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Table of Contents

PAGE

iii

ARTICLE

Editor's Note

*Patricia San Antonio, PhD**Editor in Chief, JOJJ*

1

Facility Operations and Juvenile Recidivism

Katy Hancock, Murray State University, Murray, Kentucky

15

Neighborhood Risks and Resources Correlated With Successful

Reentry of Youth Returning from Massachusetts Detention Centers

Lori A. Demeter and Nokuthula Sibanda, Walden University, Minneapolis, Minnesota

33

Girls Leaving Detention: Perceptions of Transition to Home After Incarceration

*Judith W. Herrman, University of Delaware, Newark, Delaware**Joni Silverstein Sexton, Independent Consultant, Ottumwa, Iowa*

48

An Innovative Use of Conjoint Analysis to Understand Decision-Making by Juvenile Probation Officers

*Matthew C. Aalsma, Indiana University School of Medicine, Indianapolis, Indiana**Evan D. Holloway, Fordham University, Bronx, New York**Katherine Schwartz, Indiana University School of Medicine, Indianapolis, Indiana**Valerie R. Anderson, University of Cincinnati, Cincinnati, Ohio**Gregory D. Zimet, Indiana University School of Medicine, Indianapolis, Indiana*

OJJDP

PAGE

67

82

98

112

ARTICLE

**"I'd Prefer an Applicant Who Doesn't Have a Delinquency History":
Delinquents in the Labor Market**

Melanie Taylor and Tara Spang, University of Nevada, Reno, Nevada

**Gender Comparisons in the Processes and Outcomes of Functional
Family Therapy**

*Katarzyna Celinska, John Jay College of Criminal Justice, New York, New York
Chia-Cherng Cheng, Rutgers University, Piscataway, New Jersey*

**Achieving Juvenile Justice Reforms Through Decision-Making
Structures: The Case of Georgia**

*Jesse Russell, Big Picture Research and Consulting, Reno, Nevada
Erin Manske, National Council on Crime and Delinquency, Madison,
Wisconsin*

**The Benefits of Community and Juvenile Justice Involvement in
Organizational Research**

*Carl G. Leukefeld, University of Kentucky, Lexington, Kentucky
Margaret Cawood, Georgia Department of Juvenile Justice, Decatur, Georgia
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Editor's Note

We are pleased to present the 11th issue of *The Journal of Juvenile Justice (JOJJ)*. The first part of this issue focuses on the factors that help reduce recidivism and support successful reentry for youth. Hancock explores how juvenile facility operations affect recidivism. Using state evaluation data from juvenile facilities in Florida, Hancock examined facility operations such as health care, intervention management, facility security, and program management and found they have significant inverse relationships with recidivism. Demeter and Sibanda probe the effect that neighborhood characteristics (such as availability of jobs, prosocial activities, and schooling) have on recidivism rates. Herrman and Sexton analyzed qualitative focus group data to understand how girls transitioning to home after incarceration perceive their supports and challenges. Aalsma and colleagues used conjoint analysis to reveal the decision-making process of juvenile probation officers. By using mock employers, Taylor and Spang analyze the impact that resumes of both white and black delinquent and nondelinquent applicants have on the perceptions of hiring managers.

Other articles that appear in this issue focus on gender comparisons in the outcome of intervention programs; the use of evidence-based, decision-making support tools for judges; and an exploration of the benefits and challenges of participatory research for the implementation of a behavioral health study.

We thank these authors for choosing *The Journal of Juvenile Justice* to present their research. We are interested in your feedback on this issue and encourage you to consider publishing your research in the *JOJJ*.



Patricia San Antonio, PhD
Editor in Chief, *JOJJ*

Facility Operations and Juvenile Recidivism

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Keywords: *juvenile residential facilities, recidivism, facility operations*

Abstract

Juvenile residential facilities house over 100,000 youth annually, and as processes are theoretically tied to outcomes, juvenile facility operations can affect the recidivism of these youth. The researcher sought both to examine the relationship between juvenile facility operations and recidivism and to establish the importance of how these facilities operate. Data were analyzed from rigorous state evaluations of juvenile residential facilities conducted in Florida from 2003 to 2006. These data were analyzed using multi-level regression modeling, in order to account for the nested nature of the data. The analyses indicate that program management, health care services, facility security, and intervention management have significant inverse relationships with recidivism. These results both indicate the importance of the operations of institutional facilities for juveniles and underscore need for quality health care services for institutionalized populations. The policies and procedures of these facilities, when implemented properly, can improve the lives of juveniles and strengthen public safety.

Introduction

Although nearly two-thirds of adjudicated delinquent juveniles are given probation sentences, more than 25% of adjudicated delinquent youth

are ordered to residential placement (Sickmund & Puzzanchera, 2014). Across the course of a year, over 112,000 youth are ordered to residential commitment (Sickmund & Puzzanchera, 2014). How juvenile residential facilities (JRFs) operate to handle all these youth is an issue of concern. In truth, some research indicates that institutionalization may not only expose juveniles to sexual victimization, violence, and other abuse but also may increase recidivism for some offenders (Taylor, 2016). It is even reported that, while 56% of all adjudicated youth reoffend, 85% of institutionalized youth reoffend (Snyder & Sickmund, 2006). Nevertheless, there is little research on how juvenile facility operations may affect recidivism. Studying operations is critical because it is important to find out whether what is known to be “good” is what is actually practiced (Donabedian, 1966). Indeed, the existing evidence-based practice research is based upon the theory that methods are tied to outcomes (Lipsey, Howell, Kelly, Chapman, & Carver, 2010). Moreover, in their study of correctional privatization and recidivism, Bayer and Pozen (2005) concluded that the problems of for-profit managed correctional facilities in reducing recidivism were systematic, which suggests that operational issues may be affecting facility outcomes.

Literature Review

Facility operations, which are the totality of a facility's methods, include security and control, community relationships, education services, health services, staff development, intake, and release (Pilson & Forstater, 2005). Although there is scant research on the overall influence of juvenile residential facility operations on recidivism, research has probed various factors that make up operations (i.e., mental and physical health services, management, security, etc.), as well as how these factors affect juvenile outcomes.

Program Management. Tasks in program management include setting and promoting organizational goals, maintaining relationships with the community, screening and retaining employees, and establishing rules for staff. Craig (2010) suggested that proper prison management should be studied to help address high recidivism rates, because prison managers have control over prison conditions, which affects prison outcomes. Management and problem-solving styles vary among correctional managers (Craig, 2010) and may influence whether misconduct and abuse are tolerated, whether staff feel supported in their roles, whether the prison adopts innovative strategies and policies, and whether rehabilitation is supported as a viable goal. Indeed, one of the most important factors in recidivism reduction is a therapeutic rather than control-oriented environment (Lipsey, 2009). The balance of therapeutic and control ideologies within a correctional facility is a management issue (Adams & Ferrandino, 2008) related to setting and promoting therapeutic goals and establishing rules that promote a therapeutic rather than a control environment.

Another management factor related to recidivism is staffing. To be sure, recruiting, developing, and retaining appropriate staff is important to prevent recidivism (Auerbach, McGowan, Ausberger, Strolin-Goltzman, & Schudrich, 2010; Steward & Andrade, 2004). Well-trained and thoroughly screened staff perform their jobs appropriately

and know how to handle adverse situations that may arise in a facility, such as a juvenile behaving violently, without resorting to inappropriate or abusive behavior. Violence or abuse in a facility will detract from a therapeutic environment.

Admissions. The admissions process of a residential facility includes classification of juveniles as they enter the facility to place them in appropriate housing and treatment programs. When properly placed during this process, juveniles are less likely to recidivate (Lipsey, 2009). Furthermore, prison classification instruments have been found to determine an individual's likelihood of returning to prison, even when controlling for offender characteristics (Gaes & Camp, 2009). In addition, the wrong treatment can actually increase recidivism (Petrosino, Turpin-Petrosino, & Finckenauer, 2000). Kupers and colleagues (2009) found that appropriate classification of juveniles entering a residential facility reduced incidents of violence, staff using force, and inmate misconduct. The reduction of these behaviors helps promote a more therapeutic environment that helps reduce recidivism.

Mental Health and Substance Abuse Treatment. Research shows that mental health and substance abuse issues are overrepresented in the juvenile justice population (Burke, Mulvey, & Schubert, 2015). Lipsey and colleagues (2010) list mental health issues as a risk factor for delinquency, whereas others have found substance abuse (Cottle, Lee, & Heilbrun, 2001) and drug use (Staton-Tindall, Harp, Winston, Webster, & Pangburn, 2015) to be predictive of recidivism. Screenings of juveniles entering an institution allow identification of mental health and substance abuse issues. If such issues are effectively addressed by the institution, juveniles may be better able to participate in educational activities as they are treated and be able to better reintegrate into the community upon release. Since the provision of mental health services and substance abuse treatment leads to reductions in recidivism (Batten, 2006; Hiller, Knight,

& Simpson, 2002; Kim et al., 1997), continuing to address these issues is of critical importance to the juvenile justice system.

Health Care Services. Juvenile justice youth tend to have a higher rate of physical health problems than the general youth population (Golzari, Hunt, & Anoshiravani, 2006); in fact, most youth in the juvenile justice system have unmet health care needs (Acoca, Stephens, & Van Vleet, 2014). The juvenile justice system may be the only way some lower-income youth, who are overrepresented in the justice system, gain access to health care (Golzari et al., 2006).

Notably, the provision of adequate health care services in communities has been shown to decrease recidivism (Kim et al., 1997). Studies examining the relationship between chronic illness and youth outcomes have found a link between chronic illness and both delinquency (Woods, Farineau, & McWey, 2013) and behavior problems (Gortmaker, Walker, Weitzman, & Sobol, 1990). Indeed, Woods and colleagues (2013) hypothesized that chronic health problems negatively affected emotional well-being, caused stress, and impaired behavior, thus resulting in delinquency. In addition, some scholars have proposed that chronic illness prevents children from engaging in developmentally appropriate behaviors, negatively affects school performance, and harms interpersonal relationships, resulting in delinquency (Lubkin & Larsen, 2006). As such, addressing health problems while juveniles are institutionalized may improve behavioral issues, cognition, and relationships both in the facility and after release.

Food Services. Providing adequate and nutritious meals is essential to growing youth. A lack of quality food services may play a role in juvenile recidivism. By altering chemical levels, poor nutrition can alter or even delay cognitive development, leading to impaired judgment and thus delinquent behavior. A number of studies have linked diet with behavioral issues such as violence; aggression; poor impulse control;

antisocial behavior; hyperactivity; drug and alcohol abuse; and, most importantly for the current study, delinquent behavior (Benton, 2007; Fishbein & Pease, 1995; Jackson, 2016; Schoenthaler, 1983). In addition to this direct effect, nutrition may have an indirect and long-term effect on behavior through its impact on physical and mental health. Adequate nutrition is critical for youth's appropriate physical and cognitive development (Lanigan & Singhal, 2009; Leyse-Wallace, 2013) and for establishing good mental health (Leyse-Wallace, 2013).

Security. Security includes fostering appropriate youth-to-staff ratios and staffing levels, and monitoring for contraband. High-quality facility security is essential to improving juvenile outcomes. For example, a low youth-to-staff ratio is important to maintain a therapeutic environment (Kupchik, 2007). Similarly, a higher inmate-to-staff ratio (more inmates per staff member) has been found to lead to higher levels of violence within a prison (Lahm, 2009) and abuse in juvenile facilities (Taylor, 2016). Abuse and violence in the facility may lead to stress, anxiety, and hypervigilance on the part of the juveniles, making it difficult for them to engage in programming that addresses recidivism. A violent prison environment (Listwan, Sullivan, Agnew, Cullen, & Colvin, 2013) and poor juvenile staff relationships (Loughran et al., 2009) have been linked to higher levels of recidivism. A safe environment with appropriate staffing would enable the facility to foster a more therapeutic environment and thus more effectively rehabilitate juveniles.

Intervention Management. Intervention management refers to case management and the delivery of appropriate juvenile programming. Case management ensures that juveniles connect with appropriate interventions and that their progress is monitored. One of the most important factors in reducing recidivism is appropriate programming that is delivered with fidelity (Lipsey, 2009). Studies have found that receiving treatment interventions can reduce recidivism (Lipsey, Wilson, & Cothorn, 2000), and furthermore, that

ineffective interventions may actually harm juveniles (Cecile & Born, 2009; Petrosino et al., 2000; Rhule, 2005). In addition, quality case management, which includes applying risk/need assessment instruments as intended, has been shown to reduce recidivism (Desai et al., 2006; Luong & Wormith, 2011).

Overall, it seems logical that juvenile facility operations are related to facility outcomes. The author has hypothesized that juvenile facility operations will have an inverse relationship to juvenile recidivism: Higher facility scores on operations (indicating higher overall quality) will be related to lower recidivism rates.

Method

The author performed an analysis of official data collected from 2003 to 2006 by the Florida Department of Juvenile Justice (FDJJ) on JRFs in the form of Quality Assurance (QA) evaluations of JRF operations. These evaluations served as the unit of analysis for this study. Recidivism data were collected by the FDJJ and reported in the Comprehensive Accountability Report (CAR). The unit of analysis for the current study was the QA evaluation, which made this study incident-based research. Similar to previous incident-based studies, specific facilities were included in the sample multiple times if they received a QA evaluation more than once during the study period. The sample used in the current study included 633 cases, which represented 166 low-, moderate-, high-, and maximum-risk facilities. Out of these 633 cases, 85 (13.4%) were missing, leaving a final sample of 548 cases representing 158 facilities. Most of the facilities were privately run, with 236 cases (42.1%) being for-profit companies, 228 cases (41.6%) nonprofit, and 84 cases (15.3%) run by the state.

Measures

Since 1996, the FDJJ has been training and certifying individuals to perform reviews of the JRFs. To gather QA data, a team annually conducts

onsite reviews of the JRFs. The review team studies policies, procedures, and practices of the facilities through interviews with staff, youth, and management, by examining records and through observation. Facilities are evaluated on a variety of broad standards that are made up of a number of indicators. Seven QA standards serve as measures of the quality of facility operations.¹ The possible range for all operational variable scores is 0 to 100.

Program management includes transmitting the mission statement, goals, and expectations to staff; filing appropriate reports; conducting audits of youth in residence; hiring appropriate staff; ensuring FDJJ guidelines are followed; establishing policy for incident reporting; and fostering relationships with the community.

Admissions and orientation process includes orienting the youth to the facility, receiving paperwork and making appropriate notifications to parents/legal guardians and juvenile justice personnel, and classifying juveniles so they receive appropriate sleeping arrangements and the staff are aware of each juvenile's needs and issues.

Mental health and substance abuse services include screening and assessment of youth for mental health and substance abuse issues, suicide screening and prevention, and treatment for any mental health/substance abuse needs. Due to the nature of the QA evaluations during the study period, mental health and substance abuse services could not be separated.

Food services include provision of adequate and nutritious meals and keeping the kitchen sanitary.

Health services include contracting with physicians for provision and oversight of health care, screening for health conditions, prescribing and dispensing medications, and offering gynecological services where applicable.

¹ For more detailed information regarding the QA standards, please contact Dr. Hancock.

Program security includes appropriate staff-to-youth ratios, procedures for adequate staffing, and searches for contraband.

Intervention management includes completion of progress reports and individual performance plans, provision of social and life skills education, promotion of family involvement, and implementation of restorative principles. These principles include teaching the youth the harmful consequences of their behavior and the need for them to make reparation to victims and the community.

Facility recidivism is reported by FDJJ for each facility as “the percentage of youth with a subsequent juvenile adjudication or adult conviction including adjudications withheld for an offense that occurred within one year of release” (Florida Department of Juvenile Justice, 2006, pp. 4–5).

Control variables thought to influence recidivism were incorporated in the current study.² These included risk level of the JRF, gender of the juveniles in the facility, percentage of black youth in the facility, average age of juveniles upon entry to the facility, facility size (number of beds), and average prior seriousness (APS)³ of charges among juveniles served by the facility. Also included was the region in which the JRF was located (North, Central, and South Florida). In some cases, the management of a JRF passed from one private company to another, so the change in the organization of ownership (provider change) was also included.

Analyses

For the sake of parsimony, independent variables that did not have significant relationships with the dependent variable at the bivariate level were not included in the multivariate models. Correlation analyses indicated recidivism was

only correlated with 4 of the operational variables: program management ($r = -0.08, p < 0.05$), health care services ($r = -0.09, p < 0.05$), security ($r = -0.16, p < 0.01$), and intervention management ($r = -0.10, p < 0.05$). Thus, for the final model, 4 operational variables were included in the multivariate analyses: program management, health care services, security, and intervention management.

In the current study, each JRF was managed by a provider company—either the state, a for-profit company, or a nonprofit organization. As a result of the influence the provider companies had on the facilities they manage, JRFs that were managed by the same provider company may have been more like one another than facilities owned by different companies.⁴ As such, the data are nested and will have to be analyzed through multilevel modeling (MLM) techniques.

Results

Descriptive Analyses

The results of the descriptive analyses for the categorical variables can be found in Table 1;⁵ 42% percent were in North Florida, 34% were in Central Florida, and 24% were in South Florida. Finally, most (93%) of the facilities did not experience a change in provider.

Table 1. *Descriptive Statistics for Categorical Variables*

| | <i>n</i> | % |
|-----------------|----------|------|
| Gender | | |
| Female | 112 | 20.4 |
| Male | 422 | 77 |
| Coed | 14 | 2.6 |
| Region | | |
| North | 229 | 41.8 |
| Central | 186 | 33.9 |
| South | 133 | 24.3 |
| Provider Change | | |
| No Change | 509 | 92.9 |
| Change | 39 | 7.1 |

⁴ For the current study, the ICCs ranged from 0.19 to 0.22, indicating that “provider company” accounted for about 19% to 22% of the variation in the dependent variable. Taking into account the average group size of 13, according to Barcikowski (1981), these ICCs indicate that the data are nested, and as a result, the use of MLM techniques was warranted.

⁵ Theoretically, more serious offenders should go to the higher risk level facilities; therefore, it is possible that APS and facility risk level are redundant variables. The results of the Welch test ($F(2) = 115.41, p < 0.001$) and Brown-Forsyth test ($F(2) = 160.40, p < 0.001$) indicated that mean APS scores differed significantly across risk levels in the expected direction. As such, risk level was removed, and the single continuous APS variable was retained in the final model.

² See Bayer & Pozen, 2005; Kubrin, Squires, & Stewart, 2007; Lipsey, 2009; Snyder & Sickmund, 2006; Walters, 2012.

³ APS is a seriousness score calculated for each juvenile “by assigning point values to prior charges based upon the seriousness of the adjudicated charged offenses” (Florida Department of Juvenile Justice, 2011, p. 7). Each violent felony receives 8 points, other felonies each receive 5, misdemeanors each receive 2, and any other offenses each receive 1 point. APS is calculated by dividing the total seriousness score by the total number of youth served during the fiscal year.

Table 2. *Descriptive Statistics for Continuous Variables*

| | Mean | SD | Min. | Max. | Range |
|-----------------------------------|--------|--------|-------|-------|-------|
| Facility Operations | | | | | |
| Program Management | 61.9 | 11.85 | 13.89 | 99.42 | 85.53 |
| Admissions | 65.47 | 12.05 | 17.78 | 100 | 82.22 |
| Mental Health/ Substance Abuse | 57.75 | 17.9 | 8.83 | 100 | 91.17 |
| Health Care Services | 62.87 | 13.31 | 9.09 | 92.93 | 83.84 |
| Food Services | 67.04 | 13.18 | 0 | 100 | 100 |
| Security | 59.6 | 11.22 | 17.78 | 90 | 72.22 |
| Intervention Management | 61.08 | 14.15 | 8.33 | 99.28 | 90.95 |
| Control | | | | | |
| APS | 20.87 | 8.43 | 6.8 | 60 | 53.2 |
| Percentage Black | 46.13% | 17.06% | 0 | 100% | 100% |
| Average Age | 16.16 | 1.05 | 12 | 19.8 | 7.8 |
| Number of Beds | 56.48 | 47.59 | 6 | 350 | 350 |
| Outcome | | | | | |
| Recidivism | 38.79 | 14.83 | 0 | 100 | 100 |

Table 2 lists the descriptive analysis for the continuous variables. As shown, the means and standard deviations of the operational variables placed most facilities as scoring between 50 and 80 on a scale of 100. Furthermore, the mean for APS was 20.87, meaning that on average, juveniles in a facility had at least three prior charges; the minimum was 7, which could indicate having a number of minor charges. The mean for percentage black indicated that, on average, the juvenile population of a facility was nearly one-half black. The average age of juveniles showed most juveniles were between the ages of 15 and 17. These numbers coincided with the average age and race of juveniles in residential facilities nationally (Hockenberry, 2013; Rover, 2014). Facilities ranged in size from 6-bed to 350-bed facilities. Finally, most facilities had about 25% to 50% of juveniles who completed their program recidivate; some facilities had no juveniles

recidivate within 1 year, while a few others had all recidivate.

Multivariate Analyses

The results of the 5 multilevel regression models of operations on recidivism are shown in Table 3.⁶ Recidivism was regressed individually on program management, health care services, security, and intervention management in Models 1 through 4, respectively. As hypothesized, for each model, scores on the operational variable had an inverse relationship with recidivism. Higher-quality operations were related to lower recidivism.

Model 5 regressed recidivism on all 4 operational variables to examine which operational variables were the most important. As shown, only health care services and security achieved

significance, suggesting that once health care services and security were accounted for, the impact of program management and intervention management on recidivism was reduced. Across all 5 models, facilities housing males had higher recidivism scores than coed facilities, the reference category. In addition, facilities housing a greater proportion of black youth or younger youth and facilities with more beds had higher scores on recidivism. Finally, facilities housing more serious offenders (higher APS scores) tended to have significantly higher recidivism scores. All of these relationships are in agreement with previous literature on these variables (Bayer & Pozen, 2005; Farrington & Nuttall, 1980; Moffitt, 1994; Reisig, Bales, Hay, & Wang, 2007).

⁶ The tolerance of the study variables ranged from 0.131 to 0.929, and the VIF ranged from 1.077 to 7.627; a tolerance below 0.10 or a VIF above 10 indicates issues with multicollinearity (Pallant, 2007); as such, multicollinearity should not be a serious problem. The rhos for the models indicate that the group-level variable, "provider company," accounted for about 13% to 15% of the variation in recidivism for the different models.

Table 3. Results of Regressing Recidivism on Operational Variables

| | Model 1 | | Model 2 | | Model 3 | | Model 4 | | Model 5 | |
|-------------------------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|-------|
| | β | SE | β | SE | β | SE | β | SE | β | SE |
| Program Management | −0.09* | 0.05 | — | — | — | — | — | — | −0.03 | 0.06 |
| Health care | — | — | −0.13*** | 0.04 | — | — | — | — | −0.10* | 0.05 |
| Security | — | — | — | — | −0.16*** | 0.05 | — | — | −0.12* | 0.06 |
| Intervention Management | — | — | — | — | — | — | −0.08* | 0.04 | −0.001 | 0.05 |
| Gender | | | | | | | | | | |
| Male | 10.0** | 3.51 | 10.86** | 3.49 | 9.46** | 3.49 | 10.14** | 3.51 | 10.28** | 3.48 |
| Female | −4.89 | 3.64 | −4.09 | 3.62 | −5.11 | 3.62 | −4.72 | 3.64 | −4.31 | 3.60 |
| Region | | | | | | | | | | |
| North | −0.69 | 1.41 | −0.41 | 1.40 | −0.57 | 1.40 | −0.62 | 1.41 | −0.23 | 1.39 |
| South | −2.02 | 1.62 | −1.89 | 1.60 | −2.23 | 1.61 | −1.99 | 1.62 | −1.93 | 1.59 |
| Provider Change | 1.79 | 2.05 | 2.03 | 2.03 | 1.93 | 2.03 | 1.77 | 2.05 | 2.29 | 2.04 |
| APS | 0.13 | 0.08 | 0.16* | 0.08 | 0.17* | 0.08 | 0.13 | 0.08 | 0.18* | 0.08 |
| Percentage Black | 0.17*** | 0.03 | 0.16*** | 0.03 | 0.16*** | 0.03 | 0.17*** | 0.03 | 0.16*** | 0.03 |
| Age | −4.12*** | 0.56 | −4.10*** | 0.55 | −4.07*** | 0.55 | −4.13*** | 0.56 | −4.04*** | 0.55 |
| Beds | 0.03* | 0.01 | 0.03* | 0.01 | 0.02* | 0.01 | 0.03* | 0.01 | 0.03* | 0.01 |
| Constant | 92.71*** | 9.94 | 93.74*** | 9.73 | 96.28*** | 9.88 | 92.30*** | 9.86 | 98.74*** | 11.04 |
| rho | 0.14 | 0.05 | 0.14 | 0.05 | 0.14 | 0.05 | 0.15 | 0.05 | 0.13 | 0.05 |
| Log Likelihood | −2125.98 | | −2122.34 | | −2122.23 | | −2125.69 | | −2119.00 | |
| LR Test Statistic | 221.39*** | | 228.69*** | | 228.89*** | | 221.99*** | | 235.37*** | |

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussion

Four operational variables were found to be significant predictors of recidivism: program management, health care services, security, and intervention management. In the full model, health care services and security were still significant predictors of recidivism. These findings illustrate a relationship between facility operations and outcomes, thus indicating the critical importance of studying and improving facility operations.

Health care services have an inverse relationship with recidivism, even when accounting for the provider company variable and the other

operational variables. This relationship may exist for a number of reasons. As stated previously, health problems are thought to impair emotional well-being and behavior, cause stress, hurt development, and negatively affect educational performance and interpersonal relationships (Lubkin & Larsen, 2006; Woods et al., 2013). The juvenile justice system may be the only contact that some youth have with appropriate health care services. In fact, one study found that two-thirds of youth admitted to a detention center did not have regular medical care; half of the youth said their families were unable or unwilling to ensure medical follow-up (Feinstein et al., 1998). Dealing with neglected physical health

problems may result in youth's improved day-to-day functioning and help them engage with staff and respond to intervention programming. In addition, health care services also include the provision of health care education. Thus, youth attending facilities with high-quality health care would be equipped with the skills to maintain improved health once released from the facility, perhaps improving their behavior in the community. Moreover, health care services allow staff to show concern for youth, which can help foster a therapeutic environment and subsequently reduce recidivism.

Juvenile facility administrators should make efforts to improve health care services by enhancing health screening, effectively coordinating between the facility and the community into which juveniles will be released (Conklin, Lincoln, & Flanigan, 1998; Potter, 2014), addressing the unique needs of females (Parsons & Warner-Robbins, 2010; Watson, Stimpson, & Hostick, 2004), and heightening the use of medical technologies (Watson et al., 2004). For example, increasing the use of telemedicine in correctional institutions may not only improve and coordinate health care, but may also save money (Watson et al., 2004).

Another important step would be refining and expanding health education for juveniles. Health care promotion and education among inmates has been shown to reduce health risk behaviors and increase use of community resources upon release (Grinstead, Zack, & Faigeles, 2001). A reduction in risky behaviors may improve the health of juveniles and allow them to better engage in school and community activities once they are released. The increased use of community resources (e.g., after-school programs, vocational programs, and church activities) may help to integrate and connect juveniles with their communities, thus reducing recidivism.

Also of note, even controlling for provider and other operations, high scores on the quality of facility security are also found to be related to

lower rates of recidivism. One aspect of security is staffing, including policies for appropriate staffing,⁷ maintaining an appropriate youth-to-staff ratio, and searches for contraband or weapons. Having appropriate staffing enables youth to be effectively monitored, which reduces opportunities for misbehavior and disorder within the facility. Indeed, problems in the prison environment, such as lapses in security, inadequate supervision, and youth access to contraband, may offer ideal opportunities for violence and misbehavior within the institution (Wortley & Summers, 2013).

Violence and misbehavior may subsequently create situations that foster criminal learning or result in psychological stress, leading to hypervigilance or PTSD after release, making conforming behavior difficult. In fact, Burdick-Will (2013) found that violent crime in schools had a negative effect on test scores. It is plausible that disorder and violence that may result from poor facility security creates fear and stress, which could inhibit how well juveniles engage in programming. This situation would thus decrease the effectiveness of any intervention offered by the facility. As such, facility administrators should be sure to support and enhance measures to maintain safety, structure, and order within their facilities, by hiring skilled staff, working to reduce turnover, and offering in-service trainings to prepare staff to deal with threats to safety and order. Indeed, prior research has shown that high staff turnover reduces the impact of intervention programming (Lipsey, 2009) and that educated staff are more effective (Berg, 1990) and more supportive of the rehabilitative ideal (Robinson, Porporino, & Simourd, 1997).

Although program management, health care services, security, and intervention management were individually related to recidivism, when analyzed together in one model, only health care

⁷ Policies for appropriate staffing refers to scheduling policies, including having contact information for staff when more coverage was needed, creating policies for shift rotation, having at least one staff member on duty who was the same gender as the youth served, and making sure schedules were posted where staff can see them.

services and security remained significant predictors of recidivism. Scant literature on operations may help explain this finding, but there are a number of possible explanations for the relationship found in Model 5. First, it is possible that if an individual operation is managed well, overall program management is no longer important. This would suggest that overseeing individual operations, such as health care services or admissions screening, need not be heavily emphasized in the facility director's job. Although supervising operations is important to avoid a breakdown in services, the different operations need not be micromanaged. Periodic reviews by the facility director may be sufficient to maintain the quality of operations.

