

Predictors of Competency to Stand Trial in Connecticut's Inpatient Juvenile Competency Restoration Program

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There are substantial differences between adults and juveniles in the context of competency restoration. Among juveniles, factors such as maturity level, age, intellectual functioning, and psychiatric diagnoses may affect competency to stand trial. In this study, subjects included all juveniles who were admitted to the Albert J. Solnit Children's Center for inpatient competency restoration in the period spanning January 1, 2005, through December 31, 2012. Sixty-one juveniles were referred during this period, and 58 were included in the final analyses. Several demographic and clinical variables were tested to identify which factors were associated with successful competency restoration. There was a high rate of psychiatric comorbidity in the sample, with 54 of 58 juveniles (93%), having more than one Axis I disorder. IQ was the only significant predictor of successful competency restoration. These findings suggest that cognitive limitations may be a robust predictor of competency restoration among juveniles who are deemed incompetent to stand trial. Furthermore, policy makers may want to consider more specialized services for youths whose intellectual deficits are severe enough to impact their ability to regain competency. Limitations of this study, policy recommendations, and suggestions for future research are discussed.

J Am Acad Psychiatry Law 44:451–56, 2016

Competency to stand trial (CST) determination is the most common procedure involving both the mental health and criminal justice systems¹ and have been called “the most significant mental health inquiry pursued in the system of criminal law” (Ref 2, p 200). The landmark Supreme Court

decision *Dusky v. United States* (1960)³ established the two-pronged criteria for CST, requiring that defendants must have sufficient present ability to consult with their lawyers rationally and have both a factual and rational understanding of the legal proceedings against them. Defendants are considered incompetent to stand trial (IST) when these criteria are not met.

The U.S. Supreme Court has not specified whether *Dusky* applies equally to juvenile courts. Most jurisdictions' criminal statutes necessitate the presence of some mental defect or condition for a finding of incompetence, but the *Dusky* case did not specify which conditions may render a defendant IST, leaving open the possibility that factors more common to juveniles, such as developmental immaturity, could influence competency.⁴

Concern about juveniles' competency to stand trial is a relatively recent phenomenon. As violent crimes com-

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Disclosures of financial or other potential conflicts of interest: None.

mitted by juveniles spiked in the 1990s, many states enacted laws that allowed an increasing number to be tried in criminal courts.⁵ With juveniles facing increasingly severe criminal penalties, their adjudicative competence began to be called into question with greater frequency.⁶ Recent research has focused on juveniles' cognitive and developmental capacities with regard to adjudicative competence.⁷

Overall, research has identified some common factors that appear to be associated with adjudicative competence in juveniles. Several studies have shown that age is related to a juvenile's competency to stand trial.⁸ Research has shown that juveniles younger than 16 are significantly more likely than older juveniles and young adults to have deficits in their competency abilities.⁹ Studies that compare competent to incompetent juveniles reveal that competent juveniles are typically older.¹⁰ In addition, several studies have found that below average intelligence, intellectual disability, and the presence of psychiatric illness can impair a juvenile's adjudicative competency.⁸⁻¹¹

Few studies have investigated competency restoration programs for juveniles,⁸ which is a complicated topic of research, given that each state has its own laws and guidelines governing competency to stand trial and programs for competency restoration. The few statewide studies that have been published suggest that nearly all juveniles evaluated by clinicians after inpatient commitment for restoration are eventually determined to be competent, but these outcomes are generally influenced by demographic and clinical factors, such as intelligence and the severity of their psychiatric illness.^{8,10} More research is needed to understand the qualities associated with successful restoration of juveniles deemed IST.¹² Furthermore, because of the lack of state-to-state uniformity, there is a need to continue to explore jurisdiction-specific competency restoration for juveniles.¹³

In Connecticut, before October 2012, questions of competency in juvenile courts were governed by Connecticut General Statute (CGS) § 54-56d,¹⁴ which declared that a defendant was not competent to stand trial if "unable to understand the proceedings against him or her or to assist in his or her own defense." Tailored to adult defendants, this statute did not specify any minimum age for prosecution and established that a defendant was presumed to be competent (regardless of age or stage of development). Under this law, juvenile defendants found not competent but restorable were given a period of restoration not to exceed the maxi-

imum sentence if convicted of their charges, or 18 months, and were placed in the custody of the Commissioner of the Department of Children and Families. Under CGS § 54-56d, the court ordered restoration to occur in either the inpatient or outpatient setting, whichever is deemed the "least restrictive" appropriate placement.

