignment provides an independent rating of the criteria that are critical to juvenile waivers via prototypical analysis. Each construct is discussed separately below.

Dangerousness

The prototypical analysis of dangerousness produced four distinct dimensions. The factor receiving the highest prototypic ratings was, Violent, Aggressive Tendencies. This factor was characterized by the use of extreme, unprovoked and unnecessary violence, violent histories, and lack of remorse about violent acts either toward people or animals. This factor is highly related to several of the criteria outlined in Kent. Specifically, Kent emphasizes that the seriousness of the alleged offense should be a consideration with more severe crimes requiring waiver in order to protect the community. Kent also indicates that crimes committed in a violent and aggressive manner weigh more heavily in favor of transfer to adult court. Child-Clinical
Psychologists' high ratings of violent and aggressive items as indicative of waiver corresponds with the first guideline provided in the Kent standard.

Psychologists’ beliefs were consonant with the psychological literature on dangerousness and its persistence. Specifically, Moffitt’s (1993) research has suggested a small proportion of antisocial youth (approximately 5%) are persistently violent offenders. These youth can generally be identified by the extremeness of their aggression and the frequency of their criminal behavior at an early age. Moreover, the work of Loeber and Stouthamer-Loeber (1998) have also supported this conclusion that the extremeness of the aggression predicts continued violence. While admittedly, misclassifications occur with this criteria, it appears to be a robust finding and has been demonstrated to have predictive validity.

Prototypic ratings strongly support the centrality of Violent and Aggressive Tendencies to ratings of dangerousness. As mentioned, symptoms associated with violent, aggressive tendencies received higher prototypic ratings than any other factor ($M = 5.94$). Given that this dimension reflects the current crime, offense history, and potential for future violence, its high prototypicality for dangerousness seems to correspond with Judge Fortas recommendation in Kent for those youth who should be transferred to adult court.

Planned and Extensive Criminality was the next highest factor in prototypicality of dangerousness. This factor reflects an extensive history of crimes that are often both varied and premeditated. Premeditation is an explicit criterion in Kent. Specifically, Judge Fortas stated that the crime should be conducted in a willful and premeditated
manner. This criterion is also reflected in current juvenile statutes (Heilbrun et al, 1997). In addition, Judge Fortas stated that the youth should have a history of criminality marked by previous contacts with law enforcement agencies.

Psychologists in this study believed that planned and extensive criminality was an important dimension of dangerousness. When examining its prototypicality, child clinical psychologists rated planned and extensive criminality highly ($M = 5.16$). Thus, psychologists' beliefs about the importance of this dimension was directly aligned with Judge Fortas opinion of juvenile waiver cases.

Psychopathic Personality was the third highest prototypic factor. This factor addresses characteristics that reflect psychopathy as delineated by Cleckley (1941) and Hare (1991). Such characteristics indicate the use of others to further one's own ends through deception and manipulation. Moreover, this manipulation occurs without concern for others, empathy, or feelings of guilt. Lynam (1997) has suggested that these personality types are more likely to be dangerous. The adult literature (e.g., Salekin et al., 1996) has shown that this construct is moderately related to dangerousness, at least in adults. Appropriately, psychologists in this study found that psychopathy was slightly higher than average importance to the assessment of dangerousness ($M = 4.50$).

Interestingly, Judge Fortas never addressed personality syndromes specifically but rather focused more on behavior and identified the type of crime. However, psychologists' knowledge of the dangerousness studies likely reflects the established relationship between adult psychopathy and dangerousness.
Irresponsible, Reckless, and Sensation Seeking Behavior, was rated to be the least prototypic of all the factors. This factor is characterized by a lack of long-term commitment and an absence of continuity in both goals and relationships. This fluctuating, impulsive, and stimulation-driven perspective is marked by problems in achievement. When examining Kent, these characteristics were not addressed directly as indicators of waivers. The items do not have compelling correspondence to serious crimes and crimes against persons per se. The scientific literature (e.g., Moffitt, 1993) has shown that this dimension, is more related to general delinquency than dangerousness. Moreover, youth with these characteristics can also desist from delinquency during adolescence (Loeber Stouthamer-Loeber, 1998; Moffitt, 1993).

According to Loeber and Stouthamer-Loeber (1998), youth can have irresponsible, reckless and sensation-seeking behavior and not necessarily be chronic or violent offenders. Moffitt (1993) has also suggested that youth can be irresponsible, reckless, and sensation-seeking within the context of a “normal” adolescent period. She suggests that while youth with this dimension often continue in their crimes a sizeable portion are likely to desist.

In review of the prototypical ratings, this factor was average in prototypicality ($M = 3.66$). Thus, irresponsible, reckless, and sensation seeking behavior might serve as a signal for continued criminality; however, these behaviors alone should not provide justification for juvenile waivers. Consideration of this factor in combination with other factors might inform which youth are likely to engage in chronic crimes.
In summary, psychologists adopted an approach to dangerousness assessment that was generally aligned with the standards put forth in Kent. They believed that the assessment should include violent offenses, violent pasts, and whether the adolescent was involved in a planned and premeditated crime. These three components directly correspond with the standards outlined in Kent. In addition, Child-Clinical Psychologists believed that psychopathic personality was of slightly more than average importance to the waiver decision. Thus, youth who were generally manipulative and remorseless in their approach to life would be more dangerous and thus require waiver.

The dimensions identified by Child-Clinical Psychologists as important to the juvenile waiver are highly aligned with the scientific research on dangerousness (Loeber & Stouthamer-Loeber, 1998; Lynam, 1997; Moffitt, 1993) which states that extreme violent crimes, and prior history of violence (e.g., Monahan, 1997) are predictive of continued violence. In addition, psychologists believed that the components of premeditation, willfulness, and an awareness that the act was wrong added to the dangerousness assessment. These factors correspond closely to Kent.

**Sophistication and Maturity**

Judge Fortas was vague in his description of sophistication-maturity for juvenile waivers outlined in Kent. He suggested that in order for a juvenile to be waived one of the factors that should be evaluated is “the sophistication and maturity of the juvenile as determined by consideration of his home, environmental situation, emotional attitude, and pattern of living.” (pp. 566-567). Having outlined this criterion the courts have generally
stated that the more mature juveniles be raised to adult court (e.g., Grisso, 1996; Heilbrun et al., 1997)

The prototypical analysis of sophistication-maturity in this study produced two distinct factors: Criminal Sophistication and Emotional and Intellectual Maturity. The most highly prototypical factor was Criminal Sophistication. This factor addresses the extent to which the juvenile has advanced his/her criminality, whether or not they engage in planned/premeditated crimes, and their level of manipulation of others. Criminal Sophistication was rated in the high-average range ($M = 4.87$) in importance to the juvenile waiver decision. One hypothesis is that the psychologists believed that the youth were capable of sophisticated crimes that required adult-like maturity to perform and thus should be tried at the adult level. Another possibility is that Child-Clinical Psychologists viewed youth who were sophisticated in their crimes as potentially dangerous. While this factor is often mentioned in the case law as a reason for waiver, no psychological research has examined developmental pathways for criminal sophistication.

The second dimension of sophistication-maturity, Emotional and Intellectual Maturity, reflects a juvenile who has a clear sense of who they are, has independence, and has the ability to examine the pros and cons of a situation. These individuals also have an absence of need for social validation and have the ability to regulate their emotions. Moreover, emotional and intellectual maturity reflect the juvenile’s understanding of behavioral norms. Many of these items are common among most maturity conceptualizations (Erikson, 1959; Freud, 1958; Goleman, 1995; Greenberger & Sorensen, 1974; Steinberg & Cauffman, 1995) but they are independent of prosocial
behavior. This factor was rated to be of average importance to the waiver decision ($M = 4.18$).

Child-Clinical Psychologists believed that youth should be intellectually and emotionally mature in order to justify their transfer to adult court. As mentioned, one hypothesis is that psychologists believed youth are at a different level of maturity and decision making are able to (a) appreciate behavioral norms, (b) regulate emotions, and (c) weigh the pros and cons of a given situation. Criminal behavior with these cognitive skills might indicate that a high level of responsibility and thus suggest that adult sanctions are more appropriate. Conversely, juveniles without this level of maturity (i.e., unable to understand the behavioral norms and consequences of their actions) would remain in juvenile court. Therefore, sophistication-maturity could provide information on whether a criminal model with punitive sanctions should be utilized or whether a parens patriae model with a rehabilitative focus is more appropriate.

The social science literature generally describes maturity along prosocial developmental lines. Thus, the Kent standard that is currently reflected in the juvenile statutes appears to depart from much of the descriptions of maturity in the social science literature. Nevertheless, Child-Clinical Psychologists rated components of sophistication and maturity that exclude prosocial behaviors to be of average or more than average importance to the decision to juvenile waivers. It is important to note however, that sophistication-maturity items were less prototypic than dangerousness items for raising juveniles or ATX items to have youth remain in the juvenile justice system.
In summary, Child-Clinical Psychologists believed that important components of sophistication-maturity included that the juvenile evidenced autonomy, and the capability for cost-benefit analysis and emotion regulation. Statute and case law have suggested that the criminal sophistication component is what Judge Fortas meant by sophistication-maturity (Heilbrun et al., 1997).

