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Kati J. Klitzke

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Approved:

Karl W. Stuckenborg, Ph.D., ABPP
Chair, Department of Psychology

Kathleen J. Hart, Ph.D., ABPP
Dissertation Chair
Relationship of Defendant Characteristics
to Attainment of Court-Related Skills in a Juvenile Sample
Dissertation Committee

Chair
Kathleen J. Hart, Ph.D., ABPP
Professor of Psychology

Member
Jennifer Gibson, Ph.D.
Assistant Professor of Psychology

Member
W. Michael Nelson, III, Ph.D., ABPP
Professor of Psychology
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Chapter I

Review of the Literature

The term "competency" has longstanding roots in legal canon. It refers generally to an individual's mental ability to comprehend and reason with information and is applied to many specific legal areas. The American legal system has recognized individuals' right to be competent to divorce, enter a contract, confess to a crime, plead guilty, waive the right to counsel, testify, receive a sentence, and be executed. The most commonly raised issue of competency is a defendant's competence to stand trial (CST; Melton, Petrila, Poythress, & Slobogin, 2007). Dating back to mid-17th century English common law, the issue of CST first arose as a result of defendants who, instead of entering into a plea, did not answer (i.e., "stood mute"). Courts then had to decide if the defendant was "mute of malice" or "mute by visitation of God." If the court determined that the defendant was mute of malice, the court subjected the defendant to physical torture to force him to enter a plea. In contrast, if the defendant was determined to be mute by visitation of God, which included individuals who were deaf, mute, and mentally ill, the defendant was spared the harsh punishment. Theses rulings were made on the premise that subjecting unfit defendants to trial proceedings created an unfair judicial system (as described in Melton et al., 2007).

Relying heavily on the doctrines and common laws of England, 18th century American courts also recognized the right of CST (Melton et al., 2007). American courts
reasoned that CST is based on the due process clause of the Sixth Amendment, which guarantees a defendant’s legal rights and impartial trial proceedings. The application of these rights requires that defendants must be physically present, mentally able to assist counsel, and able to participate in their defense. In addition to protecting individual defendant’s rights, American courts have also recognized the right of CST to protect society’s interests by preserving a dignified, fair, and moral criminal process (Melton et al.).

**Standards for CST**

**Adults**

The current standard of CST for adults who have been accused of criminal behavior was outlined by the U.S. Supreme Court in *Dusky v. United States* (1960), when two fundamental rulings were made. First, the Supreme Court ruled that the use of a mental status examination (alone) was insufficient to determine a defendant’s CST. Second, the Supreme Court ruled that the “test [of competence] must be whether he [the defendant] has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding – and whether he has a rational as well as factual understanding of the proceedings against him” (p. 402). The *Dusky* ruling has served as the basis of most states’ statutes describing the requirements for CST. For example, the *Ohio Revised Code (ORC)* requires that adult criminal defendants have an understanding of the nature and objectives of the proceedings against them and are able to assist in their own defense (§ 2945.37).

Other court rulings have further addressed or elaborated the issue of CST since the *Dusky* decision. The United States District Court Western District of Missouri
Western Division outlined criteria for evaluating a defendant’s CST in *Wieter v. Settle* (1961). That Court ruled that a defendant is CST if he has a mental appreciation of himself and his surroundings, an understanding of the nature of the charges against him, an understanding of the role of key personnel in court, the ability to communicate with his lawyer, an understanding of the presence of a jury who will evaluate evidence to determine guilt or innocent of his charges, and adequate memory ability to reason with this information (*Wieter v. Settle*, 1961). Subsequently, *Drope v. Missouri* (1975) specified when the issue of CST should be raised, as competence is generally assumed among adult defendants unless the question is raised. In this case, the U.S. Supreme Court ruled that if any doubt or evidence exists to suggest that a defendant is not CST, Courts must consider such evidence, including if a defendant is thought to be presently experiencing a mental illness (*Drope v. Missouri*, 1975). Whereas CST, both as a legal right and its requirements, is well described for adults, its role in juvenile courts is not as well defined.

**History of Juvenile Courts**

Prior to the establishment of state Juvenile Courts in the late 19th and early 20th centuries, children or adolescents accused of crimes were handled in criminal (adult) courts. As part of a broader social movement in the United States, juvenile courts were established on the doctrine of *parens patriae*, which is defined as the state’s authority to act as the juvenile’s “parent,” especially in situations in which children appear to be in need of additional care, such as when they are abused or neglected, engage in criminal behavior, or have been diagnosed with mental illness or mental retardation (Melton et al., 2007). In the case of criminal behavior, the implementation of this doctrine means that
juvenile courts can act in the juveniles’ best interests and provide them with treatment or other forms of intervention to rehabilitate their criminal behavior. As a result, juvenile cases were initially managed by social workers and mental health professionals who worked collaboratively with judges to determine the best intervention, rather than punishment, for the juvenile (Grisso, Miller, & Sales, 1987). Given the rehabilitative approach of juvenile courts, proceedings were handled informally, and many of the “due process” features of adult court were not used. For example, this meant that juvenile courts did not require a fact-finding process or that juveniles needed to be represented by counsel and have the ability to participate in their own defense.

Criticisms of the juvenile court arose by the middle of the 20th century because of the absence of evidence that children were treated fairly and the failure of courts to demonstrate the effectiveness of the rehabilitative approach at reducing criminal behavior or recidivism of juveniles. In particular, the basis for juveniles’ malleability, lack of responsibility, the desire for informal court proceedings, and the court’s rehabilitative potential were all assumed rather than subjected to empirical scrutiny (Melton et al., 2007). Critics claimed that the juvenile court had failed to uphold its promise of protection of the children it was serving (Melton et al.). Perhaps one of the most well-known critics of the juvenile court was U.S. Supreme Court Justice Abraham Fortas who, in the opinion for Kent v. United States (1960), wrote, “[T]here may be grounds for concerns that the child gets the worst of both worlds [in juvenile court]: that he gets neither the protections accorded to adults nor the solicitous care and regenerative treatment postulated for children.” Justice Fortas’ criticism was even more stringent when he referred to juvenile courts as “kangaroo court[s]” in a subsequent opinion in In
re Gault (1967), which has been regarded as the most significant case in juvenile law (Melton et al.). The rulings of In re Gault had two major implications. First, it established that constitutional law was applicable to juveniles. Second, it meant that juveniles were afforded the same due process rights as adults. However, the decision did not specify how these features were to be implemented in juvenile courts and it was still unclear how capable juveniles were in exercising these rights (as cited in Melton et al.).

CST in Juvenile Court

Prior to the Supreme Court decisions that clearly granted due process rights to juveniles, the issue of CST was not seen as relevant in juvenile courts, which were established to protect children. The reforms that followed the Kent and Gault decisions opened the door to questions about a juvenile’s CST beginning in the early 1970’s (Grisso, Miller, & Sales, 1987). However, there have been no federal cases that have set forth specific standards for CST in children and many states apply the Dusky standard in juvenile CST cases. Currently, approximately two-thirds of states, through statutes or case law, have addressed the issue of juvenile CST via standards and criminal codes, most of which are similar or identical to the Dusky standard (Melton et al., 2007). Several state and federal court cases have set forth their own legal standards for juvenile CST. At particular issue has been how to manage the knowledge and reasoning limitations of typically developing children, a dilemma to which courts have responded in very different ways. For example, a Louisiana State Court ruled that normal developmental immaturity was a sufficient reason to render a juvenile incompetent to stand trial (IST; In re Causey, 1978), while a Michigan court ruled that juveniles are subjected to a lower level of CST compared to adult defendants. The latter ruling
recognized that, because of their age, juveniles would be unable to comprehend court proceedings to the same degree as adults and therefore may not be found IST only because they would be found IST under adult standards (*In re Carey, 2000*). In contrast, a ruling by an Ohio Court of Appeals indicated that juveniles undergoing CST evaluations must be compared to juvenile rather than adult norms (*Ohio v. Settles, 1999*), which meant that juveniles would be compared to other children's developmentally limited abilities.

More recently, some states have established separate statutes for juvenile CST as a response to the ambiguity of applying the *Dusky* standard to children. In particular, changes to the *ORC* in 2011 state that juveniles over the age of 14 are assumed to be competent, but that a juvenile is IST if, “due to mental illness, intellectual disability, or developmental disability, or otherwise due to a lack of mental capacity, the child is presently incapable of understanding the nature and objective of the proceedings against the child or of assisting in the child’s defense” (§ 2152.51). In contrast, the *ORC* states that a juvenile is CST if he or she has the “ability to understand the nature and objective of a proceeding against the child and to assist in the child’s defense” (§ 2152.51), a standard that is virtually identical to the *ORC* standard for adult CST, which was derived from the *Dusky* ruling. The *ORC* also states, “if the child who is the subject of the proceeding is fourteen years of age or older and if the child is not otherwise found to be mentally ill, intellectually disabled, or developmentally disabled, it is rebuttably presumed that the child does not have a lack of mental capacity” (§ 2152.52). This statute implies that children under the age of 14 are not assumed to be CST and would be commonly subject to evaluation to establish their court-related abilities.
Disposition for CST Evaluations

A determination of IST for an adult defendant stops further prosecution, at least temporarily. If an adult defendant is charged with a misdemeanor criminal act or if the defendant obtains civil treatment (mental health treatment) and fails to meet the standards for competence, the charges may be dropped. In contrast, an adult defendant found IST could be involuntarily required to receive services to restore competency, including civil commitment in residential settings. The civil commitment of those found IST has posed a variety of challenges, both legally and financially, for many decades. Prior to the *Jackson v. Indiana* decision in 1972, civil commitment often meant long-term confinement in mental institutions for would-be defendants charged with misdemeanor crimes that would have resulted in fines or short prison stays had they been deemed CST (Melton et al., 2007). The U.S. Supreme Court ruled in *Jackson v. Indiana* (1972) that a defendant found IST for a state crime could not be detained for restoration for more than a reasonable amount of time to determine if the defendant could attain the required level of competence. This ruling also indicated that defendants found IST have a right to receive restoration services in the least restrictive environment. If restorative efforts are successful, court proceedings continue. However, if a defendant was found to be unable to attain CST, the state was given the option to civilly commit the adult for other legal reasons (i.e., because the individual is a danger to self or others) or drop the charges and release the defendant.

The recent statute for juvenile CST disposition in Ohio is similar to that of adult defendants, although management of IST varies by state. Most state laws, including Ohio’s, indicate that when a juvenile’s CST is questioned, a licensed forensic evaluator
con ducts an initial CST evaluation. If the juvenile is found CST after the first evaluation, trial proceedings continue as usual and barring second opinions, no additional CST evaluations are conducted. In the event that a juvenile is found IST at the first evaluation and the forensic evaluator has an opinion that the juvenile could be restored to competency (RTC), a judge or magistrate can court order the juvenile to participate in attainment services. In Ohio, juveniles in a non-residential setting have up to three months to attain competence for misdemeanor charges, six months for third, fourth, or fifth degree felony charges, and one year for first or second degree felony charges.

After the juvenile completes the attainment program or has been determined to make sufficient progress by the instructors, the juvenile receives a second CST evaluation by a licensed forensic evaluator. Again, if the juvenile is found CST at the second evaluation, court proceedings continue as usual. If the juvenile is found IST a second time, the cycle of participating in attainment services and having a CST evaluation continues until the juvenile has been RTC, the maximum time allowed for a juvenile to be RTC has passed and the court dismisses the charges without prejudice, or a forensic evaluator gives an opinion that juvenile is unable to attain competency (see Appendix A).

