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## Factors related to recidivism for youthful offenders

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Little is known about youth who were previously placed in a detention facility and what factors predict a subsequent recidivism to placement. This study of a two-county juvenile offender population (one urban and one rural) investigates what demographic, educational, mental health, substance dependence, and courtrelated variables predict recidivism to detention placement. Findings from logistic regression analysis indicate that seven variables significantly predict juvenile offenders' recidivism placement, some expected and some unexpected. Predictors that made recidivism *more* likely include youth with a previous conduct disorder diagnosis, a self-reported previous suicide attempt, age, and number of court offenses. Conversely, predictors that made recidivism *less* likely include race (Caucasian), a previous attention-deficit hyperactivity disorder diagnosis, and a misdemeanor conviction. These findings indicate that the use of a community-based suicide and mental health screening and referral approach may help to identify and assist these high-risk youth in receiving needed services prior to juvenile court involvement or during delinquency adjudication.

Keywords: recidivism; delinquency; youth; mental health; suicide

## Introduction

Over the past two decades, the juvenile justice field has been intermittently shifting between a punitive and rehabilitative approach to dealing with youthful offenders, resulting from organized reformation activities by key stakeholders and progressive juvenile courts, and today's high cost of detainment and incarceration. Recently, poor juvenile court outcomes for many youthful offenders, particularly serious offenders, have influenced an incremental movement away from 'tough on crime' policies. Furthermore, the number of youth involved annually in the juvenile justice system nationwide, while trending downward in recent years, is still somewhat staggering – over 2.1 million arrests of youth under age 18 (Puzzanchera, 2009), 1.7 million delinquency cases (Knoll & Sickmund, 2010), 350,000 youth held in detention centers (Holman & Ziedenberg, 2006; Sickmund, 2008), and over 100,000 youth held in correctional facilities (Davis, Tsukida, Marchionna, & Krisberg, 2008; Sickmund, 2009). This paper focuses on more serious youthful offenders who previously served time in a detention facility and then recidivate to detention center placement. This repeat detention experience does neither the youth nor the juvenile court systems much benefit, and is increasingly being recognized as detrimental to

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the youth and the juvenile courts' public policy goals of youth accountability and maintaining safe communities. Thus, reducing recidivism is an important juvenile justice system priority (US Department of Justice, 2010).

## Background

## Juvenile delinquency

There exist many risk factors for juvenile justice system involvement and youth delinquency. These risks are related to the individual (early aggression, mental health problems, and substance abuse), family (inconsistent parenting and trauma), school (academic problems, educational deficits, and special education disabilities), and neighborhood (high levels of unemployment, residential instability, and family disruptions) (Bor, McGee, & Fagan, 2004; Bursik & Grasmick, 1993, 1995; Hawkins et al., 1998; Hay, Fortson, Hollist, Altheirmer, & Schaible, 2006; Lynam, Moffitt, & Stouthamer-Loeber, 1993; Mallett, 2011; Sampson, Raudenbush, & Earls, 1997; Tremblay et al., 2004). In addition, a number of youth demographic factors have been consistently found to predict juvenile court supervision; hence, researchers usually control for their impact in their analysis. These factors include juveniles' age (older youth are more likely), gender (males are more likely, though females are increasing in numbers), race (minorities are more likely), and socioeconomic status (juveniles living in poor households are more likely, especially for serious forms of delinquent behaviors) (Hawkins, Catalano, & Miller, 1992; Hawkins et al., 2000; Loeber & Farrington, 2000; McLovd, 1998; Nagin & Tremblay, 2001). Because of the existence of multiple problems and risks, predicting juvenile delinquency outcomes is difficult (Ford, Chapman, Hawke, & Albert, 2007; Green, Gesten, Greenwald, & Salcedo, 2008; Gutman, Sameroff, & Cole, 2003). Predicting detention placement and recidivism is particularly difficult.