In October 2012, changes were made to CGS § 54-56d that addressed the judicial procedures specific to juveniles and competency to stand trial, including timelines for competency reports and restoration and clarification of the specific institutions and individuals involved in the process. Underscoring the difference between juveniles and adults, the new changes mandated that juvenile competency evaluations be conducted by clinicians familiar with child and adolescent psychology and psychiatry. In addition, the new law explicitly states that age, *per se*, is not a determinant of incompetency.

The current study was based on all juveniles mandated to undergo inpatient adjudicative competency restoration in Connecticut over an eight-year period, from 2005 through 2012. We examined whether there were any demographic and clinical factors associated with a significantly greater likelihood of a juvenile's being restored to competency after referral to Connecticut's inpatient competency restoration program.

Methods

This study was approved by the Human Investigation Committee of Yale University and the Institutional Review Board of the Connecticut Department of Children and Families. Subjects included all juveniles who were admitted to the Albert J. Solnit Children's Center-South Campus (Solnit Center) for competency restoration from January 1, 2005 through December 31, 2012. Sixty-one juveniles were referred for inpatient competency restoration in the State of Connecticut during this period. The Solnit Center is Connecticut's only state-administered child and adolescent psychiatric hospital and accepts all juveniles in the state under the age of 18 who are court ordered to undergo competency restoration in a locked setting.

At the Solnit Center, restoration efforts begin with a multidisciplinary, comprehensive evaluation that involves a baseline assessment of the juvenile's basic knowledge and understanding of court processes, appreciation of charges and possible penalties, under-

standing of the adversarial nature of the legal process, and ability to manifest appropriate courtroom behavior. Restoration instruction is provided by lead licensed clinicians and supported, as needed, by adjunct staff. Educational goals include attainment of a basic level of factual understanding of the individual's charges, potential outcomes, court processes, and the individual's rights and decision-making responsibilities. One-on-one verbal instruction is provided for approximately an hour, two to three times a day, for the duration of the hospitalization, with assessments of the individual's knowledge level every two to three weeks. The method of teaching is primarily through verbal discussion and review of information. Diagrams are frequently used to facilitate understanding of the functions of various courtroom personnel. In addition, psychiatric treatment is provided to address any psychiatric conditions or symptoms that may affect the juvenile's competency to stand trial.

Data were collected by retrospective chart review. Demographic variables recorded included age, gender, ethnicity/race, and IQ. Clinical data, including primary Axis I and II discharge diagnoses, history of substance abuse, and prescribed psychiatric medication during hospitalization were obtained from the discharge summaries of the subjects. Primary Axis I diagnoses and type of medication treatment were further categorized to facilitate analysis. Legal data and attainment of competence were obtained from documents sent to the hospital on each juvenile. Legal data included charges that were categorized into type of crime (i.e., person, property, sexual assault, drug, or weapon).

Analyses

Data were analyzed with IBM SPSS software version 19. Descriptive statistics were examined to provide both a comprehensive overview and detailed analyses of the population of juveniles referred for inpatient competency restoration. To facilitate a deeper understanding of factors that may contribute to a finding of incompetent to stand trial among this sample of juveniles, several continuous demographic variables, such as age and IQ, were analyzed by using a series of *t* test and correlational analyses. Categories of primary Axis I diagnoses, medication treatment, and type of criminal charge were analyzed with the chi-square test, to explore relationships between these variables and attainment of competence. A lo-

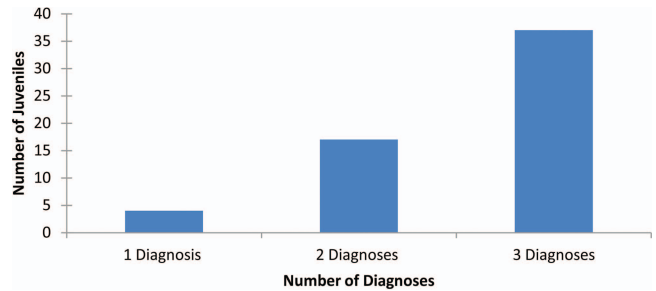


Figure 1. Number of Axis 1 diagnoses.

gistic regression was also used to determine the factors that predicted that a juvenile would be restored to competency to stand trial.

Results

The total sample size was 61 juveniles. Three were excluded from further analyses because of missing data: two without IQ data, and one without a documented competency restoration outcome. Therefore, 58 juveniles remained in the database for further analysis. As shown in Figure 1, most of the juveniles had multiple Axis I psychiatric diagnoses: 37 (64%) had three or more, 17 (29%) had two, and only 4 (7%) had a single diagnosis.