Regarding loss of significance of intervention management, one explanation is that addressing the physical, health care, and security needs of youth may allow them to better cope with higher-level problems, such as conflict resolution and other criminogenic issues, rendering intervention management less important in predicting recidivism. The idea that basic needs must be satisfied before higher-level needs has been discussed in the literature for quite some time. For example, it has been suggested that recidivism rates will remain high among adult ex-offenders if their basic needs such as employment and housing are not met (Williams-Queen, 2014). In addition, according to Maslow (1943), a human's higher-level needs could not be addressed until lower-level needs were satisfied. Maslow believed the lower-level needs were those of the physical body and the need for safety. Clearly, health care services address some of a youth's physical needs. Security addresses at least some of a youth's need for safety, for example, through the restriction of youth access to weapons in the facility. Therefore, fully adequate health care services and security, which are among a youth's most basic physical and psychological needs, may improve a youth's behavior regardless of the quality of intervention management. The synergism among health care services, security, and

recidivism supports the idea that earlier failures to address the basic needs of juveniles may have played a role in their initial delinquent behavior and underscore the importance of improving access to health care in the community.


Implications and Directions for Future Research

An important avenue for future research would be to examine how different operational variables interact with one another, as well as which ones are most important and how they can be improved. For example, admissions was not found to be significantly related to recidivism. However, it is possible that the juvenile court, in a sense, classifies the youth before admission by selecting the facility and program to which the youth will be sent, making classification during admission process unimportant in predicting recidivism.

To reiterate, program management and security, both of which include staffing issues, were found to be related to recidivism. As Lipsky (1980) asserted, fidelity to organizational policy depends on the discretion of front-line staff. Staffing should thus be investigated in more detail to see how it affects juvenile facility operations and outcomes. Moreover, although food is a basic need just like health care, youth do get fed in the community, whether or not the food is high quality. Health care, however, may not be available in the community, so addressing it in the JRF may well have a more significant impact on youth outcomes than food services. Thus, a more detailed investigation of juvenile correctional operations and their impact on outcomes is critical.

Conclusion

The results of this study underscore the importance of facility operations in serving delinquent youth and indicate that more focus should be placed on such research in the future. Indeed, as these facilities come into contact with a large number of disadvantaged youth, they become



an opportunity to help serve some of the basic physical and psychological needs of youth who might not otherwise receive treatment. A greater understanding of how facilities operate and which operational factors help them achieve their goals will not only serve to improve the lives of countless youth, but it may also reduce recidivism, thus protecting the safety of the public.

About the Author

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Neighborhood Risks and Resources Correlated With Successful Reentry of Youth Returning from Massachusetts Detention Centers

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Abstract

Youth delinquency is a major social problem in the United States, with approximately 29% of youth ages 18 to 21 reoffending within the first year of release in Massachusetts. The purpose of this quantitative, cross-sectional study was to examine whether the level of neighborhood risks, availability of jobs, availability of schooling, and availability of prosocial activities had an effect on recidivism rates. Publicly available data consisting of 347 youth ages 18 to 21 returning from statewide detention centers operated by the Massachusetts Department of Youth Services were analyzed using logistic regression. The results showed that neighborhood resources such as schooling and prosocial activities were statistically related with the rates of reoffending among youth reentering the community following incarceration. These results have important implications: Educators, law enforcement, and the community can benefit by collaborating to provide youth offenders with a special learning community that focuses on educating youth during and after release.

Introduction

Youth delinquency is a major social problem in the United States. According to Aizer and Doyle (2015), incarceration rates for juveniles have increased even faster than those of adults over the last 20 years. In 2014, juvenile courts handled approximately 1 million delinquency cases involving juveniles charged with criminal law violations (Office of Juvenile Justice and Delinquency Prevention, 2015). According to the Justice Policy Institute (2014), each year the United States incurs between \$8 billion and \$21 billion in long-term costs for the confinement of young people. It is estimated that the United States has a juvenile corrections rate five times higher than the next highest country (Aizer & Doyle, 2013). Further, taxpayers bear the financial burden of treating and incarcerating youth.

Abrams and Freisthler (2010) estimated that 200,000 youth transition back into their neighborhoods each year. Existing studies have focused on individual risk factors, problem behaviors, and negative peer associations of youth to determine the barriers that block a successful integration back to the community (Abrams & Freisthler, 2010; Anthony et al., 2010; Mendel

2011). However, this individual approach has failed to address risks posed by the context of the neighborhood to which they return. That is, little research has been conducted on the risk features of the neighborhood that the juvenile reenters and how these factors contribute to delinquent behavior and patterns of criminal activity. This paper's research addresses the gap by exploring a neighborhood's access to resources in mitigating neighborhood risks for reentry youth.

Literature Review

As offending youth return to their communities, they face many challenges that they must overcome to achieve successful reentry. When young people attempt to reintegrate into their communities, they are likely to return to the same situations that played a role in their delinquent behavior. For example, upon their return home, youth may be exposed to contact with delinquent and/or drug-using peers, dysfunctional parents or households, and opportunities for engaging in illegal behavior (Harder, Kalverboer, & Knorth, 2011). Furthermore, juveniles may encounter barriers that make it difficult for them to reintegrate back into the school system. For example, a youth's reenrollment documentation may be incomplete. Some school district policies require that a youth produce documents that establish residency immunization status. If the detention center does not forward these documents and the youth is unable to provide them, the student may be denied enrollment (Feierman, Levick, & Mody, 2009). Moreover, a youth could experience discrimination within his or her community (Feierman et al., 2009); some members of the community are likely to judge the youth based on his or her previous delinquent behavior. Thus, the youth opts to keep a distance from the community rather than trying to fully reintegrate (Harder et al., 2011).

Given the high costs to society, communities, and the individuals themselves, it is essential to understand what happens to juveniles when they have been released from custody or when they

return home after having spent time in a facility. Specifically, how do these youth who have come in contact with the justice system compare in terms of outcome measures such as employment and education?

According to Hartwell, McMackin, Tansi, and Bartlett (2010), data collected in Massachusetts indicated that 29% of youth discharged from the Department of Youth Services (DYS) supervision between the ages of 18 and 21 reoffend within the first year. In addition, research shows that approximately 50% of youth who are released from DYS violate the conditions of their release into the community (Hartwell et al., 2010). Similarly, in New York State, approximately 42% of youth who are released were rearrested within 6 months of their first release, and over 50% were rearrested within 9 months of their release (Hartwell et al., 2010). A study of a large juvenile detention system in the Southwestern U.S. states found that rearrest rates are as high as 85% at 5 years post-release (Abrams & Freisthler, 2010). Research on youth offender recidivism rates tend to show an overall decrease in reconviction after 2 years, indicating that the initial time period post-release is indicative of future arrest and conviction. Therefore, it is critical that attention be given to these initial days and months post-release (Hartwell et al., 2010; Tansi, 2009).

The research on barriers to successful transitions into mainstream society has focused on individual risk factors, problem behaviors, and negative peer associations among youth (Abrams & Freisthler, 2010; Anthony et al., 2010). Consequently, this individual approach has failed to address risks posed by the context of the neighborhood to which they return. Research has proven that neighborhood conditions play a role in contributing to delinquent behavior and patterns of criminal activity (Abrams & Freisthler, 2010). Patterns of criminal activity in neighborhoods also may be influenced by factors such as alcohol outlet density, availability of supportive services, or opportunities for youth to engage in prosocial behavior (Abrams & Snyder, 2010). Adequate conceptual

and empirical research indicates that neighborhood influences have a more significant role in youth violence above individual risk factors for offending (Abrams & Snyder, 2010). Regardless of existing findings (Abrams & Freisthler, 2010; Abrams & Snyder, 2010; Anthony et al., 2010), theory and interventions on juvenile reentry have failed to acknowledge neighborhood factors as a key source of influence for reducing recidivism rates for juveniles (Abrams & Freisthler, 2010).

A limited number of studies have sought to study neighborhood-level factors that affect the reentry experience and outcomes for adult offenders. Mellow, Schlager, and Caplan (2008) sought to understand whether there was a potential match or mismatch with the location of community services and the residences of adult parolees. This study found that the majority of services were located closer to parole district offices rather than the neighborhoods of adult parolees (Abrams & Snyder, 2010).

Little research has specifically focused on youth reentry. Abrams and Freisthler (2010) used archival data from postal codes in Los Angeles County, California, to analyze the associations between the level of neighborhood risks and resources and the success rates of youth returning to communities following incarceration. They concluded that rates of successful reentry were positively associated with neighborhood risks, such as density of off-premise alcohol outlets and level of community violence. Also, Harris and colleagues (2012) conducted a study aimed at investigating the effects of neighborhood and community-based programs and their impact in preventing juvenile recidivism. The authors analyzed data from adjudicated juvenile youth who had been assigned to court-ordered programs by the Family Court of Philadelphia, Pennsylvania. This study found that some types of juvenile offending were likely to be influenced by opportunities, constraints, and pressures present in the youth's neighborhood. Although these studies contribute to the existing knowledge that neighborhood disadvantages play a significant role in the experiences and

outcomes for offenders upon reentry, available research remains sparse, especially research focusing on juvenile offenders.

Problem Statement

Despite the increased theoretical evidence that neighborhood conditions may play a significant role in structuring success for high-risk youth, individual risk factors continue to dominate the focus of community reintegration of incarcerated youth. Research has indicated that when institutional resources that address the needs of community members are made accessible, neighborhood risks decrease. More specifically, neighborhood resources offer reentry youth with support services that can mitigate risk of reoffending, such as programs that provide school and job placement assistance and recreation centers (Abrams & Freisthler, 2010). However, the positive benefits linked to use of social services for reentry youth has not been confirmed empirically (Anthony et al., 2010). Further research is needed to support the notion that access to resources mitigates neighborhood risks for reentry youth.

Purpose of Study

The purpose of this quantitative, cross-sectional correlational study was to narrow the gap in current knowledge regarding youth reentry by examining which neighborhood risks and resources are related with rates of successful reentry of youth returning from statewide detention centers operated by the Massachusetts DYS, including the following objectives:

1. To examine the relationships between the level of neighborhood risks and rates of reoffending among youth reentering the community following incarceration.
2. To examine the relationships between environment resources such as availability of jobs, schooling, prosocial activities, and rates of reoffending among youth returning to the community.

Research Questions and Hypotheses

This study evaluated the following research questions and their corresponding hypotheses:

RQ1: To what extent, if any, does a relationship exist between the level of neighborhood risks and the rates of reoffending among youth reentering the community following incarceration?

H_{o1} : There is no relationship between the level of neighborhood risks and the rates of reoffending among youth reentering the community following incarceration.

H_{a1} : There is a relationship between the level of neighborhood risks and the rates of reoffending among youth reentering the community following incarceration.

RQ2: To what extent, if any, do relationships exist between availability of jobs, schooling, and prosocial activities and rates of reoffending among youth returning to the community?

H_{o2a} : There is no relationship between availability of jobs and rates of reoffending among youth returning to the community.

H_{a2a} : There is a relationship between availability of jobs and rates of reoffending among youth returning to the community.

H_{o2b} : There is no relationship between availability of schooling and rates of reoffending among youth returning to the community.

H_{a2b} : There is a relationship between availability of schooling and rates of reoffending among youth returning to the community.

H_{o2c} : There is no relationship between availability of prosocial activities and rates of reoffending among youth returning to the community.

H_{a2c} : There is a relationship between availability of prosocial activities and rates of reoffending among youth returning to the community.

Theoretical Framework

This study was based on two theoretical frameworks: collective efficacy and routine activities theory. Collective efficacy theory stems from the hypothesis that “neighborhoods with high levels of social cohesion and community assets are better equipped to contain individual risks for delinquency and youth violence” (Abrams & Snyder, 2010, p. 10). For example, such institutions include but are not limited to libraries, schools and other learning centers, child care, organized social and recreational activities, medical facilities, family support centers, and employment opportunities (Sampson, Morenoff, & Gannon-Rowley, 2002).

Routine activities theory focuses on the circumstances in which offenders commit criminal acts rather than emphasizing the characteristics of the offender (Cohen & Felson, 1979). Thus, an individual’s behavior patterns influence where crimes occur. This study employed these two frameworks to understand whether risks or supports associated with a neighborhood to which a youth must reenter can support or deter successful transition.

Research Method and Design

Statewide data from the Massachusetts DYS were used to measure the constructs considered in this study. The unit of analysis was based on the ZIP Codes to represent the areas in Massachusetts. Each ZIP Code was considered as one sample. Secondary data were used to measure the rates of reoffending among youth as well as the level of neighborhood risks and resources available in each area.

A quantitative correlational research design was used to examine the relationship between the level of neighborhood risks and the rate of reoffending among previously incarcerated youth in Massachusetts. A nonexperimental, cross-sectional quantitative correlational research design was deemed to be appropriate for the study, because the focus was on identifying potential relationships between identified variables

(Babbie, 2012). Therefore, the study was not concerned with cause-and-effect relationships between variables. Instead, the focus was on investigating linear relationships between two or more variables (Babbie, 2012). For the purpose of this study, the level of neighborhood risks as well as the rate of reoffending were considered as dichotomous variables. On the other hand, categorical variables, such as race or gender, are variables where the output is not a number or where the number used in the analysis does not align with a value of the variables. The availability of jobs, schooling, and prosocial activities were also considered as categorical variables.

Secondary data from Massachusetts were used to measure the rate of reoffending of incarcerated youth who were released from custody in 2008. This was the most recent available sample from the Massachusetts DYS. In addition, secondary data of crime rates and risks were used to measure the level of neighborhood risks and the availability of jobs, schooling, and prosocial activities (Marshall & Rossman, 2006). Because the focus of this study was to examine the relationship between the independent variables of the level of neighborhood risks and resources and the dependent variable of the rate of reoffending, a correlational research design was most appropriate (Bryman, 2012).

Target Population and Sampling

Secondary data were used to measure the rates of reoffending among incarcerated youth in each of the areas as identified through publicly available data for each ZIP Code. Secondary data were also used to measure the level of neighborhood risks and the resources available in each of the areas using crime rates and risks data.

This research study used correlation analysis and independent samples *t*-tests (Babbie, 2012). Correlation analysis was used for research questions that considered the level of neighborhood risks as the independent variable because both the dependent and the independent variables

were continuous in nature (Cozby & Bates, 2011). Independent samples *t*-tests were used for research questions focused on the resources available in each area, because the independent variable involved two independent groups (Cozby & Bates, 2011).

The minimum sample size of 128 was determined through several factors. The first factor was the effect size, which provides a measure on the strength of the relationship between variables. For the purpose of this study, a medium effect size was used to ensure that the assessment was not too strict nor too lenient (Cozby & Bates, 2011). Another factor considered in the identification of the minimum sample size was the power of the analysis; a standard of 80% power is used for statistical analyses. Moreover, a significance of .05 was used in this study. In the end, 347 cases fit the requirements of the study's parameters and were included in analysis.

Definition of Variables

The variables considered in this study were defined based on the following:

- Alcohol outlet was defined as any place where alcohol may be legally purchased by a buyer.
- Availability of jobs was identified as a continuous independent variable that determined the number of open jobs in the Commonwealth of Massachusetts available to youth ages 18 to 21.
- Availability of prosocial activities was identified as a continuous independent variable that determined the number of prosocial activities in the Commonwealth of Massachusetts accessible to youth ages 18 to 21.
- Availability of schooling was identified as a continuous independent variable that determined the number of potential public high schools in the Commonwealth of Massachusetts for youth ages 18 to 21.
- Detention center was defined as a residential facility that is inclusive of staffed secure

group homes to highly secure locked units, regardless of overnight stay or length of stay.

- Incarcerated youth was defined as youth ages 18 to 21 who have been incarcerated due to conviction of any criminal offense. These youth have been released on probation or parole. This study only included individuals charged as youth and those released from juvenile detention centers.
- Level of neighborhood risks was identified as one of the independent variables in this study. This was operationalized as the crime risk ratings by crime type for the Commonwealth of Massachusetts. This variable was identified as a continuous variable.
- Rates of reoffending among youth was identified as the dependent variable in this study. This was operationalized based on publicly available data in Massachusetts, considering the number of youth who are reconvicted following 1 year of release. This variable was identified as a continuous variable.
- Reconviction was any final disposition requiring a finding of guilt in a court of law for a second time.
- Reoffending youth was defined as those youth ages 18 to 21 who were reconvicted following up to 1 year of release. Those youth ages 18 to 21 were used for two reasons: (1) while considered youth by the correctional system and literature, they were at least 18 years of age or older and thus their data were publicly available; and (2) the system tracks data on these individuals until the age of 21, allowing for a larger sample size and potentially richer data.

Data Collection Procedures

After approval was obtained from the Walden University Institutional Review Board (IRB 05-05-14-0262233), a letter of intent to conduct the study was sent to the archival office of the Commonwealth of Massachusetts. Data were obtained through electronically transmitted data

from the archival office of the Commonwealth of Massachusetts. Further data on levels of neighborhood risks and resources was obtained from Location Inc., an organization that generates reports on crime rates and risks within an area. Crime data specifically on ZIP Codes from the Commonwealth of Massachusetts were also electronically transmitted.

Data Analysis Procedures

The data collected from participants were entered into the Statistical Package for the Social Sciences (SPSS) 19.0 software. The data gathered were examined through descriptive statistics and inferential statistics. Categorical data were coded using numerical representations to ensure that these could be analyzed through statistical analyses. Descriptive statistics were used to describe the area in Massachusetts that was considered in this study. Descriptive statistics such as measures of central tendency were also used to describe the data gathered for this study. Frequency and percentages were used to describe categorical data, whereas measures of central tendencies such as the mean, standard deviation, and range were used to describe continuous variables such as the rate of reoffending of incarcerated youth and the level of risks and available resources within the area. Later inferential statistics such as the correlational analysis and independent samples *t*-tests were conducted to assess the relationship between the level of neighborhood risks and the rate of reoffending among incarcerated youth, as well as between the availability of resources such as jobs, schooling, and prosocial activities and the rate of reoffending among incarcerated youth.

To address the first research question, a correlation analysis was considered, because both the independent and the dependent variables were continuous variables (Cozby & Bates, 2011). If a significant correlation existed, considering a significance level of .05, then it could be concluded that there was sufficient evidence to reject the first null hypothesis that was posed in this

study. For the second research question, independent samples *t*-tests were conducted to assess whether the independent variables of availability of jobs, schooling, and prosocial activities could significantly relate to the rate of reoffending among incarcerated youth. The independent samples *t*-tests determined whether there was a significant difference between the rates of reoffending among incarcerated youth based on the availability of jobs, schooling, and prosocial activities. A significance level of .05 was used for all statistical analyses.

Results

The sample of the study consisted of 347 youth ages 18 to 21 returning from detention centers in the Commonwealth of Massachusetts. The demographic information was summarized using frequency and percentages statistics. The summaries of the demographic information of gender, race, and reconviction rate are shown in Table 1. Table 1 illustrates that most of the 347 youth in the sample were male (325, or 93.7%). Regarding race, almost half or 160 (46.1%) were Race 1 (Caucasian), 86 (24.8%) were Race 2 (African American), and 85 (24.5%) were Race 3 (Hispanic).

Table 1. *Frequency and Percentage Summaries of Demographic Information of Gender, Race, and Reconviction Rate*

| | Frequency | Percentage |
|---------------------|-----------|------------|
| Gender | | |
| F | 22 | 6.3 |
| M | 325 | 93.7 |
| Race | | |
| 1 | 160 | 46.1 |
| 2 | 86 | 24.8 |
| 3 | 85 | 24.5 |
| 4 | 7 | 2 |
| 5 | 9 | 2.6 |
| Reconviction | | |
| No reconviction | 204 | 58.8 |
| Reconviction | 143 | 41.2 |

In terms of reconviction or reoffending among youth returning to the community, 143 (41.2%)

of the 347 youth were reconvicted. The 347 youth came from a total of 101 cities, including Boston (41, or 11.8%), Springfield (38, or 11%), Worcester (38, or 11%), New Bedford (18, or 5.2%), Fall River (14, or 4%), and Brockton (12, or 3.5%).

Table 2 summarizes the descriptive statistics of the continuous measured independent variables of level of neighborhood risks, availability of jobs, availability of schooling, and availability of prosocial activities. The descriptive statistics include the measures of central tendency of mean and standard deviations. The level of neighborhood risk was measured using the total crime index. The total crime index obtained the ratio between the total number of both violent and property crimes per 100,000, with higher values meaning more crimes were committed in a neighborhood. The mean level of neighborhood risk was 27.53, with the level of neighborhood risk among the cities the youth were from ranging from 3.29 to 74.32. In terms of the available resources within the area, the mean values showed greater availability of prosocial activities (*M* = 14.89) compared with availability of schooling (*M* = 11.43) and of jobs (*M* = 6.64). The least resource availability was the number of jobs (*M* = 6.64).

Table 2. *Descriptive Statistics of Study Variables*

| | <i>N</i> | Minimum | Maximum | Mean | Std. Deviation |
|--|----------|---------|---------|-------|----------------|
| Level of neighborhood risk (Total crime index) | 347 | 3.29 | 74.32 | 27.53 | 17.58 |
| Availability of jobs | 347 | 1.00 | 21.00 | 6.64 | 6.07 |
| Availability of schooling | 347 | 1.00 | 26.00 | 11.43 | 7.73 |
| Availability of prosocial activities | 347 | 2.00 | 37.00 | 14.89 | 9.48 |

A logistical regression model was created to determine the relationships of the independent variables of level of neighborhood risks, availability of jobs, schooling, and prosocial activities, and the dichotomous dependent variable of

rate of reoffending among incarcerated youth in Massachusetts. The logistic regression was used, since the dependent variable of rates of reoffending among youth reentering the community following incarceration is a binary variable coded as no reconviction (0) or reconviction (1). The analysis sought to determine whether the independent variables of level of neighborhood risks, availability of jobs, schooling, and prosocial activities predicted whether a youth reoffends following reentry back into the community following a period of incarceration. A level of significance of 0.05 was used in the hypothesis testing.

First, the ratio of the valid cases to independent variables for logistic regression was investigated. The minimum ratio of valid cases (*n*) to independent variables for logistic regression should be 10 to 1, and the preferred ratio should be 20 to 1. The generated logistic regression model had 347 valid cases and 4 predictor variables (4 independent variables). The ratio of cases to the predictor variables was 86.75 to 1. The ratio satisfied the minimum requirement while also satisfying the preferred ratio of 20 to 1. Therefore, the logistic regression could be conducted since the minimum ratio of valid cases was satisfied.

The first model generated was a null model that did not include independent variables. This model was generated to create a baseline to compare predictor models. Table 3 summarizes the statistics for the equations of the variables not included in the null model. These were the independent variables of level of neighborhood risk (Score [1] = 0.07, *p* = 0.79), availability of jobs (Score [1] = 0.14, *p* = 0.71), availability of schooling (Score [1] = 1.25, *p* = 0.27), and availability of prosocial activities (Score [1] = 0.02, *p* = 0.88). The probability value of the overall statistics of the regression model, not including the four independent variables, was insignificant (Score [4] = 6.66, *p* = 0.16), implying that each of the four independent variables did not have any significant effect on the dependent variable when they were included in the null model.

Table 3. Variables Not in the Equation for Null Model

| | | | Score | df | Sig. |
|--------|--------------------|--------------------------------------|-------|----|------|
| Step 0 | Variables | Level of neighborhood risk | 0.07 | 1 | 0.79 |
| | | Availability of jobs | 0.14 | 1 | 0.71 |
| | | Availability of schooling | 1.25 | 1 | 0.27 |
| | | Availability of prosocial activities | 0.02 | 1 | 0.88 |
| | Overall statistics | | 6.66 | 4 | 0.16 |

The second model generated was the Block 1 logistic regression model and included the entry of the four independent variables: level of neighborhood risks, and availability of jobs, schooling, and prosocial activities. The purpose of the second model was to determine which among the four independent variables significantly influenced the dependent variable of rates of reoffending when included in the model. The results of the overall test for the second model including the control variables are summarized in Table 4. The chi-square test was conducted to test the model to determine the existence of a significant relationship between the independent variables and the dependent variable. The probability value of the chi-square test ($\chi^2 [4] = 6.72, p = 0.15$) was greater than 0.05, indicating that the model was insignificant. The results suggested that the overall effects of the four independent variables on the dependent variable were insignificant. That is, results failed to support any effect of the independent variable on the dependent variable.

Table 4. Omnibus Tests of Model Coefficients for Logistic Regression with Independent Variables

| | | Chi-square | df | Sig. |
|--------|-------|------------|----|------|
| Step 1 | Step | 6.72 | 4 | 0.15 |
| | Block | 6.72 | 4 | 0.15 |
| | Model | 6.72 | 4 | 0.15 |

Table 5 summarizes the accuracy rate for the controlled logistic regression involving the independent variables. The accuracy rate computed by SPSS was 58.5%. Therefore, only 58.5% of the influences of the independent variables on the dependent variable were captured in the model.

Table 5. *Classification Accuracy Rate for Controlled Logistic Regression with Independent Variables*

| | Observed | | Predicted | | |
|--------|--------------------|-----------------|-----------------|--------------|--------------------|
| | | | Reconviction | | Percentage Correct |
| | | | No Reconviction | Reconviction | |
| Step 1 | Reconviction | No Reconviction | 182 | 22 | 89.2 |
| | | Reconviction | 122 | 21 | 14.7 |
| | Overall percentage | | | | 58.5 |

Note. The cut value is .500

Table 6 summarizes the results of the significance of the logistic regression and the coefficients of the variables in the equation of the logistic regression. The analysis of this statistic determined the influence of the independent variables of level of neighborhood risks and availability of jobs, schooling, and prosocial activities on the dependent variable of rates of reoffending among youth reentering the community following incarceration. The coefficients, standard errors, Wald test statistic with associated degrees of freedom, and *p* values, as well as the exponentiated coefficient (also known as an odds ratio), are enumerated in Table 6. The relationship between the independent and the dependent variables is stronger when the deviation of the odds is farther from one (Cozby & Bates, 2011). A level of significance of 0.05 was used in the statistical testing. Statistical significance of the statistics would mean the rejection of Null Hypothesis 1, that there is no relationship between the level of neighborhood risks and the rates of reoffending among youth reentering the community following incarceration; Null Hypothesis 2_a, that there is no relationship between availability of jobs and rates of reoffending among youth returning to

the community; Null Hypothesis 2_b, that there is no relationship between availability of schooling and rates of reoffending among youth returning to the community; and Null Hypothesis 2_c, that there is no relationship

between availability of prosocial activities and rates of reoffending among youth returning to the community. This would then suggest that there was a statistically significant relationship between the independent variables and the dependent variable.

The results showed that the Wald statistic for the two independent variables of availability of schooling (Wald [1] = 5.35, *p* = 0.02) and availability of prosocial activities (Wald [1] = 4.70, *p* = 0.03) were significant. The results suggested that the availability of schooling and prosocial activities significantly influenced the dependent variable of rates of reoffending among youth reentering the community following incarceration, as the *p*-value was less than the level of significance value of 0.05. The results supported the rejection of Null Hypothesis 2_b, that there is no relationship between availability of schooling and rates of reoffending among youth returning to the community; and Null Hypothesis 2_c, that there is no relationship between availability of prosocial activities and rates of reoffending among youth returning to the community. On the other hand, the independent variable of level of neighborhood risk (Wald [1] = 5.35, *p* = 0.02)

was not significantly related to the rates of reoffending among youth returning to the community. With this result, the null hypothesis for research question one (there is no relationship between the level of neighborhood risks and the rates of reoffending among youth reentering the

Table 6. *Variables in the Equation for Controlled Logistic Regression with Independent Variables*

| | | B | SE | Wald | df | Sig. | Exp(B) |
|---------------------|---|-------|------|------|----|-------|--------|
| Step 1 ^a | Level of neighborhood risk | 0.01 | 0.01 | 0.42 | 1 | 0.52 | 1.01 |
| | Availability of jobs | 0.02 | 0.04 | 0.34 | 1 | 0.56 | 1.02 |
| | Availability of schooling | 0.07 | 0.03 | 5.35 | 1 | 0.02* | 1.07 |
| | Availability of prosocial social activities | -0.07 | 0.03 | 4.70 | 1 | 0.03* | 0.93 |
| | Constant | -0.45 | 0.27 | 2.87 | 1 | 0.09 | 0.64 |

Note. Variable(s) entered on Step 1: Level of Neighborhood Risk, Availability of Jobs, Availability of Schooling, Availability of Prosocial Activities.

*Significant at level of significance of 0.05.

community following incarceration), was not rejected. In addition, Null Hypotheses 2_a (there is no relationship between availability of schooling and rates of reoffending among youth returning to the community) was also not rejected.