The combination of these two factors might provide the information about accountability that is implied in the sophistication-maturity construct outlined by Kent. That is, youth who know right from wrong and are able to identify other alternatives before they engage in their crimes may be more accountable for their behaviors. Juveniles mature enough to understand the nature and consequences of their behaviors might be more readily transferred to adult courts. With criminal sophistication and emotional and intellectual maturity these youth may understand the consequences of their behaviors and thus, according to Kent, be more accountable.

Another possibility for average ratings, although much more narrow of a hypothesis, is that psychologists believe that emotional and intellectual maturity are necessary in order to ethically transfer youth to adult court. More specifically, cognitive maturity may indicate whether the juvenile's level of competency is sufficient to stand trial at the adult level. Part of Judge Fortas logic in Kent providing sophistication-maturity as a factor in waiver decisions may have been to ensure that the juveniles be more adult-like in maturity so that they would be able to handle the proceedings of adult court. If juveniles were developmentally immature and incapable to stand trial at the adult level, then raising them to these courts would be deviating from the parens patriae
model of juvenile courts. At present, Virginia is the only state that currently specifies that transferred juveniles must be found competent (Scott, Reppucci, & Woolard, 1995). Changes in policy to ensure juveniles are competent prior to transfer have been suggested (Redding, 1996).

What makes this construct even more complex is the consideration that higher levels of maturity might produce better treatment results. Youth with better cognitive skills, emotion regulation, and identity are likely to benefit from psychotherapy (Garfield, 1994). These individuals would be more capable to work in cognitive behavioral therapy, given their cognitive skills. In addition, emotion regulation would help with the stability of functioning and facilitate them in reaching their treatment goals (Taylor, Pham, Rivkin, & Armor, 1998).

An important question is whether increased levels of maturity must be framed in prosocial behavior. Maturity may also underlie the sophistication of juvenile crimes. One possibility is that certain offenders achieve autonomy, initiative, industry, identity, and ego integrity (Erikson, 1959) and use this increased maturity for criminological ends. In this way, emotional and intellectual maturity may work dialectically with separate developmental pathways for prosocial and antisocial maturity. Differentiating these forms of maturity may assist in addressing Kent.

Amenability to Treatment

Judge Fortas suggested that "the prospects for adequate protection of the public and the likelihood of reasonable rehabilitation of the juvenile be evaluated." (pp 566-567). No other specific guidelines were provided. Thus, in this section the goal is not to
determine whether the dimensions found for ATX align with Kent but rather to examine which criteria Child-Clinical Psychologists believed were relevant to ATX.

In this study, four clearly defined dimensions emerged for ATX: (a) Considerate and Tolerant of Others, (b) Academic/Work Success and Prosocial Behavior, (c) Responsibility and Motivated to Change, and (d) Family Cooperation. Each factor and its relation to the empirical literature is briefly discussed below.

Responsibility and Motivated to Change was rated the most prototypic factor. This factor reflects the youths’ acknowledgment of having committed crimes but also insight into their own significant problems that require treatment. This dimension, high in prototypicality (M = 5.74), also indicates juveniles’ motivation to engage in treatment, and general plans to change their lifestyle from criminal to non-criminal. The empirical literature supports this finding and has suggested that acknowledgment of difficulties is a necessary step towards improvement (see Garfield, 1994).

This domain reflects juveniles’ motivation for treatment. As early as Freud (1958), the motivation for patients to seek treatment has been an important factor regarding treatment outcome. This finding supports Grisso et al.’s (1988) research with juveniles which found that treatment motivation was an important indicator of whether juveniles should be waived to adult court.

Family Cooperation was rated to be the second highest factor with regard to prototypicality. This factor addresses the family’s interest and acceptance of the youth and his/her situation, the stability of the juvenile’s home life, the family’s cooperation with the courts, and extent of contact the juvenile has with the family. Prototypical
ratings for this factor were high (M = 5.12), and suggested that family involvement is important to juveniles remaining in juvenile courts. The family as a positive influence is important as a treatment outcome variable (Garfield, 1994; Grisso et al., 1988; Masten & Coatsworth, 1998). Moreover, Masten and Coatsworth’s (1998) and Luthar’s (1994) research on resilience has suggested that a cooperative family is an essential feature to healthy development.

**Academic/Work Success and Prosocial Behavior**, was rated to be the third highest in prototypicality. This factor addresses youth’s previous academic performance, school misconduct, and prior conduct in placements or court proceedings. Psychologists rated this domain to be more than average in importance for juveniles to remain in juvenile court (M = 4.63). This domain is related to ATX in assessing juveniles’ past performance in structured settings. Research on protective factors has shown that youth who have good academic performance are less at risk for chronic offending (Hoge et al., 1993; Masten & Coatsworth, 1998).

**Considerate and Tolerant of Others**, addresses egocentricity, tolerance, honesty, and empathy. Psychologists believed that youth who have an ability to think about and tolerate others in an honest and empathic fashion would be more amenable for treatment than egocentric, intolerant, unempathic dishonest adolescents. This dimension was moderately high in prototypicality (M = 4.55) suggesting that psychologists believed that this factor was more than average in importance to the juvenile waiver decision. The empirical literature (e.g., Cleckley, 1941) has generally suggested that the inability to empathize, or be honest with others is indicative of poor treatment outcome.
In summary, psychologists believe that treatable youth show signs that they are motivated for treatment and that they are aware of their difficulties and are willing to work on overcoming them. In addition to these factors, treatment amenability was dependant upon the stability of family members which included their cooperativeness with court proceedings and treatment efforts. Those youth who were considerate and tolerant of others were considered indicators of amenability to treatment. Finally, prior placement in treatment programs would have been met with some success.

Treatment recommendations are influenced by services available in juvenile jurisdictions. Most experts (e.g., Kruh & Brodsky, 1997) would consider it unethical to consider a juvenile untreatable, due to these system issues alone. However, scholars disagree on how to address these limitations in waiver evaluations. Some commentators (Barnum, 1987; Ewing, 1990; Melton et al. 1997) suggest that forensic examiners provide recommendations, which appropriately consider these limitations. Others (e.g., Kruh & Brodsky, 1997) recommend the examiner provide a detailed treatment determination that considers unlimited treatment possibilities and leaves service availability issues to the judge (Quinn, 1992).

The often cited research (e.g., Basta & Davidson, 1987), that questions what types of therapy work, with whom, and under what conditions, draws attention to a host of circumstances influencing adolescents' adjustment. Researchers (e.g., Kazdin, 1987) have consistently encouraged specific treatments for specific disorder to avoid the implicit view that a given treatment is likely to operate in a uniform fashion across all
conditions (e.g., Kiesler, 1971). However, little research has been conducted that examines a juveniles amenability to different treatment modalities.

**Dangerousness, Sophistication-Maturity, and ATX Items as a Two Factor Construct**

In order to address the overarching conceptualization of juvenile waivers, a second-order factor analysis was conducted on the ten factors for the three psychological constructs associated with Kent. This analysis was conducted to determine whether three dimensions would result that corresponded to dangerousness, sophistication-maturity, and ATX. The PAF produced two distinct dimensions: dangerousness and amenability to treatment. The first dimension consisted of the four dangerousness factors and criminal sophistication (sophistication-maturity factor). The amenability to treatment dimension consisted of all the ATX factors plus the factor of emotional and intellectual maturity (sophistication-maturity factor). This factor cross-loaded suggesting a contributory role to both dimensions. The salience of these two dimensions (i.e., dangerousness and ATX) suggested the relative unimportance of sophistication-maturity as a dimension that stands on its own. The two factor structure indicates that the three general criteria in Kent might better be understood as two domains which include levels of sophistication and maturity. Interestingly, emotional and intellectual maturity cross-loaded suggesting that it is pertinent to both dangerousness and amenability assessments.

The second-order factor analysis for the forensic diplomate sample on waived juveniles also revealed two dimensions that reflected dangerousness and ATX. Understandably, criminal sophistication from sophistication-maturity loaded on the dangerousness factor. Additionally, the emotional and intellectual maturity factor from
the sophistication items loaded on the ATX dimension. These results were important because they suggest that juveniles who are more cognitively and emotionally mature might also be more appropriately suited for treatment. In addition, those who are more criminally sophisticated are likely to be more dangerous.

The similarity between the two factor solutions is striking and has important implications for juvenile waiver evaluations. Dangerousness and ATX appear to be paramount and sophistication-maturity is subsumed under each of these dimensions and thus informs dangerousness and ATX assessments. Thus, the stable two factor structure that resulted from this study does not necessarily equate to the unimportance of assessing sophistication and maturity but rather suggests that this construct be considered within the framework of dangerousness and ATX.

This point is underscored by Child Psychologists and Forensic Diplomates' belief that sophistication-maturity was an important factor to consider in the juvenile waiver evaluation. Child-Clinical Psychologists rated sophistication-maturity to be of average importance and Forensic Diplomates, who had a greater level of experience, rated sophistication-maturity to be of greater than average importance to the juvenile waiver evaluation. Thus, they believed that sophistication and maturity was an important consideration in the evaluation of youth being considered for waiver.