Mean comparisons are presented in Table 1. The mean age was 15 years (SD = 1.8; range = 12–17). The mean age for the juveniles whose competency

Table 1 Sample Characteristics Based on Age, IQ, Gender, Race, and Type of Crime

Characteristic	Restored to Competency (n = 40)	Not Restored to Competency (n = 18)	t	χ ²
Age*	15.15 (1.7)	14.94 (1.9)	-0.411	
IQ*	71.45 (12.7)	62.78 (11.4)	-2.481 [†]	
Gender, n (%)				0.26
Male	34 (85.0)	15 (83.3)		
Female	6 (15.0)	3 (16.7)		
Race, n (%)				1.85
African American	17 (42.5)	9 (50.0)		
Caucasian	4 (10.0)	1 (5.6)		
Hispanic	16 (40.0)	8 (44.4)		
Asian	1 (2.5)	–		
Other	2 (5.0)	–		
Type of crime, n (%)				2.93
Person	15 (37.5)	9 (50.0)		
Property	9 (22.5)	1 (5.6)		
Drug	2 (5.0)	1 (5.6)		
Sex Offense	5 (12.5)	2 (11.1)		
Weapon	1 (2.5)	1 (5.6)		
Other	8 (20.8)	4 (22.2)		

*Mean ± SD.

[†]*p* < .05.

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was restored was 15.2 (SD = 1.7), and the mean age for juveniles whose competency was not restored was 14.9 (SD = 1.9). The groups did not significantly differ based on age ($t(56) = -0.41, p = .68$). The mean IQ for the juveniles whose competency was restored was 71.5 (SD = 12.7), compared with a mean IQ of 62.8 (SD = 11.4) for those who were not restored. There was a statistically significant difference between the groups based on IQ. More specifically, the juveniles whose competency was restored had a significantly higher IQ than their counterparts who were not restored to competency ($t(56) = -2.48, p = .01$). Demographic comparisons revealed that there were no significant differences between the juveniles who were restored and those who were not, in regard to gender ($\chi^2(1) = 0.26; p = .87$), race/ethnicity ($\chi^2(4) = 1.85; p = .76$), or type of crime committed ($\chi^2(5) = 2.93; p = .71$). Also, the mean length of stay for the juveniles who were restored to competency was 94 days (SD = 39.9) with the minimum number of days being 48 and the maximum number being 217. Given that IQ was the only significant predictor between the two groups, a Pearson correlation was used to determine whether there was an inverse relationship between IQ and length of time to restoration. The results revealed that the relationship between length of time to restoration and IQ among the juveniles restored to competency was negative but not significant ($r = -0.30; p = .057$).

Table 2 shows comparisons between the groups based on clinical characteristics. Results revealed no significant difference based on primary discharge diagnosis category ($\chi^2(7) = 7.08; p = .42$), Axis II diagnosis at discharge ($\chi^2(3) = 5.97; p = .11$), prescribed psychiatric medication while in the hospital ($\chi^2(1) = 2.01, p = .16$), or presence of a substance use diagnosis ($\chi^2(1) = .22; p = .64$).

A logistic regression analysis was used to determine whether any of the demographic or clinical factors were significant predictors of competency restoration. The results of the logistic regression are displayed in Table 3. The only variable that significantly predicted a juvenile successfully being restored to competency was IQ ($\chi^2 = 5.25; \beta = .06; p = .02$).

Discussion

Research on competency restoration for juveniles is sparse. The current study investigated only juveniles who were already adjudicated as incompetent and attempted to parse out factors that were associ-

Table 2 Clinical Characteristics of the Sample

Clinical Characteristic	Restored to Competency (n = 40)	Not Restored to Competency (n = 18)	χ^2
Primary discharge diagnosis category			7.08
Psychotic disorder	10 (25.0)	2 (11.1)	
Mood disorder	9 (22.5)	5 (27.8)	
Behavioral disorder	14 (35.0)	5 (27.8)	
Anxiety disorder	4 (10.0)	2 (11.1)	
Substance Use disorder	–	1 (5.6)	
Learning disorder	1 (2.5)	–	
Developmental disorder	2 (5.0)	2 (11.1)	
Adjustment disorder	–	1 (5.6)	
Intellectual disability (ID)			5.97
None	14 (35.0)	3 (16.7)	
Borderline intellectual functioning	12 (30.0)	3 (16.7)	
Mild ID	10 (25.0)	9 (50.0)	
Moderate ID	3 (7.5)	3 (16.7)	
Prescribed psychiatric medication (in hospital)			2.01
Yes	26 (65.0)	15 (83.3)	
No	14 (35.0)	3 (16.7)	
Substance use diagnosis			0.22
Yes	13 (32.5)	7 (38.9)	
No	27 (67.5)	11 (61.1)	

Data are expressed as the number (percentage of total group).

ated with ability to be restored. In other words, our study attempted to identify factors that were correlates of successful inpatient competency restoration among juveniles initially deemed incompetent to stand trial. Overall, there was a high rate of psychiatric comorbidity in this sample, with 64 percent of the juveniles having three or more Axis I diagnoses.