The coefficient of the odds ratio statistic of Exp(B) of the significant independent variables of availability of schooling and prosocial activities were investigated to determine changes in the log odds of the dependent variable for a one-unit increase in the availability of schooling and prosocial activities. The Exp(B) coefficient for availability of schooling was 1.07, which implied that a one-unit increase in availability of schooling increased the odds for the youth to be reconvicted (versus not being reconvicted) by 0.01 or 1.0%. The Exp(B) coefficient for availability of prosocial activities was 0.93, which implied that a one-unit increase in availability of schooling decreased the odds for the youth to be reconvicted (versus not being reconvicted) by 0.07 or 7.0%. The significant finding meant that the youth had a higher probability of being reconvicted if there were higher availability of schooling, since the Exp(B) coefficient was a positive value, and lesser availability of prosocial activities, since the Exp(B) coefficient was a negative value.

SPSS computed the accuracy rate for the controlled logistic regression with independent variables as 58.5%. The third model tested the significance of the logistic regression and the coefficients of the variables in the equation of the logistic regression. Based on the Wald's statistic, availability of schooling (Wald [1] = 5.35, $p = 0.02$) and availability of prosocial activities (Wald [1] = 4.70, $p = 0.03$) were significant, meaning that both influenced the reoffending rate among youth entering the community after incarceration. However, the Wald's statistic failed to reject the null hypothesis of Research Question 1, or the level of neighborhood risk (Wald [1] = 5.35, $p = 0.02$). A null hypothesis for Research Question 2 was also not rejected, nor was the influence of availability of jobs on reoffending rates. Therefore,

the level of neighborhood risk and the availability of jobs do not influence reoffending rates.

The coefficient of the odds ratio statistic of Exp(B) of the significant independent variables of availability of schooling (1.07) and prosocial activities (0.93) implied that a one-unit increase in availability of schooling increased the odds for the youth to be reconvicted (versus not being reconvicted) by 0.01 or 1.0%, whereas a one-unit increase in availability of prosocial activities decreased the odds for the youth to be reconvicted (versus not being reconvicted) by 0.07 or 7.0%. The significant finding meant that the youth have higher probability of being reconvicted if there is higher availability of schooling due to a positive Exp(B) coefficient, and lesser availability of prosocial activities due to a negative Exp(B) coefficient.

Discussion

The findings of the study offer insight regarding how neighborhood risks and availability of resources such as jobs, schooling, and prosocial activities influenced the rate of reoffending by incarcerated youth in Massachusetts. The results show that the level of neighborhood risks do not affect recidivism, contrary to the findings of Anthony and colleagues (2010) that youth returning to an urban neighborhood face higher recidivism rates due to increased crime rates. Meanwhile, the availability of jobs do not have a significant effect on reoffending rates, which is consistent with the general observation that employment is not a factor in recidivism. On the other hand, the availability of schooling increases the likelihood that juveniles would commit a crime during the integration period. Conversely, the presence of prosocial activities decreases the chances that juveniles reoffend. These results reveal the stark reality that the kind of community that is sought for the reintegration of juveniles affects whether a juvenile will be reconvicted, similar to theories and studies in current literature (Abrams & Freisthler, 2010; Abrams & Snyder, 2010). Decreasing the recidivism rate benefits

the youth, because young people who have been sentenced to adult correctional facilities face a higher chance of physical and sexual assault while in prison as well as increasing recidivism rates (Carmichael, 2010).

Reintegrating juvenile delinquents back into educational institutions poses numerous challenges, as noted by current research. Some of these problems may help explain the inverse relationship between the option of schooling and the chances of reoffending. Sedlak and Bruce (2010) and Abrams and Synder (2010) blamed educational neglect, learning disabilities, and poor school records as the culprits for an unsuccessful reintegration. The 1992 Juvenile Justice Delinquency Prevention Act mandated that detained juveniles should receive proper educational opportunities, but 75% of facilities housing juveniles violated regulations that offer educational opportunities to these individuals (Braithwaite et al., 2010). One such program was the Individualized Education Program (IEP), which sought to address academic needs of youth while incarcerated. However, it was argued that the proper transfer process may not have been communicated to the juveniles upon release. It was possible that at the onset, the juveniles did receive adequate education to enable them to keep up with their peers who were not incarcerated. However, the juveniles may not have received the appropriate support during their incarceration, making it difficult for them to transition back into the educational system.

It was also possible that the juveniles did receive education, but it was not on par with the quality of education their peers received. The confines of the prison cell would also make it difficult for these juveniles to grow maturely without proper guidance, thus making it hard for them to have the emotional stability to deal with the challenges of the educational system outside the cell. In fact, Hatcher, Maschi, Rosato, and Schwalbe (2008) discovered that youth with serious emotional disturbance represent around 5% of a school population, making it difficult for the educational system to coordinate educational

services with youth involved with the juvenile justice system.

The juveniles may also be discriminated against when trying to reintegrate with schools. Previously incarcerated youth would bear the stigma of being potential criminals and are thought to be more educationally deficient than other youth. This educational deficiency among detained youth may significantly affect delinquent behavior. Theriot (2009) offered a recommendation on how to address this concern through increased scrutiny of special education services offered through juvenile detention facilities.

Another challenge that these youth face in reintegration with the educational system stems from the schools themselves. As explained by Goldkind (2011), since these youth are generally sent back to the same educational institutions they attended before incarceration, the schools may be apprehensive about reenrolling students who have returned from mandated placements. However, there is some merit in why schools may not consider the reenrollment of these students: Negative experiences from reenrolling students, ensuring the safety of current students, and the educational gap between the two groups may negatively hurt the school's performance (Goldkind, 2011).

Given this analysis, current educational leadership should evaluate the kind of school environment that juvenile delinquents are placed back into. Since the results of this study show that going back to school increases the likelihood that a youth will reoffend, the school environment may not be conducive to helping previously incarcerated youth to get back on the right track. Therefore, it is up to educational leadership to help create a school environment that is both accepting and supportive of these youth to bridge the educational gap and to aid these students in maturing as individuals. These environments are extremely important for juveniles who have been diagnosed with mental health

disorders. The literature shows that a majority of youth in detention centers have mental health issues (Grande et al., 2012). Hence, providing mental health treatment to these juveniles would increase the chances of a smoother transition back to the educational system.

An offshoot of the hardships in integrating back into the educational system is that roughly 20% of youth who have been detained do not earn their GED or high school diploma (Osgood, Foster, & Courtney, 2010). The lack of this arguably basic requirement for employment makes the job opportunities available for these individuals very dim. Fewer job prospects may increase the likelihood of committing crime to meet basic costs of living. Despite this theory, the availability of jobs did not have a significant impact on the recidivism rates of these youth. This is particularly interesting, because this finding goes against the argument that unemployment would push people to a life of crime. A possible explanation is that having a job is not one of the goals of these youth, since they know they need to finish their education first before thinking about getting a job. Alternatively, perhaps they do not bother to look for a job because the majority of employers hire more skilled and formally educated peers. Abrams and Snyder (2010) theorized that youth with minimal work skills and little prior work history have trouble obtaining employment. In addition, as with the dilemma that schools face in reenrolling delinquents, employers may be apprehensive in hiring previously detained youth, which could add to the apathy of these youth regarding employment. Legal barriers are also present that prohibit the employment of ex-offenders. For example, a majority of U.S. states also allow employers the full right to deny employment to applicants who have a criminal record (Spjeldnes & Goodkind, 2009). This scenario poses a challenge for educators to put more focus on employment alongside education and social support services, as mentioned by Harder and colleagues (2011). In addition, youth experience a more successful transition when education is linked with community-based social

service agencies other than mental health services or parole (Harder et al., 2011).

Prosocial activities were shown to decrease the likelihood of reoffending among youth. This finding is similar to current studies that argue that programs are successful when they prevent youth from engaging in delinquent behavior (David-Ferdon & Simon, 2012; Greenwood, 2008). These examples include community-based programs; school-based programs; home-visiting programs that focus on engagement, establishment, and maintenance of new patterns of family behavior; treatment of youth with serious clinical problems; collaborative planning; and problem solving. These types of programs engage youth with the community that they are trying to integrate with and make them feel part of the community. Programs such as functional family therapy, multisystemic therapy, and school violence prevention and maintenance programs have been found to be successful in decreasing criminal behavior by improving family functioning and decreasing the association with deviant peers, thereby creating positive outcomes for juvenile offenders. Positive relationships between students and their peers, teachers, and families can be critical assets in promoting youth's well-being and preventing school violence. For instance, many school-based violence prevention programs improve the student body's social skills and problem-solving abilities, which can result in more positive peer and student-teacher relationships throughout the school. Some school-based programs also help students know how to appropriately and safely intervene to stop an escalating violent episode between peers (David-Ferdon & Simon, 2012; Greenwood, 2008; Henggeler & Schoenwald, 2011). These programs may also be applied to the juveniles from Massachusetts described in this study. However, it should be noted that programs that focused on the individual offender have not been successful (Greenwood, 2008), perhaps because they do not offer the necessary social stimulation for youth to interact with individuals from their neighborhood.

In relation to the theoretical construct, the findings support the idea of Abrams and Snyder (2010) that neighborhoods with high levels of cohesion and community assets can decrease individual risks with regard to delinquency and youth violence. This study only investigated the effects of availability of jobs, schooling, and pro-social activities as neighborhood risks. However, these factors are far from the only ones that should be considered when assessing the quality of the neighborhood that a juvenile should be introduced to after incarceration. Such factors as noted in the literature include density of off-premise alcohol outlets and level of community violence (Abrams & Freisthler, 2010; Anthony et al., 2010).

Limitations of the Study

Several study limitations should be noted. The first limitation regards the applicability of the results. Since the study only considered data from Massachusetts, results cannot be generalized to a greater population, especially for those with different racial or ethnic compositions. The results of the study will only be generalizable to the population group of incarcerated youth within the Commonwealth of Massachusetts.

The second limitation was on the accuracy of ZIP Codes in identifying the immediate neighborhood of the offender. It was possible that the participants have already transferred to another ZIP Code without even knowing or identifying the proper authorities of the transfer. It is assumed that all data received were accurate; the researcher was not the one who collected the data personally from the samples, but the data were obtained using secondary data collection. Using a cross-sectional design also presented a limitation for the study. Cross-sectional research is commonly used to collect self-reported data from a particular group or population at the same time or within close proximity (Cozby & Bates, 2011). However, the data examined were from one period, not a longitudinal examination; therefore, it was not possible to evaluate

potential trends or changes due to the fluctuating availability of programs. The third limitation was on the amount of available resources. Since the data obtained would be from the social service directory for each study area, the data might not capture all the available resources for the area. It was assumed that all data obtained from the social service directory were complete and accurate, given that the researcher was not the one who originally collected the data.

Another limitation is that this study only considered youth who had been reconvicted of new crimes, rather than those youth who returned to detention centers for technical violations. This caused the actual recidivism rate to be lower and thus limits the applicability of this study's results. Similarly, the usual criteria for a recidivism study is a minimum of 2 years post-release. Since this study only looked at 1 year post-release, this might affect the reliability of the results.

Lastly, the reconviction rate found in this study is likely lower due to some youth aging out of the DYS system and therefore not being accounted for during the year of follow-up.

Implications

The results of this study offer insight into the issue of reoffending youth and support further exploration of issues that potentially affect the reoffending rates of juveniles who have been released from incarceration. This study also suggests that educators improve the quality of the schools in which the returning juveniles are placed. This would address the problem of increasing reoffending rates among youth due to unavailability of adequate schooling.

It is also recommended that educators and law enforcement consider placing these students in a special learning community that educates, guides, and supports them without the confinement of a detention center. This would allow a more personalized and collaborative exchange between youth and their teachers, amplifying the likelihood that youth would relate to positive role

models. To facilitate a better transition process, educators should endeavor to have a more freely flowing exchange of information and communication between schools and detention centers. This would alleviate the challenges related to processing the academic records of the juvenile delinquent. An example would be a dedicated cell-to-classroom coordinator (CCC) who focuses on a seamless handling of educational system reintroductions. The CCC would be tasked with gathering educational data about the youth and matching the youth's skills and competence to the right grade level.

Since the results showed that neighborhood schooling and prosocial activities available were significantly related to the rates of reoffending among youth reentering the community following incarceration, policies should be considered that increase the number of available adequate schools and the number of prosocial activities. Although some of this may fall within the purview of educators and law enforcement, there is a responsibility of legislators to further explore, enact, and fund such policies as well as lower recidivism rates to benefit society as a whole. Safer communities may result, and tax burdens may actually be alleviated by a lesser need to house, rehabilitate, and reintroduce former delinquents back into society.

Recommendations

The scope and limitations of the study have been focused on youth returning to their neighborhoods following incarceration in Massachusetts. Given that this study is a preliminary exploration, it would be insightful for future researchers to widen the scope of the study, analyze individuals from other states, or change the composition of the participant groups to contribute to knowledge on the factors that influence youth to become reoffenders. As a result, the researchers would like to recommend the following activities.

Building on the theoretical construct of this study, it would be important to understand the


neighborhoods of juveniles in other states, since it is highly likely that there are significant differences among the various state environments. The analysis may also be extended to include how demographics coupled with neighborhood resources play a role in discouraging reoffending. This would allow a better allocation of resources toward programs that would suit a juvenile in a specific kind of neighborhood.

Another recommendation is to gather firsthand information from reoffenders on the factors that led them to incarceration after being reintroduced to their communities. Such a study would offer excellent insights into why juveniles are led to reoffend. Particular focus should be given on the quality of the neighborhood that the juvenile is put into, to further solidify or refute the results of the present study.

A final recommendation is to consider analyzing other factors related to neighborhood risks and their influence on the likelihood to reoffend. The study presented supplementary empirical research on the introductory understanding of neighborhood risks and juvenile delinquent reintegration. The seminal work done by Abrams and Freisthler (2010) already gave several examples of other possible factors. Further research is recommended to determine other neighborhood risks that may derail a successful reintegration process.

Conclusion

The results of the study support the finding that juvenile delinquents who have been released from incarceration in Massachusetts are more likely to reoffend due to issues related to availability of schooling, and less likely to reoffend due to availability of prosocial activities. These findings conclude that specific neighborhood risks are vital to the understanding of youth recidivism rates. A successful reintegration of youth poses numerous benefits to the individual and to society. Therefore, people in positions of influence over juvenile delinquents and the policies that guide them should consider developing and



enforcing policies that increase the number of youth-centered prosocial activities in the community. Future research is recommended to examine a larger group within different geographic boundaries, include qualitative data analysis, and consider studying other neighborhood risk factors.

About the Authors

Lori A. Demeter, PhD, has taught over 50 courses (both traditional and online) in criminal justice, organizational behavior, public policy, and public administration. With nearly 20 years of experience working in all levels of government, she enjoys


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Girls Leaving Detention: Perceptions of Transition to Home After Incarceration

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Abstract

Young women exiting juvenile justice agencies may confront myriad challenges when returning to their home. Transition to home skills learned and goals established during detention may be difficult to maintain in a home environment. Support persons, resources, and personal strengths may foster a successful transition to home. These qualities, and the perceptions of young women in juvenile detention, are not known for the population of young women exiting a local juvenile justice facility. This qualitative research study determined girls' perceptions of the challenges, supports, resources, and skills that will support their success. Four focus groups of 28 young women provided rich data about their perceptions of the supports and challenges that may confront them on discharge from a detention facility. Individual, family, and community supports and challenges were identified in the study data and template analysis; using the focus group question guide allowed for the extrapolation of the most significant factors associated with successful transition to home or recidivism and return to detention. Thematic analysis determined success and challenge themes as they emerged during data analysis.

Key support themes included: *Keeping busy with positive activities, Having a support person or network, Setting goals for yourself, and Developing and maintaining a positive self-image.* Challenge themes addressed: *Feeling depressed and other behavioral issues, Having an unstable family, Living in an unstable community, and Succumbing to peer pressure.* Exemplar quotes provide the foundation for future recommendations. These findings may inform policies and programming designed to foster transition to home success in young women exiting juvenile detention.

Introduction

The release of youth from juvenile detention centers to the community and facilitation of their successful transition to home represent some of the most significant challenges confronting the juvenile justice system. About 100,000 youth are released from incarceration each year (Abrams, Mizel, Nguyen, & Shlonsky, 2014), and many recidivate in the first year after release (Abrams, Shannon, & Sangalang, 2008; Trulson, Marquart, Mullings, & Caeti, 2005). More young women are being incarcerated than ever before, making gender-specific, evidence-based practices to foster the healthy rehabilitation of young

women imperative (Cooney, Small, & O'Connor, 2008; Goodkind, 2005; Hubbard & Matthews, 2008; Watson & Edelman, 2012). Gender-specific services, or those tailored to the unique needs of women, include such components as female-oriented reproductive and general health care; female hygiene resources; female supervisors and counselors; and recognition of those issues that require increased attention with girls, including specialized mental health resources, family counseling, and trauma-informed services (Goodkind, 2005; Schaffner, 2006). These resources are warranted, because young women transitioning from incarceration to the community may encounter unique circumstances, including pregnancy and parenting, sexual abuse and trauma, family or interpersonal conflicts, and mental health issues (Cooney et al., 2008; Fields & Abrams, 2010; Schaffner, 2006).

Gender-specific service initiatives may be augmented with the knowledge of the challenges and supports perceived by young women to decrease recidivism, thereby enhancing the success of young women discharged from juvenile detention facilities. Yet few studies capture these perspectives. Much of the available research pertains to factors predisposing young people to recidivism, future confrontations with the justice system after release from incarceration, or programs designed to prevent recidivism, rather than youth perceptions of their reentry needs (Abrams, 2010, 2014; Abrams & Snyder, 2010; Abrams et al., 2008, 2014; Fields & Abrams, 2010). The current study fills this gap in the literature by exploring the insights of young women who are or who have recently been incarcerated as they plan for their transition to home. These perceptions may inform policies and programs designed to support successful re-entry.

Review of the Literature

It is estimated that between 50% to 85% of youth detained in out-of-home settings are rearrested and detained again, many related to technical issues of probation or status offenses (Nelson,

Jolivet, Leone, & Mathur, 2010; Shepherd, Green, & Omobien, 2005; Trulson et al., 2005). The reasons behind this high rate of rearrests are thought to include mental health disorders that are unaddressed in the community, low levels of cognitive or self-care functioning, lack of vocational training to ensure re-entry to the workforce, substance abuse, and unaddressed learning disabilities that challenge re-entry to school. In addition, returning to an environment that does not foster abidance to laws and policies and a lack of safety-net services or communication with schools and/or community agencies poses a challenge. Furthermore, other circumstances that contribute to the high rate of recidivism include a shorter length of incarceration, which results in less time to make a significant difference in behaviors; a lack of transition from juvenile justice to child welfare systems; and poor quality of social services received during incarceration to foster success when transitioning (Abrams & Snyder, 2010; Bullis & Yovanoff, 2002; Calley, 2012; Clark & Unruh, 2010; Fields & Abrams, 2010; Gagnon & Barber, 2010; Mathur & Schoenfeld, 2010; Nelson et al., 2010; Shepherd et al., 2005). In addition to a return to incarceration, the other sequelae must be appreciated, including continued criminal and violent behaviors, lack of a productive workforce, financial dependency on public subsidies, entry into the adult justice system, and the ongoing financial burdens incurred by the court and prison systems (Chauhan & Reppucci, 2009; Colman, Mitchell-Herzfeld, Kim, & Shady, 2010; Fields & Abrams, 2010).

Several factors are associated with positive transition of youth to the community and reentry to society following incarceration. These include school engagement, active employment in a self-sustaining job, a personal sense of determination, family support, and safe and stable housing (Abrams & Snyder, 2010; Bullis & Yovanoff, 2002; Fields and Abrams, 2010; Shepherd et al., 2005). In addition, work and education re-entry programs, mentoring and adult role models, and social services, including mental health care,

were identified as vital for successful transition to the community (Abrams, 2014; Abrams et al., 2008; Anthony et al., 2010; Bullis & Yovanoff, 2002; Ruffolo, Sarri, & Goodkind, 2004; Schaffner, 2006).

Theoretical Framework

This research is based on Sanford's Challenge and Support Theory. The premise of this theory is that individuals who have a balance of supports and challenges will grow and flourish. Supports and challenges may come from the individual themselves, their family, or their community, including friends, neighborhood, or societal influences. Under the dictums of this theory, individuals who receive too many supports and too few challenges become comfortable and complacent and are not stimulated toward growth and change; too many challenges confronting an individual may result in anxiety, defeatism, withdrawal, and lack of success (Sanford, 1966).

Sanford's theory clearly applies as we explore young women's perceptions of the individual, family, and community supports and challenges they face as they transition to home after their incarceration. This theory also has great meaning for potential interventions by focusing on each individual's potential for growth and his or her ability to be supported by family and community, and in reducing and dealing with the social challenges confronted by individuals, families, and communities in environments characterized by poverty, disadvantage, and crisis.

Methods

Participants, Recruitment and Setting

This descriptive, qualitative study was designed to gather young women's perceptions about transitioning to home after incarceration. Focus groups presented rich perspectives about these variables. Permission to conduct focus groups at the facility and approval by the academic Institutional Review Board, including review by a prison advocate, was obtained. A recruitment

flyer informed the young women of the study, and the assent/consent and permission forms were given to the activities coordinator, who obtained permission from the young women's parents or guardians.

This study was conducted at a Level-IV locked residential juvenile-detention facility for girls in a mid-Atlantic state. This agency offers school instruction, vocational and hobby training, special programming, mental health services, and supportive care for up to 12 girls at a time. The young women at the facility are generally ages 12 to 18; the young women who turn 18 during their detention may finish out their sentence in the juvenile facility. According to agency personnel, most of the residents had repeated histories with Family Court for status offenses, including running away, violating probation, or simple assault. Others incurred weapons, drugs, or other charges. The facility provided a quiet, private program room in which to conduct the focus groups.

The purposive, convenience sample represented the population of young women who are detained in a juvenile justice setting. The four focus groups included a total of 28 young women, ranging from ages 13 to 20, with a mean age of 16.6. Nineteen women reported their race black, 7 white, and 2 of mixed racial background; the question on ethnicity yielded 25 of Caucasian and 3 of Hispanic origin. Three focus groups were conducted with residents of the detention facility, and another was held with 5 young women participating in a reunion meeting 6 months after their discharge from the facility. While the focus groups with current residents presented the perspectives of a future release from detention, the reunion group shared their thoughts and experiences during the early period after release. The focus groups took place over 8 months to accommodate for the typical 3-month duration of stay and ensure that new subjects were available for participation.

Focus Group Guide and Protocol

The focus group guide was designed to measure the study variables of personal strength, supports, resources, and challenges young women in the juvenile justice system confront as they transition to home. The original focus group interview guide was based on the literature review, the challenges and supports theoretical framework (Sanford, 1966), and expertise on issues related to young women in detention. Questions included lessons learned while in detention, people who may prove to assist or hinder their success in the transition to home, goals for re-entry, thoughts on potential return to detention, and decision-making skills that may contribute to their success or difficulty in returning to their home environment. The original focus group interview guide was field tested with 3 young women from another youth program. The field-test participants recommended some changes in wording and length of the instrument. The interview guide was then shortened, with questions clustered around key areas.

Focus groups, led by the authors of this study, were scheduled during the evening activities time and—for the lone group of young women who were recently released—during their reunion meeting. Young women 18 and older completed the consent form, while those ages 12 to 17 completed the assent form. The focus group leaders introduced themselves and reviewed the purpose of the study and basic ground rules of the focus groups. The young women received small gift incentives, and the interviews ranged from 45 to 80 minutes, with a mean of 65 minutes.

Data Management and Analysis

The focus groups were audiotaped, transcribed verbatim, and checked for accuracy by the investigators. Observational notes were transcribed and merged with transcripts to ensure that this process was capturing the intentions and rich shared meanings of the participants. Data were analyzed for themes, as guided by the theoretical framework, in an iterative process. Data were coded,

as they reflected selected themes and exemplar quotes identified as they represented key themes. These emergent themes were member checked with young women at the detention setting to ensure authenticity of findings and interpretations. The authors compared notes, transcriptions, themes, and the paper audit trail to ensure credibility and transferability of the interpretations.

Results

Template analysis revealed selected perceptions of individual, family, and community factors associated with transition to home following detention. These, in turn, were categorized according to the young women's perceptions of these factors as supports and challenges. First, the individual, family and community supports will be addressed.

Supports

Individual. The young women identified several support factors that drew upon their personal strengths, goals, and potential. One aspect was their need to focus on themselves and their own needs, being careful to avoid distraction by the behavior or actions of others, especially those with whom they had previously been associated. They spoke of the need to *"learn from the past," "to stay focused,"* and *"be a leader instead of a follower."* One participant said, *"it's not my environment or my friends . . . it's me."* The situation that led up to detention was perceived as a *"wake-up call,"* wherein one young woman reported, *"It made me realize that I have to grow up"* and another stated, *"I chose not to listen before, now I need to listen."* The young women were quick to point out that they needed to learn to have the personal control to manage their anger and remain drug free, use healthy coping mechanisms, maintain a positive mindset, and respect themselves.

The young women articulated their need to address bad habits, focus on future goals, and relearn how to function with a clear mind and a sense of purpose: *"we learned how to get our life*

in order.” One young women shared the insight: *“we have a better understanding of our actions . . . positive behaviors can become habits.”* Methods to achieve these positive behavior changes included writing in journals, *“keeping busy,”* having a structured day filled with activities, *“walking away”* from confrontation, and relying on lessons learned during detention to inform future behavior. Controlling anger, healthy communication, and delaying gratification were additional lessons cited by this sample. Learning to get along with others in the group setting was identified as a means to learn important skills, which would benefit them in their post-detention period, including learning to appreciate *“different personalities . . . different lifestyles . . . we got it all here.”* One woman stated: *“Here, we take off our masks and see who we really are . . . my purpose of being here is to blossom into something beautiful.”*

Family. Young mothers mentioned their children and the need to be good parents as key motivators in their quest to be successful in the community. Many of the young women were pregnant or were mothers, and they spoke of their need to pursue their goals to provide financially for their children. Mothers also discussed their need to engage in more prosocial behaviors: *“My child . . . I be thinking of her before I start swinging . . . she’s the reason I calmed down,”* and *“I’m different now. I have to do it because of him, not myself.”*

Young women identified key family members and others close to them who offered support and inspiration as they endeavored to be successful in their lives. The young women indicated that the staff at the agency were *“like family”* and gave them high levels of support as they learned important lessons and sought out guidance. One young woman said, *“they motivate you and give you a lot of encouragement . . . encourage you that you can do it.”*

Members of our sample indicated that women served key roles in their lives. Mothers, grandmothers, aunts, and sisters were most often cited as both positive resources and role models. Some

of the young women stated, *“I wanna show my mom that I’m sorry for putting her through . . . I wanna show her I can be who I know I can be . . . I just wanna gain all that love back,”* and *“My mom can’t help me make good decisions . . . she can tell me but she can’t help me. It’s me. Only thing she can do is support me and tell me what’s right or wrong.”*

Less often noted were the men in the lives of these young women, only a few naming fathers, boyfriends, or husbands as positive forces in their lives (one participant in the reunion group was married). *“Clean friends”* and peers were also mentioned, but the participants were quick to note that it was difficult to discern between positive friends and those friends who posed challenges to their success upon leaving detention. The sample members noted that their positive behaviors *“might help change”* the behaviors of their friends; some mentioned the power of positive peer pressure, with one stating, *“I need someone my age, pushing me forward.”*

Community. The community resources that fostered the attainment of goals and helped participants to *“stay busy”* were noted. School and the need for a high school diploma to be successful were most often cited as keys to future success. One woman said, *“we NEED an education . . . we better get an education!”* The young women also discussed the challenges of going back to school and the assets of alternative education programs from which to receive their diplomas. They relayed the importance of high school graduation and the role that it served in allowing them to pursue a secondary education, join the military, become self-sustaining, or avoid negative pressures. Although money was discussed, their motivation for an education appeared to lie more in the ability for education to transform their lives and set them on a path of achievement. School also offered other diversional activities, such as cheerleading, sports, clubs, and organized activities, like yoga and Zumba, which were correlated with staying busy and focused on constructive experiences. As the young women said, *“I’m*

gonna be too busy to do anything bad” and “doing positive things you find positive friends.”

The ability of the community to offer work training, transportation, and meaningful jobs was also cited. The young women echoed each other as they described their need to work and to feel good about their jobs; the role working played in keeping them busy and out of trouble; and the ability for work to help them earn legitimate funds to support themselves and, in some cases, their children. They spoke of the money needed to *“have their own space”* and to live independently. Following 3 to 6 months of communal living, the girls expressed a desire for privacy, ownership, and autonomy. They noted that education and work would enable them to have this space, and they discussed the importance of personal ownership and self-sustainability.

Two women cited their faith, religion, church, or spirituality as sources of support. One woman attending the reunion focus group discussed the lessons she learned by reading the Bible and attending services, and how that supported her successes after leaving detention: *“I am very into Christ now, very into God . . . with God I have a partner and a life-long friend.”* Another replied, *“you can pray to God but you always have a consequence for what you did. You just gotta learn from it.”*

Challenges

The individual, family, and community domains gave a context for viewing the challenges associated with transition to home following detention. The challenges in each domain are presented here.