## Recidivism

Research that attempts to predict juvenile recidivism has been limited, with results generally accounting for approximately 20% of the variance (Katsiyannis, Zhang, Barrett, & Flaska, 2004). Many of these models measured recidivism as re-adjudication by the juvenile court, and not recidivism into a detention center or incarceration facility (Ashford & LeCroy, 1990; Katsiyannis & Archwarmety, 1997). When measuring recidivism as re-adjudication, identified predictive factors of importance for this study include age at first offense (Ashford & LeCroy, 1990; Brunner, 1993; Weaver & Wootton, 1992), severity or seriousness of delinquency (Archwarmety & Katsiyannia, 2000; Brunner, 1993; Frazier & Cochran, 1986; Wierson & Forehand, 1995), prior arrest (Ashford & LeCroy, 1990; Lattimore, Fisher, & Linster, 1995), lower academic achievement (Foley, 2001), behavioral problems including impulsivity (Hagan & King, 1997), and race (Leiber & Fox, 2005; Pope, Lovell, & Hsia, 2002; Webb, 2006).

While measuring recidivism as a re-adjudication is informative, not all youth in this situation are subsequently placed into a detention center. This detention center placement is of particular interest in this study, because it often increases subsequent youth offending and recidivism (Justice Policy Institute, 2009; Soler, Shoenberg, & Schindler, 2009). In other words, the experience of detention is unique and this experience makes it more likely that detained youth will continue

to engage in delinquent behavior, and it may increase the odds of recidivism (Holman & Ziedenberg, 2006). Hence, it is important to identify the risk factors that impact both detention placement as well as detention placement recidivism.

There are a limited number of studies that define recidivism as a return placement into a detention or incarceration facility. In a review of factors which predict recidivism to placement, carrying a weapon, gang membership, and neglect or abuse by a parent was found significant (Benda & Tollett, 1999). Others found that youth who recidivated to placement were more likely to have both personal- and school-related problems (Wordes, Bynum, & Corley, 1994), and the likelihood of being detained was greater for minority youth compared to nonminority youth even for the same offense (Feld, 1995). Most recently, in a review of what legal and extra-legal factors predicted detention, race (African-American and Hispanic), prior arrest, and personal crimes were found significant (Webb, 2006).

#### Youth mental health problems, delinquency, and recidivism

Mental health problems and disorders are linked to youth offending behaviors and delinquency adjudication; though it is not clear if this link is direct or if these difficulties lead to other risk factors, poor decision-making, or the interaction of various other risks (Grisso, 2008; Heilbrun, Goldstein, & Redding, 2005; Moffitt & Scott, 2008, chap. 35; Shufelt & Cocozza, 2006). Still, reviews have consistently found that children and youth who are involved with mental health services have a significantly higher risk for juvenile court involvement (Rosenblatt, Rosenblatt, & Biggs, 2000; Vander-Stoep, Evans, & Taub, 1997).

A number of pathways have been established which link specific childhood mental health difficulties to juvenile court involvement. Developmental studies have found behavioral and emotional problems to be predictive of later delinquency and substance abuse (Dishion, Capaldi, & Yoerger, 1999; O'Donnell, Hawkins, Catalano, Abbott, & Day, 1995). Similarly, early childhood aggressive behaviors have been found predictive of later delinquent behaviors and activities (Tremblay & LeMarquand, 2001). Attention and hyperactivity problems are linked to later high-risk taking and more violent offending behavior (Elander, Siminoff, Pickles, Holmshaw, & Rutter, 2000; Hawkins et al., 1998). Antisocial behaviors and emotional problems in early childhood are markers for later delinquent activities (Wasserman et al., 2003). In addition, childhood depression and attention-deficit hyperactivity disorder (ADHD) have been found linked to later delinquency, evidenced through physical aggression and stealing behaviors (Goldstein, Olubadewo, Redding, & Lexcen, 2005; Moffitt & Scott, 2008, chap. 35; Ryan & Redding, 2004).