Juvenile CST Evaluations

Characteristics in Juvenile CST Evaluations

Although there are no universally accepted standards regarding the evaluation of CST, a thorough reference for information pertaining to CST evaluations is the American Academy of Psychiatry and the Law (AAPL) Practice Guideline for the Forensic Psychiatric Evaluation of Competence to Stand Trial (Mossman, Noffsinger, Ash, Frierson, Gerbasi, Hackett, et al., 2007). Because of the Guideline's rich discussion of
current legal standards and procedures for CST evaluations, Fitch (2007) suggested that the *Guideline* should serve as the standard for mental health professionals asked to conduct CST evaluations in criminal and juvenile court. In particular, Fitch commented on the descriptiveness and scope of the *Guideline* for adult CST evaluations. However, as he noted, the standards pertaining to juvenile CST evaluations remain ill-defined because it is a relatively new legal concept. For example, the *Guideline* suggests that the evaluation standard for juvenile CST be flexible and context dependent.

Despite the ill-defined legal standard, the *Guideline* describes characteristics that might influence the competence status of juveniles including age, developmental immaturity (i.e., responsibility, temperance), maturity of cognitive abilities (i.e., reasoning and judgment), and mental or emotional disturbances that directly influence the juvenile’s functional ability to meaningfully participate in court proceedings (Mossman et al., 2007). This list is based on the results of earlier publications that have identified these characteristics as relevant in juvenile CST. For example, Grisso, Miller, and Sales (1987) suggested that a CST evaluation should include assessment of a juvenile’s intelligence, school achievement, prior court contacts, and behavior in a legal setting. In addition, Grisso et al. suggested that a juvenile’s CST should be questioned if a juvenile is 12 or younger, has a diagnosis of or is receiving treatment for a significant mental illness, has low intellectual functioning or is intellectually deficient, has a learning disability, or if the juvenile is noted to have impairments in memory, attention, or reasoning. At the time these recommendations were made, these factors were based primarily on clinical experience as opposed to systematic analysis of juvenile defendant characteristics.
The characteristics recommended by Grisso et al. (1987) over 20 years ago are consistent with the opinions of forensic psychologists who were surveyed in 2003. In a study of psychologists with expertise in juvenile forensic assessment, current mental status, CST abilities, understanding of charges, and ability to assist attorney were all rated as essential elements to include in juvenile CST reports by at least 90% of respondents (Ryba, Cooper, & Zapf, 2003). Three additional elements, including an opinion about mental illness, understanding of trial processes, and mental illness/retardation/immaturity rationale, were rated as essential by 70% or more of respondents. Lastly, an opinion of the juvenile’s level of maturity (48.8%) and the use and reporting of psychological assessment results (43.9%) were rated as essential elements to include in CST evaluations.

More recently, Ficke, Hart, and Deardorff (2006) evaluated the relationship between defendant characteristics and juvenile CST using the MacArthur Competency Assessment Tool-Criminal Adjudication (MacCAT-CA). They found that age, intelligence level, achievement level, and hyperactivity/behavioral problems associated with mental health conditions were correlated with the MacCAT-CA scores on the Understanding, Reasoning, and Appreciation scales. Regression analysis further revealed that these defendant characteristics accounted for different amounts of variance depending on the MacCAT-CA scale (23% Appreciation, 36% Reasoning, 38% Understanding). Several other studies have also identified characteristics of juveniles found CST or IST, including age (McKee, 1998), academic achievement skills (Peterson-Badali & Abramovitch, 1993), psychopathology (Warren, Aaron, Ryan, Chauhan, &
DuVal, 2003), previous contact with the juvenile court (Dreyer, 2001), and legal knowledge (Peterson-Badali, Abramovitch, & Duda, 1997).

Several of the above named recommendations and research findings are reflected in state law. Modeled after the Dusky standard, the ORC statute related to juvenile CST states that a CST evaluation should address the juvenile’s ability to “comprehend and appreciate the charges or allegations against the child; understand the adversarial nature of the proceedings, including the role of the judge, defense counsel, prosecuting attorney, guardian ad litem or court-appointed special assistant, and witnesses; assist in the child’s defense and communicate with counsel; comprehend and appreciate the consequences that may be imposed or result from the proceedings” (§ 2152.56). Moreover, the ORC states that CST evaluations should include the evaluator’s opinion of the extent to which a juvenile’s competence is impaired, whether reasonable accommodations would render a juvenile CST, and recommended accommodations. The evaluation must also include an opinion on the likelihood a juvenile could attain competence and in what period of time, as well as recommendations to create a competence restoration program and the least restrictive environment for these services.

**Defendants Most Likely to be Found IST**

Much of the research available on CST has primarily focused on adult defendants in the criminal justice system. That research has demonstrated that CST is significantly affected by demographic, cognitive, clinical, and legal characteristics of adult defendants (Crocker, Favreau, & Caulet, 2002; Frierson, Shea, & Shea, 2002; Roberston, Gupton, McCabe, & Bankier, 1997; Viljoen, Odgers, Grisso, & Tillbrook, 2007). In contrast, considerably less research has been conducted on juvenile defendants and characteristics
that render them IST. Therefore, this literature review will address CST in adult and
juvenile defendants, but will largely consist of research on adults. Special consideration
will be given to developmental characteristics of juvenile defendants.

**Demographic.** Although women typically account for only 15% of participants
in studies on CST, some researchers have assessed gender differences between adults
found CST or IST. Unfortunately, these studies have produced conflicting results.
Crocker et al. (2002) found that adult female defendants in Canada were two times more
likely to be recommended for a CST evaluation than adult male defendants and were
subsequently more likely to be found IST. Another study conducted in the United States
demonstrated a reverse finding, concluding that male defendants who had mental
retardation were more likely to be determined IST than female defendants who had
mental retardation (Ho, 1999). Still, other studies concluded there are no gender
differences with regard to CST (Burnett et al., 2004). These studies varied by country
(United States vs. Canada), such that jurisdictional, legal, or political views about the
nature of CST may account for the observed differences. Also, the latter two studies
addressed gender differences among defendants with mental retardation specifically,
which is only one segment of adult defendants for whom the CST question is raised.
Therefore, it is unclear if these divergent findings are a result of these factors, or if they
reflect true differences (or lack thereof).

Another commonly researched demographic characteristic is race, which has also
produced conflicting results. Ho (1999) explored the relationship between race and CST
in adult defendants who had mental retardation and were found IST. He found no
statistically significant differences in psychologists’ or judges’ opinions with regard to
the defendants' race; African American and Caucasian defendants were similarly found CST or IST. In contrast, Burnett et al. (2004) found that African American juvenile defendants scored lower than Caucasians on the Understanding and Reasoning scales of the MacCAT-CA. Similarly, Viljoen, Odgers, Grisso, and Tillbrook (2007) found that juveniles and young adults of ethnic minority (e.g., African American, Hispanic, Asian, and Other) scored significantly lower than Caucasians on the MacCAT-CA.

Several researchers have noted the importance of age in differentiating between defendants found CST or IST. For example, Frierson et al. (2002) compared the age of elderly defendants (age 65 or older) who were found CST or IST based on psychologists’ evaluations. Results indicated that age was significantly associated with CST, with older defendants more likely to be found IST. However, the actual difference in mean age between the CST and IST groups was relatively small (CST $M_{age} = 69$ years vs. IST $M_{age} = 72$ years).

Research has also shown that CST is affected by young age. Baerger et al. (2003) examined the differences between juvenile defendants found IST or CST based on psychologists’ evaluations. They found that more juveniles found IST were 12 years or younger ($\chi^2 = 19.59, p < .001$), whereas more juveniles found CST were 15 or 16 years old ($\chi^2 = 12.36, p < .001$). Overall, the mean age of juveniles found IST ($M_{age} = 13.92$) was younger than juveniles found CST ($M_{age} = 14.42$). Logistic regression analysis also showed that children 12 years or younger, history of special education, and prior mental health treatment predicted which juveniles were found IST by psychologists’ evaluation.

Cognitive. Frierson et al. (2002) found a relationship between diagnosis of dementia and psychologists’ determination regarding CST for adult elderly (> 65 years)
defendants charged with felony offenses; 90% of defendants found IST were diagnosed with dementia compared to only 19% of defendants found CST \((\chi^2 = 24.18, p < .0001)\). Defendants found IST also had more impairment in mental status and trial-related abilities than defendants deemed CST.

Nester, Daggett, and Haycock (1999) assessed specific areas of cognitive functioning to elucidate the complexity of cognitive deficits often found in defendants who are IST based on clinician judgment. In particular, defendants charged with serious felonies completed a battery of neuropsychological tests that included the Wechsler Adult Intelligence Scale-Revised (WAIS-R), Wide Range Achievement Test-Revised, Wechsler Memory Scale-Revised, Wisconsin Card Sorting Test, and the Trail Making Test. Univariate analysis revealed that there were significant differences between defendants found CST or IST on the WAIS-R Full Scale IQ, Verbal IQ, and Performance IQ \((p < .01)\), such that defendants found CST received higher scores than defendants found IST on all three scales by approximately 5 to 7 IQ points. Similar results were found on the other neuropsychological measures. Defendants found CST obtained significantly higher scores for attention, memory, and social intelligence than defendants who were IST. Small negative correlations \((r = -.32, p < .05)\) were also found for defendants determined IST and lower scores on episodic memory and social intelligence tasks (as measured by the Comprehension and Picture Arrangement subtests of the WAIS-R). Thus, it appears that the low cognitive functioning observed in adult defendants who are IST is attributed to widespread cognitive deficits.

Like adults, juvenile defendants who are found IST perform poorly on various cognitive tasks. For example, defendants with lower average high school grades were
more likely to be found IST (Redlich, Silverman, & Seinter, 2003). IQ has also been found to be positively associated with CST in that juvenile defendants who had low IQ scores were the most likely juvenile group to demonstrate low MacCAT-CA scores and require subsequent instruction (Viljoen et al., 2007). Juveniles 13 years or younger were the least likely to benefit from instruction, indicating that young juveniles have less developed reasoning capacities than older juveniles. Kivisto, Moore, Fite, and Seidner (2011) suggested that the cognitive deficits seen in juvenile defendants found IST might be related to specific mental abilities, including general word knowledge and abstract spatial reasoning, as measured by the Wechsler Abbreviated Scale of Intelligence.

Burnett, Noblin, and Prosser (2004) similarly suggested that specific cognitive deficits might help explain the correlation between young age and CST. In particular, they found that the mean MacCAT-CA Reasoning scores obtained by juvenile defendants and community matched juvenile controls was significantly related to age ($F[3, 106] = 2.913, p < .05$). They also found that juvenile defendants scored significantly lower on the Reasoning scale compared to community matched juvenile controls ($t[108] = 2.31, p = .016$). Together, these findings suggest that young juvenile defendants are especially vulnerable to demonstrate deficits in reasoning abilities, which is a requirement to be found CST.