Individual. The young women were quick to relay the personal traits that contributed to their incarceration and those that would challenge their success transitioning to home. Most often mentioned was the use of and addiction to drugs, which clouded their judgment, encouraged other illicit behaviors, attracted other negative forces in their lives, and fostered criminal behavior. Use of substances including marijuana, alcohol,

and other drugs were noted, with the sample members adding, *“smoking, it changes your whole demeanor,” “I get high and go to the mall and I fight a lot,”* and *“all we did was get high and run away.”*

The women stated that going home to the same friends and neighborhoods would require the utmost in personal strength and offer significant temptation as they struggled to achieve success. The sample noted that dealing with mental health issues, such as depression, anger, and other emotions, and substance use would require a high level of self-respect, will power, and self-control. They discussed the need to control fighting behaviors, say no to friends engaging in negative thoughts and behaviors, deal with potential peer pressure, avoid interpersonal conflict, and break *“old habits”* to achieve their goals. Having the personal strength to deal with potentially inevitable issues, such as unemployment, the debt incurred because of the incarceration, the challenges of staying in school, and a current pregnancy and childbearing were cited as the young women spoke of going home and being successful. Learning to manage emotions, deal with issues of pride and ego, communicate assertively rather than aggressively, and respect authority and elders were all important, albeit challenging, aspects of their lives after detention. Participants recalled: *“I was rude. . . . I felt like the world owed me everything,” “I didn’t use my brain and think about the consequences,”* and *“I had an ‘I don’t care’ attitude.”*

Several of the girls noted that being a minor and lacking many options as far as work and living situations posed problems for them. Others acknowledged that turning or being 18 meant that any continued criminal activity would be addressed in adult courts, offering a whole new layer of complexity, sanctions, and rigor. Pregnancy added complexity to already stressed lives. Young mothers shared their concerns: *“I mean it’s different when you get pregnant, I mean, it’s hard,” “I wish I waited,”* and *“I can’t do things now that I have my daughter.”*

Family. The discussions related to the challenges offered by family members were often the most intense and passionate. Young women discussed homes characterized by abuse, domestic violence, and substance abuse and recognized the inability for families to offer the support needed during their adolescent years. Participants declared, *"my home is not one to go home to"* and *"we have a crazy family."* They talked about violence in their homes, lack of adequate financial resources, use of drugs, and unstable relationships as contributing to their personal behavior, and they discussed the dearth of role models within their home environments. Mothers, fathers, and siblings were cited in these lists of negative forces within their family. One woman said, *"I am always worried about my house, they need to be worried about how they live."* Another added, *"sometimes you need to let go of the family you love to make it in life. . . . You can't help people who don't want help."* Others discussed a general disorganization or lack of structure in their home that did not reinforce succeeding at school, positive behaviors, or staying away from drugs and violence.

Several young women discussed that their "friendship" with their mothers, either due to parenting style or closeness in age, made discipline and limit-setting difficult. One participant stated, *"my mom wasn't there for me . . . she was more a friend than a mom."* Participants often cited the negative influences of their boyfriends. Although they recognized their own role in criminal behavior, most saw boyfriends as instigators of crime, fighting, and drug use. Few were able to cite a positive intimate relationship that would support their transition to home, although the married woman considered her husband an asset as she strived to be successful at home.

Community. Neighborhood poverty, crime, and drug use were cited as significant challenges as the young women contemplated transition to home. Negative influences of friends and their instigation or perpetuation of fighting, drug use, smoking, violence, and crime were frequently mentioned and posed challenges to the young

women. One participant remarked, *"I don't think about the consequences when I am doing something, I just do it. You do what your friends do."* Another added, *"you can have friends, but you gotta figure out which ones are your good friends and which are your bad friends."* The sample members discussed their concerns that friends they had prior to incarceration may tempt them back to negative behaviors out of resentment for the young women's new positive behaviors and may threaten to disavow them as a way to coerce them to return to negative behaviors. Some sample members said that negative friends would not accept their new positive behaviors and would meet their new identities with scorn and ridicule. One participant noted, *"they are negative, they're gonna be hating our positive stuff and not congratulating us on our program . . . they'll be hating it."* Another sample member said, *"Peer pressure is the greatest challenge . . . not everybody else is controlling their anger."* They spoke of the dilemma of wanting to have friends but needing to ensure that they did not slip back and take on the behaviors that resulted in their incarceration. One woman stated, *"When people bring you down, it's because they are down and they need someone else with them."* The participants noted the need to change their peer group following transition to home in order to ensure transition success: *"Sometimes we gotta change up people."* These observations reflected the need for personal improvement, but participants expressed concern about their ability to bring about such life changes.

The participants spoke of *"drug infested neighborhoods"* and *"bad environments"* in which they were *"trapped"* and unable to leave. One participant revealed, *"I can't change where I live,"* reinforcing the marginalization by teens who do not have housing options. In contrast, adults may have had some level of choice about their residence. The sample realized the importance of education, and the prospect of impoverished communities lacking educational resources, reinforcing that *"nowadays, without an education, you ain't going*

nowhere . . . so we need good schools and we better take education serious or be on the streets where you got nothing.”

Discussion

In this discussion, thematic analysis allowed for the extraction of themes representing the supports and challenges perceived by the young women related to their transition to home after detention. The themes synthesize the individual, family, and community domains and focus on the major supports and challenges as they emerged from the data. These themes were compared and contrasted with the literature to create the foundation for best practices and program implications.

Support Themes

The most prevalent and resounding support theme from the young women was *Keeping Busy with Positive Activities*. One woman echoed her grandmother’s advice: *“Idle hands are the devil’s workshop.”* The sample reinforced the need for activities that are meaningful, goal driven, and rewarded. The sample members emphasized that *“I need a job to keep me out of trouble,”* and *“I need something planned for me every day.”* Similarly, Anthony and colleagues (2010) discussed the need for immediate reengagement in school or work, with the least amount of disruption, to ensure success in community reentry.

Our sample cited the people in their lives who may support their success, leading to the second theme: *Having a Support Person or Network*. Sample members stated, *“My family is there for me . . . all those friends that wanted me to do all that stuff didn’t come visit me at all,”* *“My mom—she’ll do anything for me,”* and *“I need to stay focused . . . I have my daughter to think of.”* Although these networks may offer the supports needed to balance out the challenges encountered during re-entry, the young women in our sample did not say they believed that other adults outside their family served as key support persons following their incarceration. Notably omitted were

teachers, clergy, youth advocates, role models, or other adults in their community who would help them post detention.

Several researchers have explored the role of social and family networks in transition to home. Adult mentoring support and positive peer influences of formerly incarcerated youth were noted by Anthony and colleagues (2010) to be key components of successful adaptation to the community. Martinez and Abrams (2013) studied the informal supports, as in peers, extended family members, and individuals in the neighborhood, and conjectured that these forces were critical in reducing rates of recidivism.

Setting Goals for Yourself and *Developing and Maintaining a Positive Self-Image* were identified as support themes by this sample. The young women named a range of goals: *“I’m breaking the chain in my family,”* *“I’m going in the military, having my own place, and staying out of trouble,”* and *“I plan on finishing school and walk[ing] down the aisle.”* Researchers discussed the need for this individual-based reflection to ensure behavior change, to avoid resorting to old behaviors that led to incarceration, to instill hope, and to have the confidence to reenter the community despite significant obstacles (Abrams & Aquilar, 2005; Anthony et al., 2010). Positive self-images were reflected in a range of statements: *“One day you realize you get more respect by just being you”* and *“We need to not care about our friends and their bad advice . . . that’s where self-esteem comes in . . . you need to make sure you don’t go down with them.”* The power of a positive self-concept, which affords the individual the strength to bring about positive personal change, rise above current circumstances, and face significant temptation in her environment, was found by Abrams and Aquilar (2005) to be paramount to transition to success.

Challenge Themes

The first challenge theme, *Feeling Depressed and Other Behavioral Issues*, was reflected in various statements: *“I need to fight my addiction,”* *“I used*

to sleep all the time . . . I was just sad,” and “when I get mad . . . I can’t control it.” Researchers have demonstrated that young people in the juvenile justice system, and specifically girls, have complex histories including emotional and behavioral disorders, learning disabilities, mental health issues, sexual abuse and trauma, child abuse and maltreatment, consequences of high-risk sexual and other behaviors, and complex family contexts (Calley, 2012; Chamberlain & Moore, 2002; Ruffolo et al. 2004; Yampolskaya & Chuang, 2012). Resources indicated that 65% to 70% of girls who are incarcerated have mental health disorders, with varying percentages of those receiving treatment (Anthony et al., 2010; Yazzie, 2011). These factors were cited as significant challenges by our sample as they identified issues related to managing stress, handling their emotions, and working with others.

Studies also highlighted the environmental and community factors that predispose young people to incarceration including poverty, community disadvantage, family and social network dysfunction, and community violence (Chauhan & Reppucci, 2009; Herrman & Silverstein, 2012; Nelson et al., 2010). These support our identification of challenge themes associated with *Having an Unstable Family* and *Living in an Unstable Community*. Study participants said, “I feel like when I go home, I have nothing to go home to” and “Going back to the community is a challenge in itself.” Researchers have substantiated the impact of troubled families on youth attempting to make positive change in their lives following incarceration (Abrams & Aquilar, 2005; Anthony et al., 2010). In fact, Abrams and Snyder (2010) contended that negative social environments with suboptimal schools, social disorganization, little social cohesion, and poor community assets transcend individual strategies for behavior change. Without real community change, individual interventions are rendered ineffective (Abrams & Snyder, 2010).

Finally, *Succumbing to Peer Pressure*, a key theme in our study, was noted in the literature as

representing a powerful influence on community reentry. Participants said, “I want to fit in so much,” “Everybody that I was doing what I was doing with is gone . . . either they are dead or in jail,” and “My friends . . . they all smoke and drink . . . and get in trouble.” In a qualitative study with male youth who faced transition to home after incarceration, Abrams (2014) noted that facing friends and the potential for regression to previous patterns of behavior were the greatest challenges associated with community reentry. Researchers identified the need for teens to differentiate “good” and “bad” friends, or selective involvement with friends to ensure success following incarceration (Abrams, 2014; Abrams & Aquilar, 2005; Martinez & Abrams, 2013). Several resources cited mentoring as an important strategy to promote positive guidance, reinforce character strength in dealing with peer pressure, and offer role modeling of prosocial behaviors (Abrams, 2014; Abrams et al., 2008, 2014).

Recommendations

Best practices related to release to home after incarceration may be informed by the perceptions of women facing this transition. Two states, Illinois and Missouri, developed best practices for detention that have reduced recidivism in their states (Annie E. Casey Foundation, 2010; Illinois Juvenile Justice Commission, 2011). These strategies may be framed within the contexts of the perceptions gleaned in this study. In general, best practices for transition to home begin with a cogent, organized prerelease plan individualized for each young person that is worked on throughout incarceration (Illinois Juvenile Justice Commission, 2011). Plans should consider reenrollment in school, family involvement, identification of employment opportunities and/or extracurricular activities, curfews, and a behavioral contract (Annie E. Casey Foundation, 2010). Many women in our sample expressed fear about going to a home or family that does not encourage positive behaviors. Therefore, best practices dictate that a transition plan that includes careful

selection of a home, whether with the family, other kin, or in foster care, may be key to transition success (Illinois Juvenile Justice Commission, 2011). Yet another best practice is assignment of a service coordinator to a young person for his or her entire stay, along with continued contact after release (Annie E. Casey Foundation, 2010).

Involvement of family members and/or other important adults from the beginning of treatment and throughout the transition to community is also important (Annie E. Casey Foundation, 2010). Visitation is actively encouraged so that family members, and the relationships between offending youth and their families, may be assessed and recommendations may be made (Annie E. Casey Foundation, 2010). Focus group participants expressed concerns about the bad influence of family members; there must be a way to remove those adults from the environment or mitigate their ability to serve as negative influences. Best practices dictate that collaboration between departments is important, because families of youth in detention may be involved with various other state agencies or community services (Illinois Juvenile Justice Commission, 2011).

Many of the girls in the focus groups expressed concern about their future, especially as it pertained to education and employment. In many instances, they realized that the behaviors that led to their detention might have serious impact on their futures. Missouri's best practices include the development of academic, pre-vocational, and communication goals and skills to improve the successes of teens post-detention. To foster communication skills, personal interests, and a strong work ethic, learning is conducted in small groups, work experience is encouraged, and community service projects are routine elements of programming (Annie E. Casey Foundation, 2010). Service projects have helped teens develop empathy and relationship skills (Mathur & Schoenfeld, 2010).

Other strategies to reduce recidivism include placing youth who require detention in smaller facilities near their home and family. Facilities should resemble a home, including carpeting and homelike features. Rather than wearing uniforms or standardized outfits, young people are allowed to dress in their own clothes. The youth are closely supervised and attend daily group and individual treatment sessions to explore the roots of delinquent behavior, future goals, and strategies for success. Youth stay with their peer group and are encouraged to socialize, learn positive behaviors, and deal with interpersonal differences in a positive manner. Isolation or other punishments are avoided (Annie E. Casey Foundation, 2010). The young women in our study talked about what they must do to be successful. Yet they were understandably unsure of their own level of resilience and ability to surmount obstacles. To address this, before release, youth return home for short-term furloughs. Any problems that arise during these furloughs are dealt with, sometimes leading to longer times in detention, intensive therapy, or plan revision (Annie E. Casey Foundation, 2010).

Part of the success of the Missouri initiative is attributed to a service coordinator assigned to a young person for his or her entire stay and maintaining contact with the youth after release (Annie E. Casey Foundation, 2010). Illinois also had success with specialized parole officers for youth who develop a relationship with juvenile offenders at the beginning of their confinement. These parole officers, with other service professionals, create individualized post-detention plans, meet with youth and their support systems, and work closely with others in the community to ensure a seamless transition. Experts in Illinois also recommend a reduction in parole, based on the premise that youth with reduced parole periods demonstrated the ability to attain skills and were less likely to recidivate than those with longer parole periods (Illinois Juvenile Justice Commission, 2011). Both best-practice models in

Illinois and Missouri dictate that youth should remain under surveillance and receive services for 4 to 6 months after detention (Annie E. Casey Foundation, 2010; Illinois Juvenile Justice Commission, 2011). Research demonstrated that surveillance-only models lead to a high degree of recidivism for technical violations for teens. Ongoing services should include mental health treatment and therapy, vocational training, and connection with appropriate community resources.

Several of the young women in our sample were pregnant or parenting during their detention. Schaffner (2006) conjectured that one-fifth to one-quarter of female detainees are pregnant or parenting at the time of incarceration. Researchers suggest that female juvenile offenders have unique physical and mental health needs related to pregnancy, parenting, and sexual activity (Cooney et al., 2008; Herrman & Waterhouse, 2012). Offering adequate resources for young women is important to ensure their success after release from detention and also may pave the way for more positive outcomes in their children, thereby helping to break the cycles of crime, poverty, and incarceration.

Limitations

The young women participating in these focus groups represented a single agency in a mid-Atlantic state, so results may not be generalized to other populations. The dynamics of the group and the potential for breach of confidentiality, along with the presence of detention center staff required for groups conducted at the facility, may have made it less likely that these young women would be candid during the focus group, further limiting the findings. Ongoing research with samples of young women from different sites may add further breadth to the findings. States with different policies related to length of incarceration, penalties related to status offenses, and adherence to gender-specific services may add additional value to the perspectives noted in the current study.

Conclusions

The young women identified important challenges and supports when considering their personal transition to home after incarceration. The exploration of the individual, family, and community domains to delineate the supports and challenges for young women endeavoring to transition to home may offer insight as policies and programs are developed to assist them. These young women clearly articulated what they should do to ensure successful re-entry, but some seemed dubious about their ability to confront the challenges imposed by their family and community. Several young women shared inspiring stories of courage, personal goals, and strength, instilling true hope in the interviewers. Others appeared to echo the rhetoric of good behavior and purposeful return to society, while their nonverbal communications expressed their personal ambivalence about their potential for success. As articulated in Sanford's theory of Supports and Challenges, the right balance of these factors is critical to ensure successful transition to home. Too many challenges or a dearth of supports clearly signal failure in the ability of these young women to meet the expectations of society and of their probation contract. Sanford's theory offers a lens through which to view the need to carefully inventory supports and challenges experienced when transitioning to home.

Young women confront unique challenges when transitioning from detention facilities to home. A major focus of rehabilitation should explore young women's perceptions of their personal challenges and supports, assist in anticipating obstacles to successful re-entry, and propose interventions to circumvent roadblocks. Using authentic perceptions of young women as they confront their own release may inform future strategies designed to ease the transition from juvenile justice settings to the community.



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An Innovative Use of Conjoint Analysis to Understand Decision-Making by Juvenile Probation Officers

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Abstract

Juvenile probation officers (JPOs) play an important role in the juvenile justice system, and their decisions influence youth outcomes. Conjoint analysis was used to determine the relative influence of youth, case, and family characteristics on JPO decision-making. JPOs ($N = 224$) were recruited from 18 Indiana counties to review 8 scenarios describing youth probationers. JPOs were randomly assigned to review scenarios depicting either a white youth or a black youth. Within youth probationer race, each scenario varied by 5 dichotomous dimensions commonly associated with differences in decision making among justice system personnel: youth gender, offense severity, mental health screening results, youth age, and family involvement. JPO participants then made recommendations for each

probationer regarding (1) placement in the community or secure facility, (2) conditions of probation supervision, and (3) referrals to mental health services. For each recommendation (placement, supervision conditions, and service referrals), mean JPO responses did not differ by probationer race. For both black and white probationers, offense severity was the most influential factor on placement decisions. In contrast, the relative influence of scenario characteristics on JPO recommendations differed by probationer race when JPOs made decisions about conditions of probation and mental health service referrals.

Introduction

Most youth involved in the justice system are sentenced to probation and supervised by a juvenile probation officer (JPO; Sickmund & Puzzanchera,

2014). In their supervisory role, JPOs make decisions that have immediate and lasting implications for youth probationers (Griffin & Torbet, 2002; Leifker & Sample, 2011). JPOs provide input and recommendations related to several aspects of probationer status and care, including whether probationers should be returned to the community, the terms of probation supervision, and which social services probationers should be referred to. Though juvenile court judges are ultimately responsible for many of these decisions, research (Leifker & Sample, 2011) has shown that judicial decisions align with the recommendations of JPOs in the vast majority of cases. JPOs have also been described as gateway providers to behavioral health services for youth offenders, helping identify mental health treatment needs of adolescents (Wasserman et al., 2008) and facilitating youth engagement in behavioral health-care (Holloway, Brown, Suman, & Aalsma, 2013). Despite the range of decisions to be made by JPOs, and the discretion afforded them, questions remain about how JPOs reach their decisions. Indeed, juvenile probation has been referred to as one of the “black boxes” in justice system decision-making research (Bechtold, Monahan, Wakefield, & Cauffman, 2015, p. 325).

Decisions within the context of the justice system are, ostensibly, to be made in consideration of relevant legal factors, such as the extent of an offender’s criminal history or the severity of a charged offense (Schwalbe, Hatcher, & Maschi, 2009). The juvenile justice system, with its additional mandate to protect the best interests of youth offenders, allows courts to also consider extralegal factors, which are less directly tied to the factual details of a charged offense. For example, judges may consider a youth’s amount of parental support when making determinations about youth culpability and sentencing. In other words, judges make a risk versus needs calculation when considering juvenile offenses (Vincent, Paiva-Salisbury, Cook, Guy, & Perrault, 2012). To this end, decision-makers within the system can be aided by formal risk assessment

measures or detailed legal guidelines to weigh complex and potentially conflicting information about an individual youth offender. Some jurisdictions have implemented sentencing rubrics, for example, with the goal of consistently administering punishments proportionate to the offenses committed (Vincent & Lovins, 2015). In the pre-sentencing stage of the juvenile justice system, decision-makers use validated risk and needs assessments to determine an offender’s need for both supervision and services (Grisso, 2007; Vincent et al., 2012). Guidelines, however, vary widely by jurisdiction, and their use is often voluntary. Despite the availability of these determine processes to increase fairness within the justice system, decision-makers can choose to override prescribed outcomes, diminishing the purpose of guidelines (Wang, Mears, Spohn, & Dario, 2013). This suggests a continued need to study how legal and extralegal factors differentially influence decision-making within the juvenile justice system.

A wide array of interrelated variables have been implicated in decision-making at different stages of the adult and juvenile justice systems, potentially contributing to disparate outcomes among offenders. Past studies have identified many influences on court personnel, including the demographic characteristics of individual offenders (Leiber & Fox, 2005); the severity of the criminal charge (Leiber & Peck, 2015); the mental health of the offender (Cappon & Vander Laenen, 2013); the offender’s family structure or involvement in the legal process (Rodriguez, Smith, & Zatz, 2009); and each decision-maker’s own characteristics, professional orientation, and personal biases (Ricks & Eno Loudon, 2015). Many of these factors appear to work in tandem to influence decision-making and depend highly on the context of the decision to be made (Schwalbe & Maschi, 2009).

In addition to the factors described thus far, the role of an offender’s race/ethnicity in decision-making within the justice system has been the subject of a significant body of research, especially given that systemic racial disparities are

widespread (Wakefield & Uggen, 2010). Although minority youth comprise about one-third of the general population, just over 60% of individuals involved in the juvenile justice system are youth of color (Desai, Falzer, Chapman, & Borum, 2012). In many cases, racial disparities in arrest and detention persist, even when controlling for other correlates of justice system involvement, including mental illness, propensity for violence, and other social or demographic variables (Desai et al., 2012; Leiber & Johnson, 2008; Pope, Lovell, & Hsia, 2002). JPO recommendations may disproportionately affect youth of color, particularly black youth. In an analysis of JPO case files, offender race influenced JPO assessment of probationers beyond other youth and case characteristics, since black youth were over four times more likely to be documented by JPOs as noncompliant with court orders, despite having fewer prior referrals (i.e., arrests) than other racial/ethnic groups (Smith, Rodriguez, & Zatz, 2009). Black youth ultimately receive more punitive sentences and are removed from their homes at higher rates than white youth (Rodriguez et al., 2009).

Other findings paint a more complicated picture of the influence of offender race within the system. For example, researchers have found that some pre-adjudication race disparities appear to be corrected by post-adjudication decisions. A study (Bechtold et al., 2015) of decision-making within the context of juvenile probation found that, though youth may be sentenced to probation terms at different rates depending on their race, JPOs treated probation violations similarly for both black and white youth.

Theoretical Approach

Social cognition theories, including attribution theory, have offered an approach to understanding legal decisions related to offender culpability (Mears et al., 2014). Attribution theory describes the process by which individual decision-makers attend to, prioritize, and interpret a variety of

social and contextual cues to make causal attributions about the behavior of others (Bridges & Steen, 1998; Mears et al., 2014). Causal attributions may align with cultural stereotypes or other developed cognitive heuristics (Graham & Lowery, 2004). Cognitive heuristics are simple and efficient mental tools relied on by individuals to form judgments quickly (Gigerenzer & Gaissmaier, 2011). Heuristics reduce the individual effort required to form a judgment by, for example, eliminating extraneous or conflicting cues from the decision-making process or by ignoring the relative importance or salience of individual attributes (Hilbert, 2012; Shah & Oppenheimer, 2008). Though heuristics can be helpful in making decisions under stress or time constraints, they can contribute to biased decisions if, for example, an individual focuses on one scenario attribute while ignoring other important cues. It has been hypothesized that such biases contribute to disparate outcomes among youth involved in the justice system, since decision-makers appear to rely on heuristics and stereotypes related to offender race, age, mental health status, socioeconomic disadvantage, and complex combinations of these and other extralegal factors (Graham & Lowery, 2004; Rodriguez, 2011).

Purpose

In the current study, we sought to understand the relative importance of various youth, family, and case characteristics in JPO decision-making by employing conjoint analysis, a unique approach described in detail below. Conjoint analysis presents a way to measure the relative influence of multidimensional factors on decision-makers without overtly asking decision-makers about their preferences. We hypothesized that the relative importance of scenario characteristics in JPO decision-making may vary by youth race. Specifically, we anticipated that JPOs would prioritize different data when making decisions for black youth when compared to data that informed their decision-making for white youth.

Methods

Procedures

JPO participants were recruited from counties taking part in a statewide initiative, the Indiana Mental Health Screening Project, to implement standardized, universal mental health screening at detention intake (Aalsma, Schwartz, & Perkins, 2014). Of the 22 Indiana counties in which there is a detention center, 19 counties were involved in the Mental Health Screening Project. All but one of these counties ($n = 18$) agreed to be included in the present study. Participants were asked to complete surveys and, potentially, follow-up qualitative interviews. A total of 258 JPOs, by virtue of their employment in one of the 18 counties, were eligible to complete the study's online survey. The Chief JPO of each participating county provided study personnel with the e-mail addresses of all JPO employees within their counties. Though eligible JPOs were not selected randomly from Indiana's total population of JPOs, the JPOs employed in counties with a detention center receive nearly 70% of the state's annual referrals to the juvenile justice system (Supreme Court of Indiana, 2015). Therefore, despite reliance on a convenience sample, the participating JPOs likely represented the typical experience of Indiana JPOs.

The participation of JPOs in the study was voluntary. To maintain participant confidentiality, each JPO received a study recruitment e-mail containing a unique web link to the online survey. The JPOs were also assured that their supervisors and coworkers would not be informed about any individual employee's participation in the study. This study was approved by the Indiana University–Purdue University Institutional Review Board.

Participants

Of the 258 eligible JPOs, 224 (86.8%) consented to study participation and completed survey measures. The sample of JPOs was largely female (67.0%), white (83.3%), and 30–49 years old (64.9%). All participants had received a 4-year

college degree, and approximately 30% of JPOs had either begun or completed a master's program. Participants, on average, had spent 12.7 years ($SD = 8.7$) working in the juvenile justice system and 7.8 years ($SD = 6.7$) in their current position. More than 23% were in a management or supervisory position. The mean caseload size per JPO was 40 probationers ($SD = 28.4$). The

JPOs included in the sample supervised youth exhibiting a range of behaviors and needs. A total of 62.5% of the JPOs reported supervising youth categorized as minimum risk; 31.0% supervised sex offenders; and 56.7% supervised high-risk youth. See Table 1 for demographic characteristics of the JPO participants.

Measures

JPO recommendations. The JPO participants were presented with 8 written scenarios, each describing a hypothetical youth probationer. The JPOs were prompted with the statement, "If you had this child on your caseload, which of the following actions would you recommend?" The recommendations to be made included (1) whether the hypothetical probationer should be placed in a secure facility or returned to the community, (2) how intense/restrictive the youth's probation supervision should be, and (3) whether and to what extent the probationer should receive mental health services. The JPOs indicated their decisions using a scale that ranged from 0 to 100.

Table 1. *Demographic Characteristics of Juvenile Probation Officers (N=234)*

| Participant | n (%) |
|-----------------------------------|------------|
| Age | |
| 20–29 | 42 (17.9) |
| 30–39 | 89 (38.1) |
| 40–49 | 63 (26.9) |
| 50–59 | 38 (16.2) |
| 60–69 | 2 (0.9) |
| Gender | |
| Female | 156 (67.0) |
| Male | 77 (33.0) |
| Race/Ethnicity^a | |
| White | 194 (83.3) |
| Black | 34 (14.6) |
| Hispanic | 6 (2.6) |
| Native American | 4 (1.7) |
| Multiracial | 12 (5.2) |

^a Subjects were instructed to choose all that apply.

Greater value responses indicated more restrictive recommendations for youth placement and probation conditions and more intense mental health services. Anchors for the JPO recommendations regarding youth placement included “Community” (0), “Residential” (50), and “Department of Corrections” (i.e., youth prison) (100). Anchors related to probation supervision conditions included “No Action” (0), “Standard” (50), and “Intensive with Restrictions” (100). Mental health services recommendation anchors were “None” (0), “Outpatient” (50), and “Intensive Home-Based” (100). The JPOs were not given specific definitions of each response anchor. However, both the scenarios and the response scales were pilot tested for construct validity with a chief JPO and an assistant chief JPO. Both confirmed that the response anchors corresponded to typical variations in JPO recommendations and would be familiar to JPOs.

Probationer and case characteristics. To assess the relative influence of various probationer, case, and family characteristics on JPO decision-making, the 8 scenarios reviewed by JPOs differed from each other along 5 dimensions, each

with dichotomous attributes (see all scenario variations in Table 2). In contrast, for each survey respondent, the race of the hypothetical youth probationers remained consistent across scenarios. Participants were randomly assigned to evaluate one of two groups of scenarios: one group where all scenarios referenced white youth, or one where all scenarios referenced black youth. By incorporating youth race as a between-subjects rather than within-subjects effect, we sought to reduce the likelihood that survey responses would be skewed by social desirability bias. This bias refers to the tendency for research participants to tailor their responses to societal expectations or norms about what is correct (Drakulich, 2015). For example, if the JPOs reviewed scenarios that noticeably differed by youth race, respondents may have felt compelled to appear unbiased by keeping their responses consistent across races of the youth described. Past studies on the use of self-report measures have repeatedly shown that respondents are especially vulnerable to social desirability bias when answering questions about sensitive topics, including questions perceived as related to race or racism (Drakulich, 2015; Krumpal, 2013).