Findings have been mixed regarding the relationship between mental health treatment needs (including substance abuse) and severity of juvenile court disposition. Indeed, youth mental health problems (broadly defined) have been found to predict both less and more severe dispositions; whereas substance abuse leads to more severe sanctions, including confinement (Campbell & Schmidt, 2000; Fader, Harris, Jones, & Poulin, 2001; Lyons, Baerger, Quigley, Erluch, & Griffin, 2001; McReynolds, Schwalbe, & Wasserman, 2010; Schwalbe, Hatcher, & Maschi, 2009).

Youthful offenders needing secure placement pose a particularly difficult challenge to the juvenile courts, for juvenile detention and incarceration facilities are disproportionately populated by youth with at least one, if not multiple, mental health disorders and/or school-related disabilities (Garland et al., 2001; Mallett, 2009; Teplin et al., 2006). Within these correctional facilities, 60% of the youth have an identified mental health disorder (with 20% of these disorders severely impacting functioning) (Grisso, 2008), over 35% of the youth have an identified special education disability (Mears & Aron, 2003), and between 30 and 50% of the youth have a significant substance abuse disorder (Chassin, 2008).

#### Suicidal behaviors

This situation becomes more complicated when reviewing youth mental health problems along with prior suicide attempt. Suicide is a significant concern for detained and incarcerated youth, with 110 suicides occurring between 1995 and 1999 (Hayes, 2009), a rate that is multiple times more frequent than what occurs in the general youth community (Kaczmarek, Hagan, & Kettler, 2006). In addition, in one study of suicides in Utah, 63% of youth in the community who completed the suicide had past juvenile justice system contact (Gray et al., 2002). While suicide completion is tragic, the reports of suicide ideation and attempts look to be significantly greater within this confined youthful offender population than in the general youth population. In one study of 900 incarcerated youth, over 30% reported a past suicide attempt (Putnins, 2005); while in a most recent nationally representative survey of over 7000 youthful offenders being held in facilities, over 22% reported a past suicide attempt (Sedlak & McPherson, 2010).

A number of youth suicide risk factors are relevant here and include numerous mental health disorders, drug use, antisocial behaviors, and delinquency (Epstein & Spirito, 2009; Flisher et al., 2000; Maris, Berman, & Silverman, 2000; Thompson, Ho, & Kingree, 2007). Aggression frequency and violent behaviors increased with increased suicidality levels (Vannatta, 1996); while getting involved with fights and using weapons were found to be high risks for suicide ideation (Evans, Marte, Betts, & Silliman, 2001). These acting out and antisocial behaviors, and specifically conduct disorder, were often found among suicidal youth (Brent et al., 1993). Evidence of the ADHD link to suicide attempts is less clear, with some researchers finding higher rates of ADHD in these populations (Ruchkin, Schwab-Stone, Koposov, Vermeiren, & King, 2003; Swensen, Kruesi, Allen, Beusching, & Secnik, 2002), and others not finding such a connection (Renaud, Brent, Birmaher, Chiappetta & Bridge, 1999).

However, predicting suicide risk is not easy because risk factors vary in their impact and intensity for incarcerated and formally adjudicated youth, though this population is in general at a higher suicidal-behavior risk (Epstein & Spirito, 2009; Evans, Hawton, & Rodham, 2004). Even when other risk factors – age, ethnicity, gender, alcohol and drug problems, depression, and impulsivity – were accounted for, delinquency was still related to suicidal ideation and attempts up to one year after adjudication and to ideation up to seven years after adjudication (Thompson et al., 2007).

#### Justification for the study

As discussed, only a small number of studies have focused on offenders who recidivate to placement; therefore, additional research is needed. Continuing these inquiries and identifying what legal and extra-legal factors predict recidivism to detention placement is important in understanding and directing preventative programs. If certain youth risks, behaviors, and/or disabilities are clearly identified, then early intervention efforts may decrease or help youth desist delinquent offending and subsequent detention or incarceration. Decreasing youth recidivism (offending and incarceration) is effective public policy, saving limited fiscal resources, and improving public safety (Caldwell, Vitacco, & Van Rybroek, 2006; Gatti, Tremblay, & Vitaro, 2009; Loughran et al., 2009; Soler et al., 2009).