How sophistication and maturity might inform assessments of dangerousness and ATX requires highlighting. Psychologists have often grappled with the defining features of each of the three constructs investigated in this study. In addition, there has been a considerable amount of confusion as to how the factors should be weighted and how
sophistication-maturity could be integrated to provide courts with meaningful information of youth with regard to juvenile waivers. How can psychologists understand this two factor structure with regard to juvenile waivers? The present study indicates that although three legal constructs are presented in Kent and most juvenile statutes, two dimensions may account for juvenile waivers (Dangerousness and ATX) rather than three factors (Dangerousness, Sophistication-maturity, and ATX). Based on this study, sophistication-maturity remains an important concept to assess but plays a subsidiary role to dangerousness and ATX. While criminal sophistication adds to the dangerousness assessment cognitive and emotional maturity is less easily aligned with one or the other of the two broader dimensions. This component of sophistication-maturity may operate paradoxically and be indicative of treatment for some youth (i.e., against waivers) while suggesting increased levels of dangerousness for others (i.e., for waivers). Clinicians will likely want to consider all other factors in combination with emotional and intellectual maturity. Further research will also have to determine how interactions of dangerousness, ATX and emotional and intellectual maturity may interact.

Measurement of Psychological Criteria for Juvenile Waivers

Psychologists who participate in juvenile waiver cases are presented with an evaluation that could have serious ramifications for the youth involved. A critical issue for forensic psychologists is distinguishing between those juveniles suited for waiver and those most likely benefit from the juvenile justice system's rehabilitative focus. As of yet, no guidelines exist to inform clinical psychologists with regard to these decisions, other than juvenile statutes and the criteria outlined in Kent. Psychologists are expected
to be able to assess the youth’s history accurately and determine whether they meet the
standard by making (a) forecasts about future dangerousness, (b) assessments of levels of
maturity, and (c) predictions regarding the likelihood of rehabilitation.

At present, little empirical attention has been paid to this issue; therefore few
suggestions are offered as to the techniques and/or psychological measures that should be
utilized. As suggested by Mulvey (1984), many of the present evaluations are likely
based on clinical intuition and clinical hunches rather than empirically-based data. Given
this lack of knowledge with regard to the juvenile waivers, the current prototypical
analysis can assist in determining what issues ought to be evaluated and what components
of current evaluations may mislead clinicians.

Each construct and the assessment technology that has been recommended is
summarized below. The discussion focuses on whether these psychological measures
contribute in meaningful ways to the assessment of juvenile waivers. That is, do current
assessment technologies address the pertinent issues that were delineated by
psychologists in this study? Moreover, do current methods mislead clinicians in
rendering conclusions on juvenile waivers? These questions will be addressed in each of
the sections that follow.

Dangerousness Assessment Technology

Recommendations in the literature that risk assessments address the type, severity,
and frequency of the predicted violence seem warranted (Barnum 1996, Grisso, 1995;
Monahan, 1981, 1996; Steadman et al., 1993; Webster & Eaves, 1995). The
psychologists in this study appeared to address all of these issues in assessing
dangerousness. The question is whether the measures that have been recommended address these issues.

While standardized assessment instruments may improve the reliability and validity of risk judgements by ensuring that essential areas of inquiry are evaluated, thus far, much of the current risk assessment research targets adult patients and offenders, but does not apply directly to young offenders (Barnum, 1996; Monahan, 1996; Rice, 1997).

**Traditional methods.** Few traditional methods for the assessment of youths’ dangerousness exist. The suggestions put forth by Kruh and Brodsky (1997) that adult measures be used in the prediction of dangerousness for juveniles is not warranted. Although they suggest that these measures be utilized as a starting point, this approach is likely to result in serious misclassifications because this short-cut does not adequately address this population’s specific risk factors.

The VRAG, an adult measure, was suggested for use with youth as a starting point for dangerousness assessments. A majority of its 12 variables do not apply to juveniles. Specifically, diagnosis of personality disorder, marital status, and DSM-III diagnosis of schizophrenia likely do not apply to youth given that personality disorders are typically not assessed in youth and Schizophrenia onset is typically older than youth who come into contact with the juvenile justice system. In addition, most juveniles are not married making this variable of no use to dangerousness assessments in youth. Other items might not apply directly: (a) PCL-R scores because they are based on an adult measure, and (b) DSM mental disorders because the disorders are likely to be different for youth. Male index victim offense and history of property offenses might also have
little to do with juvenile assessment of dangerousness. Therefore, as much as 67% of the variables for this assessment technique may not apply to juvenile dangerousness.

Four items appear to be relevant to dangerousness assessments: (a) failure on prior conditional release, (b) elementary school maladjustment, (c) age at index offense, and (d) victim injury in index offense. The measure does not assess the dimensions of violent and aggressive tendencies or planned and extensive crimes adequately. In summary, any composite score using the VRAG would not provide psychologists with any further information regarding dangerousness assessments and may actually mislead clinicians.

The HCR-20 has the same limitations as the VRAG, given that it was modeled on the VRAG. Several items do not apply to Kent. Specifically, employment problems, substance use problems, major mental illness, personality disorder, lack of insight, negative attitudes, impulsivity, exposure to destabilizers, and stress do not appear to be directly applicable to youths' dangerousness. Thus, 50% of the HCR-20 items may not apply to juvenile dangerousness assessments and use of this instrument for the assessment of youth would be inappropriate.

Use of personality measures developed for general adolescent populations to address dangerousness lack empirical validation. For example, the Jesness Inventory (1974) has poor reliability and weak validity. When examining the content of the Jesness Inventory, its scales are only indirectly related to dangerousness. Additionally, this measure does not address planned and extensive criminality. At best, this measure addresses a circumscribed part of the psychopathic personality dimension, given that it assesses manipulation and non-compliance. However, no studies have been conducted to
determine whether or not the Jesness Inventory accurately assesses psychopathy. Most importantly, longitudinal research examining the predictive validity of this measure with juveniles has not been conducted and thus it is difficult to know whether the measure is useful for predictions of dangerousness.

The Millon Adolescent Clinical Inventory (MACI; Millon, 1993) has also been suggested as a useful measure for assessing juveniles. This measure consists of 160 items composed of 30 scales with considerable overlap. Although the measure has been suggested for use with juveniles, no specific scale elevations have been identified to predict dangerousness. Two scales that seem most relevant are delinquent predisposition and impulsive propensity, although neither of the scales have predictive validity. Moreover, given the high degree of overlap among the elevations on these specific scale elevations are difficult to interpret. Similar problems with the adult Millon measure resulted in Rogers, Salekin, and Sewell (1998) concluding that it does not meet the Daubert standard for court testimony.

Measures of psychopathy might prove to be useful with juvenile offenders as a component of risk assessments. Psychopathy was rated as being of slightly more than average importance to the juvenile waiver. Thus far, several measures of psychopathy are available for children and adolescents. Frick (1995) developed the Psychopathy Screening Device (PSD) for children aged 12 and under. However, no predictive validity studies have been conducted with this measure; thus, its use with children in the juvenile justice system is unwarranted. Moreover only two of the F1 items were high in prototypicality: (a) lack remorse and (b) lacks empathy.
While child measures of psychopathy might help with younger children, the Psychopathy Screening Device is inappropriate for most adolescents. Moreover, no adolescent measures of psychopathy are available to clinicians. Forth (1998) is developing a measure of psychopathy for adolescents, named the Psychopathy Checklist - Youth Version (PCL-YV). While this measure has good initial reliability and validity data (Forth, personal communication, June 5, 1998) data have not been published of the PCL-YV. Because the PCL-R was low in its relation to violence in youth and was not developed for use with youth, it is inappropriate for juvenile waiver cases. While the PCL-YV is intended for use with youth (Forth, 1998), I would not recommend its use for clinical purposes until sufficient predictive validity data are available. Factor 2 was represented by highly prototypic items but does not directly address the severe, aggressive high frequency nature of antisocial behavior that psychologists believed was necessary for a waiver determination. Numerous PCL-R items were low (≤ 4.00) in prototypicality; low prototypical items include reckless and irresponsible, need for stimulation/proneness to boredom, glib/superficially charming, promiscuous sexual behavior, and lacks realistic long-term goals. These items constitute 25% of the PCL-R. The fact that youth could meet Factor 2 items without necessarily being frequently aggressive, and severe antisocial individuals suggests that this measure, as a composite, is not appropriate for juveniles. Juvenile assessment of risk might be better assessed based upon data derived from studies on youth violence that differentiates those who are violent from those who are not.
Proposed methods. Assessing juvenile dangerousness might be better addressed by a semi-structured clinical interview that included collateral data from families, courts, schools as well as the youth that specifically targeted the violent and aggressive tendencies of the youth. In addition, the assessment should include the degree to which the youth has been involved in planned and premeditated crimes. This would involve record review which would also help to assess the accuracy of self reports from collateral sources as well as the youth. Once these two main factors had been assessed, an assessment of psychopathy could be utilized to supplement them in determining the youth’s level of risk. However, this assessment of psychopathy would have to be based upon severe aggressive and frequent antisocial behavior coupled with a lack of empathy and a lack of remorse. Items such as superficial charm, grandiosity, promiscuous sexual behavior, lacks realistic long-term goals, and need for stimulation/proneness to boredom may add little or actually obscure the types of psychopathic classification that would indicate increased dangerousness (Rogers, Salekin, Sewell, Hill, & Murdock, 1998).