Table 2. Mean (SD) JPO Recommendation Scores (0–100) for Youth Placement,^a Mental Health Services,^b and Probation Supervision Conditions^c by Scenario Variations and Youth Probationer Race

| Scenario Variations | | | | | Youth Placement | | Probation Supervision Conditions | | Mental Health Services | |
|---------------------|------------------|---------------------------------|-----|--------------------|-------------------|-------------------|----------------------------------|-------------------|------------------------|-------------------|
| Gender | Offense Severity | Positive MH ^d Screen | Age | Family Involvement | Black Probationer | White Probationer | Black Probationer | White Probationer | Black Probationer | White Probationer |
| Female | Burglary | Yes | 13 | Active | 28.35(21.29) | 27.54(22.18) | 62.19(29.30) | 61.18(25.89) | 61.08(29.71) | 54.14(29.49) |
| Male | Runaway | Yes | 13 | Active | 17.68(16.19) | 15.54(14.64) | 58.57(25.12) | 60.98(26.38) | 62.11(27.31) | 56.80(29.67) |
| Female | Burglary | No | 13 | Inactive | 21.11(19.81) | 20.03(17.04) | 59.18(25.01) | 55.73(24.54) | 50.61(31.12) | 57.08(29.93) |
| Female | Runaway | Yes | 16 | Inactive | 18.87(17.81) | 16.47(14.11) | 55.10(27.78) | 57.62(27.60) | 52.58(29.15) | 59.90(28.67) |
| Male | Runaway | No | 13 | Inactive | 11.85(12.68) | 12.11(13.32) | 53.28(27.22) | 54.72(25.18) | 53.80(29.60) | 59.09(27.06) |
| Female | Runaway | No | 16 | Active | 16.17(14.73) | 13.67(11.82) | 59.95(27.73) | 55.98(24.36) | 56.73(26.27) | 53.29(28.60) |
| Male | Burglary | Yes | 16 | Inactive | 28.23(21.80) | 26.12(19.07) | 61.67(26.48) | 55.90(27.25) | 57.81(29.09) | 55.60(31.49) |
| Male | Burglary | No | 16 | Active | 32.18(25.93) | 28.76(23.90) | 60.53(24.79) | 62.31(24.02) | 60.04(25.00) | 58.45(29.48) |

^aYouth Placement = “Community” (0), “Residential” (50), and “Department of Corrections” (i.e., youth prison) (100).

^bMental Health Services = “None” (0), “Outpatient” (50), and “Intensive Home-Based” (100).

^cProbation Supervision Conditions = “No Action” (0), “Standard” (50), and “Intensive with Restrictions” (100).

^dMH = mental health.

By asking each participant to consider youth of a single race, rather than asking them to make side-by-side recommendations for youth of different races, it should be possible to detect the relative influence of other scenario dimensions on JPO decisions. Random assignment was accomplished by using a function built into Qualtrics, the survey development software used in this study.

The youth probationers depicted in the 8 scenarios differed systematically across 5 dimensions commonly shown to influence decision-making within the justice system: (1) probationer gender; (2) severity of the charged offense (running away, a status offense vs. burglary, a criminal offense); (3) results of a mental health screen (positive vs. negative for mental health problems); (4) probationer age (age 13 vs. age 16); and (5) the level of family involvement in the probation process (active vs. inactive). For example, one scenario read, *"A 16-year-old female has been arrested for running away from home. She has screened positive for mental health problems. Her family has not participated in the probation process in the past."* All scenarios varied by the underlined portions of this example. See Table 2 for a description of all scenario variations included in the surveys.

Analysis

Previous studies of decision-making within the justice system have often turned to retrospective, archival data (e.g., criminal case histories and court hearing transcripts) to identify disparate—and potentially biased—decision-making (Rodriguez, 2011). Other studies have relied on the self-reported attitudes and beliefs of court personnel to gain insight into what may be driving their decisions (Ricks & Eno Loudon, 2015). Although survey measures allow researchers to make inferences based on how decision-makers respond to vignette manipulations, "they typically do not allow researchers to determine which components of the manipulation produced the observed effects" (Hainmueller, Hangartner, & Yamamoto, 2015, p. 2). Thus, in

the present study, we applied conjoint analysis, which is typically used in business marketing research to evaluate how individual characteristics or dimensions of a product influence product acceptability (Raghavarao, Wiley, & Chitturi, 2011). More recently, conjoint analysis has been employed in the study of healthcare treatment preferences (Bair et al., 2008; Newman, Rongprakhon, Tepjan, & Yim, 2010; Zimet et al., 2005), political science (Hainmueller et al., 2015), and implementation science (Farley, Thompson, Hanbury, & Chambers, 2013). Conjoint analysis is particularly useful for studying the formation of complex judgments, where multiple and inter-related influences are at play (Shamir & Shamir, 1995). This approach also overcomes limitations to more traditional methods of analysis, in that the preferences of the decision-maker are "less declarative and less tainted by social desirability" (Tsang, Chan, & Chan, 2001, p. 137).

Conjoint analysis provides a descriptive model that clarifies the relative preferences of participants for attributes of a variety of dimensions (Bridges et al., 2011). In conjoint analysis, the relative preference of a dimension attribute is called a part-worth utility, which can be interpreted as a relative standardized effect size. The more participants preferentially distinguish among attributes, the wider the range in part-worth utilities. For example, if JPOs strongly preferred prison placement for youth relative to placement in the community, prison placement would have a high positive part-worth utility value; the community placement attribute would have an equally strong proportional negative part-worth utility value. For each dimension, the sum of the part-worth utilities of these attributes is zero (Raghavarao, Wiley, & Chitturi, 2011). The extent to which each dimension contributed to a decision is measured by importance scores, which reflect the relative ranges of the part-worth utilities across scenario-specific dimensions. Thus, importance scores sum to 100.

In the present study, full-profile ratings-based conjoint analysis was applied to assess JPO

recommendations. Using a fractional factorial design, JPOs were presented with eight representative scenarios constructed through the SPSS v.21 conjoint procedure. Asking JPOs to consider a full factorial design of this conjoint analysis (e.g., requiring JPOs to make recommendations in response to 32 scenarios) would have been too cumbersome to collect reliable data. It is important to note that one limitation of a fractional factorial design is that analysis is limited to the main descriptive effects of each dimension. However, due to the exploratory nature of the current analysis, we thought that this design was appropriate.

Results

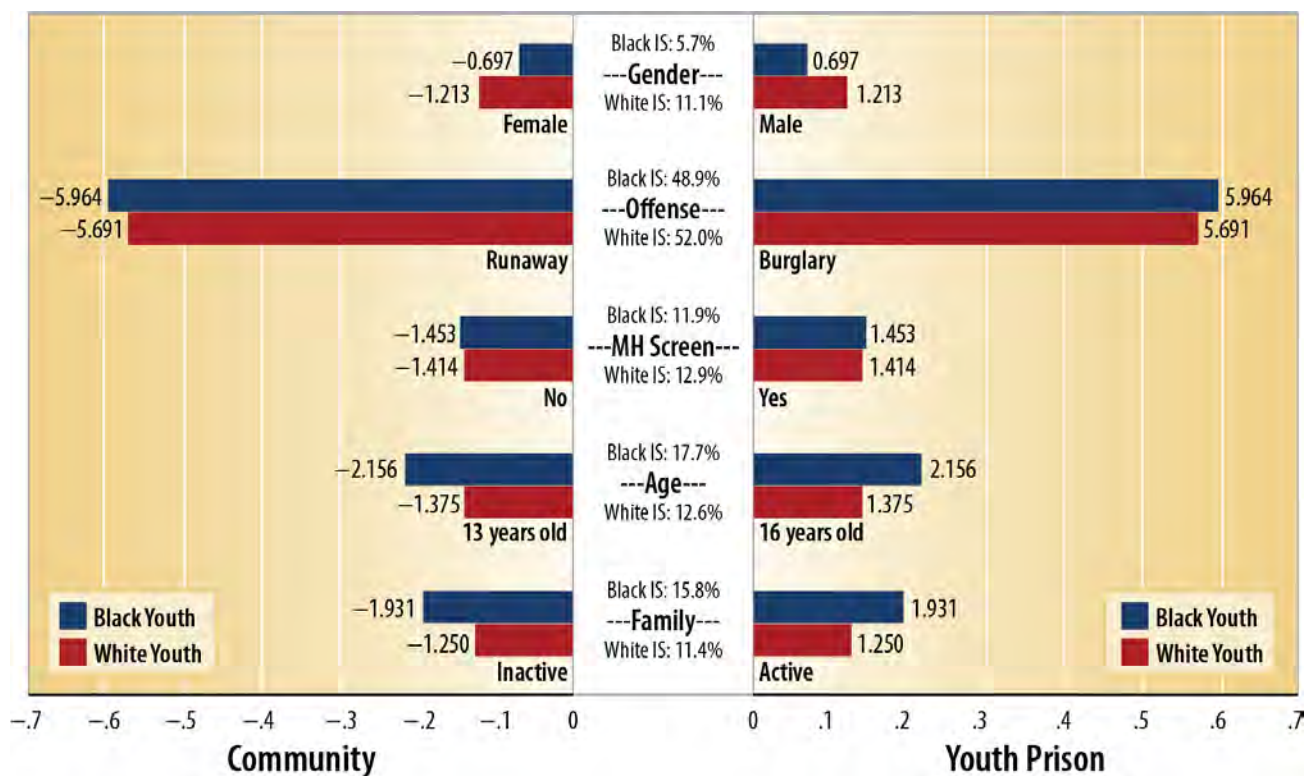
T-tests indicated that, overall, JPO recommendations did not differ significantly by study condition (black or white youth probationers). Likewise, results were not significant for t-tests by probationer race comparing JPO recommendations regarding placement, mental health services, and probation supervision conditions

(all p values > 0.20). Table 2 presents all mean JPO recommendation scores by decision-making context (youth placement, probation supervision conditions, and mental health referral), study condition (probationer race), and all eight variations in scenario characteristics.

Youth Placement

Conjoint analysis revealed that JPOs considered scenario characteristics and their attributes similarly for black and white youth probationers when making placement recommendations (see Figure 1). Regardless of youth race, JPOs were more likely to recommend a more restrictive placement (i.e., Department of Corrections/youth prison) if the youth were an older male who had committed a more serious offense, who had received a positive mental health screen, and whose family had been active in the probation process. According to the importance scores associated with each scenario characteristic, offense severity was by far the most influential

Figure 1. Probation officer placement recommendations, part-worth utility, and importance scores (IS).



Note. MH = mental health.

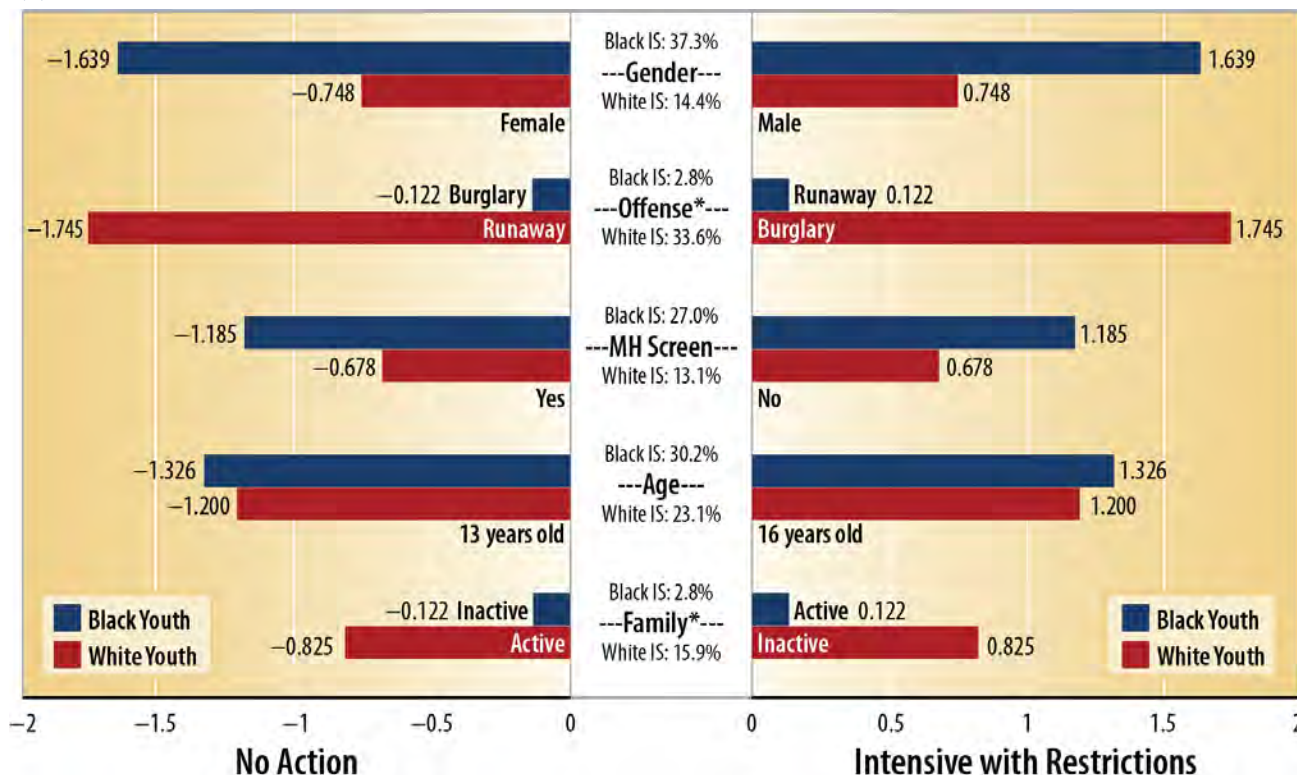
factor in JPO decision-making regarding youth placement (black youth: 48.9%; white youth: 52.0%). In other words, JPOs were much more likely to recommend a restrictive placement for a youth probationer who committed a burglary than for a youth who ran away from home. All other scenario characteristics, based on their importance scores (range = 5.7%–15.8%), were less influential on JPO recommendations for youth placement.

Probation Supervision Conditions

In making recommendations related to probation supervision conditions, JPOs weighed some scenario characteristics differently when considering black versus white youth (see Figure 2). Considering relative importance scores, youth gender was the most important influence on JPO decisions if probationers were black (37.3%),

whereas offense severity was the most important factor for white probationers (33.6%). Within each study condition, JPOs were more likely to recommend intensive probation supervision conditions for males (part-worth utility value, black: |1.639|; white: |0.748|); probationers without a positive mental health screen (part-worth utility value: black, |1.185|; white: |0.678|); and 16-year-olds (part-worth utility value, black: |1.326|; white: |1.200|). In contrast, there were differences by probationer race related to offense severity, since black probationers who ran away from home were recommended for more intensive supervision than those who committed burglary (part-worth utility value—black, runaway: 0.122), while white probationers who ran away from home were likely to be recommended for a less intensive probation supervision than those who committed burglary (part-worth utility value—white, runaway: –1.745). There was also a probationer race effect

Figure 2. Probation officer recommendations for probation supervision conditions, part-worth utility, and importance scores (IS). Note that the influence of charged offense and family involvement on JPO recommendations regarding probation supervision conditions varied by youth race.



Note. MH = mental health.

*Note that the influence of charged offense and family involvement on JPO recommendations regarding probation supervision conditions varied by youth race.

when JPOs considered the family's involvement with probation. Black probationers with families active in the probation process were likely to be recommended for more intensive probation supervision (part-worth utility—black, active: 0.122), while white probationers with active families were likely to be recommended for less intensive probation supervision (part-worth utility—white, active: -0.825).

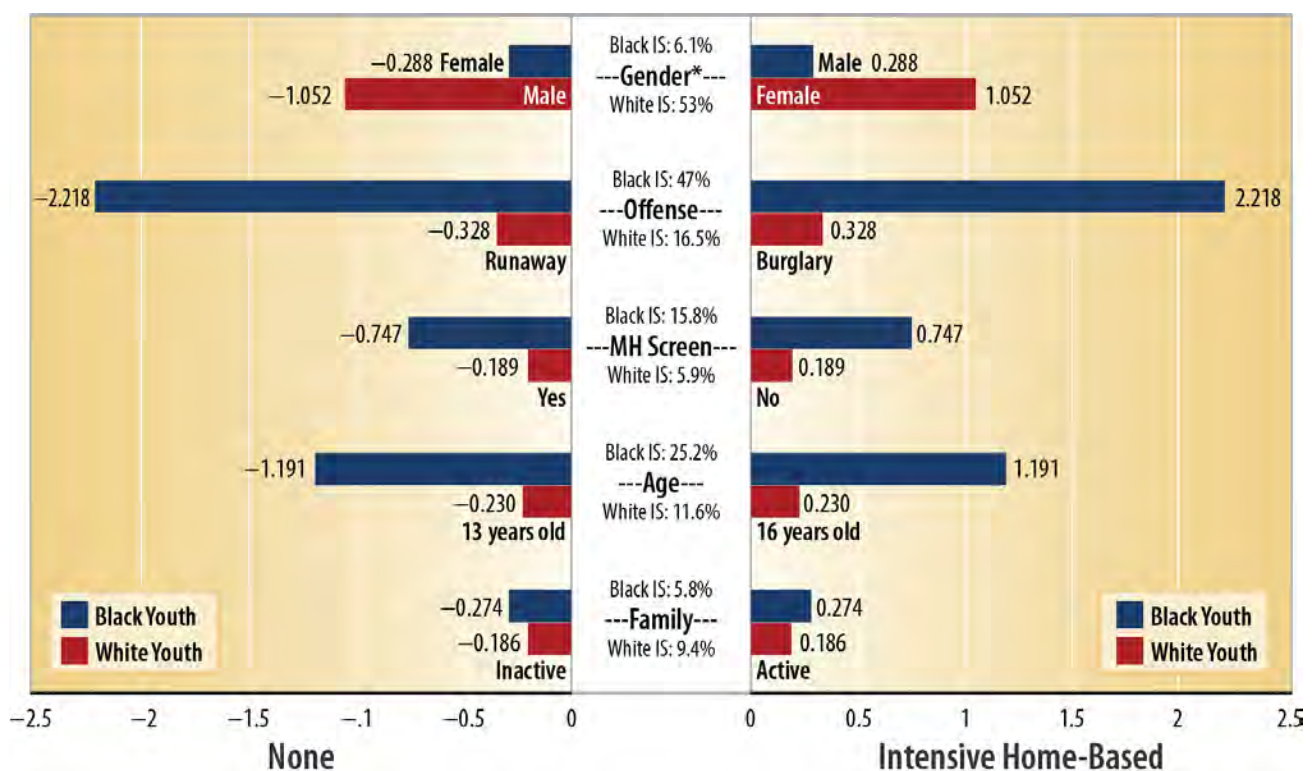
Mental Health Services

When deciding whether youth probationers should receive mental health services, probationer race affected how JPOs weighed scenario factors (see Figure 3). Specifically, JPOs showed a relative preference for recommending more intensive mental health services for black, male probationers than for black, female probationers (part-worth utility value: |0.288|). In contrast, JPOs demonstrated a relative preference for less

intensive mental health services for white, male probationers than for white, female probationers (part-worth utility value: |1.052|). JPOs were more likely to recommend intensive mental health services for youth with a burglary charge than probationers who ran away from home (part-worth utility value, black: |2.218|; white: |0.328|). Likewise, probationers who were 16 years old were more likely to be recommended for intensive mental health services than probationers who were 13 years old (part-worth utility value, black: |1.191|; white: |0.230|). Finally, JPOs were more likely to recommend intensive mental health services for youth *without* a positive mental health screen than for those with a positive screen (part-worth utility value, black: |2.218|; white, |0.328|).

The relative importance scores of each scenario factor for mental health services also differed depending on probationer race (see Figure 3). For black probationers, offense severity had the

Figure 3. Probation officer recommendations for mental health (MH) services, part-worth utility, and importance scores (IS). Note that the influence of gender on JPO mental health services recommendations varied by youth race.



Note. MH = mental health.

*Note that the influence of gender on JPO mental health services recommendations varied by youth race.

greatest influence on JPO recommendations (47.0%), while youth gender was most important for white probationers (53.0%; see Figure 3 for remaining importance scores).

Discussion

The results of this study reflect the complexities of decision-making within the juvenile justice system. Our purpose was to understand the relative influence of various youth, family, and case characteristics on JPO decision-making. Results suggest that JPOs in the current sample attended to probationer race and gender—more so than other individual-level factors—when making decisions about mental health services and probation supervision. Considering the relative influence of race and gender, the JPOs may have relied on common cognitive heuristics or stereotypes related to race and gender, to the exclusion of other empirically supported risk factors including family involvement, age, and offense severity (Hilbert, 2012; Shah & Oppenheimer, 2008). However, the role of race and gender did not explicitly affect JPO recommendations regarding youth placement. These findings have implications for JPO practices and juvenile justice system policy.

We found that the relative influence of legal (e.g., offense severity) and extralegal characteristics (e.g., gender, family involvement) was highly dependent on the type of recommendation to be made by JPOs, meaning that the importance of these factors varied by whether JPOs were making decisions about youth placement, the conditions of probation, or referral to mental health services. When considering a placement recommendation for a youth probationer, offense severity was the most important factor considered by JPOs, while probationer race was not salient. In other words, youth probationers who committed burglary were more often recommended for placement in prison than runaways, regardless of probationer race and other characteristics. Note that the practical distinctions between a status offense (e.g., running away) and a more serious criminal offense (e.g., burglary) are striking; the

range of punishments available to a decision-maker for these offenses is likely more prescriptive than discretionary. Clear legal guidelines, and sometimes legal mandates, often guide decision-making related to placement (Wang et al., 2013), which may account for the reliance of JPOs on charge severity to make placement recommendations. This result is also consistent with findings in the context of judicial decision-making with adult populations (Leifker & Sample, 2011). However, probationer race was implicated when JPOs were asked to make recommendations regarding probation supervision conditions or referrals to mental health services.

In terms of their recommendations regarding probation conditions, JPOs were more likely to consider the individual characteristics of black youth (e.g., gender and age) rather than offense severity or family involvement. Although JPOs appeared to consider all scenario characteristics when making recommendations for white youth (importance scores: 13.1%–33.6%), legal factors were especially salient. Specifically, a recommendation for intensive probation supervision for black youth was most likely for older males. For white youth, intensive probation recommendations were more likely for youth who committed more serious offenses and whose families were not active in the probation process. This finding is consistent with previous research showing that justice system decision-makers may view the causes of crime differently for black versus white offenders. Bridges and Steen (1998) found that court officials were more likely to attribute the criminal behavior of black youth to negative *internal* personality characteristics (i.e., uncooperative; does not admit guilt) and attribute the crimes of white youth to negative *external* environmental factors (i.e., dysfunctional family, drug/alcohol use). In the current study, one seemingly *positive* environmental factor (i.e., family involvement with the probation process) was associated with more intensive probation conditions for black youth than for white youth. Family involvement is widely regarded as a protective factor against

delinquency, whereas family disenfranchisement from the juvenile justice system can impair the ability of parents to advocate for their children, potentially leading to more punitive outcomes (Arya, 2014). Here, the differential consideration of families of white and black probationers may reflect findings from past research: a common negative attribution that black families are less structurally stable than white families (Pope & Feyerherm, 1995). This underlying structural assumption is one potential reason why black youth have received more intensive probation conditions than their white peers. Future research should examine how the interaction of youth race and perceived family involvement affect JPO decision-making.

Our finding that the combination of probationer gender and race influenced JPO recommendations regarding referrals to mental health services and the intensity of probation conditions may reflect the impact of implicit (rather than explicit) racial bias among decision-makers. Implicit bias against black youth has been demonstrated among police officers in studies of disparate use-of-force by offender race (Goff, Jackson, Di Leone, Culotta, & DiTomasso, 2014). Decision-makers may implicitly view black children more like adults and more culpable for delinquent acts. For instance, in one nationally representative study in which participants were primed to consider a youth who was either black or white, the authors found that adults who were primed to think about a black child were more supportive of life without parole sentences than when they were primed to think about a white child (Rattan, Levine, Dweck, & Eberhardt, 2012). Participants in the black-prime condition were also more likely to perceive the blameworthiness of juveniles as more similar to adults. This pattern has been found among JPOs who were primed with words stereotypically related to black Americans before being presented with a vignette; JPOs “judged the alleged offender to be less immature and more violent . . . more culpable, more likely to reoffend,

and more deserving of punishment” when primed with such words (Graham & Lowery, 2004, p. 496).

There is also evidence that prosecutors and JPOs may not select probationers for diversion programs due to attributional stereotypes related to black youth (e.g., family instability; Pope & Feyerherm, 1995), which can also occur when parents seem uncooperative or have trouble making an intake appointment (Henning, 2013). Indeed, one study found that black youth were less likely to be diverted to these programs than youth of other races with similar offense histories and characteristics (Leiber, Johnson, Fox, & Lacks, 2007). However, a more recent study of two model jurisdictions found no racial/ethnic differences in JPO monitoring practices and decisions to file a violation (Bechtold et al., 2015), suggesting that the role of race may be contextually dependent. Indeed, between one-third and one-half of the variance in the use of treatment, deterrence, and restorative justice strategies by JPOs in the current study sample was due to nesting at the county level, indicating that geographical differences in basic training and standard operations may contribute to practice differences among JPOs (Holloway, Cruise, Downs, Monahan, & Aalsma, 2016). Future studies should examine jurisdictional differences associated with racial/ethnic disproportionality in youth outcomes.

In the current study, probationer race was also implicated in JPO recommendations for mental health services. In fact, their recommendations aligned with established stereotypes related to both race and gender in the provision of mental health care among justice-involved youth. Research has shown that black offender youth are less likely to be referred to mental health services (Glisson, 1996; Thomas & Stubbe, 1996). For white youth in the current study, female gender was most influential in mental health service recommendations made by JPOs. For black youth, mental health services were recommended only for older youth who had committed more serious crimes.

Interestingly, the presence of a positive mental health screen was largely ignored in JPO decision-making. JPOs were less likely to recommend intensive mental health services for both black and white youth with positive mental health screens. Research has consistently demonstrated that up to two-thirds of detained youth exhibit symptoms of a mental health or substance use disorder (Fazel, Doll, & Långström, 2008; Teplin, Welty, Abram, Dulcan, & Washburn, 2012). This fact could have the unintended consequence of JPOs perceiving all justice-involved youth as needing care, regardless of screening status, meaning that JPOs rely on other factors in recommending mental health services. Grisso (2007) describes this tendency to perceive all justice-involved youth as needing mental health treatment as “over-interpreting the message” (p. 162). When justice personnel are faced with the possibility that two-thirds of youth need mental health treatment, it may overwhelm their decision-making abilities. Grisso (2007) explained that, “The thought of providing treatment for such a large number of youth seemed to some so daunting that they failed to respond at all” (p. 162).

However, there is a substantial minority of youth in the system who do not meet the diagnostic criteria for a mental health disorder. Moreover, diagnosis of a mental health disorder should not be conflated with the level of treatment need. A helpful model for JPOs when discerning treatment need is to understand the specific risks and needs of juveniles (e.g., Risk-Needs-Responsivity; RNR). Using the RNR model may well improve JPO responses to mental health diagnosis and treatment need (Andrews & Bonta, 2010). An important caveat, however, is that some research findings suggest that risk assessment tools based on the RNR model may be less effective in reducing recidivism with justice-involved females. This highlights the need to consider other gender-specific factors relevant to treatment outcomes for female justice-involved youth. For example, Vitopoulos, Peterson-Badali, and Skilling (2012) found that female adolescents were more likely

than males to receive a recommendation for services that targeted personality as a criminogenic need (e.g., short attention span, anger, inadequate guilt) and were scored as higher risk than their male peers on a risk/needs assessment instrument. The authors also found that services matched to risk/needs assessment results were less effective in reducing recidivism risk for female justice-involved youth, presumably due to unidentified criminogenic needs or specific responsivity factors more common among females. Research in this area has consistently recommended that potential factors such as victimization/abuse, trauma exposure, chronic mental health concerns, family dynamics, and social support are factors that deserve greater consideration with justice-involved females (Anderson et al., 2016; Gavazzi, Yarcheck, & Chesney-Lind, 2006; Vitopolous et al., 2012). Such gender-specific factors may interact with more commonly identified criminogenic needs and/or specific responsivity factors to reduce the effectiveness of interventions designed to reduce recidivism risk.

Finally, we found that JPO decision-making was also influenced by probationer gender. Regardless of a probationer’s race, JPOs were more likely to recommend restrictive placements and intensive probation conditions for male than female probationers. This may be partially attributed to JPO reliance on heuristics related to gender and community safety (e.g., JPOs attributing male gender to imply greater community safety needs and recommending placement more frequently for boys). This finding is consistent with research highlighting judicial paternalism in regards to gender (e.g., Corrado, Odgers, & Cohen, 2000; Spivak, Wagner, Whitmer, & Charish, 2014). Probationer gender, along with race, was also implicated in JPO recommendations for mental health services. Referrals for services were more likely for black males than females, but the opposite was true among white youth probationers; white females were referred to mental health services more frequently than males.

These gender-based findings may have important implications for service referral and utilization, given previously documented disparities in the juvenile justice system (Grande, Hallman, Underwood, & Reh fuss, 2012; Herz, 2001; Lopez-Williams, 2006). In particular, these findings align with previous research on the cognitive attributions and stereotypes JPOs have applied to describe girls in the justice system (e.g., that girls are highly emotional, manipulative, and have mental health issues; Gaarder, Rodriguez, & Zatz, 2004; Leiber & Peck, 2015). Understanding and addressing these JPO cognitive heuristics (i.e., mental shortcuts) and decision-making processes can inform future training and promote equitable treatment for all justice-involved youth with mental health needs.