#### **Research** question

What demographic, educational, mental health, substance dependence, and courtrelated variables predict secure detention placement recidivism in a population of court involved youth?

#### Methods

#### Sampling

The sampling frame for this study consisted of court involved youth from two counties over a distinct period of time. An a priori analysis was conducted to calculate an appropriate sample size. Given the annual population size of 2300 delinquent probation-supervised youth from the first county (urban) and an annual population size of 300 delinquent probation-supervised youth from the second county (rural), it was determined that a sample size of 343 (over three years, from 2006 to 2008) from the first county and a sample size of 90 (over one year -2008) from the second county would provide the appropriate five percent margin of error and 95% confidence interval, assuming a population proportion of 50% (Royse, Thyer, Padgett, & Logan, 2006). A simple random sample was drawn for each population year of the counties' juvenile delinquent probation-supervised population; youth who had been adjudicated delinquent during that calendar year and chosen for the study did not include youth transferred to criminal (adult) court (though this number of transferred youth represented less than half of one percent of the total). A total of 433 (not duplicated) youth were included in this study sample: urban county 2006 = 100; 2007 = 137; 2008 = 105; rural county 2008 = 91.

## Data collection

Data were collected from existing de-identified files provided by each county's juvenile court. Each file contained official records associated with each youth in the study sample. Specifically, juvenile court histories, probation supervision case files, school records, and mental health assessments were provided. Data from the case records were coded and entered into a statistical software package. Each case entered was evaluated for proper coding and correct data entry. Inter-coder reliability was high (.96).

## Measurement

#### Independent variables

Theoretically important demographic, educational, mental health, and juvenile court-related variables were measured. Demographic variables include age (in years), gender (male = 1), race (Caucasian = 1, all other = 0), and county of residence

when first adjudicated delinquent (rural = 1, urban = 0). Three separate education disability variables were measured – severely behaviorally handicapped (SBH), developmentally handicap (DH), and severely emotionally disturbed (SED). For each variable, diagnosis was made prior to first delinquency adjudication, by a licensed provider using DSM-IV criteria (yes = 1 indicates an existing diagnosis). Mental health-related variables that were measured include ADHD, conduct disorder, oppositional defiant disorder, bipolar disorder, depression, adjustment disorder, post-traumatic stress disorder (PTSD), and anxiety disorder. Additionally, alcohol dependence and substance use disorders were also measured. Individuals were counted as alcohol dependent if they had ever been diagnosed with alcohol dependence, and individuals were counted as substance dependent if they had ever been diagnosed by a licensed provider using DSM-IV criteria with dependence to any drugs other than alcohol. All diagnoses were made prior to the youth's first delinquency adjudication by licensed providers using DSM-IV criteria (yes = 1 indicates a prior diagnosis). In addition, youth's self-report of a prior suicide attempt was also measured (yes = 1 indicates a prior suicide attempt). Juvenile court-related variables included the total number of times each youth was adjudicated delinguent (in number of times), the youth's age at first delinquency (in years), the youth's total number of court offenses which includes multiple offenses over time (in number of court offenses), if the youth had ever been convicted of a felony (yes = 1), if youth had ever been convicted of a misdemeanor (yes = 1), and if the youth had ever been convicted of a property crime, personal crime, drug crime, status offense, or violation of court order (VCO) (all coded 1 for yes).

#### Dependent variable

One dependent variable, recidivism, was measured. Youth were coded (yes = 1) if they were sentenced to detention, were released from custody, and then subsequently placed back into detention.