**Clinical.** Several studies have found that some defendants deemed IST have been diagnosed with a mental health disorder or have received services through a mental health agency. Roberston et al. (1997) examined differences between adult defendants found CST or IST, in addition to the extent that clinical (e.g., diagnosis, history of substance abuse, personality test data) and nonclinical (e.g., race, age, sex) variables
predicted their CST status. They found that the clinical variable of mental health
diagnosis correctly predicted clinicians' opinions regarding CST status in 77% of
evaluations while nonclinical demographic variables did not correctly predict CST status
much better than chance alone. Moreover, diagnosis was the only variable to
significantly differentiate between the two groups of defendants, such that defendants
who were diagnosed with a psychotic disorder were more likely to be found IST ($\chi^2 =
27.2, p < .001$). Crocker et al. (2002) found that defendants who had one or more
symptoms of psychosis were 10.6 times more likely to be found IST than defendants
without psychotic symptoms. Other studies have yielded comparable results, indicating
that a diagnosis of psychosis in adult male defendants is the most significant predictor of
CST status, followed by a diagnosis of organic brain disorder and mental retardation
(Cochrane, Grisso, & Frederick, 2001). Even adult defendants given non-psychotic
mental health disorders are six times more likely to be found IST (Cooper & Zapf, 2003).
Additionally, Cochrane et al. found that the relationship between criminal charges and
CST status was mediated by diagnosis.

Other potential characteristics of defendants who may likely be found IST include
problematic behaviors such as the MacDonald Triad, which consists of childhood cruelty
to animals, enuresis, and fire-setting behaviors. These behaviors were thought to be
associated with criminal offenders who were diagnosed with antisocial personality
disorder. Heller, Ehrlich, and Lester (1984) examined the relationship between clinician
opinion of CST and the MacDonald Triad. Although the prevalence in each CST group
was relatively small, they concluded that defendants found IST were less likely to exhibit
some or all behaviors in the MacDonald Triad (9.4%) than defendants found CST
(17.4%). Of the three behaviors in the MacDonald Triad, enuresis was the only behavior that significantly differentiated between defendants found CST or IST ($\chi^2 = 6.76, p < .01$).

Research pertaining to clinical characteristics of juvenile defendants is much more limited than adult defendants. However, it has been shown that juvenile defendants found CST had a lower prevalence of inpatient or outpatient mental health treatment and a higher prevalence of drug abuse than juvenile defendants found IST (Baerger et al., 2003). Juveniles deemed CST were also significantly less likely to receive special education services or have been a victim of neglect, physical abuse, or sexual abuse. Multivariate prediction revealed that the characteristics of age, special education services, and mental health treatment predicted CST status, such that juveniles 12 or younger with a history of special education services and inpatient or outpatient mental health services were more likely to be found IST.

**Legal knowledge.** Given the requirements of the *Dusky* standard, it is surprising to note the small number of studies that have addressed the specific legal knowledge or related characteristics of defendants. Redlich et al. (2003) examined the legal knowledge of juvenile and adult defendants in four CST domains (Understanding, Reasoning, Appreciation, and Total score) as measured by the MacCAT-CA. Multiple regression analyses indicated that the Understanding ($F[5, 31] = 2.65, p \leq .05$) and Total score domains ($F[5, 31] = 3.90, p \leq .01$) significantly predicted CST status. In a related study, Viljoen et al. (2007) assessed the CST-related knowledge of juvenile and adult defendants. Overall, more than 98% of defendants’ knowledge did not initially meet their respective CST standards. The three most common areas in which defendants had
knowledge deficits included the role of the judge, waiver of rights in guilty pleas, and potential consequences as a result of conviction. In contrast, the three areas in which defendants possessed the most knowledge were for the consequences of a guilty plea, role of a defense attorney and prosecutor, and role of the jury.

Very few studies have examined the relationship between criminal charge and CST. Cochrane et al. (2001) found that the type of criminal charge is associated with CST status. Adult defendants charged with illegal immigration were the most likely to be found IST by clinician opinion, followed by defendants who were charged with making threats, murder, and assault.

**Developmental factors.** Consideration of developmental characteristics in CST evaluations has primarily applied to juvenile defendants and has been the focus of much research in recent years. For instance, Cox, Goldstein, Dolores, Zelechoski, and Messenheimer (2010) examined the extent to which judges considered developmental factors in CST cases in criminal or juvenile court and how much weight was given to each factor. Judges from across the United States read CST reports about hypothetical juvenile defendants that varied only in regard to age (12 – 17) and level of psychosocial maturity (mature or immature) of the juvenile and then rated their perceived CST (e.g., Likert scale of 0 – 5, 0 = least CST, 5 = most CST). Overall, there were main effects for age and maturity level, in that more judges rated juveniles CST if they were older and more mature ($F[2, 324] = 34.24, p < .01$). No interaction was found for age and level of maturity, suggesting that judges considered each factor independently in juvenile CST cases.
Because adult courts do not permit developmental immaturity as a basis for the determination of IST, juveniles transferred to the adult courts may be less likely to be found IST given their natural tendency to be more immature than adult defendants. Poythress, Lecceen, Grisso, and Steinberg (2006) examined CST-related abilities on the MacCAT-CA and developmental characteristics on the MacArthur Judgment Evaluation. Defendants were divided into one of three groups: 16 – 17 year old adolescents in juvenile court, 16 – 17 year old adolescents who were transferred to the criminal court (direct file), and 18 – 24 year old adults in criminal court. Overall, few differences were found between the three groups with regard to MacCAT-CA scores and developmental characteristics. Univariate ANOVAs and pairwise comparisons revealed that the three groups significantly differed on the Understanding scale ($F[2, 383] = 4.517, p = .012$), such that the direct file group obtained significantly higher scores ($M = 12.41$) than the adult defendants ($M = 11.32$). Other results indicated that adult defendants were significantly better than the juvenile court group at risk identification (adult $M = 13.68$, 16 – 17 year old juveniles $M = 12.88, p = .01$) and that the direct file group scored significantly higher than the other two groups for resistance to interrogation influence (direct file $M = 2.13$; 16 – 17 year old juveniles $M = 1.82, p < .02$; adult $M = 1.88, p < .05$). These results suggest that compared to younger juveniles, the influence of age and maturity level on CST-related abilities is less pronounced in older juvenile defendants.

**Defendants Most Likely to Benefit from Restoration Services**

Stemming from the ruling in *Jackson v. Indiana*, mental health professionals are required to provide an opinion regarding the likelihood that a defendant who has been found IST could be RTC, in what time period, and under what level of services.
Available studies have found that, on average, approximately 75% of adult defendants are RTC (Colwell & Gianesini, 2011; Mossman, 2007), often within 100 days or less (Colwell & Gianesini). Other researchers have reported similar statistics for adult defendants in Indiana, where almost 75% of adult defendants were discharged within six months, and approximately 85% of adult defendants were discharged within one year (Morris and Parker, 2008). Research on juveniles has produced comparable results in that approximately 75% of juvenile defendants are RTC and usually within 90 to 120 days (Warren, DuVal, Komarovskaya, Chauhan, Buffington-Vollum, & Ryan, 2009).

Research on clinicians' predictions about which defendants will be RTC and in what period of time remains scarce (Melton et al., 2007). Some researchers and commentators (Mossman et al., 2007; Roesch & Golding, 1980) have noted that there have been relatively few empirical studies regarding RTC and these have produced mixed results. However, a few studies assessing the relationship between defendant characteristics and adult RTC have been fruitful. For example, Mossman (2007) examined archival data from defendants who were court-ordered to undergo RTC as psychiatric inpatients over a five-year period at a state run facility in Ohio. He concluded that adult defendants with lower probabilities of RTC typically had the following characteristics: misdemeanor charges; older age; diagnosed mental illness such as mental retardation, schizophrenia, schizoaffective disorder, substance use; more previous hospitalizations and longer lengths of stay; and non-African American ethnicity. Leong (2007) reported similar findings for adult defendants in Washington State.

Like research on CST, most of the RTC literature has focused on adult, rather than juvenile defendants, and has also demonstrated that RTC is significantly affected by

demographic, cognitive, clinical, and legal characteristics (Advokat, Guidry, Burnett, Manguno-Mire, & Thompson, 2012; Colwell & Gianesini, 2011; Hubbard, Zapf, and Ronan, 2003; Morris & Parker, 2009). Thus, this portion of the literature review will include research on RTC in adult and juvenile defendants, but will again primarily address the adult population.

**Demographic.** Research on the demographic characteristics that are related to RTC is limited. A few researchers have found that adult defendants who were African American (Anderson & Hewitt, 2002) or female (Morris & Parker, 2008) were more likely to be RTC. Other researchers have concluded that older defendants (> 65 years) were less likely to be RTC (Morris & Parker, 2009), while younger adult defendants were more often predicted to be RTC based on clinician opinion (Hubbard et al., 2003).

**Cognitive.** Although not frequently studied, some researchers have found that cognitive functioning is related to RTC. For example, Colwell and Gianesini (2011) determined that adult defendants found incompetent to stand trial and unremovable (ISTU) typically had lower cognitive functioning ($M_{IQ} = 69.67$) than defendants RTC ($M_{IQ} = 87.96$) and that defendants with lower IQ scores had longer lengths of hospital stay ($M_{Stay} = 173.18$) than defendants RTC ($M_{Stay} = 98.92$). In a similar vein, Morris and Parker (2009) found that adult defendants with dementia were less likely than non-forensic psychiatric hospital patients to be RTC at six months and one year after diagnosis than defendants without dementia. Anderson and Hewitt (2002) used logistic regression analysis to predict RTC by examining specific measures of cognitive functioning in males and females diagnosed with mental retardation. They found that higher IQ scores predicted which defendants were RTC based on clinician opinion. Of
the limited data on juvenile defendants, researchers have found that defendants without mental illness or mental retardation had the highest rate (91%) of being RTC (Warren et al., 2009). In contrast, juvenile defendants with the lowest rate (47%) of being RTC were those with mental retardation only.

Clinical. In a novel study on adult defendants referred for inpatient RTC, Advokat et al. (2012) examined the clinical symptoms of defendants RTC and adult defendants who remained IST after receiving RTC services. They found significant between group differences on the Global Assessment of Functioning (GAF) scale from the Diagnostic and Statistical Manual-Fourth Edition (American Psychiatric Association, 2000), a clinician rating of an individual’s level of psychological, social, and occupational functioning. Specifically, defendants who were RTC had higher GAF scores (e.g., better overall functioning) than the defendants who remained IST both prior to and after they received RTC services.

In their study of 71 adult male defendants discharged from a forensic hospital, Colwell and GIANesini (2011) similarly determined that adult male defendants found ISTU also had lower GAF scores at discharge than defendants who had been RTC. In addition, they found that defendants judged to be ISTU typically had more previous evaluations in which they were found IST (t = -2.90, p = .01), more prior hospitalizations (t = -2.09, p = .04), more prescribed medications (t = -3.83, p < .001), and were more frequently diagnosed with a psychotic or cognitive disorder, such as borderline intellectual functioning, mental deficiency, psychosis (Colwell & GIANesini, 2011), and mental retardation (Morris & Parker, 2008), than defendants who were RTC. Likewise, Advokat et al. (2012) found that defendants RTC also had less severe psychotic
symptoms and were discharged approximately 10 months sooner than the defendants who remained IST. Hubbard et al. (2003) found that defendants RTC were more likely to have a non-psychotic mental health disorder. With the exception of the previously mentioned results of Warren et al. (2009), which found that juveniles without mental illness or mental retardation are more likely to be RTC, it appears that few studies have examined the relationship between clinical characteristics of juvenile defendants and RTC.

**Legal knowledge.** Hubbard et al. (2003) conducted an exploratory study to determine which legal characteristics of defendants were associated with RTC. Using a sample of 468 adults, they found that defendants predicted to be RTC were more likely to have had previous criminal charges and were rated as having greater ability to understand legal processes than defendants who were not RTC. In contrast, Colwell and Gianesini (2011) determined that defendants found ISTU typically had more incarcerations and less serious charges than defendants RTC. It appears that no studies assessing the relationship between juvenile legal knowledge and RTC have been conducted.