Limitations

A few aspects of the current study may limit interpretation of the results. First, the outcomes of interest were assessed using hypothetical scenarios rather than actual cases. Although the vignettes allowed an opportunity to maximize internal validity, the results may have varied if individual cases of actual juvenile probationers were assessed. It is also possible that mere descriptions of probationer characteristics lacked the impact to trigger any associated cognitive heuristics. Again, asking JPOs to make recommendations for actual probationers, or even using photographs of probationers, may have changed the results.

Furthermore, our study only included 5 dimensions that may influence JPO decision-making, though many other factors have been shown to affect JPO recommendations (Steen, Engen, & Gainey, 2005). For example, this study did not account for JPO characteristics or probationer offense history. Also, though we contacted JPOs from many jurisdictions to capture a wide range of caseload sizes, job training, and community cultures, our results were gathered from one state. State-specific factors, such as legislation or political climate, may have influenced JPO


decision-making and limited the generalizability of our findings.

Conclusions

This study highlighted the importance of studying JPO decision-making by employing an innovative analytic approach. Conjoint analysis, a technique that has primarily been used in business and medical research, may be an effective method for examining complex decision-making processes. Although many juvenile justice system jurisdictions use standardized measures to guide post-disposition decision-making (e.g., criminogenic risk/needs assessments), decision-makers have been found to often override these decisions (Wang et al., 2013). JPOs may be relying on cognitive heuristics and stereotypes regarding the youth and families with whom they work. Future studies should examine the interaction of how cognitive heuristics and standardized risk measures may affect JPO decision-making. For example, researchers should examine the factors associated with overriding assessment scores and under what conditions JPOs may not follow assessment recommendations.

Family involvement with the probation process was treated differently by the JPOs who were primed to think about a white versus a black probationer. Vignettes about black youth whose families had been actively involved with probation in the past received more intensive probation, whereas those about white youth in the same circumstances received less intense supervision. Future research should examine whether similar patterns are found with real justice-involved youth. If so, differential treatment of family involvement on the basis of race may be a procedural justice issue, since it may disenfranchise black justice-involved youth and their families.

In sum, probationer race and gender were both associated with JPO decision-making regarding probation supervision intensity and mental health recommendations, which is consistent



with prior research. Taken together, probationer race, gender, and their interaction should remain a continued focus for future research.

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"I'd Prefer an Applicant Who Doesn't Have a Delinquency History": Delinquents in the Labor Market

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Abstract

A criminal record is recognized as a barrier to reentry for former offenders, especially for employment outcomes. Formerly incarcerated black males face the brunt of these outcomes, as they are less likely to be employed and they earn lower wages than whites. What remains unclear is if a delinquency record similarly harms employment outcomes. Recently, protections granted to juveniles have been eroded, as records are less likely to be expunged and court proceedings are increasingly publicized, suggesting that an employer may now be able to consider a juvenile record. In the current study, university students were presented with fictitious resumes indicating either involvement or noninvolvement with the juvenile justice system. Respondents were significantly more likely to grant callbacks to nondelinquent applicants than delinquent applicants; however, there were no significant differences in the likelihood of black and white applicants receiving a callback. Easier access to delinquent records makes it possible to stigmatize applicants with a delinquency history, which may now serve as a new barrier to employment. Findings from the study highlight the importance of preventing employer access to delinquency records. Future research should examine the extent to which employers access and consider juvenile records.

Introduction

Gaining employment is arguably one of the most critical stages in crime desistance, but limited research has examined this experience for job applicants with a delinquency history. As states are increasingly removing delinquency record protections that were once standard in the juvenile justice system (Shah, Fine, & Gullen, 2014), the door is now open for a juvenile's history to influence employment. As a result, it is critical to determine how employers perceive applicants with a delinquency history: Are they stigmatizing delinquents in a similar manner as adult offenders, or do they view delinquents differently? The current study examines hiring practices of mock employers reviewing fictitious resumes of white and black applicants with and without delinquency histories. Using qualitative and quantitative responses of applicants, the current study examines the perspectives of mock employers when confronted with delinquent applicants.

Gaining Employment on Reentry

Returning offenders face substantial challenges in obtaining employment, as is evidenced by the high percentage of returning offenders who are unemployed in the first year after release (Petersilia, 2001). This is especially true for racial and ethnic minorities, since employers are less

likely to grant them interviews or offer employment. In her seminal study of hiring practices regarding returning offenders, Pager (2003) found only 17% of white males with a criminal record received a callback from an employer, versus 34% of white males without a criminal record. In contrast, 5% of black males with a criminal record and 14% of black males without such a record received a callback. These findings suggest that a criminal record is exceedingly harmful for blacks and may prevent them from reaching the background stage in hiring, because employers may assume that all black males have a criminal history (Holzer, Raphael, & Stoll, 2002).

Various factors affect employability following a criminal conviction, including employer stigmatization of convicted criminals; insurance companies restricting the hire of convicted criminals; and lack of education and employment history among returning offenders (Dale, 1976; Krienert & Fleisher, 2004). Returning offenders may also be negatively affected by background checks or online access to criminal records. Finlay (2009) found that in states where criminal history records were publicly available to employers, reentering offenders were less likely to be employed or received lower salaries than non-offenders. Employers may also be cautious in hiring those with criminal histories, since vicarious liability may result in employers being responsible for torts committed by their employees (Snow, 1992). Extensive research demonstrates the detrimental impact of a criminal record on employment, but it remains unclear how delinquency records influence employers.

The Impact of Having a Juvenile Record

It may be assumed that a delinquency history has a minimal effect on employability due to the expungement or sealing of juvenile records, but policy changes nationwide are increasingly eroding the protections once granted in the juvenile justice system. The juvenile justice system was founded on the idea that juveniles are in a transitory period and should not be stigmatized for

adolescent behaviors. However, “support for forgiving and forgetting juvenile misconduct ha[s] significantly diminished, while support for governmental and judicial transparency ha[s] significantly increased” (Jacobs, 2013, p. 10). State policies on expungement and sealing vary significantly based on factors such as offense type, delinquency history, and age, as well as the types of documents that are eligible to be sealed (e.g., law enforcement and court records; for an in-depth review of state policies see Shah et al., 2014). Shah and colleagues (2014) reviewed national expungement and confidentiality policies and found that 33 states “allow certain types of juvenile record information to be publicly available” (p. 14), 7 states “give complete public access to juvenile records” (p. 15), the majority of states will release juvenile records to schools, 15 states “limit expungement to court records” (p. 27), and in nearly all states juveniles have to qualify for expungement based on their age. In fact, only 9 states were classified as having full record protection for former juvenile delinquents.

Even when expungement or sealing of records is an option, many juveniles are unprotected for a variety of reasons. First, the financial cost of record expungement is cost prohibitive to many former delinquents. For example, it can cost up to \$320 in Illinois to have a juvenile record expunged, a fee that many are unable or unwilling to pay (Illinois Juvenile Justice Commission, 2016). Second, records may not be expunged if the juvenile was prosecuted using a blended sentence in both juvenile and criminal courts (Altschuler & Brash, 2004). A final issue is that confidential records of juveniles may be inappropriately shared by those with legal access to the records, resulting in the release of private information (Illinois Juvenile Justice Commission, 2016).

Fourteen states allow for automatic expungements of delinquency records, but in many states juveniles have to apply for an expungement (Litwok, 2014). In Litwok’s examination of 3 states that require an application to initiate

an expungement, the rate of expunged cases ranged from 0.2% to 10%. The financial cost of the process and the inability of juveniles to appreciate the impact of a delinquency history on long-term employment prospects were two suspected factors for the infrequency of juvenile applications.

Fees, along with the aforementioned barriers to expungement, have been considered a reason for the scarcity of expungements. For example, “for every 1,000 juvenile arrests in Illinois, only 3 are expunged” (Illinois Juvenile Justice Commission, 2016, p. 1). In Washington State, “9 in 10 individuals who are estimated to be eligible for sealing still have open records” (Calero, 2013, p. 4). Calero also found that whites and those living in neighborhoods with higher median incomes were the most likely to have their records sealed, suggesting that record sealing is just another example of disproportionate minority contact that has long plagued the juvenile justice system.

As delinquency records are increasingly losing protections, there is now potential for employment discrimination based on actions committed during adolescence. The deleterious impact of a criminal record on employment prospects is well known, yet research has largely failed to consider how a delinquent record may similarly affect employment opportunities. In one of the only studies to test this relationship, Baert and Verhofstadt (2015) conducted a field study in Belgium using two fictitious applications that were sent to employers, one application with a delinquency history and one without. They found applicants who indicated a delinquency history were 22% less likely to receive a callback for employment than nondelinquents. A similar type of study has yet to be conducted in the United States and with non-white applicants, so it remains unclear if this finding would hold true under different conditions.

More extensive research has been conducted on an adult cohort’s history of wages earned when they were juveniles. This research found that

involvement with the juvenile justice system is detrimental in adulthood. For example, one study of juvenile delinquents in adulthood found that delinquents had lower socioeconomic index scores (an indicator of income and educational level) than nondelinquents (Tanner, Davies, & O’Grady, 1999). Further research found that being charged in adolescence decreased earnings by 21% (Allgood, Mustard, & Warren, 1999), while incarceration during late adolescence and young adulthood led to an income reduction of 18% per year (Apel & Sweeten, 2010). Related to the current study, Litwok (2014) found that juvenile delinquents in automatic-expungement states had incomes 21% higher than former delinquents living in states requiring an application for expungement.

It was recently argued that the failure to protect juvenile records “harms individuals by hindering their ability to obtain the essential building blocks needed to contribute to society: namely, a stable home, a job, and opportunities for educational advancement” (Illinois Juvenile Justice Commission, 2016, p. 11). However, few empirical studies have demonstrated the validity of these claims. To begin to fill this void, we examined the short-term impacts of delinquency on the hiring process using fictitious job applications.

Methods

The current study examined perceptions and hiring prospects of job candidates with delinquency records. During the spring of 2016, 340 students at the University of Nevada, Reno, were asked to assume the role of an employer and report the likelihood of hiring job applicants based on a job announcement and fictitious resumes. College students have been successfully used in prior employment research and are an appropriate research sample, because they will eventually have a role in hiring applicants for future jobs (Varghese, Hardin, & Bauer, 2009). Of the 340 students, 6 were dropped from the analyses because they did not complete the majority of the survey; the final sample size was 334. After completing

a consent form, respondents were presented with a job announcement for an entry-level coffee-server position at a local coffee chain. The advertisement detailed the job's qualifications and benefits, and a statement indicating the company was an "equal opportunity employer."

Participants were randomly assigned to review one of four resumes (for examples, see Figure 1 and Figure 2)—a white male with no indication of a delinquency history, a white male with an indication of a delinquency history, a black male with no indication of a delinquency history, and a black male with an indication of a delinquency history. Instead of explicitly stating the race or ethnicity of the applicant, commonly used white and black names were used, with "Tanner Johnson" for a white male and "Darius Jackson" for a black male. Similarly, resumes did not explicitly state if the applicant had a delinquent or nondelinquent background. To indicate a history of delinquency, community and volunteer service were included as part of the "work experience" section. Resumes of delinquent applicants stated, "Washoe County Department of Juvenile Services—Community Service with the Friends of Washoe County Library; Completed mandatory community service to fulfill probation requirements." In contrast, resumes of nondelinquent applicants stated, "Washoe County Library—Volunteer; Volunteered during high school with Key Club." The fictitious resumes also included an educational history (i.e., high school diploma and community college courses), entry-level work experience (i.e., a local burger restaurant and an office supply store), a variety of skills applicable to the aforementioned job advertisement, and contact information.

After reading the fictitious job advertisement and one randomly selected resume, participants were asked a variety of questions regarding their perceptions of the applicant specifically and hiring practices in general. Respondents were asked how likely they were to call a candidate, how qualified they perceived the candidate to be for the position, how strongly a variety of

background factors would affect their decisions to interview in general, and what their own demographic characteristics were. Participants also were asked to describe any concerns they had in hiring an applicant with a delinquency history. Finally, they were asked about their perceptions of the fictitious applicant, including gender, race, and delinquency history, to ensure that they appropriately assumed the applicant type.

A mixed-methods approach was used in the current study. First, *t*-tests were conducted to determine if there were significant differences in the likelihood of callbacks based on applicant type. Then, an ordinary least-squares regression was performed to predict the likelihood of callback while controlling for factors that were expected to shape perceptions of job applicants, including perceived qualifications of the applicant and demographic characteristics of the respondent. Finally, qualitative responses on perceptions of hiring juvenile delinquents were analyzed. Using the constant comparison method adopted in grounded theory approaches (Glaser & Strauss, 1967), responses were coded line by line and compared between and among participants. Higher-level concepts (i.e., themes) were developed through the process of open coding and theme identification (e.g., observing similarities and differences in responses; identification of linguistic connectors; Ryan & Bernard, 2003).

Results

After respondents read a description of an entry-level job posting and a randomly selected resume, they were asked how likely they would be to call the applicant for a job interview (1 = Very unlikely; 10 = Very likely). The average score for this question was 6.93, indicating that participants were likely to call applicants for a job interview. Participants were also asked to indicate how qualified they believed the job candidate was (1 = Very unqualified; 4 = Highly qualified), with respondents reporting a mean score of 3.03. The average age of the sample was 21.68 years old; 56% were female; and 66% were

Figure 1. Sample resume of white delinquent juvenile.

Tanner Johnson
2795 Edgewood Drive, Reno, NV 89503
tanner.johnson13@gmail.com
(775)391-8060

Objective

Seeking a customer service position in a fast-paced environment where I can apply my prior experience.

Work Experience

12/2014-Present **Office Depot, Retail Sales Consultant**
Responsibilities included: Providing excellent customer service to educate customers on merchandise, assisting customers in purchases, maintaining an in depth knowledge of a variety of products

10/2013-9/2014 **McDonalds, Crew Member**
Responsibilities included: Preparing quality food to meet customers' standards, maintaining a clean workspace, providing friendly customer service

1/2013-3/2013 **Washoe County Department of Juvenile Services, Community Service with the Friends of Washoe County Library**
Completed mandatory community service to fulfill probation requirements

Education

Truckee Meadows Community College
2014-Present

Reno High School
2010-2013

Skills

- Extensive knowledge of handling money and operating cash registers
- Knowledge of a variety of computer programs including Microsoft Word and Excel
- Ability to be a team player with co-workers
- Able to efficiently and effectively work at a fast pace
- Stellar attendance and punctual

Reference available upon request.

Figure 2. Sample resume of black nondelinquent juvenile.

Darius Jackson
2795 Edgewood Drive, Reno, NV 89503
darius.jackson13@gmail.com
(775)391-8060

Objective

Seeking a customer service position in a fast-paced environment where I can apply my prior experience.

Work Experience

12/2014-Present **Office Depot, Retail Sales Consultant**
Responsibilities included: Providing excellent customer service to educate customers on merchandise, assisting customers in purchases, maintaining an in depth knowledge of a variety of products

10/2013-9/2014 **McDonalds, Crew Member**
Responsibilities included: Preparing quality food to meet customers' standards, maintaining a clean workspace, providing friendly customer service

1/2013-3/2013 **Washoe County Library, Volunteer**
Volunteered during high school with Key Club

Education

Truckee Meadows Community College
2014-Present

Reno High School
2010-2013

Skills

- Extensive knowledge of handling money and operating cash registers
- Knowledge of a variety of computer programs including Microsoft Excel and Word
- Ability to be a team player with co-workers
- Able to efficiently and effectively work at a fast pace
- Stellar attendance and punctual

Reference available upon request.

white, 4% were black, 19% were Hispanic, and 12% were Asian (see Table 1).

Table 1. *Demographic Characteristics*

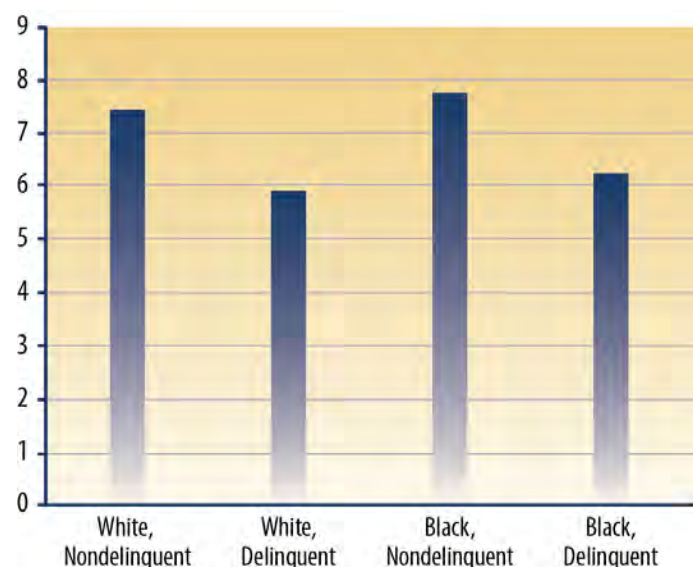
| Application Viewed | |
|--|-------|
| White nondelinquent | 24.9% |
| Black nondelinquent | 22.5% |
| White delinquent | 25.2% |
| Black delinquent | 27.5% |
| Perceptions of Applicant | |
| Likelihood of calling applicant for interview (Scale of 1—unlikely to 10—likely) | 6.9 |
| Applicant is qualified for the job (Scale of 1—unqualified to 4—qualified) | 3.0 |
| Respondent Demographics | |
| White | 71.3% |
| Black | 3.9% |
| Hispanic | 18.9% |
| Asian | 12.3% |
| Other Race/Ethnicity | 4.5% |
| Male | 43.7% |
| Age (Average) | 21.7 |

Hiring Based on Race and Delinquency History

When considering the four applicant types, white nondelinquents had the highest callback score (7.45), followed by black nondelinquents (7.29), black delinquents (6.61), and white delinquents (6.42). Following completion of the survey, respondents were asked to report what they believed the applicant's race and delinquency history were. Seventy-seven percent of respondents were able to correctly identify the delinquency history of the applicant based on the resume, whereas only 59% of applicants were able to correctly assume the race of the applicant based on the resume. To account for this issue, callback scores were analyzed only for respondents who were able to correctly identify the race and delinquency history of the applicant (Figure 3). When examining only respondents who appropriately identified the applicant type, black

nondelinquents had slightly higher callback scores (7.76) than white nondelinquents (7.46), followed by black delinquents (6.22) and white delinquents (5.94).

Figure 3. Likelihood of callback based on applicant type.



In considering only respondents who correctly identified applicant type and race, significant differences in callback scores were found. Table 2 presents the *t*-tests comparing callback scores for each of the applicant types. *T*-tests showed that delinquents significantly differed from nondelinquents in likelihood of callback, but that blacks and whites did not have significantly different callback scores. More specifically, white nondelinquents ($M = 7.46$, $SD = 1.81$) had a significantly greater likelihood of receiving a callback than both white ($M = 5.94$, $SD = 1.80$) ($t(102) = 4.06$, $p < .001$) and black delinquents ($M = 6.22$, $SD = 2.24$) ($t(90) = -2.69$, $p < .01$). Similarly, black nondelinquents ($M = 7.76$, $SD = 1.84$) were more likely to receive a callback than white ($t(62) = 3.97$, $p < .01$) and black delinquents ($t(50) = 2.72$, $p < .01$). In contrast, white delinquents were less likely to be called than both white ($t(102) = 4.06$, $p < .001$) and black nondelinquents ($t(62) = 3.97$, $p < .01$), while black delinquents had a significantly lower likelihood of being called than white ($t(90) = -2.69$, $p < .01$)

Table 2. *T-Tests of Likelihood of Callback Based on Applicant Type*

| Applicant Type | Mean | Standard Deviation | Confidence Interval | T-Value (DF) |
|---|--------------|--------------------|------------------------|--------------|
| White, Nondelinquent/ White, Delinquent | 7.46 5.94 | 1.81 1.80 | 7.03–7.90 5.33–6.56 | 4.06(102)* |
| White, Nondelinquent/ Black, Delinquent | 7.46 6.22 | 1.81 2.24 | 7.03–7.90 5.25–7.18 | –2.69(90)** |
| White, Nondelinquent/ Black, Nondelinquent | 7.46 7.76 | 1.81 1.84 | 7.03–7.90 7.06–8.46 | .73(96) |
| White, Delinquent/ Black, Delinquent | 5.94 6.22 | 1.80 2.24 | 5.33–6.56 5.25–7.18 | .52(56) |
| Black, Nondelinquent/ White, Delinquent | 7.76 5.94 | 1.84 1.80 | 7.06–8.46 5.33–6.56 | 3.97(62)** |
| Black, Nondelinquent/ Black, Delinquent | 7.76 6.22 | 1.84 2.24 | 7.06–8.46 5.25–7.18 | 2.72(50)** |

* $p < .001$, ** $p < .01$, *** $p < .05$

Table 3. *Ordinary Least-Squares Regression of Likelihood of Calling Applicant for a Job Interview*

| | B(SE) |
|---------------------------------------|--------------|
| Perceptions of Applicants | |
| Juvenile History (Delinquent) | –1.36(.30)* |
| Race (Black) | .046(.32) |
| Qualified for Job | 3.41(.55)* |
| Age | .077(.46) |
| Gender (Female) | 0.21(.56) |
| Respondent Characteristics | |
| Age | .056(.039) |
| Gender (Female) | .0023(.29) |
| Race (Black) | |
| White | .14(.37) |
| Other | .041(.90) |
| Ethnicity (Hispanic) | –.097(.39) |
| Experienced Employment Discrimination | –.022(.41) |
| Constant | 2.87(1.25)** |
| <i>N</i> | 156 |
| Adjusted R^2 | .28 |
| <i>F</i> Ratio | 6.43* |

Note. Categories in parentheses are reference groups.

* $p < .001$, ** $p < .05$

and black nondelinquents ($t(50) = 2.72$, $p < .01$). Notably, black and white delinquents were not significantly different in callback rates, nor were black and white nondelinquents.¹

An ordinary least-squares regression was also conducted predicting the likelihood of a respondent calling the applicant for a job (Table 3). No demographic characteristics of respondents were significant (i.e., age, gender, race/ethnicity, personally experienced discrimination in hiring), and neither were most applicant characteristics that were assumed by the respondent (i.e., applicant race, age, and gender). The two factors that significantly influenced likelihood of callback were delinquency history of the applicant and being qualified for the job. More specifically, respondents who believed the

applicant was delinquent were less likely to suggest a callback, whereas those who believed the applicant was qualified for the job were more likely to suggest a callback.

Perspectives on Hiring Juvenile Delinquents

Respondents then described their specific concerns with hiring the fictitious applicant. Of the respondents who believed the applicant was delinquent, 70% stated they were concerned about hiring the applicant because of the delinquency history. Respondents made statements that they would be concerned “that he’d do his job right without breaking any laws,” “whether or not he would bring any legal problems to my business,” “that [he] would go to juvy again,” and “that he has learned his lesson and is ready to work and keep his life on track.”

As prior research has found that a variety of factors influence employment decisions, especially involvement with the criminal justice system, respondents were asked about the degree to which certain factors would *generally* affect their decision to hire (0 = Would not impact my decision to interview; 10 = Would strongly impact my decision to interview). These factors included if the applicant had a

¹ Demographic characteristics were examined between respondents who were able to correctly identify the applicant type (i.e., race and delinquency history of applicant) and those who were unable to. With the exception of age of respondents (those who could identify applicant type were slightly older than those who could not), there were no significant differences in any characteristics of applicants (e.g., gender, race, educational level).

delinquency history (6.95), was currently on parole (8.34), had a criminal history (8.30), was previously fired from a job (7.69), had no high school diploma (7.16), had a gap in work history (5.84), had a limited work history (5.33), or had no college education (4.74). A delinquency history reportedly affected decisions to hire much less than an adult criminal record, being fired from a job, or failing to graduate from high school.

Although the previous question suggested that respondents were less concerned about juvenile delinquency than adult offenses, their qualitative responses about general hiring practices demonstrated a varying degree of concern in hiring a juvenile delinquent. Five major themes were noted in the qualitative responses. First, a few respondents suggested they would be willing to hire a delinquent because they believed in *second chances*. Typical statements for those who believed in reform included “I feel that everybody deserves a second chance, they may have been young. . . . I would have to listen to everybody’s story and their situation as to why they were delinquent”; “I would take into consideration what had happened. If it is someone who is young, I understand that young people do make mistakes and as long as they are willing to overcome that and change and be a great asset to my team, then I wouldn’t have a problem hiring them”; and “[I would want to know] how are they working to improve their history and themselves to make sure this would not be a problem in the future.” These respondents appeared to believe that juveniles are able to reform in adulthood.

A second theme emerged of *alternative employment choices*. These respondents made comments such as “although I do not have any specific concerns, I’d prefer an applicant who doesn’t have a delinquency history over one who does”; and “I would not want to hire a delinquent as they have proven in the past to have made poor decisions, I have no evidence that they would not do it again. . . . There are plenty of people who aren’t delinquents [who] I would be more likely to hire.” These respondents thought

it would be unnecessary to hire someone with a delinquent record when they could hire a similar applicant without a delinquency history.

The majority of respondents expressed concerns over *safety* in the workplace if an applicant with a delinquency record were hired. For example, respondents stated, “if they are handling money it would make me nervous and I would be afraid that they will steal from me or maybe that they are not responsible enough to show up to work every day on time”; “I would be concerned that the applicant may damage company property or take company funds based on what type of history he/she has”; and “I would be concerned about their personal values and for the safety of my other staff members.” Participants suggested that *crime type* would also shape their perceptions of danger presented by the applicant. Respondents made statements such as “it depends on the crime that was committed, but if they happened to have been caught stealing, that would be very concerning . . . property destruction would also be concerning”; “It would depend on the history. . . . If the person got busted for drugs, I would have no problem hiring that applicant at all. . . . If that person had been convicted of rape, I would have some more questions”; and “I would be concerned about the type of crime they committed, for instance if they stole something or committed a violent crime I would be less willing to hire them for fear of a repeat offense in the workplace.” Respondents who expressed concerns over the crime type were most concerned with property-related offenses, which to them seemed to indicate a greater likelihood of reoffending specifically against the employer.

The final theme that emerged was concern about the *image of the company*. Several respondents stated that hiring a juvenile delinquent would harm the corporate image that employees and customers shared: “I would be concerned they had a bad attitude with me or the customers”; “I do not want to take a chance that this new employee can create aggression and conflict

with customers or even co-workers. . . . Since this person has a delinquent history I would be worried about my safety and the safety of the business"; and "the applicant would not be safe to be around customers or the applicant might engage in illegal activity again and jeopardize the company." Participants also suggested that the company image could be damaged more generally and that hiring former delinquents would be a liability. These respondents made statements such as "the company's clean and friendly image might be negatively affected by hiring an applicant with a delinquent history"; "I would be concerned with their work ethic and any possible legal trouble I could potentially run into if hiring an applicant with a delinquent history"; and "[there may be potential] liability to the company." Whereas some participants believed that the image of the company in the eyes of customers would be harmed, others thought that there would be severe legal repercussions over hiring someone with a delinquency history.

Discussion

The current study is an important first step at exploring hiring perceptions of job applicants with a delinquency history in the United States. Findings suggest that mock employers perceived juvenile delinquents negatively when comparing them with nondelinquents and were less likely to suggest delinquents for job interviews. Although other applicant characteristics appeared to be of greater concern to the mock employers (e.g., currently on parole, fired from a prior job), their qualitative responses clearly indicated that a delinquent background was a factor that would negatively shape perceptions of employees. Safety in the workplace and the image of the company were two common concerns expressed by the respondents, suggesting that a delinquency history would be an indicator of persistent offending. If these concerns about stigma do in fact extend to employers in the real world, employers may fail to recognize the transitory nature of juvenile offending—a key reason

why expungement and sealing policies were implemented in the first place. Instead, employers who likely have minimal knowledge of delinquency and desistance from crime may unfairly stigmatize applicants with delinquent records as habitual or serious offenders.

These findings have serious implications for the hiring prospects of applicants with a delinquency record for several reasons. Employment is a well-known factor that is critical for crime desistance (Laub & Sampson, 2003; Raphael & Weiman, 2007). Juveniles naturally have less employment experience than adults, so barriers that prevent them from gaining experience potentially delay the acquisition of this social capital. In other words, employment discrimination based on a delinquent record may exacerbate the challenges already faced in the hiring process. Research has also found that labeling juvenile delinquents as criminals negatively affects crime desistance because juveniles will adopt the delinquent labels they seem stuck with (Becker, 1963). Expungement and sealing of records theoretically mitigates the impact of formal labels for adolescents, so the removal of such protections allows for the stigmatization of job applicants bearing a delinquency label.

Research on adult exonerees similarly found that a criminal label was detrimental, as the "failure to expunge was a significant predictor of post-exoneration offending" (Shlosberg, Mandery, West, & Callaghan, 2014, p. 353). The effect of a delinquency label on recidivism is also mediated by employment (Bernburg & Krohn, 2003), a finding that highlights the impact that employment discrimination directed toward former delinquents may have on future offending.