The only significant predictor of competency restoration was IQ, indicating that juveniles with a higher IQ were significantly more likely than juveniles with a lower IQ to be restored. This finding is consistent with prior research showing that intellectual and cognitive deficits are associated with impairments in a juvenile's adjudicative competence abili-

Table 3 Logistic Regression Analysis Predicting Competency Restoration

Variable	β	Wald χ^2
Age	0.07	0.17
Race/ethnicity	0.20	0.61
Primary discharge diagnosis category	-0.03	0.11
Total number of psychiatric diagnoses	-0.20	0.68
Presence of substance use diagnosis	-0.28	0.22
IQ	0.06	5.25*
Prescribed psychiatric medication	-0.99	0.17
Type of crime	-0.01	0.00

* $p < .05$.

ties.⁹ Based on the fact that one of the primary tools for restoration is education, we would expect that IQ would make a difference, as it would probably correlate with an enhanced ability to benefit from education. We also expected variables such as age and psychiatric illness to make a difference.⁹ These expectations were based on the fact that the principles driving competence tests/standards are static and we would expect that as juveniles mature developmentally and their psychiatric condition becomes more stable, their ability to comprehend abstract principles and their attention span would improve, thereby increasing the likelihood of successful competency restoration.^{8,10} We expected a subset of psychiatrically ill individuals with psychosis or severe attention-deficit/hyperactivity disorder (ADHD) to be restored to competency by treatment with psychotropic medications. However, these expectations did not come to fruition. Data regarding the severity of psychiatric symptoms, or specific data regarding the barriers to competency, would have been useful in helping to understand why psychiatric illness and age were not significant predictors of competency in our study. It should be noted that the youngest individual in this study was 12 and that a previous study by LaVelle Fickle and colleagues indicated that younger individuals (in the 9- to 12-year-old range) have more problems with competency based on performance on the MacCAT-CA than do older juveniles.¹⁵ The lack of significant findings may also be attributable to low power due to the small sample size.

The small sample size is one limitation of this study. The current sample consisted of fewer than 60 juveniles. However, this number included nearly all of the juveniles referred for competency restoration in a locked setting over an eight-year period in the entire state of Connecticut. Another limitation is possible selection bias, such that there may be other factors at play in determining which juveniles are referred by the Connecticut courts to inpatient competency restoration (for example, their housing situation or tendencies of a particular judge or court). Our study also lacked data on how many juveniles in our study failed outpatient restoration efforts before being court ordered for inpatient restoration.

Additionally in this study we did not identify juveniles who were incompetent primarily on the basis of developmental immaturity, which is an important

point of future research, given that some other states have determined that developmental immaturity, in itself, can serve as a basis for being incompetent to stand trial.¹⁶

Despite these limitations, this study represents an attempt to identify the characteristics associated with successful competency restoration among juveniles in Connecticut after inpatient restoration. The results of our study may raise the question of whether the state should develop specialized competency restoration methods for juveniles with cognitive limitations. Similarly, our results did not show a significant association between the number of psychiatric diagnoses or use of psychotropic medications and attainment of adjudicative competence. Therefore, policy makers in Connecticut may want to question the extent to which the inpatient setting is the ideal environment for the juvenile restoration process, particularly for juveniles whose crimes are not severe and who do not pose a risk of danger to self or others. To help address these concerns, future studies in Connecticut should compare characteristics between juveniles referred for inpatient and outpatient restoration. From a public health perspective, juvenile competency restoration programs provide an opportunity for early identification of juveniles with cognitive limitations and to provide appropriate services targeted at preventing long-term involvement with the criminal justice system.

Acknowledgments

Special thanks to Madelon Baranoski, PhD, for her guidance on this project. We fondly remember Lesley Siegel, MD, former Chief of Psychiatry for the Connecticut Department of Children and Families, and Assistant Clinical Professor at the Yale Child Study Center, who was instrumental in the planning and formulation of this study. Dr. Siegel passed away on September 25, 2014, and is greatly missed.

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