**Attainment Programs.** Although not widely researched, jurisdictions are beginning to create programs for juveniles to help them attain the legal requirements of CST. If a forensic evaluator concludes that a juvenile is IST and would likely benefit from attainment services (i.e., could be RTC), a judge or magistrate has the option to court-order juveniles to participate in these programs. According to the ORC, juveniles charged with misdemeanor offenses have up to six months to attain CST, while juveniles charged with felony offenses have up to one year. In Hamilton County, Ohio, a juvenile attainment curriculum was developed by a committee of Hamilton County Juvenile Court
(HCJC) employees, including judges, magistrates, forensic evaluators, and other members of the Juvenile Court, and is usually taught by Probation Officers. The Attainment Program was designed to help juveniles learn about key court personnel, understand court-related processes, and be able to reason with this information. To date, little research has been conducted on the effectiveness of this program or juvenile attainment programs in general.

**Summary.** The aforementioned studies provide support for the relationship between defendant characteristics and CST in adult and juvenile populations. Research with these groups has also supported the association between defendant characteristics and RTC. However, given the limited nature of research on juvenile defendants, these relationships are not as well understood as those in adult defendants. Lastly, it remains unclear if juvenile attainment programs are effective at RTC. The present study will attempt to contribute to the growing literature in these areas by examining the effectiveness of a juvenile RTC program and defendant characteristics that predict successful RTC in this sample.
Chapter II

Rationale and Hypotheses

Although U.S. law has required that defendants be CST throughout its history, the 1960 Dusky ruling by the Supreme Court established the current standard to make that determination. Over the next several decades, some state and federal courts expanded the Dusky standard to be applicable to both adult and juvenile courts, including setting forth procedures for defendants who are found CST or IST. For example, most legal codes state that adult and juvenile defendants who are found CST continue with their court proceedings, while defendants deemed IST are court-ordered to receive RTC services.

Numerous studies have demonstrated that CST is significantly related to demographic, cognitive, clinical, and legal characteristics of adult defendants (Crocker, Favreau, & Caulet, 2002; Frierson, Shea, & Shea, 2002; Roberston, Gupton, McCabe, & Bankier, 1997; Viljoen, Odgers, Grisso, & Tillbrook, 2007). Research has also demonstrated a significant relationship between these characteristics and RTC in adult defendants (Advokat, Guidry, Burnett, Manguno-Mire, & Thompson, 2012; Colwell & Gianesini, 2011; Hubbard, Zapf, and Ronan, 2003; Morris & Parker, 2009). In particular, older age, lower cognitive functioning, mental health diagnoses, and decreased court knowledge were significantly associated with poorer RTC outcomes.

While some of these same relationships have been studied in other defendant groups, considerably less research has been conducted on the characteristics that render
juveniles IST. Of the available research, it has been found that demographic, cognitive, clinical, legal, and developmental characteristics are related to CST, such that juvenile defendants most likely to be found IST have a young age, low IQ, higher prevalence of receiving mental health services, less legal knowledge, and greater levels of immaturity (Baerger et al., 2003; Cox, Goldstein, Dolores, Zelechoski, & Messenheimer, 2010; Viljoen et al., 2007). Like research on CST, most of the RTC literature has focused on adult, rather than juvenile, defendants. This research found that juvenile defendants without mental illness or mental retardation had the highest rate of RTC (Warren et al., 2009). To date, it appears that no studies have specifically addressed the relationship between demographic, cognitive, or legal characteristics of juvenile defendants and RTC.

In conclusion, the relationship between juvenile defendant characteristics and RTC is an emerging area of study that, given its important legal and psychological implications, would benefit from additional research efforts.

In light of the above, the following null hypotheses are offered:

$H_01$: There is no statistically significant correlation between demographic (age, sex, race, grade, special education status), cognitive (IQ), or legal characteristics (number of charges, number of previous adjudications, type of charge) and CST status (CST or IST) as determined by a forensic evaluator at the initial referral for CST.

$H_02$: There is no statistically significant difference in demographic (age, sex, race, grade, special education status), cognitive (IQ), or legal characteristics (number of charges, number of previous adjudications, type of charge) between juveniles determined CST or IST as determined by a forensic evaluator at the first CST evaluation.
H₀₃: There is no statistically significant difference in demographic (age, sex, race, grade, special education status), cognitive (IQ), or legal characteristics (number of charges, number of previous adjudications, type of charge) between juveniles determined CST or IST as determined by a forensic evaluator at the second CST evaluation.

H₀₄: There is no single demographic (age, sex, race, grade, special education status), cognitive (IQ), legal characteristic (number of charges, number of previous adjudications, type of charge) or combination of characteristics that statistically predicts CST status (CST or IST) as determined by a forensic evaluator at the first CST evaluation.

H₀₅: There is no single demographic (age, sex, race, grade, special education status), cognitive (IQ), legal characteristic (number of charges, number of previous adjudications, type of charge) or combination of characteristics that statistically predicts CST status (CST or IST) as determined by a forensic evaluator at the second CST evaluation.

H₀₆: There is no statistically significant difference in the number of attainment sessions attended by juveniles found CST vs. juveniles found IST by a forensic evaluator at the second CST evaluation.
Chapter III

Method

Participants

Data for this study will come from the clinical files of juveniles (17 years 11 months or younger) who have been charged with criminal acts by the HCJC and have been evaluated for CST by the Hamilton County Juvenile Court Psychology Clinic (HCJCPC). This will include information from juveniles found CST and juveniles deemed IST who were ordered to participate in an attainment program operated by the HCJC, which began in 2007. The data include files that have been generated over the course of approximately five years, from the start of the Attainment Program through December 2012.

Power Analysis

In order to determine the number of participants needed for this study, power analysis was calculated based on Cohen’s (1992) work. Participants in this study will consist of at least 190 juveniles, as suggested by Cohen’s power analysis with .80 power to detect a medium effect size at .01 alpha.

Procedure

Permission for this study will be obtained from the HCJC and Xavier University’s Institutional Review Board. All juveniles evaluated for CST through the HCJCPC have the results of their evaluations reported in a standard format to the Court (see Appendix
B. The file also contains the results of psychological tests administered as part of the evaluation, a list of current and previous charges, a copy of all CST evaluations, and attendance records at attainment classes.

Data will be obtained from juveniles’ files and will be recorded in a computer database. Juveniles will be assigned an identification number in order to track participant data and maintain confidentiality. The following information (if available) will be collected from juveniles’ files and will reflect data at the time of each CST evaluation: age (in years and months), sex, race, IQ (as measured by a standardized IQ test, most often the Wechsler Abbreviated Scale of Intelligence), grade in school, special education status (yes or no), number of current charges and previous adjudications (obtained from the juveniles official record of arrests and prosecutions), type of charge (misdemeanor vs. felony, as reported in the official record of arrests and prosecutions), year of evaluation, months since last evaluation, forensic evaluator opinions (CST vs. IST), ratings from the CST evaluations and the reason for IST if relevant (developmental immaturity, mental retardation, or mental illness), and number of attainment classes attended. In the event that a juvenile has been charged with multiple offenses, the most serious charge will be recorded. Management of files with missing data will be analyzed using the casewise deletion method.

Juveniles are evaluated for CST by one of two licensed psychologists or a licensed psychiatrist employed by the HCJCPC. All of these individuals have experience working with a juvenile forensic population and have performed multiple forensic evaluations of juveniles. Evaluator opinion of CST or IST is based on the criteria for juvenile CST evaluations as outlined by the ORC. As part of CST evaluations, evaluators
rate the degree (yes, no, marginal) to which juveniles understand and appreciate specific areas of legal knowledge, in addition to their ability to participate in their defense and maintain appropriate courtroom behavior. Evaluators also form an overall opinion regarding the juvenile's CST status and indicate a reason for IST (developmental immaturity, mental retardation, or mental illness).

The Hamilton County Attainment Program was designed to help juveniles achieve the CST knowledge outlined by the ORC (summarized in Appendix B) and the ability to reason with this information. Juveniles learn about court-related information via discussion, worksheets, drawings of a courtroom layout, and reasoning through hypothetical legal scenarios. Most juveniles go through the Program as a group, which is held weekly for approximately one hour on Saturday mornings at the Hamilton County Juvenile Court Youth Center (HCJCYC). Juveniles detained at the HCJCYC attend the Attainment Program with other juvenile defendants who are conditionally released and travel to the HCJCYC from home. The majority of juveniles are taught by Probations Officers employed by the HCJC, with the exception of juveniles who have difficulty conforming to the format of the program, either because they are too distracted in the group format or have difficulty acquiring the knowledge presented at the typical pace. These individuals receive additional instruction from one of two supervised clinical psychology graduate students or a licensed professional counselor who are employed by the HCJC.

After each attainment session, data about each juvenile's effort, progress, and knowledge is recorded and stored in their file, which is used to determine when juveniles are ready for a second CST evaluation. Juveniles remain in the Attainment Program until
they have been found CST, the maximum allotted time to be RTC has expired, or a forensic evaluator determines the juvenile will be unable to be RTC within ORC limits. In the event that some juveniles received more than two CST evaluations, only data from the first and second evaluations will be used in this study.
Chapter IV

Proposed Analyses

The purpose of the current study is twofold. First, this study will add to the research on the characteristics of juvenile defendants associated with CST. Second, this study will address which defendant characteristics predict who is more likely to benefit from attainment intervention in a juvenile sample referred for a CST evaluation.

The first hypothesis examines the relationships between demographic characteristics of juvenile defendants and CST status. This hypothesis will be examined using Pearson correlations for continuous variables (i.e., age, IQ, grade, number of charges, number of current charges, and previous adjudications) and Spearman correlations for categorical variables (i.e., sex, race, type of education, and type of charge.)

The second two hypotheses examine the possible differences in the demographic characteristics of juveniles found CST vs. IST at the first and second evaluation. Independent samples t-tests will be used to compare the groups on the continuous variables of age, IQ, grade, number of charges, number of current charges, and number of previous adjudications. Chi-squared tests will be used to compare the groups on the dichotomous variables of sex, race, type of education, and type of charge.

Hypotheses four and five will be examined using discriminant function tests to determine which defendant characteristics predict CST status at the first and second
evaluation. Lastly, the sixth hypothesis compares the relationship between the number of attainment sessions attended and CST status at the second evaluation, and will be examined using an independent samples \( t \)-test. Given the high number of analyses that will be conducted, a more conservative .01 alpha will be used for all hypotheses.
References


*In re Causey*, 363 So.2d 472 (La. 1978).


JUVENILE COURT-RELATED SKILLS


Ohio Revised Code, 129th General Assembly File No. 29, HB 86, § 1.