Thus, if the youth had an extensive criminal history that included violence as well as planned and premeditated crimes and a diagnosis of psychopathy with a lack of empathy and remorse would augment risk assessments. Finally, an assessment of the youths’ level of involvement in the crime would be paramount with those youth demonstrating a leadership role in the crime being considered more dangerous than youth who were more peripheral to the planning and implementing of the crime. Again record review would be extremely important to this component of the assessment.
Sophistication-Maturity Assessment Technology

No well-validated measures exist for the assessment of juveniles' maturity and sophistication in the legal context. Moreover, most conceptualizations of maturity include prosocial items and appear less applicable to offender populations.

Traditional methods. Kruh and Brodsky (1997) and Ewing (1990) have suggested the use of intelligence tests, such as the Wechsler Intelligence Scale for Children - Third Edition (WISC-III; Wechsler, 1991), achievement tests, such as the Kaufman Test of Educational Achievement (K-TEA; Kaufman & Kaufman, 1985), and behavioral measures, such as the Vineland Adaptive Behavior Scales (Vineland; Sparrow, Bala, & Cached, 1984). These measures allow individual youth to be compared to age peers on cognitive and behavioral maturity. While these measures have reliability and validity data, no empirical data are available on how these measures should be used with youth who are being considered for waiver to adult court. Neither Kruh and Brodsky (1997) nor Ewing (1990) provide specific guidelines regarding scale elevations or for the interpretation of test data. Thus, whether these measures would be useful in the assessment of sophistication-maturity is difficult to determine.

Use of the Wechsler intelligence scales may provide some information with regard to intellectual maturity, although this is speculative. Logically, Comprehension, Information, and Vocabulary subscales of the Verbal scale might provide useful information with regard to ATX of youth with brighter youth being able to make quicker gains in treatment. On the other hand, youth who have violent and aggressive past and are bright may indicate higher risk levels. Empirical testing of these hypotheses is
necessary. Other Verbal subscales such as Digit Span, Arithmetic, and Similarities may have little discriminative capability although this hypothesis remains to be tested.

Picture Arrangement on the performance scale might give some indication of the youth’s ability to understand social interactions. Another hypothesis, is that youth who understand social interactions well but continue to engage in criminal activity may be more sophisticated in there crimes and thus dangerous. It is difficult to know how other performance tests (i.e., Block Design, Object Assembly, and Digit Symbol) would contribute to the assessment of sophistication other than to provide an overall estimate of intellectual maturity. Achievement tests and adaptive living scales do not directly assess the two factors of maturity found to be important in this study. However, the KTEA or Vineland might be useful indirectly for ATX, given that achievement is often thought to be a protective factor (Luthar, 1993).

Kruh and Brodsky (1997) recommended the Jesness Inventory (Jesness, 1983, 1997) as a measure of adolescent maturity but did not state how this might inform psychologists with regard to maturity judgements. Jesness’s model does not appear to assess maturity because it lacks theoretical underpinnings. Rather the Jesness Inventory more likely represents a measure of manipulation, impulsivity, and non-compliance. Lower levels on this measure indicate that the youth is (a) lacking in compliance, and (b) impulsive and manipulative. These characteristics would seem to be, if anything, more indicative of waiver despite low levels of maturity.

A similar model to that of Jesness was developed and tested by Reitsma-Street (1984, 1988). This model was referred to as the Conceptual Level Matching Model.
(CLMM) and measurement of maturity is achieved in this system through the use of semi-projective measures referred to as the Paragraph Completion Method (Hunt, Butler, Noy, & Rossor, 1978) or the Paragraph Completion Test (Sechrest, White, & Brown, 1979). This measure appears to have good inter-rater reliability and has been shown to be useful in the placement of young offenders. According to Rogers and Mitchell (1991), the CLMM model appears to be the most appropriate at providing some standardized measure of maturity. However, it does not capture other aspects of maturity, such as intellectual and emotional capacity, self identity, or autonomy that psychologists in this study believed to be important in the assessment of juvenile waivers.

Other psychometric measures suggested for maturity assessments, such as the California Personality Inventory (CPI; Gough, 1995), the Eysenck Personality Inventory (Eysenck & Eysenck, 1975), and the Progressive Matrices do not show particularly good evidence of construct validity for this purpose. More generally, discriminant validity coefficients often exceeded that of convergent validity coefficients, raising questions about construct validity. Moreover, no predictive validity data exist to determine whether these measures correctly assess maturity in juvenile offenders. Thus, at this time they too would be inappropriate for these evaluations.

One aspect of sophistication-maturity that is not directly addressed by any of the testing materials is accountability of the juvenile for the crime. Kent outlined criteria that indicated accountability as an important factor. Given the parens patriae philosophy of the juvenile courts, it comes as no surprise that those juveniles who are more mature and
understand the wrongfulness of their crimes would be more likely to be considered for crime-control models.

With regard to this matter assessments of morality might also be important. Again, lower levels of maturity would likely indicate an increased likelihood of continuance in crime. According to Kent, more mature juveniles should be waived to adult court. Psychologists utilizing this measure should know that “low in maturity” on this measure might indicate that the youth is more child-like but possibly more dangerous. Nevertheless, these assessments might have valuable information and require further testing. Kohlberg’s (1981, 1984) moral reasoning framework or Selman’s (1980) perspective taking model require further testing before they could be considered for these types of evaluations. Further research on these systems would inform psychologists as to whether such systems provide useful information for these evaluations. Ewing (1990) suggested that a detailed psychosocial history, an assessment of current functioning, and mental status through interviews with the juvenile and his/her family, and projective and self-report personality measures to obtain “useful indications of the juvenile’s internal controls, ability to organize thoughts coherently, and reality testing” (p. 9). Ewing (1990) and Kruh and Brodsky (1997) have suggested that this technique would facilitate in screening out those individuals who truly did not understand the nature of their crime due to low cognitive abilities and/or a mental illness.

Evaluating juveniles with regard to their mental state at the time of the offense may be a particularly important issue. According to Grisso (1996), juveniles may be developmentally unable to appreciate the wrongfulness of their acts. Scott et al. (1995)
stated "... adolescents may not appreciate the long-term consequences or potentially serious ramifications of criminal conduct for themselves and other. Adolescents and adults may perceive differently the risks and benefits of both engaging in criminal behavior and being held legally responsible for such behavior." (p. 239). Child developmental researchers are beginning to identify ways in which adolescents differ from adults in making decisions (Scott, 1992, 1995; Steinberg & Cauffman, 1996) but clearly much work is still required.

Predictive validity testing of the maturity-sophistication construct is essential in order to improve courtroom decision-making. As it stands, no measures adequately address this construct. While the aforementioned approaches to the assessment of maturity and sophistication are important, they lack the reliability and validity testing required to substantiate their clinical use. Sophistication and maturity assessments must be comprehensive. From an ethical standpoint, what might be equally important to criminal sophistication and emotional and intellectual maturity is the assessment of the juvenile’s maturity in the context of his/her ability to understand and appreciate his or her wrongdoing and to be able to participate adequately in the proceedings of the criminal justice system. Thus, maturity evaluations may need to extend beyond the customary scope.

Proposed methods. While Ewing (1990) has recommended two factors (cognitive and emotional maturity) to assess when considering juvenile waiver to adult court, the current study suggests that an additional factor would require assessment: criminal sophistication. At present, criminal sophistication may be indirectly assessed through
dangerousness evaluations and does not appear to have been addressed as a separate construct. It may be that there are important components to this construct that would inform the evaluations of mature criminal thought.

I would recommend that sophistication-maturity assessments be conducted with intelligence testing and a semi-structured interview. Intelligence testing would provide psychologists with a base-line of intellectual functioning and would allow for those youth who were developmentally delayed or significantly low in intelligence to be considered for special treatment under the parens patriae model. It would also give some information about the decision making capabilities of those who scored high on intelligence measures.

A semi-structured interview would address the youth's criminal sophistication as well as emotional intelligence and would supplement intellectual testing. Thus, the interview would address the youth's progression along a criminological pathway and determine whether the crimes were becoming progressively more planned and premeditated. In addition, it would be critical to determine whether the youth understood behavioral norms and whether they were able to identify alternative actions to the criminal behavior in which they had engaged. Emotional maturity could be assessed by determining if the youth was generally capable of such variables as regulating his/her emotions, delaying gratification, and being able to identify and label emotions (Goleman, 1995).

Assessment of competency to stand trial at the adult level should be a separate evaluation. While this might, in part, be assessed through the sophistication-maturity
construct, a separate component of the evaluation process could directly address their factual and rational understanding of the proceedings in order to determine suitability for adult court.

Amenability to Treatment

Little empirical support and no assessment tools exist for the assessment of juvenile offenders’ ATX. The ATX construct has generally been assessed via clinical intuition and hunches about whether the juvenile was likely to improve during treatment. Thus, the scientific literature has no specific measures for ATX with regard to juvenile transfers. However, psychologists who have involvement in these type of evaluations have offered clinical suggestions.