One surprising finding of the current study was that white and black applicants were equally likely to receive a callback. This finding held true for delinquents and nondelinquents alike and when those who were unable to identify race were excluded. Prior studies found that non-white applicants were significantly less likely to

receive a callback (Pager, 2003; Pager, Western, & Sugie, 2009; Varghese et al., 2009). There are several possible explanations for this finding. The survey took place in 2016, when extensive media attention was focused on discrimination and bias directed toward blacks, especially regarding blacks being punished in the criminal justice system. This may have translated into a shifting public sentiment on hiring practices, since it may be recognized that in some cases, blacks are unfairly arrested and incarcerated. Research on racial awareness recently found that when awareness of bias increases, racial bias is subsequently reduced (Pope, Price, & Wolfers, 2013). Other research suggests that Millennials believe in the importance of racial equality more so than prior generations (Luckerson, 2015), which may translate into racially neutral responses.

Juveniles have long been acknowledged as less mature, less rational, and having less self-control than adults, characteristics that influence adolescent-limited delinquency. The increased criminalization and punitive responses directed toward juvenile delinquents beginning in the 1980s have increasingly led juveniles to be treated similarly to adults. Recent changes in the media portrayal of juveniles as violent superpredators (Haegerich, Salerno, & Bottoms, 2013) and in policy protections that were once standard in the juvenile system have opened the door to bias and discrimination, potentially harming applicants with a delinquent record. There is growing concern among juvenile justice advocates that as the protection of juvenile delinquency records diminishes, youth with these records may be stigmatized similarly to adults (Shah et al., 2014).

There are several policy implications to be gleaned from the current study. First, it is critical that, in most cases, access to delinquency records is restricted for employers and the public. There is a growing trend nationwide to “ban the box,” where job applicants with felony records are no longer required to report felonies on employment applications because the stigma

of a criminal record is now publicly recognized (Henry & Jacobs, 2007). At the same time, states are increasingly removing protections that were once standard for juveniles (Willison, Mears, & Butts, 2017). This outcome conflicts with the primary goal of the juvenile justice system—rehabilitation of delinquents so that they desist from offending in adulthood. On a related note, when juvenile records are published on the Internet, it becomes more difficult to expunge or seal records (Calvert & Bruno, 2010). Caution should be taken in states that allow records to be publicly available online, because it may become unrealistic to expunge records after third-party websites download such information.

Second, expungement and sealing fees for delinquency records should be eliminated nationwide. Prior research suggests that these fees, which may appear nominal, serve as a substantial barrier to many former delinquents (Calero, 2013; Illinois Juvenile Justice Commission, 2016). As a result, juveniles or their parents rarely pay to have records sealed. Recently, recognition that fees are harmful to reentry led to the elimination of sealing fees for delinquent records in the state of California (Selbin & Campos, 2016). For example, before the statewide elimination of fees, the Alameda County Probation Department assessed juvenile fee collection and found that there was “little net financial gain” (Selbin & Campos, 2016, p. 13). In other words, fees are rarely paid, probation departments make little profit, and unsealed records serve as reentry barriers—findings that collectively suggest that charging for this protection is illogical and counterproductive.

Finally, though only a few states have adopted automatic expungement policies, research suggests that adoption of these policies is favorable to reentry (Litwok, 2014). However, these policies are not without limitations. For example, automatic expungements typically only occur after the delinquent has turned a certain age and has not committed any new offenses (Shah et al., 2014). In some cases, the expungement may occur after 10 years. This suggests that the

stigmatization of a juvenile record may occur for a decade after the juvenile turns 18, potentially delaying entry into the labor market. Even in states with automatic expungement policies, some records may not be expunged due to the multiple locations where records are stored (Illinois Juvenile Justice Commission, 2016). In Illinois, it is estimated that the majority of juvenile arrests are not protected by automatic expungements, since only cases reported to the Illinois State Police are expunged. Because of the rehabilitative benefits of automatic expungements, policymakers should consider expanding these protections across all states and ensure that they are truly automatic when juveniles turn 18.

As noted, research is beginning to confirm that failing to protect juvenile records has long-term deleterious effects in a former delinquent youth's adulthood. The increased accessibility of records fueled by the public's right to know needs to be reconsidered using a cost-benefit analysis approach, since there is growing evidence that availability of records can have long-term effects on employment likelihood for juveniles. In turn, this may then result in recidivism that has clear societal harms.

Limitations and Future Research

There are several limitations to the current study. It is recognized that job applicants would be unlikely to willingly disclose court mandated community service on a resume. However, similar strategies have been used in prior studies of hiring practices regarding felons (Pager, 2003). The decision to include this experience as an indicator of delinquency was made for two reasons. First, it was believed that simply giving respondents the applicant's delinquency history was too overt and would bias the respondents. The strategy in the current study represented a more realistic experience, closer to what employers face in deciding among job applicants through the relatively limited information presented in resumes. Second, although applicants would be unlikely to indicate a delinquency history

on a resume, in cases where records were not expunged, such a history may eventually be revealed through a background check, during which bias may become clear.

The study was also limited because the convenience sample primarily consisted of university students. Although prior employment research has relied on samples of university students (Varghese et al., 2009), students are arguably likely to differ in their hiring decisions compared with actual employers. Students have little investment in granting an interview, so they may be more likely to interview an applicant than an employer who recognizes the time investment in interviewing candidates. The use of a convenience sample in Reno also resulted in a sample of primarily white mock employers. Although in the current study callbacks did not vary based on the race or ethnicity of the mock employer, future research should be conducted with a more diverse sample. Blacks were underrepresented in the current study in comparison to the representation of blacks among human resource officers nationally (Bureau of Labor Statistics, 2016). Prior research demonstrates that non-white applicants are more likely to be hired by non-white hiring agents (Stoll, Raphael, & Holzer, 2004), suggesting that the black applicants in the current study may have fared even better when being considered by black hiring agents.

Future research is critical in determining two outcomes of background checks—how frequently delinquency histories are revealed through background checks, and how actual employers are affected by this information. One recent study of employer perceptions of hiring delinquents found that employers actually suggested that delinquent applicants reveal a delinquency history to remain "honest" (Pham, Unruh, & Waintrup, 2015). Pham and colleagues found "very few employers were aware of or showed a regard for juvenile confidentiality laws" (p. 118), since 62% of employers said that juveniles should disclose a delinquency history, while only 11% said a disclosure was unnecessary.

When considering the findings of the current study, it is apparent that employers want to know about delinquency histories and may make hiring decisions partially based on this information. As expungement and sealing protections for juveniles are increasingly eroded across the United States, it is critical that future research examines responses of actual employers when they are confronted with applicants who have delinquency histories.

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Gender Comparisons in the Processes and Outcomes of Functional Family Therapy

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Abstract

Although their overall delinquency rates have been declining in recent years, female adolescents are being arrested and institutionalized at a higher rate than males. This study explores the participation of female and male delinquents in Functional Family Therapy (FFT). The data include 116 adolescents who were enrolled in FFT in Middlesex County, New Jersey. The results indicate that females and males are referred to FFT by different agencies, suggesting another pathway to delinquency. The findings show similar therapeutic but mixed juvenile justice outcomes for female and male delinquents. However, no statistically significant differences between both genders have emerged. More studies are needed to explore effectiveness of FFT by gender, and whether gender-specific approaches are more suitable than evidence-based interventions.

Introduction

The statistical data indicate that the number of female delinquents arrested and detained is on the rise. In 2013, law enforcement made over 700,000 arrests of juveniles under age of 18. Although the juvenile arrests decreased by 15.5 percent in 2013 compared with 2012, arrests of female juveniles

have been rising. For example, the percentage of female arrests increased from 17 percent in 1980 to 29 percent in 2010 (www.fbi.gov). The data show that female delinquents tend to be arrested for larceny-theft, prostitution, and breaking liquor laws. The largest increase in female arrests occurred in property crimes (Sickmund & Puzzanchera, 2014). In addition, although the court cases of female adolescents account for a relatively small share of all cases, the number of female defendants either increased, or decreased less than the number of male defendants (Sickmund & Puzzanchera, 2014).

The data indicate that male delinquents are more likely to be detained than females. However, between 1985 and 2010 the number of detained females increased by 43 percent, while the number of detained males increased by 11 percent. In 2010, females were charged in 28 percent of all delinquency cases and in 43 percent of all status offenses. The majority of female status offenders were brought to the court on charges of running away from home (58 percent; Sickmund & Puzzanchera, 2014).

The above-summarized statistical data clearly show that female involvement in the juvenile justice system has been increasing. These recent

trends are concerning; subsequently, many scholars have been calling for gender-appropriate interventions that would prevent and reduce female involvement in the system (Bloom, Owen, & Covington, 2005; Hubbard & Matthews, 2008; Widom, 2000; Worthen, 2011).

The current study is exploratory and reports results of the process and outcome evaluation for females and males who participated in Functional Family Therapy (FFT). Specifically, the purpose of this research is to describe how females and males enter the juvenile justice system and the FFT intervention, and to compare the therapeutic and the juvenile justice outcomes by gender. The data used in this research were collected between 2006 and 2011 as part of a larger evaluation study conducted with youth enrolled in the Children at Risk Resources and Interventions—Youth Intensive Intervention Program (CARRI-YIIP) in Middlesex County, New Jersey. The sample includes 116 adolescents who completed FFT: 72 males and 44 females.

Although FFT has been recognized as an effective intervention for many types of juvenile delinquents (status offenders, serious delinquents, drug- and alcohol-abusing juveniles), only a small number of studies address the issues of differential impact by gender. This study is an attempt to fill the current gap that exists in the literature. The findings of this project will contribute to the literature on interventions for female and male delinquents, and particularly on their participation in FFT. The results are relevant to current juvenile justice policies.

Interventions for Juvenile Delinquents

In recent years, many scholars have focused their attention on evaluating effectiveness of programs and interventions for juvenile delinquents. Myers (2013) argues that this trend is a part of the “accountability movement” pursued by the agencies and organizations in the juvenile justice system.

There are various ways of identifying and subsequently implementing effective interventions for young offenders. For example, Lipsey, Howell, Kelly, Chapman, and Carver (2010) differentiated among three approaches: a direct evaluation of the implemented program, selecting a model program that has been deemed effective by a reliable source (e.g., the Office of Juvenile Justice and Delinquency Prevention’s “Model Programs Guide”), or selecting a program through meta-analysis. Based on these approaches, Greenwood (2008) distinguished among proven, preferred, promising, provisional, and ineffective programs and strategies. The proven and preferred programs have been reviewed and recommended by various institutions (e.g., the Center for the Study and Prevention of Violence at the University of Colorado in the form of the Blueprint for Violence Prevention) and based on meta-analysis research (e.g., Lipsey; the Campbell Collaboration). Further, Greenwood explained that the interventions shown to be effective were recommended either in their “generic” form of successful strategies (such as group therapy or behavior modification) or because they were in the category of brand-name programs (such as FFT and Multisystemic Therapy [MST]). He concluded that family therapy appeared to work as a generalized approach and as a preferred brand-name program when offered in the community. Two interventions that were identified in these groups were FFT and MST (see also MacKenzie & Farrington, 2015).

Similar to FFT, MST is a family-based program, but it is more extensive in its scope and more expensive to run, because it involves a wider social network. Besides FFT and MST, Greenwood (2008), MacKenzie and Farrington (2015), and Welsh and Greenwood (2015) listed other effective types of community programs, such as teen courts and adolescent diversion projects, as well as programs such as Multidimensional Treatment Foster Care (MTFC) and its specific category—Girls in Treatment Foster Care.

Overall, scholars tend to agree that increasing severity of punishment and increasing control over delinquents do not reduce delinquent behavior. The most effective programs and interventions are those that include elements of family therapy, behavior modification, and skill building. Skill-building programs (e.g., behavioral programs) aim to teach youth how to control their behavior and how to participate in social activities (e.g., educational and vocational training; Lipsey, 2009). Yet Greenwood (2008) also stated that only about 5 percent of youth who are eligible to participate in these programs, are able to participate. He suggested the two main reasons are a lack of accountability and assessment of programs within the juvenile justice system, and a lack of funding to implement evidence-based programs.

Interventions for Female Delinquents

Research indicates that the trajectory or pathways to delinquency and the juvenile justice system differ by gender. Some scholars suggest this trend could be related to differences in self-concepts and socialization of boys and girls (Espinosa, Sorensen, & Lopez, 2013). In addition, many female delinquents have serious co-occurring problems since their childhood. For example, girls involved in the juvenile justice system tend to have had trauma, often caused by emotional, physical, and sexual abuse they experienced in destructive and unstable families (Chesney-Lind & Shelden, 2004; Chesney-Lind, Morash, & Stevens, 2008; Marsiglio, Chronister, Gibson, & Leve, 2014). Involvement in drug and alcohol abuse also has been linked to traumatic events in the lives of girls. Finally, research indicates that female delinquents who have experienced trauma tend to suffer from various mental health issues (Crimmins, Cleary, Brownsteing, Spunt, & Warley, 2000). In fact, mental health needs of females in the child welfare and in the juvenile justice systems are significantly higher than in the general population (Lennon-Dearing, Whitted, & Delavega, 2013; Teplin et al., 2006).

According to many scholars, girls are punished more severely than boys in the juvenile justice system. It is especially evident in controlling and punishing for committing status offenses—acts that would be legal if committed by an adult (Carr, Hudson, Hanks, & Hunt, 2008; Chesney-Lind, 2002). In 1974 the Federal Government passed the Juvenile Justice and Delinquency Prevention Act (JJDP). Though the Act's intent was to reduce institutionalization of status offenders, the family courts have continued to punish female status offenders—especially ethnic and racial minority females (Carr et al., 2008; Espinosa et al., 2013).

Research on adult female offenders suggests that women respond differently to interventions and imprisonment than their male counterparts, indicating a similar trend for young female and male delinquents (Bloom et al., 2005; Gover, Perez, & Jennings, 2008; Wolff & Shi, 2009). Nevertheless, research on programs and interventions for female delinquents is still very limited (Carr et al., 2008; Hubbard & Matthews, 2008).

According to Hubbard and Matthews (2008), there are two theoretical approaches to interventions for female delinquents. One approach focuses on different pathways to criminality and distinctive ways of entering the juvenile justice system. Subsequently, those researchers call for "gender-specific" interventions and programs that differ from those offered to male delinquents (e.g., Belknap, 2001; Belknap & Holsinger, 1998; Bloom, 2000; Bloom, Owen, & Covington, 2003; Chesney-Lind & Shelden, 2004). Yet some scholars warn about the consequences of applying this approach. Carr and colleagues (2008) suggest that although gender specific programs might be very useful, they might also lead to different gender standards for behavior expectations and interventions. Such a change could be counterproductive for female delinquents.

The second approach, preferred mainly by the quantitative researchers, identifies variables correlated with recidivism. These scholars tend to support evidence-based programs that they

claim are equally applicable to males and females (e.g., Cullen & Gendreau, 2000; Gendreau, 1996; Latessa, Cullen, & Gendreau, 2002). Among all evidence-based programs, cognitive-behavioral models seem to be the most effective in addressing delinquency. FFT is an example of such an evidence-based intervention. However, researchers in the gender-responsive group argue that cognitive-behavioral approaches ignore differences in the roots of criminality. They assert that the best approaches for young female delinquents are strength-based, leading to empowering females. They support therapeutic approaches and relational models that address traumas in the lives of young females.

Based on current literature, Hubbard and Matthews (2008) concluded that the preferred interventions to prevent female delinquency and female involvement in the juvenile system are those that combine both the relational and cognitive-behavioral models. One such approach would be a family intervention that focuses on reducing conflicts within family and on improving communication skills among family members. FFT includes such elements, especially during the first stage of motivation and engagement. The emphasis of the first phase is on improving family relations and on engaging all participants equally in the therapeutic process. Yet the FFT model does not address other vital elements of female delinquency, such as trauma.

Research on gender issues in FFT is still limited. Some researchers focused on gender of therapists and how it affected FFT's effectiveness. For example, Newberry, Alexander, and Turner (1991) found that female therapists were more successful than male therapists in engaging families in the first FFT phase. They claimed that the gender of the therapist mattered to clients because female and male therapists responded differently to clients' behavior. In contrast, Robbins, Alexander, and Turner (2000) found no differences in therapy outcomes based on the gender of the therapist.

The question of the differential impact of FFT based on the client's gender was addressed in several outcome studies. Early research by Alexander and Parsons (1973) and Barton and Alexander (1981), as well as a more recent study by Robbins, Alexander, and Turner (2000), indicated that therapy outcomes do not depend on the gender of the clients. On the other hand, in a retrospective study of 118 families who participated in FFT, Graham, Carr, Rooney, Sexton, and Satterfield (2014) found that FFT effectiveness was not only associated with treatment completion and adherence to the model by the therapists, but also with the clients' gender. Specifically, they concluded that better outcomes were obtained by younger female clients. In one of the most comprehensive recent evaluations, Baglivio, Jackowski, Greenwald, and Wolff (2014) compared the effectiveness of MST and FFT and found that both programs led to significant improvements for youth with two exceptions: females receiving FFT had a lower recidivism rate, and low-risk youth receiving FFT had fewer offenses during the service provision. Contrary to the above-mentioned studies, in 2007 Aultman-Bettridge reported no significant differences in post-program risk factors and recidivism between delinquent girls who participated in FFT and those who did not. Similarly, Celinska, Furrer, and Cheng (2013) found that only males who participated in FFT improved on the Child Strengths Scale of the Strengths and Needs Assessment (SNA), but not females. However, they also noted that the results could be affected by a small sample size.

There are still few published studies on gender differences in FFT outcome evaluations. In addition, the findings in these studies seem to be contradictory and inconclusive. In light of those results, it is especially pertinent to further explore the impact of FFT on young females.

Functional Family Therapy

Functional Family Therapy (FFT) is a systematic clinical model and intervention designed to assist

delinquents and juveniles at risk for delinquency, and their families (Alexander & Sexton, 2002; Sexton & Alexander, 2004). Developed in the late 1960s, FFT has been recognized by various governmental and nongovernmental organizations as a model intervention and a blueprint program that addresses needs of young delinquents in preventing behavior that leads to delinquency (<http://www.fftllc.com>).

FFT is a short-term family therapy intervention that targets adolescents ages 11 to 18. Siblings and at least one parent or guardian are also included. The FFT model has three distinctive stages: engagement and motivation, behavioral change, and generalization. During the first phase, the therapists work on engaging families by reducing negativity and blaming in communication among family members. One of the goals during this stage is to create a balanced alliance among all family members and the therapist, and to facilitate an equal participation from everyone, especially youth. During the second stage, the therapists work on changing behaviors that led youth to risky and delinquent behavior. The therapists may work on such issues as anger management, problem solving, and parental skills. Finally, during the last stage of generalization, the therapists focus on educating families in sustaining the positive behavioral changes gained during the therapy and in using available local resources (Alexander & Sexton, 2002; Sexton & Alexander, 2004). The fidelity to the FFT model is ensured by the training of the therapists and through on- and off-site supervision from the FFT supervisors and FFT consultants.

Evaluation of FFT

Since its inception, FFT has been evaluated for its effectiveness in preventing delinquency. Several studies have indicated that FFT has a positive impact on communication skills among family members (Alexander & Parsons, 1973). Further, Alexander, Barton, Schiavo, and Parsons (1976) found that participating in FFT decreased defensiveness and increased support among family

members. Many studies linked positive outcomes of FFT with its model design, particularly its first phase of engagement and motivation (Mas, Alexander, & Turner, 1991; Robbins et al., 2000; Robbins, Turner, Alexander, & Perez, 2003).

The published evaluation studies have tended to show a significant and positive impact of FFT on delinquency and recidivism rate (Barnoski, 2004; Barton, Alexander, Waldron, Turner, & Warburton, 1985; Gordon, Arbuthnot, Gustafson, & McGreen, 1988; Klein, Alexander, & Parsons, 1977; Washington State Institute for Public Policy, 2002). More recently, using a slightly different and a smaller sample from the same project as in the present study, Celinska and colleagues (2013) found that adolescents who participated in FFT significantly reduced their unmet emotional and behavioral needs, and reduced risk behaviors as measured by the Strengths and Needs Assessment. Graham and colleagues (2014) observed that FFT was effective when the treatment was completed by participants, and when the therapists adhered to the model. Finally, in a comprehensive evaluation of FFT and MST, Baglivio and colleagues (2014) found both FFT programs to be effective in reducing recidivism rates. They also noted that females who completed FFT had a lower recidivism rate than females who completed MST.

Some studies indicated that FFT was successful in addressing the needs of drug- and alcohol-abusing youth. For example, Waldron and Turner (2008) conducted a meta-analysis of 17 studies on outpatient treatment for adolescents and found that participating in FFT significantly and positively reduces substance abuse among adolescents.

FFT also seems to be an effective intervention for adult offenders. Datchi and Sexton (2013) indicated that probationers who were in FFT had less intrafamily conflicts and fewer mental health issues than those who received only probation supervision.

A number of published studies have focused on the role of FFT therapists who are trained to offer individualized therapy to families while adhering to the FFT model (Flicker, Turner, Waldron, Brody, & Ozechowski, 2008; Flicker, Waldron, Turner, Brody, & Hops, 2008; Newberry et al., 1991; Sexton & Schuster, 2008). Sexton and Schuster (2008) concluded that FFT has an advantage over other family therapies, because its first phase is dedicated to addressing motivation and engagement, as well as to reducing blame among family members.

Methods and Data

The goal of this study is to describe how young females and males enter the juvenile justice system and the FFT intervention, and to compare and contrast the therapeutic and the juvenile justice outcomes by gender. The data were collected between 2006 and 2011, and the Family Automated Case Tracking System (FACTS) data were collected in March 2014. The project received an Institutional Review Board approval from Rutgers University in New Jersey (formerly the University of Medicine and Dentistry of New Jersey [UMDNJ]) and the Certificate of Confidentiality from the National Institute of Child Health and Human Development.

Recruitment and Characteristics of the Sample

The data were collected on 116 adolescents enrolled in FFT in the CARRI-YIIP program at the UMDNJ (currently Rutgers University). The sample came from a larger evaluation project that included youth ages 11 to 17 who lived with a parent or guardian, and who had a history of aggressive behavior, destruction of property, or chronic truancy. Youth with serious criminal behavior, drug or alcohol use, or mental health issues were not admitted to FFT. The CARRI-YIIP accepted clients until the program's saturation.

The initial involvement and referral sources to FFT differed by gender (see Table 1). The majority of male adolescents came to the program through Middlesex County Probation (40 versus

9 for females), while the majority of female adolescents were referred by the Mobile Response and Stabilization Services of New Jersey. Mobile Response responds to assist children and youth who are experiencing emotional and behavioral crises. Mobile Response offers short-term services that focus on resolving crises, providing safety to children while trying to maintain them in their own environment (http://ubhc.rutgers.edu/services/children_family/CMRSS.html).

The majority of youth who participated in FFT were mandated by the Family Court (59 percent). Among all 69 mandated adolescents, 48 were males and 21 were females. The difference is significant at $p < .05$.

Fidelity to the model was ensured in several ways. Each therapist had to complete annual FFT Site Certification Training. They were also monitored through a web-based FFT Clinical Services System and supervised by the off-site national FFT Consultant. An on-site FFT-certified supervisor provided ongoing oversight.

The sample included youth who completed FFT and for whom the outcome data were available. The basic characteristics of the sample and the referral sources to the program are presented in Table 1.

Outcome Data

The outcome data for our study came from two sources: the Strengths and Needs Assessment (SNA) and the Family Automated Case Tracking System (FACTS). Both data sets are described below.

The Strengths and Needs Assessment

The Strengths and Needs Assessment (SNA) is a comprehensive clinical and research instrument developed by Lyons (2009) that consists of rating the strengths and needs of adolescent clients and their parents. The total scores guide therapists in choosing appropriate treatment. They can also be used to assess the effectiveness of the intervention (Anderson, Lyons, Giles, Price, & Estle, 2003;

Table 1. *Demographic and Program Characteristics by Gender*
(N= 116)

| | Male (N = 72) | Female (N = 44) |
|--|------------------|--------------------|
| Race/Ethnicity: | | |
| White | 25 (36%) | 8 (19%) |
| Black | 21 (30%) | 20 (48%) |
| Latino | 18 (26%) | 11 (26%) |
| Other | 5 (7%) | 3 (7%) |
| Age (mean): | 15.49 | 14.64 |
| Mandated: | | |
| Yes | 48 (70%) | 21 (30%) |
| No | 24 (51%) | 23 (49%) |
| Referrals: | | |
| Middlesex County Probation | 40 (56%) | 9 (21%) |
| Mobile Response | 10 (14%) | 11 (25%) |
| Youth Case Management (YCM) | 7 (10%) | 6 (14%) |
| Family Crisis Intervention Unit (FCIU) | 6 (8%) | 5 (11%) |
| Division of Youth and Family Services (DYFS) | 0 | 4 (9%) |
| Middlesex County Multi-Disciplinary Team (MDT) | 0 | 2 (5%) |
| Other | 9 (13%) | 7 (16%) |
| Duration in FFT: | | |
| Duration in program (days) | 179 | 179 |
| Total number of sessions attended (mean) | 11.7 | 10.3 |
| Total number of sessions in the first phase (mean) | 4.7 | 4.5 |

Lyons, Griffin, & Fazio, 1999). Studies suggest that the SNA have both validity and reliability (Anderson & Estle, 2001; Anderson et al., 2003; Lyons, 2009; Lyons, Weiner, & Lyons, 2004). In this project the reliability of the SNA was also ensured through in-person or web-based training of the CARRI-YIIP therapists (Caliwan & Furrer, 2009). In addition, since the SNA was used for clinical decisions, the accuracy of the SNA was continuously assessed through supervision and the review of client records.

The SNA consist of seven domains: Life Domain Functioning (13 items), Child Strengths (9 items),

Acculturation (3 items), Caregiver Strengths (6 items), Caregiver Needs (5 items), Child Behavioral/Emotional Needs (9 items), and Child Risk Behaviors (10 items). Life Domain Functioning includes items on family life, school, and occupation. Child Strengths focuses on each adolescent's family situation, personal achievements, and involvement in the community. Acculturation pertains to language and culture. Caregiver Strengths includes issues regarding the caregiver's relationship with the child and the level of stability at home. Caregiver Needs includes any mental and physical health problems. Child Behavioral/Emotional Needs measures impulsivity, depression, anxiety, anger control, and substance abuse. Child Risk Behaviors assesses suicide risk, self-mutilation, danger to others, sexual aggression, running away, delinquency, and fire setting.

The SNA was administered twice, before and after intervention. This process allowed for employing the SNA as a pre- and post-test. The therapists rated families on a scale ranging from 0 (no evidence of problem; no need for service) to 3 (severe; need and priority for an intervention). The items were recoded (from 1 to 4) so that the higher scores represented improvement. Next, 6 scales were created: Life Domain Scale (LDF), Child Strengths Scale (CS), Caregiver Strengths Scale (CST), Caregiver Needs Scale (CN), Child Behavior Emotional Needs Scale (CBEN), and Child Risk Behavior Scale (CR). The scales were computed as the means of all the items within each domain.

Family Automated Case Tracking System

The Family Automated Case Tracking System (FACTS) came from an electronic data system kept by the Family Division of the Middlesex Family Court in New Brunswick, New Jersey. Researchers obtained permission from the New Jersey Supreme Court to access the records of juveniles who participated in FFT. FACTS were developed by the Information Systems Division in conjunction with the Family Division of the Administrative

Office of the Courts. Currently, FACTS is fully implemented in all New Jersey counties (<http://www.judiciary.state.nj.us/family/fam-02.htm>).

The records were received by researchers in March 2014. The data included all appearances in the Middlesex County Family Court with information on charges and dispositions. The data were coded by two graduate students. The database was created in SPSS by Dr. Celinska. The codes related to the charges and dispositions were developed by her after consulting with the Assistant Family Division Manager. The data were further coded by Mr. Cheng to facilitate statistical analysis.

Results

Characteristics of the Sample

We started our analysis by comparing the sample of male and female delinquents on the basic demographic and program characteristics and on the ratings obtained from the initial SNA assessment. The findings showed no statistically significant differences between male and female adolescents based on race, ethnicity, duration in the program, and initial assessment on 6 domains.

To find out more about the sample of adolescents that participated in FFT, we researched 2 central factors in male and female delinquency and their involvement in the juvenile justice system: trauma and drug and alcohol abuse. These variables came from the initial SNA. We found that 29 adolescents (13 female and 16 male) experienced trauma in their lives. Those with trauma scored significantly lower on the Child Strengths Scale, Caregiver Strengths Scale, and Child Behavior Emotional Needs Scale. Although the literature suggest that females who are in the juvenile justice system are more likely to experience trauma in their lives due to neglect and abuse, in our sample there was no significant difference between males and females in terms of trauma occurrence. On the other hand, there were significantly more males (43) who abused drugs and/or alcohol than females (15)

($F = 7.177, p < .01$). In total, 58 adolescents (50 percent of the sample) used alcohol and/or drugs in the past. Those who used alcohol and/or drugs had significantly lower scores on the Life Domain Scale, Caregiver Needs Scale, Child Behavioral Emotional Scale, and Child Risk Behavior Scale. In short, youth who used drugs and alcohol and experienced trauma in their lives were also those with more serious problems related to everyday functioning (Life Domain Scale) and to risk factors for delinquency (Child Behavioral Emotional Scale and Child Risk Behavior Scale). In addition, the caregivers of adolescents with a history of trauma or alcohol and drug abuse rated significantly lower either on the Caregiver Needs scale or the Caregiver Strengths Scale.