Appendix A

HB 86 Juvenile Provisions
Competency (O.R.C. § 2152.51 - §2152.59): Fact Sheet

Flowchart of Competency Proceedings

- Motion for competency determination
  - Within 15 days:
    - Court finds that child is incompetent without hearing or evaluation
    - Court finds - within 10 days of conducting a hearing - a reasonable basis to conduct a competency evaluation
    - Court finds - without a hearing - a reasonable basis to conduct a competency evaluation

- Competency determination hearing held within 15-30 days
  - Court finds that child is competent and continues with proceedings
  - Court finds that child is not competent but could become competent within maximum period, court orders child to competency attainment services
  - Court finds that child is not competent and will not become competent within maximum period, court dismisses without prejudice

- Competency evaluation by professional submitted to court within 45 days
  - If court finds that child attains competency, court continues delinquency proceedings at that time
  - If court finds that child does not and will not attain competency within maximum period, court dismisses without prejudice
# Appendix B

## COMPETENCY WORKSHEET

<table>
<thead>
<tr>
<th>Name: ____________________________</th>
<th>Date: ____________________________</th>
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</table>

<table>
<thead>
<tr>
<th>Role of Key Personnel:</th>
<th>Factual Awareness</th>
<th>Adequate Appreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judge/Magistrate role</td>
<td>Yes, No, Marg</td>
<td>Yes, No, Marg</td>
</tr>
<tr>
<td>Defense lawyer’s role</td>
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<td>Yes, No, Marg</td>
</tr>
<tr>
<td>Prosecutor’s role</td>
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<tr>
<td>Aware of serious nature of offense</td>
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<td>Yes, No, Marg</td>
</tr>
<tr>
<td>Understanding of possible pleas</td>
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<td>Yes, No, Marg</td>
</tr>
<tr>
<td>What happens at a trial</td>
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<tr>
<td>Awareness of possible punishments</td>
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<th>Understanding of Trial Process:</th>
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<td>Understanding of trial outcomes</td>
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<td>Role of evidence</td>
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<td>Role of witness</td>
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<td>How Judge makes decision</td>
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<tr>
<td>How to assist lawyer</td>
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<tr>
<td>How to make a plea</td>
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<tr>
<td>Aware of issues related to plea bargains</td>
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<th>Ability to Participate at Hearing:</th>
<th>Factual Awareness</th>
<th>Adequate Appreciation</th>
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<tr>
<td>Ability to attend to event</td>
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<tr>
<td>Ability to maintain self-control</td>
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<td>Ability to testify</td>
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<th>Concern regarding Effort:</th>
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<table>
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<tr>
<th>Estimated time to Attainment:</th>
<th>______ sessions</th>
<th>Re-Evaluation Requested:</th>
<th>Yes, No</th>
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</thead>
<tbody>
<tr>
<td>(Are they ready for follow-up Competency Evaluation)</td>
<td></td>
<td></td>
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</table>

**Accommodations Needed for Evaluation:**
- extended time
- use of simple language
- repetition of questions
- comprehension checks

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<thead>
<tr>
<th>Barriers to Competency</th>
<th>Recommended Interventions</th>
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**Instructor Name:** ____________________________

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FOR PROFESSIONAL USE ONLY
Chapter V

Dissertation

Abstract

The current study compared the characteristics of juvenile defendants found competent to stand trial (CST) versus incompetent to stand trial (IST) at initial and second evaluation points and examined characteristics that predicted which juveniles were likely to benefit from competency attainment intervention. Using a sample of 263 juvenile defendants, results indicated that age, IQ score, grade, number of charges, number of previous adjudications, and special education were significantly correlated with CST status (CST vs. IST). Significant differences were found between CST and IST groups for all of these variables at the first evaluation, but IQ score was the only variable that significantly differed between groups at the second evaluation. The typical juvenile found IST at the first evaluation was younger, had a lower IQ score, was enrolled in an earlier grade, had a greater number of charges, and had fewer previous adjudications than juveniles found CST. Despite the group differences, IQ score was the only variable to significantly predict CST status at either evaluation.
Relationship of Defendant Characteristics to Attainment of Court-Related Skills in a Juvenile Sample

The current standard of CST for adult criminal defendants was outlined by the U.S. Supreme Court in *Dusky v. United States* (1960), which states, “the test [of competence] must be whether he [the defendant] has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding – and whether he has a rational as well as factual understanding of the proceedings against him” (p. 402).

There have been no federal cases that have set forth specific standards for CST in children. Currently, approximately two-thirds of states, through statutes or case law, have addressed the issue of juvenile CST via standards and criminal codes, most of which are similar or identical to the *Dusky* standard (Melton, Petrila, Poythress, & Slobogin, 2007). In 2011, Ohio established a separate statute for juvenile CST to address the unique issues that arise when considering CST with children. The *Ohio Revised Code* (ORC; § 2152.51) states that juveniles over the age of 14 are assumed to be competent, but that a juvenile is IST if, “due to mental illness, intellectual disability, or developmental disability, or otherwise due to a lack of mental capacity, the child is presently incapable of understanding the nature and objective of the proceedings against the child or of assisting in the child’s defense.” In contrast, the ORC states that a juvenile is CST if he or she has the “ability to understand the nature and objective of a proceeding against the child and to assist in the child’s defense,” a standard that is virtually identical to the ORC standard for adult CST (§ 2945.371), which was derived from the *Dusky* ruling. This statute implies that children under the age of 14 are not assumed to be CST and would be commonly subject to evaluation to establish their court-related abilities.
Following Ohio law, when a juvenile’s CST is questioned, a licensed forensic evaluator conducts a CST evaluation. If the juvenile is found CST, plea, trial, and/or disposition proceedings continue as usual. When the examiner opines that a juvenile is IST, he or she must also render an opinion about the likelihood that the juvenile can attain competence within the statutory time limits allowed based on the nature of the alleged offense. Informed by that opinion, a judge or magistrate can order the juvenile to participate in services so that the juvenile attains competence. Before a juvenile can be subsequently adjudged CST, his or her court-related abilities must be re-assessed by a licensed forensic evaluator. Again, if the juvenile is found CST at the second evaluation, court proceedings continue as usual. If the juvenile is found IST a second time, the cycle of participating in attainment services and having a CST evaluation continue until the juvenile has been determined to have attained competence, the maximum time allowed for attainment has passed, or a forensic evaluator opines that the juvenile is unable to attain competence.

There are currently no universally accepted standards regarding the evaluation of CST and Fitch (2007) explained that the standards pertaining to juvenile CST evaluations remain ill-defined because it is a relatively new legal concept. Nonetheless, the American Academy of Psychiatry and the Law (AAPL) Practice Guideline for the Forensic Psychiatric Evaluation of Competence to Stand Trial (Mossman, Noffsinger, Ash, Frierson, Gerbsa, Hackett, et al., 2007) described characteristics that might influence the CST status of juveniles including age, developmental immaturity (i.e., responsibility, temperament), maturity of cognitive abilities (i.e., reasoning and judgment), and mental or emotional disturbances that directly influence the juvenile’s
functional ability to meaningfully participate in court proceedings. This list is based on the results of earlier studies and observations that have indicated these characteristics are relevant in juvenile CST. For example, Grisso, Miller, and Sales (1987) suggested that a CST evaluation should include assessment of a juvenile’s intelligence, school achievement, prior court contacts, and behavior in a legal setting. In addition, Grisso et al. (1987) suggested that a juvenile’s CST should be questioned if a juvenile is 12 or younger, has a diagnosis of or is receiving treatment for a significant mental illness, has low intellectual functioning or is intellectually deficient, has a learning disability, or if the juvenile is noted to have impairments in memory, attention, or reasoning. At the time these recommendations were made, these factors were based primarily on clinical experience as opposed to systematic analysis of juvenile defendant characteristics.

The characteristics recommended by Grisso et al. (1987) over 20 years ago are consistent with the opinions of forensic psychologists who were surveyed in 2003. Ryba, Cooper, & Zapf (2003) surveyed psychologists with expertise in juvenile forensic assessment and found that current mental status, CST abilities, understanding of charges, and ability to assist their attorney were all rated as essential elements to include in juvenile CST reports by at least 90% of the 82 respondents. Three additional elements, including an opinion about mental illness, understanding of trial processes, and mental illness/retardation/immaturity rationale, were rated as essential by 70% or more of respondents. Lastly, an opinion of the juvenile’s level of maturity (48.8%) and the use and reporting of psychological assessment results (43.9%) were rated as essential elements to include in CST evaluations.
Ficke, Hart, and Deardorff (2006) evaluated the relationship between defendant characteristics and juveniles’ performance on the MacArthur Competency Assessment Tool-Criminal Adjudication (MacCAT-CA; Poythress, Nicholson, Otto, Edens, Bonnie, Monahan, et al., 1999), a measure of CST-related knowledge and skills. They found that age, estimated IQ scores, achievement scores, and hyperactivity/behavioral problems associated with mental health conditions were significantly correlated with the Understanding, Reasoning, and Appreciation scales of the MacCAT-CA. Regression analyses further revealed that these characteristics significantly predicted MacCAT-CA scores, accounting for 36% and 38% of the variance in the Reasoning and Understanding scales, respectively. However, this study did not evaluate factors associated with judicial decisions of competence, only performance on a measure used to assist forensic examiners in rendering an opinion regarding CST.

Burnett, Noblin, and Prosser (2004) found that African American juvenile defendants scored lower than Caucasians on the Understanding and Reasoning scales of the MacCAT-CA. Several researchers have also noted the importance of age in differentiating between defendants found CST or IST. Baerger, Griffin, Lyons, and Simmons (2003) examined the differences between juvenile defendants found IST or CST based on psychologists’ evaluations. They found that more juveniles found IST were 12 years or younger, whereas more juveniles found CST were 15 to 16 years old. Overall, the mean age of juveniles found IST ($M_{\text{age}} = 13.92$) was significantly younger than juveniles found CST ($M_{\text{age}} = 14.42$).

In addition to demographic characteristics, researchers have noted that juvenile defendants who are found IST perform poorly on various cognitive tasks. For example,
defendants with lower average high school grades were more likely to be found IST (Redlich, Silverman, & Seinter, 2003). IQ has also been found to be positively associated with CST in that juvenile defendants who had low IQ scores were the most likely juvenile group to demonstrate low MacCAT-CA scores and require subsequent instruction (Viljoen, Odgers, Grisso, & Tillbrook, 2007). Juveniles 13 years or younger were the least likely to benefit from instruction, indicating that young juveniles have less developed reasoning capacities than older juveniles.

Burnett et al. (2004) suggested that specific cognitive deficits might explain the correlation between age and CST status. In particular, they found that the mean MacCAT-CA Reasoning scores of juvenile defendants and a community matched control group were significantly related to age. However, post hoc analyses revealed no significant differences between groups. These findings suggest that young defendants as a whole are especially vulnerable to demonstrate deficits in reasoning abilities, which can affect CST status.

Baerger et al. (2003) found that juvenile defendants found CST had a lower prevalence of inpatient or outpatient mental health treatment and a higher prevalence of drug abuse than juvenile defendants found IST. Juveniles deemed CST were also significantly less likely to receive special education services or have been a victim of neglect, physical abuse, or sexual abuse. Multivariate prediction revealed that the characteristics of age, special education services, and mental health treatment predicted CST status, such that juveniles 12 or younger with a history of special education services and inpatient or outpatient mental health services were more likely to be found IST.
Given the requirements of the *Dusky* standard, it is surprising to note the small number of studies that have addressed the specific legal knowledge or associated characteristics of defendants. Viljoen et al. (2007) assessed the CST-related knowledge of juvenile and adult defendants on the teaching component of the MacCAT-CA. Overall, more than 98% of defendants’ earned an imperfect score on at least one of six teaching items and required subsequent instruction. After receiving this intervention, results indicated that defendants’ post-teaching scores were significantly higher than their pre-teaching scores. Notably, younger juveniles (11 – 13 years old) demonstrated significantly less improvement than older juveniles (16 – 17 years old).

Poythress, Lexcen, Grisso, and Steinberg (2006) espoused that developmental characteristics should be considered in CST evaluations, and this has been the focus of much research in recent years. For instance, Cox, Goldstein, Dolores, Zelechoski, and Messenheimer (2010) examined the extent to which judges considered developmental factors in CST cases in criminal or juvenile court and how much weight was given to each factor. Judges from across the United States read CST reports about hypothetical juvenile defendants that varied only in regard to age (12 – 17) and level of psychosocial maturity (mature or immature) of the juvenile and then rated their perceived CST (e.g., Likert scale of 0 – 5, 0 = least CST, 5 = most CST). Overall, there were main effects for age and maturity level, in that more judges rated juveniles CST if they were older and more mature. No interaction was found for age and level of maturity, suggesting judges consider each factor independently in juvenile CST cases.