Traditional methods. Current suggestions for structuring the evaluation of amenability are based on clinical experience (Kruh & Brodsky, 1997). Barnum (1987) suggested that clinicians measure amenability using signs of low risk for career criminality and high likelihood of treatment response for related psychopathology, such as depression and post-traumatic stress (Grisso, 1996; Kinscherff & Tobey, 1995). These guidelines are important considerations in light of Rogers’ (1998) highlighting of the importance of protective factors.

Melton et al. (1997) recommended assessing four broad domains including (a) family, (b) community, (c) academic/vocational, and (d) personality functioning. However, they did not provide specific content to assess within these four domains. Grisso (1995) suggested that clinicians develop a diagnostic and dynamic conceptualization of the offense causes, utilizing the juvenile’s life history, family
functioning, and psychological test results. He stated that assessments are critical to the conceptualization of (a) anxiety due to previous trauma or threatening living situations, (b) appreciation for sub-cultural norms, (c) examination of situational details of the crime, and (d) consideration of positive relationships with significant others, including gangs. According to Grisso (1995), through careful consideration of the juvenile’s traits that might facilitate or hamper treatment, empirically and clinically supported interventions should guide the amenability recommendation. The recommendations by Barnum (1987) and Grisso (1995) are plausible yet remain to be empirically tested.

Proposed methods. I recommend that this construct be assessed with a semi-structured interview that takes into account an examination of the youth’s level of pathology and whether or not that pathology is related to the continuance of criminality. As Barnum (1987) and Grisso (1995) emphasized, youth with treatable forms of mental disorders may respond to interventions and reduce criminality. Examining different variations of antisocial personality disorders would be beneficial with more extreme and aggressive personalities being possibly more difficult to treat.

In addition, this assessment should include a close examination of the youth’s motivation for treatment and their acknowledgment of treatment objectives (i.e., youth recognizing their problems). This assessment should also address the youth’s expectations of change, because positive perceptions may lead to better outcome (Garfield, 1994).

Other important areas of assessment include how the youth expect to benefit from treatment, whether they demonstrate remorse/guilt about the crime, and whether they
demonstrate empathy. Additionally, an assessment that the youth have a family that are stable and supportive would be useful. Although this latter factor is likely a contentious issue, youth who have stable and supportive families might be more likely to have positive outcomes.

One factor that seems to require further attention is whether juveniles with different forms of conduct disorder are more amenable to treatment than other juveniles (Rogers et al., 1997). In addition, improved assessment of childhood characteristics with regard to amenability will permit elaborating of possible child X treatment interactions in treatment outcome and hence finer grained analyses of amenability and treatment.

Explication of Kent’s Psychological Criteria

Clinical psychologists involved in waiver evaluations will want to assess youth for highly prototypic items. Highly prototypic items were examined for each of the constructs to determine if explication of the themes may provide further understanding of the three constructs that are utilized to guide juvenile waivers that are not captured in the factor analyses. This section differs from the past section in that highly prototypic items may not be represented by certain factors or measures. Each of the constructs is reviewed separately below.

Dangerousness

Clinicians assessing dangerousness of youth can utilize the four factors that resulted from the PAF. In addition, to assessing these broad dimensions, several highly prototypic items may augment such assessments by elucidating the most prototypic items as well as addressing items that were not identified by the factors themselves. Twenty
two of the dangerousness items were highly prototypic ($> 5.00$). The three highest items were mentioned multiple times in case law as a rationale for waiver to adult court: (a) use of deadly weapons, (b) extreme unprovoked violence, and (c) engages in severe antisocial behavior. Four other themes surfaced from highly prototypic items. First, items for Severe Aggressive Conduct Disorder with an early onset were rated as highly prototypic. Second, two items from the PCL (Hare, 1990) were found to be pertinent: (a) lacks remorse or guilt, and (b) callous/lack of empathy. Third, premeditation was high in prototypicality and was represented by items such as (a) had discussed a plan, and (b) premeditated crimes. Finally, playing a leadership role in the crime was rated as a highly prototypic item with regard to juvenile waivers. This criterion was commonly mentioned in the case law but not in social science literature. Therefore, the general themes of the prototypical data for dangerousness indicate that waiver to adult court should be considered when youth:

1. engage in extreme unprovoked violence
2. have a severe, aggressive, antisocial personality
3. lack remorse/guilt and empathy, and
4. show a leadership role in the crime.

Sophistication-Maturity

Only four items were high in prototypicality for the sophistication-maturity construct: (a) criminal sophistication, (b) capable of planned and premeditated crime, (c) understanding of behavioral norms, and (d) were able to identify alternative actions.

Both criminal sophistication and premeditated crime came from the case law and juvenile
statutes and were items which provided justification for juvenile waiver. The items understanding behavioral norms and able to identify alternative actions were derived from the psychological literature on maturity (Goleman, 1995; Steinberg & Cauffman, 1995). Therefore, psychologists believed that those youth who knew the norms and were able to identify alternative actions but still engaged in premeditated and sophisticated crimes were more appropriate for juvenile waivers. Examination of highly prototypical items points to the importance of accountability in the sophistication-maturity construct. The general themes of the prototypical data for sophistication-maturity indicate that waiver to adult court should be considered when youth:

1. have criminal sophistication
2. are capable of planned and premeditated crimes
3. understand behavioral norms, and
4. were able to identify alternative actions.

In this case higher scores with regard to understanding of behavioral norms and ability to identify alternative actions would be indicative of waiver. However, these items must be considered in relation to all other factor scale scores. That is, if youth are high in dangerousness and low in amenability to treatment then it may be that these items indicate that the youth was mature enough to understand the nature and consequences of their crime. On the other hand, if the youth is low in dangerousness and high with respect to amenability to treatment then these items may actually be beneficial to the juvenile in making quicker gains in psychotherapy.
**Amenability to Treatment**

Clinicians will benefit from assessing highly prototypic items with regard to ATX. The highest item was motivation to engage in treatment. Thus, youth who showed that they were ready and willing to receive treatment were seen as more amenable than youth who did not meet this criterion. The next highly prototypic item indicated that the youth was aware that he/she had a problem and that they wanted to overcome this problem. Expectations were also rated high in prototypicality with youth who believed they had a good chance of being rehabilitated considered as more ATX.

The feelings that the youth had about the actual crime was also of importance to ATX. Psychologists believed that if youth felt guilt and remorse about the crime they would have a better chance of being rehabilitated. A related factor was that youth be able to demonstrate empathy - a lack of empathy was seen as a sign of unamenability to treatment.

Finally, family life was also seen as important with youth who had supportive families being seen as more ATX. This theme included families who were stable and willing to participate in the court proceedings as well as cooperate with the courts. Other factors included having limited contact with the juvenile courts in the past, knowledge of right from wrong, and good conduct in previous juvenile placements.

Therefore, the general themes of the prototypical data for ATX indicate that keeping juveniles in juvenile court should be considered when youth:

1. are motivated for treatment
2. are aware of their difficulties and want to change them
3. expect that they will benefit from treatment
4. demonstrate remorse/guilt
5. are empathic
6. have knowledge of right from wrong, and
7. have a family that are stable and supportive.

Current Limitations and Future Directions

This study was a first and initial step to clarify the three constructs that guide juvenile waivers. As such, it was not possible to address all the questions pertaining to this important topic. What follows is a discussion of the limitations of this study and a section that addresses the course that future research might take to help further clarify these three constructs and the juvenile waiver evaluation.

Limitations of the Current Study

The current study had several limitations. One primary limitation was that the dangerousness literature varied markedly in its operational definitions of dangerousness. This heterogeneity in definitions led to the use of diverse criterion/samples designated as dangerous; they included delinquent youth, chronic offenders, aggressive youth, severe antisocial youth, and violent youth. While more recent research has made a more clear distinction of violence and dangerousness (e.g., Loeber & Stouthamer-Loeber, 1998), the extent to which data exist with this more specific classification is limited.

Compounding problems with operational definitions and criterion groups were methodological flaws (Sechrest & Rosenblatt, 1987). Dangerousness studies frequently lack adequate operational definitions of dangerousness and lack sophistication in the
multivariate use of variables to predict future dangerousness. Moreover, many studies do not provide readers with adequate data to examine the relationship between youth characteristics and dangerousness.

Few studies have adequate measurement outcomes. For example, actual recidivism rates are rarely examined, a criterion of most interest to policy makers. Moreover, whether defined as re-arrest, re-adjudication, or re-incarceration, the measurement of recidivism is problematic. Specifically, recidivism involves discretionary judgements of juvenile justice personnel and does not correspond exclusively to the criminal behavior it is designed to appraise (Reppucci & Clingempeel, 1978). Nevertheless, recidivism data along with self reports and collateral observers, should allow for a more comprehensive assessment of dangerousness.

Rogers (1998) has argued that social scientists have not critically examined their abilities to make risk assessments. In addition, he stated that protective factors are rarely considered despite the fact that they would add substantially to the risk assessment equation. Rogers and Salekin (in press) have shown that the use of base rates, as suggested by Grisso and Applebaum, can result in serious misclassifications. As a result of the aforementioned problems with the dangerousness literature, it is difficult to know whether the sampling of items regarding dangerousness accurately represents the dangerousness domain.