A small number of missing variables were imputed with either the mean (for continuous variables) or the mode (for categorical variables), except for juvenile court-related variables where missing cases (only one to two per variable) were eliminated from the analysis. There were no missing cases for the dependent variable (see Table 1).

#### Data analysis

A bivariate correlation analysis among all variables was first conducted. Second, bivariate logistic regression was used to assess the bivariate relationship between each of the independent and control variables and the dependent variable, recidivism to secure detention placement. Variable pairs that were significant at a p-value greater than .1 in the bivariate mode were then entered into a forward stepwise multivariable model (see Table 2).

Additionally, a second multivariable forward stepwise logistic model with all the potential independent variables was developed. This was done so that two theoretically relevant variables which have demonstrated impact on detention placement would be included in the multivariate model. The models differed only in the inclusion of ADHD and race, which were not significant in bivariate relationships. The final model included age, race, ADHD, conduct disorder, suicide attempt, number

	Variable	Yes (coded 1)	No (coded 0)
Predictor	Recidivitated to placement	71 (16.4%)	362 (83.6%)
Control	Age	Mean = 15.2	
	0	(SD = 1.6)	
	Gender	Male 303 (70.0%)	Female 130 (30.0%)
	Race	Caucasian 155	All other 278
		(35.8%)	(64.2%)
	Country	Urban 343 (79.2%)	Rural 90 (20.8%)
Education	SBH	29 (6.7%)	404 (93.3%)
	DH	5 (1.2%)	428 (98.8%)
	SED	30 (6.9%)	403 (93.1%)
Mental	ADHD	103 (23.8%)	330 (76.2%)
health	Conduct disorder	40 (9.2%)	393 (90.8%)
	Oppositional defiant	33 (7.9%)	400 (92.4%)
	Disorder		
	Bipolar disorder	34 (7.9%)	399 (92.1%)
	Depression	52 (12.0%)	381 (88.0%)
	Adjustment disorder	10 (2.3%)	423 (97.7%)
	PTŠD	10 (2.3%)	423 (97.7%)
	Anxiety disorder	11 (2.5%)	422 (97.5%)
	Alcohol dependence	17 (3.9%)	416 (96.1%)
	Substance use disorders	64 (14.8%)	369 (85.2%)
	Suicide attempt	53 (12.2%)	380 (87.8%)
Juvenile	Times adjudicated	Mean = $1.3$ (SD = $0.6$ )	
court	Delinquent		
	Age at first delinquency	Mean = 14.6	
		(SD = 1.6)	
	Number of Court Offenses	Mean = 4.4 (SD = 3.8)	
	Felony <sup>a</sup>	237 (54.9%)	195 (45.1%)
	Misdemeanor	358 (82.7%)	75 (17.3%)
	Property crime	238 (55.0%)	195 (45.0%)
	Personal crime <sup>a</sup>	261 (60.4%)	171 (39.6%)
	Drug crime <sup>b</sup>	85 (64.9%)	346 (80.3%)
	VCÕ <sup>a</sup>	149 (34.5%)	283 (65.5%)

Table 1. Descriptive statistics of variables.

Note: Frequencies and percentages in parenthesis (n = 433).

<sup>a</sup>1 missing cases.

<sup>b</sup>2 missing cases.

of court offenses, and previous conviction on a misdemeanor offense. This model was tested for stability using repeated 80% validation samples from the data. In each case, the same variables were identified and the estimates were within the confidence intervals of the final model. The overall model was significant at predicting detention placement recidivism  $X^2 = 140.63[df=7] p < .001$  and correctly classified 88.5% of cases; Nagelkerke  $R^2$  .47.