Stemming from the ruling in *Jackson v. Indiana* (1972), mental health professionals are required to provide an opinion regarding the likelihood that a defendant
who has been found IST could be restored to competency (RTC), in what time period, and under what level of services. Research on clinicians’ predictions about which defendants will be RTC and in what period of time remains scarce (Melton et al., 2007). Some researchers and commentators (Mossman et al., 2007; Roesch & Golding, 1980) have noted that there have been relatively few empirical studies regarding RTC and these have produced mixed results. In juvenile populations, the phrase ‘attainment of competence’ is preferred over RTC because it is assumed that children have not yet been competent based on their age and developmental level.

Although not widely researched, jurisdictions are beginning to create programs for juveniles to help them attain the legal requirements of CST. Previous studies have found significant relationships between defendant characteristics and juveniles’ court-related skills (Viljoen et al., 2007), yet there is limited information on characteristics or skills that are associated with their ultimate attainment of CST. Indeed, it remains unclear if juvenile attainment programs are effective in developing their court-related abilities. The present study contributed to the growing literature in these areas by examining the effectiveness of a psychoeducational attainment program for juveniles adjudicated IST and by examining defendant characteristics that predict successful attainment in this sample.

**Method**

**Participants**

Data for this study were gathered from the clinical files of juveniles (17 years, 11 months or younger) who were charged with delinquent offenses by the Hamilton County Juvenile Court (HCJC) and referred for evaluation of CST by the Hamilton County
Juvenile Court Psychology Clinic (HCJPC). This included information from juveniles ultimately found CST, and juveniles deemed IST who were court-ordered to participate in an attainment program operated by the HCJC, which began in 2007. The data included files that were generated over the course of approximately five years, from the start of the Attainment Program through December 2012. Information from all files that contained data relevant to the current study was included in the dataset.

Review of files yielded a total of 264 juveniles who underwent an initial CST evaluation. One of these juveniles was excluded from analysis on the suspicion of malingering that was later supported by psychological testing; in 11 other cases, the forensic examiner suspected poor effort, but there was no systematic evaluation to address that concern, so their data were not eliminated. This yielded data from a total of 263 juveniles for analyses.

Tables 1 and 2 present demographic characteristics of the sample. The majority of juveniles who received an initial CST evaluation were male (83.7%) and identified as African American (77.2%). The sample ranged in age from 8 years, 7 months to 17 years, 10 months ($M = 12.51$, $SD = 1.86$); almost 30% of the juveniles were receiving special education services. IQ scores were available for 188 juveniles, revealing an average score of 79.16 ($SD = 13.83$). Juveniles in the overall sample were charged with an average of 2.52 offenses, and 189 youth were charged with at least one felony level offense. The most common reason cited for the CST evaluation referral was ‘Developmental Immaturity’ (79.1%).

The majority (74.5%, $n = 196$) of juveniles who underwent the initial evaluation were found IST. Of the IST group, 57% ($n = 115$) underwent a second evaluation. This
smaller number excludes those juveniles who were found CST after the first evaluation \((n = 67, 25.5\% \text{ of the total sample})\) and cases for which the court decided not to pursue the charges \((n = 81, 30.8\% \text{ of the total sample})\). We have no information about why these juveniles' charges were dismissed; see Appendices A and B for descriptive information about this subsample.

The first and second evaluation samples did not differ significantly in age, grade, number of charges, number of current charges, or previous adjudications, although there were significant differences in sex, \(\chi^2(1) = 196, p < .01\), race, \(\chi^2(16) = 784, p < .01\), and IQ score, \(t(80) = 4.04, p < .01\). These differences reflect that, at the second evaluation, there were fewer boys (83.7\%) and more juveniles who identified as African American (77.2\%) than at the first evaluation. Juveniles at the second evaluation also had lower IQ scores \((M = 75.95, SD = 12.76)\) than juveniles receiving an initial evaluation.

**Procedure**

Permission for this study was obtained from the HCJC (see Appendix C) and Xavier University's Institutional Review Board (see Appendix D). All juveniles evaluated for CST through the HCJCP had the results of their evaluations reported in a standard format to the Court (see Appendix E). The files also contained the results of psychological tests administered as part of the evaluation (if conducted), a list of current and previous charges, a copy of all CST evaluations, and attendance records at attainment classes (if ordered/applicable).

The primary investigator reviewed the files of all juveniles who have been referred for a CST evaluation between January 2007 and December 2012, and recorded the relevant information in a computer database. Juveniles were assigned an
identification number in order to track participant data, but maintain confidentiality. The following information (when available) was collected from juveniles’ files and reflected data at the time of each CST evaluation: age (in years and months), sex, race, IQ score (as measured by a standardized IQ test, most often the Wechsler Abbreviated Scale of Intelligence, WASI; Wechsler, 1999), grade in school, special education status (yes or no), number of charges, number of current charges and previous adjudications (obtained from the juveniles’ official record of arrests and prosecutions), type of charge (misdemeanor vs. felony, as reported in the official record of arrests and prosecutions), year of evaluation, months since last evaluation, forensic evaluator opinions (CST vs. IST), clinicians’ ratings of the youths’ understanding and appreciation of critical elements of court-related information as recorded in the CST evaluations (yes, no, marginal), reason for IST if relevant (developmental immaturity, mental retardation, or mental illness), and number of attainment classes attended (if relevant). If a juvenile was charged with multiple offenses, the most serious charge was recorded. Files with missing data were analyzed using the casewise deletion method.

Juveniles were evaluated for CST by one of three forensic evaluators who were employed by the HCJCPC (two licensed clinical psychologists and one psychiatrist). All of these individuals had experience working with juveniles in a forensic setting and had performed multiple forensic evaluations of juveniles. Evaluator opinion of CST or IST was based on the criteria for juvenile CST evaluations as outlined by the ORC and as operationally defined by specific functions or abilities established by the clinic in which they operated (see Appendix E). As part of CST evaluations, evaluators rated the degree (yes, no, marginal) to which juveniles understood and appreciated specific areas of legal
knowledge, in addition to their ability to participate in their defense and maintain appropriate courtroom behavior. Evaluators also formed an overall opinion regarding the juvenile’s CST status.

In 2007, the HCJCPC began to offer an Attainment Program to assist juveniles found IST acquire the court-related knowledge and skills outlined by the ORC (summarized in Appendix F). A committee of HCJC employees developed the program, including judges, magistrates, forensic evaluators, and other members of the Juvenile Court. In a group format, the juveniles ordered to attend the program learned court-related information via discussion, worksheets, drawings of a courtroom layout, and hypothetical legal scenarios. Most juveniles participated in the program as a group, which was held weekly for one-hour sessions. The majority of sessions were conducted by Probations Officers employed by the HCJC, with the exception of juveniles who had difficulty conforming to the group format (most often because they were disruptive, highly distracted, or had difficulty acquiring the knowledge presented at the typical pace). These juveniles received additional instruction from one of two supervised clinical psychology graduate students or a licensed professional counselor who were employed by the HCJC.

After each attainment session, information about each juvenile’s effort, progress, and knowledge was recorded and stored in the juvenile’s file. This information was used to determine when juveniles were ready for a second CST evaluation. Generally, juveniles participated in the Attainment Program until they were found CST, the maximum allotted time to attain competence had expired, or a forensic evaluator determined the juvenile would be unable to attain CST within the time limits outlined in
the ORC. When juveniles received more than two CST evaluations for the same set of charges, only data from the first and second evaluations were used in this study. To date, little research has been conducted on the effectiveness of this Attainment Program or juvenile attainment programs in general.

Results

The overall purposes of this study were to compare the characteristics of juvenile defendants found CST versus IST at initial and second evaluation points, and to examine defendant characteristics that might predict which defendants are likely to benefit from attainment intervention in a juvenile sample referred for a CST evaluation. Given the high number of analyses that were conducted, a more conservative .01 alpha was used for all statistical procedures.

We examined the relationships between demographic characteristics of juvenile defendants and CST status using Pearson correlations for continuous variables (age, IQ, grade, number of charges, number of current charges, and previous adjudications) and Spearman’s rho for categorical variables (sex, race, type of education, and type of charge). The results of these analyses are presented in Table 3. Whereas most of the continuous variables were significantly correlated with CST status, special education was the only categorical variable statistically related to CST status ($r = .18, p < .01$). Excluding number of current charges, all of these correlations ranged in strength from small to moderate, with IQ being the strongest.

Next, we examined the possible differences in the defendant characteristics of juveniles found CST versus IST at the first and second evaluations. Means, standard deviations, independent samples $t$-tests (for continuous variables), percentages, and chi-
square analyses (for dichotomous variables) are presented in Tables 1 and 2. The groups differed on most continuous variables (age, IQ, grade, number of charges, and number of previous adjudications) at the first evaluation, whereas IQ score was the only characteristic that significantly differed between the CST and IST groups at the second evaluation, $t(80) = 4.04, p < .01$. The typical juvenile found IST at the first evaluation was younger, had a lower IQ score, was enrolled in an earlier grade, had a greater number of charges, and had fewer previous adjudications than juveniles found CST. Chi-square tests were used to compare the groups on the dichotomous variables of sex, race, special education status, and type of charge. The chi-square tests revealed significant differences between these groups in the proportion of juveniles who received special education services at the first evaluation, $\chi^2 = 7.83, p < .01$, but not at the second evaluation. No other differences between categorical variables were significant at either evaluation period. Additionally, juveniles found CST or IST at the second evaluation did not significantly differ on the number of attainment sessions attended prior to the evaluation, $t(105) = -1.66, p = .10$.

Using logistic regression, the next two analyses evaluated which defendant characteristics predicted CST status at the first and second evaluation. These results are presented in Table 4. IQ was the only variable with a significant Wald value at the first evaluation, $F(1, 161) = 18.97, p < .01$, or second evaluation, $F(1, 76) = 11.99, p < .01$, indicating it was the only variable to predict CST status at either evaluation. Special education status was the next best predictor at the second evaluation, but did not reach statistical significance for our study, $F(1, 76) = 5.37, p = .02$. 
Discussion

Previous research (e.g., Baerger et al., 2003; Cox et al., 2010; Viljoen et al., 2007) has aided in psychologists' understanding of juvenile CST by examining the relationship between CST status and defendant characteristics, finding that CST status was significantly related to demographic, cognitive, clinical, legal, and developmental characteristics of juvenile defendants. However, there have been few studies that have examined the relationship between defendant characteristics and eventual attainment of required court-related abilities. The current study aimed to expand the literature on juvenile CST by examining defendant characteristics of a juvenile sample court-ordered to participate in a psychoeducational attainment program, and directly assess the relationship between defendant characteristics and attainment. Specifically, the purposes of this study were to examine the relationship between defendant characteristics and CST status and determine which characteristics predict who is most likely to be found CST after attending attainment classes.