Sophistication literature is limited and this construct does not appear to have an easy alliance with the legal conceptualization. A broad sampling of the literature and case studies revealed some relevant factors although further research is obviously needed.
with this construct. Again, the problem here is an uncertainty of whether the sample of maturity items accurately represent the domain of sophistication maturity items that was originally proposed by Kent.

ATX has rarely been studied with juveniles and this construct requires further attention. The published research generally focuses predominantly on the treatment technique alone (e.g., Basta & Davidson, 1987). A major research priority for the field is to expand the range of questions asked of psychotherapies for children and adolescents involved in the juvenile justice system. At present, it is difficult to know whether the items obtained in this sample accurately reflect all ATX components.

A second major limitation of the study is the sample size for Version 2. A larger sample would be more representative of forensic experts and might result in changes in prototypical ratings. Future research should sample larger groups of psychologists experienced with waiver evaluations. Comparisons of waived and not waived offenders would assist in understanding these constructs and development of measures. Finally, this study did not provide predictive validity data such as the likelihood that someone scoring high on the dangerousness items actually engaged in violence at a later point in time.

**Proposed Research for the Clinical Assessment of Juvenile Waivers**

Future research should have psychologists as well as other professionals, such as lawyers and judges, provide characteristics that they believe to be important to each of the constructs. By combining legal and clinical professionals, further clarification of these constructs might be achieved. For instance, while forensic diplomates reported that
the sophistication maturity construct was moderately important to juvenile waivers, they evaluated emotional and intellectual maturity as low but criminal sophistication as high. It would be useful to determine whether legal professionals believe these criteria to be important to juvenile waivers.

Implementing the current findings from this prototypical analysis to the assessment of juveniles who are both waived and remain in juvenile court would provide useful information about construct validity. This could be implemented by developing a semi-structured interview that addresses the pertinent characteristics from the three domains and then testing their reliability and validity in the assessment of youth. Additionally, it would also be useful to determine which youth continue in criminality and continue to be dangerous although this is difficult to determine given that necessary legal interventions often make it difficult to determine if an individual will continue or desist in dangerous behaviors. One way to examine risk for future violence is to examine those with severe conduct disorders and control groups to determine what factors differentiate between those who go on to be violent offenders and those who do not.

Prior to treatment efforts, an assessment of juvenile characteristics would be useful so that treatment outcome could be evaluated systematically. Outcome studies would include an evaluation of the youth’s adjustment to the community as well as recidivism rates. These studies could focus on client variables as well as treatment variables and their interactions.

Assessment of juveniles’ veracity during transfer evaluations is underresearched. Barnum (1990) suggested that many juveniles deny involvement in the crime often
distorting indications of amenability, risk, and maturity. Barnum (1990) developed a
four-fold classification of these denials: (a) strategic (i.e., deliberate denial due to
personal belief or attorney recommendation that it will help the case), (b) avoidant (i.e.,
characterological propensity to deny participation in negative behaviors), (c) repressive,
(i.e., a genuine loss of awareness because of disturbing memories of the act), and (d)
genuine (i.e., accurate declaration of innocence).

An underresearched and critically important issue is the long-term differential
outcome between juveniles in the juvenile justice system and those transferred to adult
court. Transferred juveniles are often incarcerated and lose benefits associated with the
juvenile system. They risk more punitive sentences (e.g., execution and life sentences),
and are placed at risk to be assaulted by adult criminals (Edwards, 1995; Grisso, 1996;
Grisso & Conlin, 1984). Understanding the consequences of these placements could
improve the experts’ recommendations and aid judges in making the transfer decision.

The quality of psychological reports regarding waiver needs further evaluation.
Provornse and Sarata (1989) conducted a study of 36 juvenile judges. These judges
viewed psychological reports as an important resource. However, they also noted a need
for more interactive communication between courts and experts and expressed
dissatisfaction with reports “couched in jargon,” ignoring the dispositional realities, and
not addressing the pertinent questions.

Melton et al. (1997) provided an outline for waiver evaluation reports. Despite
having made suggestions, they maintain that psychologists should not address ultimate
issue opinions. On the other hand, forensic experts are well aware that judges often
expect experts to provide them with relevant information that often touches very close to the ultimate opinion. Rogers and Ewing (1989) have acknowledged the strident criticism that ultimate opinion testimony by mental health professionals has undergone. However, they argue that the ultimate opinions do not unduly sway fact finders. There data suggest that these claims underestimate the ability of jurors to evaluate expert testimony critically and exaggerate the ability of psychiatric and other mental health experts ability to sway jurors with their testimony. Moreover, they concluded that the goal to eliminate such testimony will not achieve its intended goal.

Given the intricacies of the juvenile transfer evaluations, I believe that these constructs require further refinement and distillation. I agree with the recommendations that transfer evaluations be performed only by specially trained clinicians (Kinscherff & Tobey, 1995). As juvenile transfers become more common in the evolving juvenile justice system, scientists and practicing clinicians should be working toward refining the information that they gain with regard to these constructs in order to ensure that the information provided to the courts is valid, reliable, and useful. Research-based guidelines, standardized procedures, and psychometrically sound assessment measures are essential to understanding how well transfer evaluations serve juveniles and courts.

Future research should focus on sampling other groups of professionals involved in waiver evaluations, such as attorneys and judges. Their viewpoints would likely shed further light on the constructs of risk assessment, maturity, and amenability. In addition, examining the development of constructs on juveniles will be a necessary next step with regard to convergent and discriminant validity and predictive validity.
Research and refinement of these and similar systems may allow for the classification of groups of delinquents that can be empirically compared and followed-up after receiving various treatment approaches. Through such investigations an offender-treatment “matching” approach can be initiated as suggested by Mulvey (1984).

It is beyond the scope of social science research, of course, to determine what types of information satisfy the law’s ultimate purpose. Yet where the law is vague in its guidance to legal decision makers in the use of information, social science methods can assist the law by examining the range of information available for decisions, structuring the diversity of information, and examining courts’ current uses of information in relation to legal decisions.

The empirical literature on interventions with adolescents and particularly seriously violent adolescents is limited. Furthermore, it offers little resolution for those looking for simplistic answers to the question of whether intervention with violent juveniles is justified by scientific evidence. Clearly, no single approach has proven effective when working with violent adolescents. Furthermore, the studies that have been conducted, to date, have not differentiated between violent and other types of offenders (Tate et al., 1995).

A need clearly exists for methodologically sophisticated studies of treatment effectiveness that are more precise with regard to their definition of violence and their specification of violent juveniles. Psychologists’ ability to develop meaningful conclusions about the effectiveness of interventions with violent juveniles and refinements in public policy could be enhanced by: (a) replicated findings of promising
prevention and intervention programs, (b) specification of the conditions and populations with which these interventions work best, (c) clarification of different typologies of violent adolescents (e.g., Cornell, Benedek, & Benedek, 1987), (d) exploration of specific childhood risk and protective buffering factors that promote or inhibit future violent behavior, and (e) development more valid and reliable means of risk assessment. Ultimately, identifying specific treatments that will diminish criminality in well-defined categories of adolescent offenders would be the goal.

Much work is left to be done with regard to juvenile waiver to adult court. Programmatic research is required to further elucidate the developmental pathways of dangerousness, sophistication, and treatment amenability. Once waiver decisions are rendered, follow-up studies are needed to document the effectiveness of these decisions.
FOOTNOTES

1. For the sake of succinctness, juvenile waivers to adult court will be referred to as simply “juvenile waivers.”

2. For the sake of succinctness, *Kent v the United States* (1966) will be referred to as simply *Kent*.

3. Grisso et al. (1988) factor analyzed detention, transfer, and disposition cases together and did not provide a separate factor analysis for those juveniles who were waived to adult court. They did however, provide correlation coefficients to examine each factors relatedness to the waiver decision. The factors only accounted for small portions of variance ($r$s ranging from .02 to .35). Some of the factors were negatively correlated, but again the magnitude of the correlation coefficients were generally low ($r$s ranging from -.08 to -.49).

4. Although Robins (1966) uses the term “sociopathy” throughout her book, she refers to the syndrome as being synonymous with psychopathy. Her diagnosis of sociopathy included a “failure to conform to societal norms” in at least five of the following areas: (a) work history, (b) financial dependency, (c) arrests, (d) marital history, (e) alcohol abuse, (f) school history including truancy, (g) impulsiveness, (h) sexual behavior, (i) “wild” adolescence, (j) vagrancy, (k) belligerency, (l) maintenance of social relationships, (m) lack of guilt, (n) somatic complaints, (o) poor Armed Forces performance, (p) pathological lying, (q) drug use, and (r) suicide attempts.
APPENDIX A

PROTOTYPICAL ANALYSIS MEASURE - PHASE I: CORE CHARACTERISTICS
OF JUVENILES WAIVED TO ADULT COURT
We are asking for your expertise to clarify critical components of decisions to waive juveniles to adult criminal courts. The three factors that we would like clarification on with regard to children and adolescents include: (a) dangerousness, (b) sophistication-maturity, and (c) amenability to treatment. Clearly, there are other factors than children's and adolescent's characteristics that enter in to the decision of whether or not to waive youth (e.g., availability of treatment resources). However, we would like you to focus on each of these three constructs and to rate the core characteristics of each construct.