#### Findings

In all, seven variables significantly predict juvenile offenders' secure detention placement recidivism. Predictors that made this recidivism more likely include a previous diagnosis of conduct disorder (10 times more likely), a self-reported previous suicide attempt (almost three times more likely), age (for each additional year, 1.3 times more likely), and number of court offenses (for each additional offense,

	Variable	Univariate odds ratio	<i>p</i> -value
Control	Age <sup>a</sup>	1.271	.007
	Male	1.442	.223
	Caucasian	.694	.053
	Urban	3.273	.008
Education	SBH	6.658	<.001
	DH	1.000	.493
	SED	.346	.153
Mental health	ADHD	.920	.786
	Conduct disorder	6.706	<.001
	Oppositional defiant disorder	1.413	.439
	Bipolar disorder	0.870	.782
	Depression	2.094	.032
	Adjustment disorder	2.237	.252
	PTSD	.560	.586
	Anxiety disorder	1.952	.332
	Alcohol dependence	1.097	.887
	Substance use disorders	3.752	<.001
	Suicide attempt	2.851	.001
Juvenile court	Times adjudicated delinquent <sup>a</sup>	2.012	.001
	Age at first delinquency <sup>a</sup>	.781	.002
	Number of court offenses <sup>a</sup>	1.390	<.001
	Felony <sup>c</sup>	5.055	<.001
	Misdemeanor	1.036	.919
	Property crime	2.204	.005
	Personal crime <sup>b</sup>	1.052	.850
	Drug crime <sup>c</sup>	2.717	<.001
	VCŎ	1.596	.077

Table 2. Univariate logistic regression with recidivism (n=433).

<sup>a</sup>Odds ratio is per unit increase.

<sup>b</sup>1 missing case. <sup>c</sup>2 missing cases.

Table 3. Multivariable logistic regression predicting recip	livism.
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Independent variables	В	S.E.	Wald	Odds Ratio
Numbers of court offenses	.379***	.052	54.118	1.461
Age	.237*	.122	3.769	1.267
Caucasian	$818^{*}$	.394	4.300	.441
ADHD	$862^{*}$	.446	3.739	.422
Conduct disorder	2.365***	.470	25.357	10.646
Suicide attempt	1.096*	.448	5.999	2.993
Misdemeanor	-1.232**	.451	7.453	.292
Constant	$-6.429^{**}$	1.956	10.807	.002

\**p*<.05; \*\**p*<.01; \*\*\**p*<.001.

1.5 times more likely). Conversely, predictors that made this recidivism less likely to occur include race (Caucasians were more than twice as less likely), a previous diagnosis of ADHD (more than twice less likely), and a conviction for a misdemeanor (3.4 times as less likely) (see Table 3).

#### Discussion

These study findings are of interest because of the paucity of studies on predicting juvenile offender recidivism to detention, and because of the confirmatory (expected) and unexpected predictors. There is nothing unexpected for juvenile offenders who are older or have increasing number of court offenses being at a higher risk for recidivism (Ashford & LeCroy, 1990; Brunner, 1993; Weaver & Wootton, 1992; Webb, 2006). Likewise, convictions for misdemeanors are not expected to be highly predictive of secure detention placement, or here for placement recidivism (Archwarmety & Katsiyannia, 2000; Brunner, 1993; Frazier & Cochran, 1986; Wierson & Forehand, 1995). Caucasian youth were also expected to be less likely to be placed into secure detention, and in this case, recidivate to placement. This disproportionate minority confinement problem is well documented across many jurisdictions (Feld, 1995; Leiber & Fox, 2005; Pope et al., 2002; Webb, 2006), and was also found here.

Less clear though is the impact different mental health problems or disorders have on delinquency and subsequent detention. Conduct disorder was the strongest predictor of recidivism into detention placement, which has been found to varying degrees by others (Hagan & King, 1997; McReynolds et al., 2010). However, other researchers have often failed to differentiate by disorder and many times had grouped their mental health problems into one measured variable (Campbell & Schmidt, 2000; Fader et al., 2001; Lyons et al., 2001). This study's data collection allowed the identification and differentiation of individual mental health diagnoses. With the second disorder, ADHD was found to make recidivism less likely for the juvenile offender. This has been measured before as impulsivity, though not in detention prediction (Hagan & King, 1997). While both conduct disorder and ADHD have externalizing features, in other words, acting out behaviors, impulsive reactions, and over-reaction symptoms, they may be handled differently by juvenile court personnel. It may be that the more severe aggression symptoms associated with conduct disorder leads to additional difficulties or court charges for the youth: while ADHD and its more impulsive or reactive symptoms do not lead to similar results.