In concert with previous research, the results of the current study found that age, grade, special education status, IQ, number of current charges, and number of previous adjudications were significantly correlated with CST status. Similarly, Baerger et al. (2003) found that juveniles with a history of special education services were more likely to be found IST, and Viljoen et al. (2007) found that juvenile defendants who had low IQ scores were more likely to demonstrate low scores on the MacCAT-CA teaching items and require subsequent instruction. Ficke et al. (2006) also found a significant correlation between age and mean scores on the MacCAT-CA scales. Results of their study demonstrated a curvilinear relationship between age and MacCAT-CA
performance, with the strongest relationships occurring in defendants 12 or younger and generally leveling off after age 13. While both of the latter studies support the findings of the current study, it is unclear if the relationship between age and CST is influenced by the method of assessing CST (i.e., CST evaluation opinion versus scores on a CST measure; overall CST versus features of CST). Methodological differences may also help explain discrepancies between the current study and previous research regarding racial differences between juveniles found CST versus IST. Specifically, previous research found that ethnic minorities scored significantly lower than Caucasians on the MacCAT-CA Understanding and Reasoning scales (Burnett et al., 2004) and teaching component (Viljoen et al., 2007). Our study, which examined overall CST, did not find differences in the proportion of racial groups by CST status.

Results of the current study yielded differences between juveniles found CST versus IST, such that juveniles found IST at the first evaluation were younger, had lower IQ scores, were enrolled in earlier grades, had fewer charges and previous adjudications, and were more likely to be enrolled in special education classes. These results are consistent with previous studies, which found significant differences between cognitive and clinical variables of defendant groups. Researchers have found that the mean age of juveniles found IST was younger than juveniles found CST based on judges' ratings (Cox et al., 2010), psychologists' opinions (Baerger et al., 2003), and MacCAT-CA scores (Ficke et al., 2006).

Burnett et al. (2004) proposed that specific cognitive deficits might help explain the relationship between age and CST. In particular, they found that the mean Reasoning scores obtained by juvenile defendants on the MacCAT-CA were significantly related to
age. Additionally, Viljoen et al. (2007) found that juveniles 13 years or younger were the least likely to benefit from CST instruction. Kivisto, Moore, Fite, and Seidner (2011) suggested that the cognitive deficits seen in juvenile defendants found IST might be related to specific mental abilities. For example, they found that CST-related abilities were positively associated with general word knowledge and abstract spatial reasoning, as measured by the WASI. Furthermore, juvenile defendants with cognitive deficits are at higher likelihood to be enrolled in special education services. Given that lower IQ scores are common among students who receive special education services, it is not surprising our study found that juveniles determined to be IST were more likely to be enrolled in special education services. These results are also consistent with the work of Baerger et al. (2003), who found that greater numbers of juveniles determined IST were receiving special education.

At the second evaluation, IQ was the only variable to differ significantly between juveniles found CST versus IST, with juveniles found IST having lower IQ scores. Contrary to logic, our study found no differences between the number of attainment sessions attended and CST status at the subsequent evaluation. Typically, how long a juvenile receives attainment services is related to the progress they are making (or not making) in the program. The lack of observed differences may be attributable to the almost equal number of juvenile defendants who received attainment services and were found CST ($n = 58, 50.4\%$) or IST ($n = 57, 49.6\%$) at the second evaluation.

Our data uncovered interesting trends about how this juvenile court manages cases when CST is questioned. Specifically, 196 juveniles were found IST after the first evaluation and nearly half ($n = 81$) of these cases were dismissed. These two groups
differed only in grade ($t_{188} = 2.93, p < .01$), such that juveniles who had their case
dismissed were enrolled in earlier grades ($M = 5.87, SD = 1.77$) compared to juveniles
found IST who did not have their case dismissed ($M = 6.57, SD = 1.53$). This resulted in
115 juveniles being referred for attainment services; 58 of these juveniles (22.1% of the
original sample) were ultimately determined to have attained competence. Notably,
previous research has reported higher rates of attainment; approximately three out of
every four juveniles referred for attainment services (the nature and content of which
varied considerably) were later found CST and usually within three to four months
(Warren, DuVal, Komarovskaya, Chauhan, Buffington-Vollum, & Ryan, 2009).
Juveniles in this sample were demographically similar to defendants in our study (age 8 –
17, predominately male, mostly non-Caucasian minorities), so that does not appear to
account for differences in outcome.

Warren et al. (2009) also found that the highest rates of RTC (as phrased in their
study) were among juveniles with no history of mental illness or mental retardation,
whereas juveniles whose only diagnosis was for mental retardation had the lowest RTC
rates. The results of our study do not support these findings. Specifically, juveniles
referred for a CST evaluation for reasons of mental retardation (albeit a very small
portion of the sample) had the highest attainment rate, ($n = 3, 66\%$), followed by
developmental immaturity/mental disorder ($n = 2, 50\%$), and developmental immaturity
($n = 106, 49\%$). There was one juvenile referred for reasons of developmental
immaturity/mental retardation, and he did not attain competence at the time of the second
evaluation. Approximately half of juveniles in the current study who received attainment
services were determined to have attained competence at their second evaluation, after
attending an average of 7.93 attainment classes (approximately two months) and were found CST within an average of 4.46 months, slightly longer than the time period reported by Warren et al.

Despite having similar juvenile samples, the overall percentage of defendants who reached attainment in our study was lower than that found by Warren et al. (2009). Differences in data classification may have impacted the lower rates of attainment we observed. We analyzed attainment based on CST status at the time of the second evaluation only, whereas Warren et al. based it on the court’s final decision regarding CST. Thus, defendants in their study who were RTC after the second evaluation were included in analyses, but were excluded in ours. Additionally, juveniles in the Warren et al. study received an average of three-times weekly, individualized CST interventions in the location where the youth resided (e.g. home, emergency shelter, detention center/adult jail, psychiatric hospital/residential treatment center). When considering only those juveniles RTC, almost one quarter of defendants in the Warren et al. study received 30 or fewer attainment sessions, and 50% of the juveniles were restored in two to four months. Likewise, 58 of the 115 juveniles (50.4%) who received attainment services in our study were found competent at the second evaluation in an average of approximately 4.5 months with fewer than eight classes. Thus, it appears that the defendants in our study attained competence at similar rates as other juveniles.

The final analyses of our study examined which juvenile defendant characteristics predicted who was most likely to be found CST at the second evaluation. Logistic regression found that IQ score was the only variable to significantly predict CST status at the first or second evaluation. While special education status was the next best predictor,
this variable did not reach significance based on our more conservative $p$-value.

Relatively few studies have also found that IQ significantly predicted CST status (as reported in Liptak, 2003). In contrast, it appears that related studies assessing other variables associated with cognitive functioning have predicted CST status. Previous research has found that juvenile and young adult defendants' average grades in high school predicted their performance on the Understanding score of the MacCAT-CA (Redlich et al., 2003). Defendants in this sample were demographically dissimilar to our study, primarily identifying as Caucasian and older (14 – 25 years old). Using a demographic sample similar to ours, Baerger et al. (2003) found that a history of special education services predicted CST status. These results indicate that CST status may be determined by a combination of multiple cognitive abilities, as opposed to a single, discrete ability. Previous research has also shown that a history of mental illness predicts CST status in juvenile defendants (Baerger et al.).

There are several limitations to the current study that can help guide future research on juvenile CST. First, CST status was based on the opinion provided by the evaluating psychologist or psychiatrist and was not subjected to interrater reliability. Second, the data were based on archival information contained in juvenile records, which limited the variables available for study. Earlier research has found significant relationships between scores on a brief measure of juvenile psychopathology and scores on the MacCAT-CA (Ficke et al., 2006). Other researchers have also found that juveniles with a history of mental illness were less likely to be found CST (Baerger et al., 2003). While mental illness was not explicitly examined in our study, our results are inconsistent with this research. We found that defendants who received an initial CST
evaluation for reasons of suspected mental illness were surprisingly more likely to be found CST than juveniles referred for other reasons. Future studies may want to consider collecting prospective data on mental illness to further understand the relationship between psychopathology and CST-related skills in juvenile offenders. Additionally, some juvenile files did not contain data for all variables in this study. The most common type of missing data was IQ score, followed by special education status. It is possible that these data were not collected for a systematic reason, such as the evaluation strategies used by the psychologists versus the psychiatrist, or because intellectual functioning did not seem to be important in rendering an opinion. Finally, IQ scores were gathered using different measures of intellectual functioning and sometimes under circumstances other than a CST evaluation (e.g., to qualify for special education services), which might result in different scores.

Despite these limitations, our study revealed significant findings that may impact future examiners’ understanding of juveniles’ court-related knowledge and reasoning that potentially limits their ability to meet statutory requirements. In particular, of the variables assessed, IQ and other aspects related to cognitive functioning were found to have the greatest influence on the examiners’ opinions about the juvenile defendants’ court-related skills and the likelihood of attaining those skills following an education-based attainment program. While our results indicated that IQ scores were significantly correlated with and predictive of CST, these findings are based on an understanding of CST as requiring broad, rather than specific, cognitive abilities. There is still relatively little known about whether specific requirements of CST are impacted differently by particular cognitive abilities. Future research efforts should consider assessing certain
components of CST evaluations (i.e., understanding of nature and purpose of trial; trial processes; key personnel; reasoning and decision making; ability to participate at hearing; factual awareness versus adequate appreciation of CST knowledge) to help elucidate these questions. It also does not appear that previous studies on juvenile CST evaluated defendant characteristics specific to CST groups at the first and second evaluations. Our study appears to be unique in that it assessed defendant characteristics at multiple evaluations. Follow-up studies may want to assess defendant characteristics at the third or fourth CST evaluation to determine any differences among variables across time.

It is our hope that the results of the current study will help examiners to better understand the unique challenges of juvenile defendants referred for CST evaluations. We also hope that these results will be used to tailor the curriculum of juvenile attainment programs to accommodate their specific needs related to cognitive abilities, which may include more one-on-one instruction for juveniles with lower IQ scores and consultations with special education teachers to better understand how to meet individualized learning needs. Lastly, it is our aspiration that the current research will help the legal system make more research-based decisions about which juveniles are referred for CST evaluations. This will hopefully reduce the number of juveniles referred for an evaluation who are unlikely to be found CST within statutory limits (i.e., those with low IQ) and improve the cost effectiveness of resources devoted to juvenile attainment programs.
References


*Ohio Revised Code*, 129th General Assembly File No. 29, HB 86, § 1.


Table 1

*Number, Percentages, and $\chi^2$ of Juvenile Defendant Characteristics by Evaluation*

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<td>46</td>
<td>68.7</td>
<td>143</td>
<td>73</td>
</tr>
<tr>
<td>Misdemeanor$^b$</td>
<td>21</td>
<td>31.4</td>
<td>53</td>
<td>26.9</td>
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<tr>
<td>Reason for Suspected IST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>---</td>
<td>---</td>
<td>8</td>
<td>4.1</td>
</tr>
<tr>
<td>Developmental Immaturity</td>
<td>43</td>
<td>64.2</td>
<td>165</td>
<td>84.2</td>
</tr>
<tr>
<td>Mental Disorder</td>
<td>10</td>
<td>14.9</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>CST Status</td>
<td>8</td>
<td>12</td>
<td>17</td>
<td>8.7</td>
</tr>
<tr>
<td>------------</td>
<td>----</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Other</td>
<td>67</td>
<td>25.5</td>
<td>196</td>
<td>74.5</td>
</tr>
</tbody>
</table>

Percentages may not be exact due to rounding

* $p < 0.01$

* Other = Multicultural ($n = 4$), Unknown ($n = 2$), Hispanic ($n = 1$)

* One charge of “Violation of Court Order” was included as a Misdemeanor for the first evaluation.