General Instructions

On the following page you will find the criteria that are listed for dangerousness. We are interested in how you would describe a child or adolescent who is dangerous. To help with this description, we have listed below characteristics which, at one time or another, have been considered by mental health professionals, judges, lawyers, and other court workers as related to dangerousness in juveniles. The same professionals are now attempting to elucidate what should and should not be considered characteristics of dangerousness in youth. Because of your experiences with children and adolescents, we are interested in your views. Following the dangerousness construct we ask you to make core characteristic ratings for sophistication-maturity and amenability to treatment. The survey should take you less than 10-15 minutes to complete.

Return Mailing

When you have completed the survey, please return it to us as soon as possible. A preaddressed and postage prepaid envelope is enclosed for your convenience.

Thank you very much for your participation. Your responses will be kept confidential.
DANGEROUSNESS

Please rate the characteristics listed below on the following pages using rating from 1 to 7. Try to use the full range of ratings.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>slightly less than average</td>
<td>average</td>
<td>more than average</td>
<td>very much</td>
<td>extremely</td>
<td></td>
</tr>
</tbody>
</table>

The child or adolescent:

- is conning/manipulative
- lacks remorse or guilt
- is narcissistic
- is glib/ or superficially charming
- is callous/lacks empathy
- has extreme or serious Conduct Disorder
- has Conduct Disorder- Aggressive subtype
- has Conduct Disorder- Destruction of Property
- has Conduct Disorder- Deceitfulness of theft
- has Conduct Disorder- Serious violations of rules
- is a pathological liar
- has high frequency of criminal behavior
- has behavior problems that are occurring in multiple settings
- engages in a wide variety of illegal activities
- engages in severe antisocial behavior
- is involved in physical fighting
- is involved in fire setting
- has a history of violence toward animals
- has an early onset of antisocial behavior (before the age of 11)
- is reckless and irresponsible
- has a previous criminal record
- has a violent history
- was involved in a premeditated crime
- disposed of the evidence indicating that he/she was aware of the wrongfulness of their act but nevertheless acted
- had discussed with others the plan (e.g., to murder) showing premeditation and calculation of the crime
- showed volition and premeditation demonstrated by deliberate attempts to cover up the crime
- use of deadly weapons
- generally carries a weapon
- has generally poor impulse control
- has a need for stimulation/proneness to boredom
- lacks realistic, long-term goals
- fails to accept responsibility for own actions
- was involved in a crime which was a case of extreme unprovoked violence
- knowledge of consequences of behavior - (e.g., aware that they would cause bodily harm to another)
- is generally cruel
- was noted to be bragging about the violence in current crime or past violence
- is involved in promiscuous sexual behavior
uses drugs and alcohol regularly
is involved in selling drugs
has runaway behavior
has parents who are involved in crime and aggression
surrounds self with those who are deeply engaged in criminal activity and criminal conduct
hyperactivity
played a leadership role in a violent crime
can easily become angered and physically aggressive

MATURITY and SOPHISTICATION

Please rate the characteristics listed below on the following pages using rating from 1 to 7. Try to use the full range of ratings.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>slightly</td>
<td>less than average</td>
<td>average</td>
<td>more than average</td>
<td>very much</td>
<td>extremely</td>
</tr>
</tbody>
</table>

The child or adolescent:

is able to resist pressures from others
has an internal locus of control
is able to maintain convictions even in the face of criticism
is resourceful
has an absence of excessive need for social validation
values own independence and autonomy
has clarity of self-concept
has consideration of life goals
has a high self-esteem
is open to periods of re-evaluation of identity and effectively integrates self-concepts with the way others see them
is aware of personal strengths and weaknesses
is clear about values and priorities
has psychological insight
is capable of being aware of both their mood and their thoughts about that mood
develops realistic expectations about oneself
is able to consult others for advice
is more assertive and skilled at communicating
knows and manages their own feelings well
is able to delay gratification in pursuit of their goals
is better able to cope with frustrations
is generally open to change
models effective self-initiated behavior, as demonstrated in projects and activities
has intentionality—wish and capacity to have an impact, act upon with persistence, competence
is able to think abstractly
is able to identify alternative actions and their consequences before acting
has the ability to switch goals
has decision-making skills
has an understanding behavioral norms (what is and what is not acceptable behavior)
is intelligent
is capable of planned or premeditated criminal behavior
has criminal sophistication = the degree to which a person has moved into a criminally oriented lifestyle
has good academic achievement
gives thoughts to the consequences
has future time perspective (able to project events in the future)
has goal setting behaviors
engages in cost-benefit analysis
deals with others' feelings effectively
is capable of getting others to do what they want whether they want to or not
has the skill of managing emotions in others
has an increased ability to analyze and understand relationships
is able to regulate emotions
makes clear requests
is outwardly conforming to authority or by "conning" and manipulation.
has internalized a standard for their and others' behavior.

AMENABILITY to TREATMENT

Please rate the characteristics listed below on the following pages using rating from 1 to 7. Try to use the full range of ratings.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>slightly less than average</td>
<td>average</td>
<td>more than average</td>
<td>very much</td>
<td>extremely</td>
<td></td>
</tr>
</tbody>
</table>

The child or adolescent:

is insightful and has insights into their problems
is psychologically minded
is empathic
feels guilt about the crime
is not manipulative
is not a chronic liar
is able to tolerate frustrations
has a good self concept
demonstrates competence
is not self centered
engaged in alcohol drug use whichwas thought to be related to criminal behavior
does not seem to be attention seeking
has self control of immediate impulses
is open to change
is not callous or unemotional
does not lack remorse
is not unemotional
admits that he/she has a problem
takes responsibility for their problems
aware of their difficulties, and wanting to overcome them
family admitted having problems within the family

has knowledge of right from wrong

thinks he/she has a good possibility of being helped from treatment

is highly motivated to engage in treatment and is otherwise highly motivated

was willing to participate in psychiatric/psychological evaluation

is not rebellious toward authority figures

motivation for academic or work progress

has no/ or limited previous police, court, and probation involvement

has shown an increase in seriousness of offense over time

has good academic performance

has not engaged in school misconduct

has good school attendance

considers consequences

is a logical thinker

has plans to change lifestyle from criminal to non

has capacity to make future plans

conduct in prior placements

receptiveness and responsiveness to adult attempts to provide help (not just treatment)

extent of positive involvement by parents

had a secure stable home life

family cooperation with court assistance

amount of daily contact with family

family cooperation with court assistance

family acceptance and interest in the juvenile

susceptibility to peer influence

conduct in court settings (detention, prehearing interviews, courtroom)

BACKGROUND CHARACTERISTICS

In order to gain some knowledge about you, would you please provide the following information?

Highest degree Occupation ________________________________

Years of Post Doctoral Experience ______

Percentage of time Clinical ______

Percentage of time Forensic ______

Primary setting for post-doctoral experience:

Setting: ______ clinical, ______ forensic, ______ correctional, ______ medical, or ______ other

Have you ever conducted any clinical non-forensic evaluations on dangerousness of youth? ______

Maturity of youth? ______

Amenability to Tx? ______

Have you ever conducted any forensic evaluations on dangerousness of youth? ______

Maturity of youth? ______

Amenability to Treatment? ______
To what extent do you believe dangerousness to be important in the decision to waive juveniles to adult criminal courts?

To what extent do you believe amenability to treatment to be important in the decision to waive juveniles to adult criminal courts?

To what extent do you believe sophistication and maturity to be important in the decision to waive juveniles to adult criminal courts?

Do you believe that certain charges are necessary before a juvenile is waived to adult court?  Yes  No

If yes indicate with an X the type(s) of charges you believe to be necessary before a child of adolescent is raised to adult court

A status offense  An offense against persons
A misdemeanor  A very assaultive, violent offense
A felony  Violation of court order (was in court custody at the time)
An offense against property

Do you believe that the juvenile should have been processed through the system previously as a juvenile before being raised to adult court

YES  NO  DON'T KNOW

Have you previously been involved in an evaluation for juvenile waiver to adult court? Yes  No

If yes, would you be willing to participate in a second, shorter phase of this study? Yes  No

Given that it is difficult to identify psychologists who conduct such evaluations we are asking for your help. If you are aware of a psychologists who is involved in such evaluations could you please provide us with their address so that we can mail a survey asking them their opinions regarding juvenile transfer cases.

Thank you for your participation!
APPENDIX B

PROTOTYPICAL ANALYSIS MEASURE- PHASE II: CORE CHARACTERISTICS
OF JUVENILES WAIVED TO ADULT COURT
PROTOTYPICAL ANALYSIS MEASURE - PHASE II

CORE CHARACTERISTICS OF JUVENILES WAIVED TO ADULT COURT

We are asking for your expertise in clarifying critical characteristics of juveniles waived to adult criminal courts. We provide items that have been considered in the past with regard to the waiver to adult decision. We would like you to focus on each of the items provided below and rate the core characteristics of the juvenile who was waived to adult court.

General Instructions

We are asking you to think of the most typical case in the last two years, for which you performed a juvenile waiver evaluation and recommended transfer. It does not matter whether the juvenile was actually transferred only that you felt that the juvenile should have been transferred. The case that you hold in your mind should be the case for which you answer all the questions in the questionnaire. We also ask you to answer some questions about the juveniles demographic characteristics and offense. We encourage you to use records and files on the case if available. If, and only if, you have not conducted such a case then we are asking for you to imagine yourself in such an evaluation process.