The finding that a youth's past attempted suicide made recidivism more likely is unique. The interplay among youth suicidality, mental health disorders (particularly aggressive symptoms), drug use, and delinquency is complex (Epstein & Spirito, 2009; Maris et al., 2000; Thompson et al., 2007). This finding has implications for these at-risk and detained juvenile offenders. If ongoing research (including community-based populations) confirms this suicide risk, then numerous youth-serving systems have an opportunity to intervene. The suicide attempts were reported to have occurred while the youth was in the community, prior to detention placement. These at-risk youth may have been in contact with the mental health system, and undoubtedly most were enrolled in a school system, presenting possible intervention and coordination points. In addition, standardized suicide risk assessments by experienced practitioners could be utilized within the detention centers; or better yet, at earlier juvenile justice system processing points to identify those at risk for suicide. This may be very important because detention and incarceration are also risk factors for suicide, making the placement experience itself potentially harmful for youth (Centers for Disease Control & Prevention, 2009).

Indeed, what is known is that youth suicide and attempts continue to be an alarming problem: seven percent of the general youth population has attempted suicide in the past year (Centers for Disease Control & Prevention, 2009). Additionally, up to 80% of youth with a serious mental health disorder do not receive needed services (Kataoka, Zhang, & Wells, 2002). Even following a suicide attempt, only 40% of youth needing mental health services receive help (Centers for Disease Control & Prevention, 2009). This problem has been identified by policv-makers as exemplified by the Garrett Lee Smith Memorial Act of 2004, which mandates suicide screening and interventions for youth. The National Registry of Evidenced-Based Programs and Practices identified Columbia University's Teen-Screen Program: Mental Health Check-ups for Youth (2003) as an ideal model. This program focuses on screenings for mental health, suicidal ideation, and substance use disorders in community settings such as schools and clinics (Horowitz, 2009). Youth who screen positive are then referred to a variety of community agencies for further assessment and or treatment. Community-based screenings for mental health disorders, substance use, and suicide risk can be completed easily and effectively using the Diagnostic Predictive Scales-8. Although their use has expanded in recent years, evidenced-based screening and intervention programs are currently underutilized in community-based settings (Payne, 2009). Given the findings from this current research, the benefits of this type of screening and subsequent referrals could be even more effective, perhaps impacting juvenile delinquency and detention placement.

## Limitations

This study has some important limitations worth noting. First, data were gathered from existing case records. Hence, any errors within the case files are unknown. Second, there may be some underdiagnosis or under-reporting of some of the independent variables. For example, some youth could have struggled with the ADHD symptoms prior to their first arrest, but may have never been properly diagnosed. Similarly, the suicide measurement relies on self-report by the youth. There is a possibility that this variable was under-reported. Finally, although a random sampling method was used, the findings are not widely generalizeable due to the narrow sampling frame.

## Conclusions

A number of juvenile offenders experience multiple placements into secure detention. This detention is an oftentimes ineffective method for improving outcomes for delinquent youth. This study evaluated a two county population of delinquent youth to investigate the legal and extra-legal variables that predict recidivism. This study found that youth with a previous diagnosis of conduct disorder, a selfreported previous suicide attempt, those who were older, and those who had an increased number of court offenses are more likely to recidivate. If the goal is to reduce recidivism that leads to subsequent detention placement, it is imperative for all stakeholders to understand these factors that may serve as early detection points for concern and intervention. Utilizing a community-based suicide and mental health screening and referral approach may help to identify and assist these highrisk youth in receiving needed services prior to delinquency and formal juvenile court involvement.

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