* Other = “Other” or a combination of reasons for suspected IST
Table 2

Means, Standard Deviations, and t-Values of Juvenile Defendant Characteristics by Evaluation

<table>
<thead>
<tr>
<th>Variables</th>
<th>First Evaluation</th>
<th></th>
<th></th>
<th>Second Evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CST</td>
<td>IST</td>
<td></td>
<td>CST</td>
<td>IST</td>
</tr>
<tr>
<td></td>
<td>$n = 67$</td>
<td>$n = 196$</td>
<td></td>
<td>$n = 58$</td>
<td>$n = 57$</td>
</tr>
<tr>
<td>$M$</td>
<td>$M$</td>
<td>$t^a$</td>
<td></td>
<td>$M$</td>
<td>$M$</td>
</tr>
<tr>
<td>$(SD)$</td>
<td>$(SD)$</td>
<td></td>
<td></td>
<td>$(SD)$</td>
<td>$(SD)$</td>
</tr>
<tr>
<td>Age</td>
<td>13.75</td>
<td>12.09</td>
<td>6.83*</td>
<td>12.49</td>
<td>12.05</td>
</tr>
<tr>
<td></td>
<td>(1.75)</td>
<td>(1.70)</td>
<td></td>
<td>(1.73)</td>
<td>(1.39)</td>
</tr>
<tr>
<td>IQ</td>
<td>88.90</td>
<td>75.73</td>
<td>6.29*</td>
<td>81.05</td>
<td>70.60</td>
</tr>
<tr>
<td></td>
<td>(12.27)</td>
<td>(12.70)</td>
<td></td>
<td>(12.59)</td>
<td>(10.68)</td>
</tr>
<tr>
<td>Grade</td>
<td>8.05</td>
<td>6.29</td>
<td>7.06*</td>
<td>6.84</td>
<td>6.30</td>
</tr>
<tr>
<td></td>
<td>(1.74)</td>
<td>(1.66)</td>
<td></td>
<td>(1.64)</td>
<td>(1.36)</td>
</tr>
<tr>
<td>Number of Charges</td>
<td>6.22</td>
<td>3.73</td>
<td>3.85*</td>
<td>3.98</td>
<td>3.21</td>
</tr>
<tr>
<td></td>
<td>(6.49)</td>
<td>(3.70)</td>
<td></td>
<td>(3.74)</td>
<td>(2.31)</td>
</tr>
<tr>
<td>No. Current Charges</td>
<td>2.75</td>
<td>2.44</td>
<td>1.15</td>
<td>2.45</td>
<td>2.49</td>
</tr>
<tr>
<td></td>
<td>(1.91)</td>
<td>(1.83)</td>
<td></td>
<td>(2.27)</td>
<td>(1.61)</td>
</tr>
<tr>
<td>Prior Adjudications</td>
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<td>.59</td>
<td>4.76*</td>
<td>.90</td>
<td>.39</td>
</tr>
<tr>
<td></td>
<td>(4.70)</td>
<td>(1.50)</td>
<td></td>
<td>(1.56)</td>
<td>(1.01)</td>
</tr>
</tbody>
</table>

* $p < 0.01$

$^a$ df = 261 unless noted

$^b$ df = 113 unless noted

$^c$ df = 186

$^d$ df = 80

$^e$ df = 248
Table 3

*Correlation Coefficients Between Defendant Characteristics and CST Status*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$r^a$</th>
<th>$r^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
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</tr>
<tr>
<td>IQ</td>
<td>-.42*</td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>-.41*</td>
<td></td>
</tr>
<tr>
<td>Number of Charges</td>
<td>-.23*</td>
<td></td>
</tr>
<tr>
<td>Number of Current Charges</td>
<td>-.07</td>
<td></td>
</tr>
<tr>
<td>Previous Adjudications</td>
<td>-.28*</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td>-.07</td>
</tr>
<tr>
<td>Race</td>
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<td>-.06</td>
</tr>
<tr>
<td>Special Education</td>
<td></td>
<td>.18*</td>
</tr>
<tr>
<td>Type of Charge</td>
<td></td>
<td>.04</td>
</tr>
</tbody>
</table>

$^a$ Pearson correlations
$^b$ Spearman’s rho
* $p < .01$
Table 4

**Wald Values for Logistic Regression of Juvenile Defendant Characteristics and CST**

*Status by Evaluation*

<table>
<thead>
<tr>
<th>Variables</th>
<th>First Evaluation</th>
<th>Second Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.87</td>
<td>2.00</td>
</tr>
<tr>
<td>Sex</td>
<td>1.32</td>
<td>.50</td>
</tr>
<tr>
<td>Race</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>IQ</td>
<td>18.97*</td>
<td>11.99*</td>
</tr>
<tr>
<td>Grade</td>
<td>2.29</td>
<td>3.50</td>
</tr>
<tr>
<td>Special Education</td>
<td>2.01</td>
<td>5.37</td>
</tr>
<tr>
<td>Number of Charges</td>
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<tr>
<td>Number of Current Charges</td>
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<td>Type of Charge</td>
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<td>1.42</td>
</tr>
<tr>
<td>Previous Adjudications</td>
<td>3.00</td>
<td>4.65</td>
</tr>
</tbody>
</table>

* $p < .01$
### Appendix A

**Number and Percentages of Juvenile Defendant Characteristics for Dismissed Cases**

<table>
<thead>
<tr>
<th>Variables</th>
<th>$n$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>66</td>
<td>81.5</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>18.5</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>66</td>
<td>81.5</td>
</tr>
<tr>
<td>Caucasian</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Other*</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Special Education Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education</td>
<td>59</td>
<td>72.8</td>
</tr>
<tr>
<td>No Special Education</td>
<td>14</td>
<td>17.3</td>
</tr>
<tr>
<td><strong>Type of Charge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felony</td>
<td>53</td>
<td>65.4</td>
</tr>
<tr>
<td>Misdemeanor**</td>
<td>28</td>
<td>35.6</td>
</tr>
<tr>
<td><strong>Reason for Suspected IST</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>5</td>
<td>6.2</td>
</tr>
<tr>
<td>Developmental Immaturity</td>
<td>59</td>
<td>72.8</td>
</tr>
<tr>
<td>Mental Disorder</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Other***</td>
<td>14</td>
<td>17.2</td>
</tr>
</tbody>
</table>

* Other = Unknown ($n = 1$), “Other” ($n = 1$)
** One charge of “Violation of Court Order” was included as a Misdemeanor
*** Other = “Other” or a combination of reasons for suspected IST
Appendix B

*Means and Standard Deviations of Juvenile Defendant Characteristics for Dismissed Cases*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>11.83</td>
<td>1.84</td>
</tr>
<tr>
<td>IQ</td>
<td>75.42</td>
<td>12.73</td>
</tr>
<tr>
<td>Grade</td>
<td>5.87</td>
<td>1.77</td>
</tr>
<tr>
<td>Number of Charges</td>
<td>3.93</td>
<td>4.4</td>
</tr>
<tr>
<td>No. Current Charges</td>
<td>2.41</td>
<td>1.64</td>
</tr>
<tr>
<td>Prior Adjudications</td>
<td>.51</td>
<td>1.70</td>
</tr>
</tbody>
</table>
April 8, 2013

Marell Mullins, Ph.D.
Xavier University Institutional Review Board
3800 Victory Parkway
Cincinnati, Ohio 43207

Dear Dr. Mullins:

This letter is to document that I have granted permission to Ms. Katie Klitzke, psychology doctoral student at Xavier University, to use a de-identified database of information generated and operated by our Court.

It is my understanding that Dr. Kathleen Hart and Dr. Shelly Jebens, both Court employees, will facilitate Ms. Klitzke’s access to this database and will oversee Ms. Klitzke’s research project in a manner that protects the security of the information contained in that database.

Please feel free to contact me if you need any additional information in this matter.

Sincerely,

Curtis E. Kissingar
Court Administrator
May 23, 2013

Kati Klitzke
2368 Montgomery Ave. Apt. F
Cincinnati, OH 45211

Re: Protocol #1296, Relationship of Defendant Characteristics to Attainment of Court-Related Skills in a Juvenile Sample

Dear Ms. Klitzke:

The IRB has reviewed the materials regarding your study, referenced above, and has determined that it meets the criteria for the Exempt from Review category under Federal Regulation 45CFR46. Your protocol is approved as exempt research, and therefore requires no further oversight by the IRB.

If you wish to modify your study, including the addition of data collection sites, it will be necessary to obtain IRB approval prior to implementing the modification. If any adverse events occur, please notify the IRB immediately.

Please contact our office if you have any questions. We wish you success with your project!

Sincerely,

[Signature]

Morell E. Mullins, Jr., Ph.D.
Chair, Institutional Review Board
Xavier University

MEMO

C: Kathleen Hart, Advisor
Summary

Title: Relationship of Defendant Characteristics to Attainment of Court-Related Skills in a Juvenile Sample

Problem. Although not widely researched, jurisdictions are beginning to create programs for juveniles to help them attain the legal requirements to be competent to stand trial (CST). Previous studies have found significant relationships between defendant characteristics and juveniles’ court-related skills (Viljoen et al., 2007), yet there is limited information on characteristics or skills that are associated with their ultimate attainment of CST. Indeed, it remains unclear if juvenile attainment programs are effective in developing their court-related abilities. The present study contributed to the growing literature in these areas by comparing the characteristics of juvenile defendants found CST versus incompetent to stand trial (IST) at initial and second evaluation points and by examining defendant characteristics that predict successful attainment in this sample.

Method. Data for this study were gathered from the clinical files of 263 juveniles who were charged with delinquent offenses in an urban Juvenile Court in the Midwestern United States and referred for an evaluation of CST by court-employed forensic evaluators. The sample ranged in age from 8 years, 7 months to 17 years, 10 months ($M = 12.51, SD = 1.86$). The majority of juveniles who received an initial CST evaluation were male (83.7%) and identified as African American (77.2%).

Using a de-identified dataset comprised of demographic (i.e., age, sex, race, grade, special education status), cognitive (i.e., IQ), and legal characteristics (i.e., number of charges, number of current charges, number of previous adjudications, type of charge), we conducted correlational analyses to assess the relationship between defendant variables and CST status (CST or IST). We then used independent samples $t$-tests and chi-square analyses to assess potential differences in defendant characteristics between juveniles opined to be CST or IST at both the first and second evaluations. Finally, we used logistic regression to determine which variables predicted juveniles’ CST status after participating in the attainment program.

Findings. Most (74.5%, $n = 196$) juveniles who underwent an initial evaluation were found IST, and 57% ($n = 115$) underwent a second evaluation. The juvenile defendant characteristics of age, IQ, grade, number of charges, number of previous adjudications, and special education were significantly correlated with CST status. Significant differences were found between CST and IST groups for all of these variables at the first evaluation, but IQ score was the only variable that significantly differed between groups at the second evaluation, $t(80) = 4.04, p < .01$. The typical juvenile found IST at the first evaluation was younger, had a lower IQ score, was enrolled in an earlier grade, had a greater number of charges, and had fewer previous adjudications than juveniles found CST. Despite the group differences, IQ score was the only variable to significantly predict CST status at both evaluations periods.
Implications. Contrary to the results of previous studies, the majority of juveniles in this sample were found IST at the first evaluation, and only 50% of the juveniles who participated in attainment were found CST at the second evaluation. It is our hope that the results of the current study will help forensic examiners to better understand the unique challenges of juvenile defendants referred for CST evaluations. We also hope that these results will be used to tailor the curriculum of juvenile attainment programs to accommodate their specific needs, as well as assist the legal system in making more research-based decisions about which juveniles are referred for CST evaluations. This will hopefully reduce the number of juveniles referred for an evaluation who are unlikely to be found CST within statutory limits and improve the cost effectiveness of resources devoted to juvenile attainment programs.