To help with your description, we have listed below characteristics which, at one time or another, have been considered by mental health professionals, judges, lawyers, and other court workers to be related to juveniles who are being considered with regard to the waiver decision. The same professionals are now attempting to elucidate what should and should not be considered characteristics of youth who are waived to adult court. Because of your experiences with the waiver to adult court evaluation, we are interested in your views. The survey should take you approximately 15 minutes to complete.

Please indicate here if this is a real or imagined case: Real case _____

Imagined case _____

Return Mailing

When you have completed the survey, please return it to us as soon as possible. A preaddressed and postage prepaid envelope is enclosed for your convenience.

Thank you for your participation.
CHARACTERISTICS OF THE JUVENILE YOU EVALUATED FOR WAIVER AND EITHER WAS WAIVED OR YOU BELIEVED SHOULD HAVE BEEN WAIVED

Please rate the characteristics listed below on the following pages using rating from 1 to 7. Try to use the full range of ratings.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>not</td>
<td>slightly</td>
<td>less than</td>
<td>average</td>
<td>more than</td>
<td>very much</td>
<td>extremely</td>
</tr>
<tr>
<td>at all</td>
<td>average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The child or adolescent:

- was highly motivated to engage in treatment and was otherwise highly motivated
- engaged in a wide variety of illegal activities
- was not rebellious toward authority figures
- motivated for academic or work progress
- had goal setting behaviors
- engaged in cost-benefit analysis
- was capable of getting others to do what they wanted whether they wanted to or not
- had the skill of managing emotions in others
- had an increased ability to analyze and understand relationships
- had Conduct Disorder - Aggressive subtype
- had family cooperation with court process
- generally considered consequences
- was clear about values and priorities
- generally had the capacity to make future plans
- poor conduct in prior treatment placements
- had Conduct Disorder - Deceitfulness or theft subtype
- had psychological insight
- had internal locus of control
- generally able to maintain convictions even in the face of criticism
- valued own independence and autonomy
- had clarity of self-concept
- had a high self-esteem
- had Conduct Disorder - Serious violations of rules subtype
- was a pathological liar
- had high frequency of criminal behavior
- showed remorse
- had behavior problems that were occurring in multiple settings
- engaged in severe antisocial behavior
- had an early onset of antisocial behavior (before the age of 11)
- was willing to participate in psychiatric/psychological evaluation
- was reckless and irresponsible
- was better able to cope with frustrations the average youths
- had a previous criminal record
- had a violent history
- was involved in a premeditated crime
- disposed of the evidence indicating that he/she was aware of the wrongfulness of their act but nevertheless acted
had discussed with others the plan (e.g., to murder) showing premeditation and
calculation of the crime
showed volition and premeditation demonstrated by deliberate attempts to cover up the
crime
used deadly weapons
generally carried a weapon
had generally poor impulse control
was noted to be bragging about the violence in current crime or past violence
had future time perspective (able to project events in the future)
was involved in promiscuous sexual behavior
used drugs and alcohol regularly
was involved in selling drugs
had good academic performance
was emotional
had good conduct in school
had good school attendance
had runaway behavior
had parents who were involved in crime and aggression
surrounded self with those who are deeply engaged in criminal activity and criminal
conduct
played a leadership role in a violent crime
could easily become angered and physically aggressive
was a logical thinker
was able to resist pressures from others
was open to periods of re-evaluation of identity and effectively integrates self-concepts with
the way others see them
was aware of personal strengths and weaknesses
was capable of being aware of both his/her mood and thoughts about that mood
had a good self-concept
had knowledge of right from wrong
demonstrated competence
was not self-centered
engaged in alcohol drug use which was thought to be related to criminal behavior
did not seem to be attention seeking
had self-control of immediate impulses
had plans to change lifestyle from criminal to non-criminal
developed realistic expectations about oneself
was able to consult others for advice
was assertive and skilled at communicating with others
knew and managed their own feelings well
was able to delay gratification in pursuit of their goals
was generally open to change
modeled effective self-initiated behavior, as demonstrated in projects and activities
had intentionality—wish and capacity to have an impact, act upon with persistence, competence
was able to think abstractly
dealt with others' feelings effectively
was able to identify alternative actions and their consequences before acting
had the ability to switch goals
thought he/she has a good possibility of being helped from treatment
had decision-making skills
had an understanding behavioral norms (what is and what is not acceptable behavior)
was intelligent
was capable of planned or premeditated criminal behavior

had realistic chances of the minor being placed in that program

had criminal sophistication = the degree to which a person has moved into a criminally oriented lifestyle

had a secure stable home life

had good academic achievement

gives thoughts to the consequences

had a need for stimulation/proneness to boredom

lacked realistic, long-term goals

failed to accept responsibility for own actions

was involved in a crime which was a case of extreme unprovoked violence

had knowledge of consequences of behavior - (e.g., aware that they would cause bodily harm to another)

was generally cruel

was able to regulate emotions

had a history of violence toward animals

was outwardly conforming to authority but "conning" and manipulative.

had internalized a standard for their and others' behavior.

was conning/manipulative

was egocentric

was glib/ or superficially charming

had extreme or serious Conduct Disorder

was resourceful

had an absence of excessive need for social validation

was insightful and has insight into their problems

was psychologically minded

was empathic

felt guilt about the crime

was not manipulative

was generally honest

was able to tolerate frustration

lacked remorse or guilt

was open to change

was not callous or unemotional

admitted that he/she had a problem

had hyperactivity

took responsibility for their problems

was aware of their difficulties, and wanted to overcome them

family admitted having problems within the family

had no/ or limited prior police, court, and probation involvement

was callous/lacked empathy

had shown an increase in seriousness of offense over time

had positive involvement by parents

had high amount of daily contact with family

family cooperation with court assistance

had family acceptance and interest in the juvenile

had Conduct Disorder- Destruction of Property subtype

was susceptible to peer influence

showed good conduct in court settings (detention, prehearing interviews, courtroom)

was receptive and responsive to adult attempts to provide help (not just treatment)

had potential to change and modify behavior with the right treatment

had consideration of life goals
made clear requests
was involved in physical fighting
was involved in fire setting

BACKGROUND CHARACTERISTICS

In order to gain some knowledge about you, please provide the following information.

Age _____ gender _____ race ____________

Highest degree _____ Occupation ____________________________

Years of Post Doctoral Experience ______
Percentage of time Clinical ______
Percentage of time Forensic ______
Primary setting for post-doctoral experience: _____ clinical, _____ forensic, _____ correctional, _____ medical, or _____ other

How many clinical (i.e., non-forensic) evaluations have you conducted on
(a) _____ Dangerousness of youth?
(b) _____ Emotional or
Maturity of youth?
(c) _____ Amenability to treatment of youth?

How many forensic evaluations have you conducted on
(a) _____ Dangerousness of youth?
(b) _____ Emotional and Maturity of youth?
(c) _____ Amenability to Treatment of youth?

Demographics of the juvenile (for actual juvenile cases)

Age _____ Gender ______ Did the juvenile live with his/her family Yes _____ No _____

Race ______________ Education level (highest grade completed)_____

Did he/she have previous violations of the law? Yes _____ No _____
If yes, please describe these violations

How many times had the juvenile been previously seen in juvenile court? ______

Was the juvenile ever employed (did he/she have a work history? Yes _____ No _____

What was the alleged crime for the juvenile being evaluated?

Please rate ion a scale of 1 to 7. With 1 being not at all important and 7 being extremely important

To what extent do you believe dangerousness to be important in the decision to waive juveniles to adult criminal courts?
To what extent do you believe sophistication and maturity to be important in the decision to waive juveniles to adult criminal courts?

Do you believe that certain charges are necessary before a juvenile is waived to adult court?
Yes ____ No ____

If yes indicate with an X the type(s) of charges you believe to be necessary before a child of adolescent is raised to adult court

A status offense ______ An offense against persons ______
A misdemeanor ______ A very assaultive, violent offense ______
A felony ______ Violation of court order (was in court custody at the time) ______
An offense against property ______

Do you believe that the juvenile should have been processed through the system previously as a juvenile before being raised to adult court?

YES ____ NO ____ DON'T KNOW ____ DEPENDS ON THE CRIME ____

How many prior evaluations for juvenile waiver to adult court have you conducted? ____

In your opinion, was the juvenile you evaluated competent to stand trial at the criminal level?
Yes ____ No ____

Given that it is difficult to identify psychiatrists or psychologists who conduct such evaluations we are asking for your help. If you are aware of a psychiatrist(s) or psychologist(s) who is involved in such evaluations could you please provide us with their address so that we can mail a survey asking them their opinions regarding juvenile transfer cases (please provide as many as possible).

Thank you again for your participation!
REFERENCES


International perspectives (pp. 131-143). Walter de Gruyter, Berlin, Federal Republic of Germany.


Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies. Is it true that “Everyone has won and all must have prizes”? *Archives of General Psychiatry, 32*, 995-1007.


Monahan, J. (1982). The prediction of violent behavior: Developments in psychology and law. In C. J. Scheirer & B. L. Hammonds (Eds.), *The master lecture