Outcome Variables: Strengths and Needs Assessment and Recidivism

Table 2 present the results of *t*-tests between initial and discharge SNAs.

The comparison between initial and discharge assessments showed significant improvements for male and female adolescents on the Life Domain Scale and Child Behavior Emotional Needs Scale (at $p < .001$). Both groups also improved on the Child Strengths Scale and Child Risk Behavior Scale; however, the male adolescents improved more on the Child Risk Behavior Scale, while the female adolescents improved more on the Child Strengths Scale. There was a statistically significant improvement on the Caregiver Strengths Scale for the caregivers of males (at $p < .05$), but not for the caregivers of females. Finally, neither caregivers of females nor of males improved significantly on the Caregiver Needs Scale. Overall, several pre- and post-intervention significant differences were detected for both male and female adolescents, suggesting a positive impact of FFT on youth and their caregivers. Next, the comparison between females and males was conducted to examine whether there was a differential impact of FFT.

Table 2. *Change Between Initial and Discharge Strengths and Needs Assessments by Gender: Paired t-test (N=116)*

| Scale | Male | Female |
|---|---------|---------|
| Life Domain Scale (LDS): | | |
| Initial Assessment | 3.20 | 3.22 |
| Discharge Assessment | 3.40*** | 3.46*** |
| Child Strengths Scale (CS): | | |
| Initial Assessment | 2.86 | 2.80 |
| Discharge Assessment | 3.97* | 3.01*** |
| Caregivers Strengths Scale (CST): | | |
| Initial Assessment | 3.33 | 3.31 |
| Discharge Assessment | 3.44* | 3.35 |
| Caregivers Needs Scale (CN): | | |
| Initial Assessment | 3.82 | 3.80 |
| Discharge Assessment | 3.82 | 3.79 |
| Child Behavior Emotional Needs Scale (CBEN): | | |
| Initial Assessment | 3.26 | 3.21 |
| Discharge Assessment | 3.44*** | 3.43*** |
| Child Risk Behavior Scale (CR): | | |
| Initial Assessment | 3.60 | 3.63 |
| Discharge Assessment | 3.72*** | 3.73* |

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Based on ANCOVA analysis, no significant changes were found between both samples. This finding indicated that the improvements on 6 SNA scales did not differ by gender (see Table 3).

Finally, we compared the numbers of delinquency cases brought to the Family Court. Table 4 presents 8 types of cases (custody/child support, child abuse and neglect, matrimonial/divorce, guardianship, family in crisis/behavior, family in crisis/Mobile Response, domestic violence, and delinquency) and 3 types of court adjudications (convictions, institutionalizations, and non-convictions). The data are organized for the whole sample and indicate the number of cases before, during, and after participating in FFT.

The data for the FFT participants indicated a decrease in total number of cases from 390 to 225, and, in delinquency cases, from 286 to 177. Similarly, the number of convictions decreased

Table 3. *Change Between Initial and Discharge Assessments (Strengths and Needs Assessment) by Gender: The ANCOVA Model (N=116)*

| | Mean | F | Pr > F | R-squared |
|--|-------|-------|--------|-----------|
| Life Domain Scale (LDS): | | | | |
| Male | .204 | .674 | .413 | .182 |
| Female | .238 | | | |
| Child Strengths Scale (CS): | | | | |
| Male | .112 | 1.156 | .285 | .102 |
| Female | .204 | | | |
| Caregiver Strengths Scale (CST):* | | | | |
| Male | .104 | 1.382 | .242 | .213 |
| Female | .0378 | | | |
| Caregiver Needs Scale (CN): | | | | |
| Male | .003 | .250 | .618 | .200 |
| Female | -.007 | | | |
| Child Behavior Emotional Needs Scale (CBEN):* | | | | |
| Male | .181 | .086 | .770 | .240 |
| Female | .224 | | | |
| Child Risk Behavior Scale (CR):* | | | | |
| Male | .115 | .025 | .875 | .291 |
| Female | .106 | | | |

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4. *Number of Cases and the Results of Delinquency Cases Before, During, and After Functional Family Therapy (N=116)*

| | Before FFT | During FFT | After FFT |
|-----------------------------------|------------|------------|-----------|
| Case: | | | |
| Custody, Child Support | 39 | 2 | 20 |
| Child Abuse and Neglect | 1 | 0 | 8 |
| Matrimonial, Divorce | 17 | 0 | 5 |
| Guardianship | 2 | 1 | 0 |
| Family in Crisis, Behavior | 11 | 2 | 5 |
| Family in Crisis, Mobile Response | 4 | 1 | 8 |
| Domestic Violence | 30 | 0 | 2 |
| Delinquency | 286 | 57 | 177 |
| Result: | | | |
| Conviction | 175 | 35 | 64 |
| Institutionalization | 35 | 11 | 68 |
| Non-conviction | 76 | 10 | 42 |

from 175 to 64, and the number of those who were not convicted increased from 76 (before FFT) to 42 (after participating in FFT). However, the number of institutionalizations increased from 35 to 68. This last increase probably means that the longer involvement in the juvenile justice system leads to a harsher punishment, including institutionalization.

According to FACTS data, the number of delinquency cases after participating in FFT decreased. The data (not presented in Table 4) suggest that the charges brought in the Family Court differed by gender. Unexpectedly, more females were convicted for violent offenses (8) than males (3); however, more males were institutionalized for violent offenses (8) than females (2). It is plausible that young male delinquents committed a smaller number of violent offenses but more serious acts than those committed by females. It is also possible that the male subjects had a longer history of involvement in the justice system, which could lead to a more serious outcome. Finally, if we take into account convictions for violent crimes during participation in FFT, the total number of convictions is nearly equal: 9 for males and 10 for females. It is worth noting that 35 male adolescents were institutionalized due to violation of probation, versus only 2 such violations for female delinquents. This finding

Table 5. ANCOVA: Change Between Before and After FFT by Gender

| | Male (N = 72) | | Female (N = 44) | |
|------------------------------|---------------|---------|-----------------|------|
| | Mean | Sig. | Mean | Sig. |
| Delinquency: | | | | |
| Before FFT | 3.68 | | 2.23 | |
| After FFT | 2.77 | .110 | 2.38 | .840 |
| Convictions: | | | | |
| Before FFT | 1.92 | | .84 | |
| After FFT | .88 | .000*** | .82 | .941 |
| Institutionalization: | | | | |
| Before FFT | .42 | | .11 | |
| After FFT | .93 | .019* | .27 | .146 |

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

reflects that more males than females entered the FFT program through probation.

To examine whether the changes in the number of delinquency cases, convictions, and institutionalizations before and after intervention for female and male delinquents were significant, ANCOVA and a paired t -test were performed. We combined the numbers during and after FFT (see Table 5).

Although the same pattern was observed for females and males (a decrease in the number of convictions and an increase in the number of institutionalizations), some important differences also emerged. For example, the number of delinquency cases increased for females, but decreased for males. These changes were not statistically significant. On the other hand, the increase in the number of convictions and institutionalizations was significant for males but not for females. It is possible that these results reflect a difference in crime patterns between genders as well as in referral sources. Significantly more male adolescents were mandated to participate in FFT and were referred to the program by probation.

Next, we performed ANOVA to examine whether the changes pre- and post-intervention differed by gender (see Table 6). The results suggest that there are no statistically significant differences between male and female adolescents in terms

Table 6. ANOVA: Change Between Before and After FFT by Gender (N = 116)

| | Mean | F | Pr > F |
|------------------------------|-------|-------|--------|
| Delinquency: | | | |
| Male | −.90 | 1.142 | .288 |
| Female | .15 | | |
| Convictions: | | | |
| Male | −1.04 | .091 | .764 |
| Female | .15 | | |
| Institutionalization: | | | |
| Male | .51 | 3.858 | .052 |
| Female | .16 | | |

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

of delinquency cases, number of convictions, and number of institutionalizations.

Conclusions

Although juvenile delinquency rates have been declining in recent years, female delinquents are being arrested and detained at a higher rate than their male counterparts. One way of preventing this trend is by using effective intervention programs that would reduce recidivism and prevent delinquency in the first place.

The current research suggests two types of interventions for female delinquents: gender-specific programs that focus on the needs of females, and evidence-based interventions applicable to both males and females. FFT follows the second paradigm, although its focus on communication skills and engagement in its first phase includes elements recommended by the gender-specific approach.


By researching a sample of 116 youth enrolled in FFT in Middlesex County, we explored two issues: how young males and females entered the program, and whether post-intervention outcomes, as measured by SNA and recidivism data, differed by gender. Some interesting findings about both samples (72 males and 44 females) have emerged. In accordance with the literature, we found that girls are mainly brought to the system on status offense charges. Although most male adolescents were brought to FFT through probation and were mandated to participate in the program, the majority of girls entered FFT by referral from Mobile Response Services used in the county to respond to family crisis.

We specifically examined two issues in our samples: trauma, and drug and alcohol abuse. We expected that more females experienced trauma before being enrolled in FFT. Although 25 percent of youth in our sample experienced trauma, no significant difference between males and females was detected. On the other hand, there were significantly more males than females who used drugs and/or alcohol before being enrolled in

FFT (60 percent of all boys and 34 percent of all girls). Those who experienced trauma and/or used alcohol and drugs scored lower on one of our outcome variables, the SNA.

Next the pre-FFT and post-FFT comparison was conducted on 6 SNA scales. Both females and males improved significantly on the Life Domain Functioning, Child Behavioral Emotional Needs, Child Strengths, and Child Risk Behavior scales. The subsequent ANCOVA analysis showed no statistically significant changes between both samples, which suggests that FFT is comparably effective for male and female delinquents in our sample. Finally, the Family Court data were used to compare the number of delinquency cases, convictions, and institutionalizations. We found that the number of convictions decreased and the number of institutionalizations increased. Both changes were significant for males. We interpret these findings not as a failure of the intervention (we did not conduct statistical analysis to examine these outcomes), but rather as an impact of different crime patterns as well as reasons for being enrolled in FFT. Our results on SNA scales suggest a similar and overall positive impact of FFT on adolescents in our sample. Finally, the results of ANOVA analysis suggest no significant differences between both genders on changes before and after FFT in terms of number of delinquency cases, convictions, and institutionalizations. The change in the number of institutionalizations between genders nearly approached the statistically significant level, reflecting an increase in the number of institutionalizations and an overall higher number of institutionalizations among male adolescents.

The results should be considered with caution. The sample of females is smaller than the sample of males. Further, the sample was limited only to those who completed FFT and for whom all the data (SNA and FACTS) were available. The data on program dropouts were not available. Also, statistical analysis of recidivism was limited to comparing the changes in the numbers of delinquency cases, convictions, and institutionalizations. We



did not conduct more sophisticated statistical analysis that would include types of crimes or more detailed history of involvement in the juvenile justice system. Future studies should consider different factors that lead young males and young females to delinquency and to entering the juvenile justice system.

This exploratory research is one of the first studies to separately evaluate the participation of females and males in FFT. The facts that female delinquents came to the FFT program from different referral sources and that their participation was less likely than male delinquents to be mandated by court suggest different underlying problems and committed offenses. Although we did not find significant outcome differences on one of our dependent variables, the SNA, we did find significant differences in the number of convictions and institutionalizations. After participating in FFT, male adolescents were convicted significantly less and institutionalized significantly more than females. These results suggest that the uniform approach to male and female delinquents may not necessarily be warranted. More studies are needed with analyses conducted using larger samples of males and females. It would be also important to conduct qualitative interviews to gauge satisfaction with FFT among female delinquents, as well as to address female issues of trauma and empowerment.

This study is important in bringing up questions of gender differences among juveniles in entering juvenile justice prevention programs and in

examining intervention outcomes by gender. Although many scholars and practitioners call for using brand-name programs such as FFT, the number of evaluation studies that focus on female delinquents and gender differences is still quite limited. However, in light of the increasing numbers of females involved in the juvenile justice system, it is critical to identify programs and interventions that adequately address the needs of females and the different pathways of female and male delinquents to the juvenile justice system.

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Achieving Juvenile Justice Reforms Through Decision-Making Structures: The Case of Georgia

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Keywords: *adjudication, confinement, judicial disposition, juvenile, juvenile court process*

Abstract

In 2013, the state of Georgia passed revisions to its juvenile code. These revisions committed Georgia to juvenile justice reform. Particular emphasis was placed on incentivizing evidence-based practices and on supporting valid and reliable decision-making. A key component was the development and implementation of evidence-based decision-support tools. The Georgia Department of Juvenile Justice partnered with the National Council on Crime and Delinquency (NCCD) to develop and implement a set of decision-making supports. The newly implemented assessments that resulted from this process help judges determine the risk levels of youth, help inform court decisions regarding the best dispositional options for youth, help the courts place youth in the least restrictive environments necessary to ensure public safety, and inform service planning. The current analysis considers whether these practice and policy changes have led to changes in outcomes. Three decision points are considered: detentions, adjudications,

and dispositions to out-of-home placements. The qualitative and quantitative evidence presented suggests that detentions, adjudications, and dispositions to out-of-home placements have decreased, and that there has been no upward change in the number of referrals from law enforcement, despite the increased numbers of youth in the community.

Introduction

The U.S. juvenile court and justice system has stood for reform and system improvement from its start. First formalized in Illinois in 1899, juvenile court evolved from a variety of systems used to handle juvenile justice and child welfare matters during the nineteenth century and earlier (Fox, 1996). During the same period, social norms in the United States were shifting, driven by large waves of immigration and urbanization. Social activists, as well as lawmakers and other officials, began to theorize that criminality was a result of the social environment and often a survival mechanism. They suggested that if youth were taught

other skills in prison, they would be more likely to make meaningful contributions to society upon their release. This concept was then applied at the system level, leading to the inception of the juvenile court. Early juvenile courts were based on the idea that treating young people involved in criminal activity as if they were adults was not the best way to respond. Rather than focus on the punitive aspects of intervention, the concept of juvenile court took into consideration the legal doctrine of *parens patriae*—that these youth were actually in need of protection and an opportunity to develop more socially productive life skills. The juvenile court was not established to hold children accountable, but rather to consider the best interests of children and to rehabilitate them.

Much of the initial efforts of the juvenile court went toward offering these rehabilitative treatments in noninstitutional settings. Because the model was one of positive intervention rather than punitive accountability, the deprivation of individual liberty was not the focus. As Charles L. Chute, the first president of the National Council on Crime and Delinquency (then named the National Probation Association), stated in 1933, “Probation care under an officer of the requisite ability, personality and character, is far safer and more effective than institutionalization, and incidentally it costs the state less than one-tenth as much per child. . . . Too often we have sent up, as these children call it, neglected, problem children, and they have come out real delinquents” (Chute, 1933, p. 750). Nearly a century ago, Chute was suggesting that community-based interventions were more effective, less costly, and more likely to lead to safer communities.

In 1846, Horace Mann made much the same point: “The courts and the ministers of justice sit by until the petty delinquencies of youth glare out in the enormities of adult crime” (Mann, 1846, p. 143). Mann further declared, “[A]re there not moral means for the renovation of mankind? Are there not resources whose vastness and richness have not yet been explored?” (p. 142). Again, the argument was that there is an opportunity for

positive interventions that will lead to more successful young people and safer communities.

Since the time of Horace Mann—for the past 170 years—the United States has been challenged to respond to this question: How can we as a nation best take advantage of this opportunity to use our resources to keep our communities safer through positive interventions? During that time, juvenile justice in the United States has variously shifted primacy among three different and simultaneous goals: (a) punitive accountability, (b) positive rehabilitation, and (c) sustainable community safety. Much of the struggle has been to find a path to concurrently maximize all three goals. As a National Research Council (2013) report concluded, numerous states and local jurisdictions have made substantial progress on the task. The report suggests that jurisdictions can maximize both positive rehabilitation and community safety if they are willing to mostly let go of punitive accountability.

Although activists in past centuries were positive that there were opportunities for effective treatment, rehabilitation, and positive intervention, the question of “what works” has been prominent in recent decades. Starting in the early 1960s, there was rising skepticism about the juvenile justice system’s ability to fulfill its promises. The famous conclusion to a review of interventions to reduce recidivism was that rehabilitative efforts produced no observable effect on it (Martinson, 1974). Many found this conclusion salient, and it became known as “nothing works.” The “nothing works” thesis was echoed by researchers as recently as Cullen and Gendreau (1989).

Censures of the juvenile justice system were also delivered by the U.S. Supreme Court in *Kent v. United States* (1966) and *In re Gault* (1967). The effects of these rulings pushed the evolution of more modern juvenile justice statutes that reflected a different philosophy. The emphasis shifted from entrusting maximum power and discretion to system officials to determine outcomes for individual youth, to limiting and controlling

those powers. The Supreme Court–mandated safeguarding of juvenile due process rights made lawyers a necessity in juvenile court to enforce these rights (both as advocates and as judges), just as in the adult system. With the increased presence of lawyers, the system became even more driven by law and less driven by treatment. The juvenile justice field shifted away from intervention models that used individualized rehabilitation plans to reduce future system involvement (Dawson, 1990). The “nothing works” theory, which raised doubts about the effectiveness of rehabilitative practices, worked in combination with the reforms in court procedure to promote the rise of more punitive practices focusing on offense-based sentencing.

More recently, the research literature has found that some programs and interventions can be effective for particular groups of juvenile justice system–involved young people. Since the late 1990s, efforts such as the Office of Juvenile Justice and Delinquency Prevention’s (OJJDP) *Comprehensive Strategies for Juvenile Offenders and the Model Programs Guide*, studies of evidence-based practices, and a push for program evaluation, have led to a more nuanced understanding of what works, when, and for whom in juvenile justice.

Intervention effectiveness can be found within particular limits. Empirical research findings generally suggest the following: (a) Services are most effective when they address needs pertaining to the offending and arrest; (b) program effectiveness is attenuated for those who are incarcerated; and (c) correctional sanctions and placement in secure settings can increase the likelihood of rearrest or reoffending.

Further, the effectiveness of intervention turns on appropriately targeting services to those most at risk of future juvenile justice system involvement. The research literature supports the conclusion that interventions are most effective when applied only to the youth at highest risk of rearrest or reoffending. The same programs can

cause negative effects when applied to youth at lower risk levels (Lipsey, 1992, 2009). Low-risk system-involved youth can suffer negative consequences from over-intervention.

Georgia

Justice reform in Georgia was initiated in the legislature by creating the Special Council on Criminal Justice Reform in 2011. In 2012, Governor Nathan Deal issued an executive order to expand the focus of the Special Council to include the juvenile justice system. The Special Council received intensive technical assistance from the Public Safety Performance Project of the Pew Charitable Trusts and the Juvenile Justice Strategy Group of the Annie E. Casey Foundation (Pew Charitable Trusts, 2013a, 2013b). With that guidance, the Special Council issued recommendations to reduce recidivism by investing in evidence-based programs and practices. It also recommended requiring data collection and performance-based contracting and altered the way certain offenses were categorized. A bill containing most of the recommendations passed both chambers of the General Assembly unanimously and was signed into law by Governor Deal on May 2, 2013. The state also appropriated \$5 million in fiscal year 2013 to fund an incentive grant program (Georgia’s 2013 Juvenile Justice Reform) to encourage the counties to embrace the changes.

The goals of reform outlined by the Special Council were specifically identified as: (a) a reduction in the number of youth housed in Georgia Department of Juvenile Justice (DJJ) secure facilities who were at lower risk to reoffend; (b) a decrease in the out-of-home juvenile population committed to DJJ; and (c) a decline in Georgia’s juvenile recidivism rate as youth began to be assessed using new tools designed to measure risk and needs for each youth (Georgia Children’s Cabinet, 2016).

Of particular interest to the current analysis was the Special Council’s focus on valid assessment

as a way of approaching these goals. The Special Council highlighted a lack of validation and inconsistent use of risk and needs assessment tools in juvenile justice practice in Georgia. The Special Council reported that many young people who had been adjudicated on low-level offenses—and who were unlikely to be rearrested—were being sent to secure out-of-home placements, with little benefit for public safety and at great cost. The Special Council recommended the use of empirically validated assessment tools at key decision points to guide out-of-home placement decisions. In addition, the Special Council suggested that a set of standardized, structured decision-making tools would help DJJ accurately assess risk, provide a basis for disposition recommendations made to the court, inform judges' disposition decisions, help the courts place youth in the least restrictive environments necessary to ensure public safety, and inform service planning (Pew Charitable Trusts, 2014).

The work of the Special Council, with assistance from the Pew Charitable Trusts and the Annie E. Casey Foundation, laid the foundation for the interventions described here.

Decision-Making and Tools

The efficacy of decision-making and assessment tools can be understood in the context of the hazards inherent in human decision-making. Empirical research literature on the potential hazards of decision-making is robust. In particular, recent research on the role of heuristics and cognitive biases has outlined several ways individual and group rationality can be limited.

The phenomenon of heuristics explains how the brain handles information overload by developing simple and efficient rules to rapidly make decisions, form judgments, and resolve issues, especially when faced with challenges or incomplete information. These mental shortcuts can create cognitive biases, or the process of deviating from rationality to form judgments and

inferences in an illogical manner. Avoiding cognitive biases is a challenge, because people typically are oblivious to their manifestations (Dunbar et al., 2014), and professionals and experts are just as likely as anyone else to perpetuate cognitive biases when making important decisions (Englich, Mussweiler, & Strack, 2006). In situations where somewhat uncertain evaluations demanding great amounts of cognitive effort must be made, decision-makers are particularly prone to succumbing to biases (Abelson & Levi, 1985). "Given the propensity for cognitive biases to short-circuit the effectiveness of everyday decision-making, the need for methods to mitigate their effects is constant" (Dunbar et al., 2014, p. 307). Implementing a methodological decision-making tool for workers in the juvenile justice system removes many of the potentially harmful effects caused by heuristics and cognitive biases and promotes logical and rational decision-making based on available information about the young person and his or her charges.

In addition, there is a growing body of research on how decision-making can be improved in terms of increased accuracy and fewer errors. Much of this research focuses on how decision supports, and specifically checklists, can be effective for improved decision-making.

Decision supports help to ensure that tasks that are done again and again are completed efficiently and appropriately every time. Typically, a checklist includes each step needed to complete a task, which allows for an allocation of energy from remembering the steps to their more thoughtful and thorough completion. Checklists can also improve productivity, reliability, and delegation, since different people are able to complete the same task in the same way.

Research shows how highly skilled decision-makers in stressful situations benefit from the use of checklists. For example, airline pilots use checklists, particularly when a series of tasks is too extensive for memorization and when retrieving procedural items while experiencing high

cognitive load (Ciavarelli, 2001; Clay-Williams & Colligan, 2015). In fact, not using or improperly using a checklist has been cited as a key contributing factor in aircraft accidents (Degani & Wiener, 1993). In medical situations of numerous types, checklists work to improve decisions, reduce errors, and lead to better outcomes. Similarly, in the medical field, checklists have been shown to improve diagnostic decision-making by experts by removing cognitive biases and mental shortcuts without increasing cognitive load (Sibbald, de Bruin, & van Merrienboer, 2013; Stiegler & Ruskin, 2012; Winters, Aswani, & Pronovost, 2011). Checklists can also help judges (Guthrie, Rachlinksi, & Wistrich, 2007) and police officers make nonbiased decisions quickly and with limited information, by encouraging them to be methodological rather than relying on memory or intuition alone (Beauregard & Michaud, 2015).

The use of checklists and other decision supports has been found to promote more accurate and consistent decisions, and their use is spreading from industries into the social services. For example, in child welfare, decision supports and training have been shown to be more effective than training alone. A combination of training on cognitive biases and training on decision-making processes and goals, along with a decision-support tool, can lead to better outcomes for children and families (Russell & Summers, 2013).

Many of the concerns about reliable, consistent, and accurate decision-making are echoed in the juvenile justice field. Given these concerns, it is likely that the use of decision supports and checklists can be effectively applied in the juvenile justice field. Police officers, intake officers, judges, probation staff, and others in the field can use decision supports to: (a) improve accuracy by using validated decision-making tools to reduce reliance on memorization of routine procedural items; (b) improve reliability by ensuring that when presented with the same information about a youth and his or her specific circumstances, similar decisions are made by workers, units, and departments, etc.; and (c) improve equity

by reducing implicit and cognitive biases. These goals are consistent with the findings and recommendations of the Special Council and with the recommendation in the code change.

Research Questions and Hypotheses

We pose five research questions.

- Have observable practice and process changes been implemented?
- Has the number of law enforcement referrals to the juvenile court changed?
- Has the number of secure out-of-home pre-adjudication detentions declined?
- Has the number of adjudications declined?
- Has the number of dispositions to out-of-home placements declined?

We hypothesize that despite typical implementation challenges and ongoing efforts to support system improvement, substantive and meaningful practice and process changes have been implemented. We expect these to be especially manifested and observable at specific decision points.

We also hypothesize that the number of referrals from law enforcement to the juvenile court has remained steady, while the number of secure out-of-home pre-adjudication detentions and the number of adjudications have declined in Georgia. We expect to find these declines as both total numbers and as proportions of law enforcement referrals. We further hypothesize that fewer adjudications are ending with a disposition to an out-of-home placement.

Method

Participant Characteristics

Georgia has a dual-court system whereby delinquency services are organized at both state and local levels. In most counties, community supervision, aftercare, and reentry services are offered by DJJ, an independent juvenile corrections agency. DJJ administers all secure detention and

commitment to state public facilities (Juvenile Justice Geography, Policy, Practice & Statistics, 2016).

In 13 urban counties, local juvenile courts administer community supervision and reentry services (Chatham, Clayton, Cobb, DeKalb, Dougherty, Floyd, Fulton, Glynn, Gwinnett, Hall, Spalding, Troup, and Whitfield counties). Twelve counties maintain a mixture of DJJ and local juvenile court service staff to provide community supervision services (Carroll, Columbia, Coweta, Crawford, Fayette, Gordon, Heard, Henry, Newton, Peach, Upson, and Walton counties).

Judges, prosecutors, public defenders, independent court staff, and representatives from the Governor's Office for Children and Families (GOCF), DJJ, the Division of Family and Children Services (DFCS), the Department of Public Safety (DPS), the State Bar of Georgia, and the community participated in steering groups to help guide development and implementation of the interventions.

Sampling Procedures

Qualitative interviews and focus groups were held with representatives from 15 counties across the state of Georgia. The purpose of the interviews and focus groups was to understand, from a user's perspective, how the tools were introduced statewide, how training and implementation were supported, and how the tools supported evidence-based decision-making. Workers in the field, judges, prosecutors, public defenders, and community representatives gave feedback on the implementation and use of the intervention tools to representatives from NCCD and the Georgia DJJ. This feedback was taken into consideration as a mechanism for rapid-response, continuous quality improvement and used in ongoing trainings, information dissemination, and in conjunction with field testing to determine when adjustments to the tools were warranted. Counties were chosen by the steering group for qualitative interviews and focus groups. The selection of counties

was designed to maximize representation of the 142 dependent counties in the state of Georgia.

Quantitative data were obtained from the Juvenile Tracking System (JTS), an electronic database maintained by DJJ for all 142 of Georgia's dependent/shared court counties, and for independent counties when available. This state-operated case management system contains the legal history for all youth held in a juvenile detention facility, including referrals, charges, dispositions, and commitments to DJJ (including placements in detention facilities). Data describing arrests, referrals, charges, dispositions, and admissions—categorized by subgroups such as year and geography—were examined before the tool was implemented in 2013. Trend data also were analyzed for arrests, referrals, placements, and crime rates pre- and post-tool implementation.

Definitions of Variables

A referral (or case) represents a juvenile and offense entry into the juvenile court or DJJ systems. If one juvenile has multiple charges on the same date, they are counted as a single referral.

Pre-adjudication placements are measured as a period of time spent in a Georgia Regional Youth Detention Center (RYDC). A placement is considered a new detention if it began during the reporting period.

Adjudication refers to the process of determining if a juvenile in a petitioned case is delinquent of the misdemeanor or felony charges. One finding of delinquency may include multiple charges.

Dispositions to out-of-home placements are measured by the order entered by the juvenile court at the conclusion of a disposition hearing. Dispositions that commit a person to DJJ may include placement in a Youth Development Campus (YDC) or a RYDC.

Decision-Support Tools Implemented in Georgia

Development and Implementation Leadership

Judges, prosecutors, public defenders, independent court staff, and representatives from GOCF, DJJ, DFCS, DPS, the State Bar of Georgia, and the community helped NCCD develop and implement the decision-support tools. Representatives met as steering groups for each intervention area (detention, adjudication/diversion, and disposition).

DJJ Leadership

The Georgia DJJ serves youth involved in the juvenile justice system up to the age of 21. DJJ runs 26 facilities and 92 community services offices throughout the state (Georgia Department of Juvenile Justice, 2016a).

Governor's Office for Children and Families

Representatives from the now-defunct GOCF served on the workgroups for the decision-support tools.

The Council of Juvenile Court Judges

The Council of Juvenile Court Judges (CJCJ) is composed of all 144 judges of courts in Georgia with jurisdiction over juveniles. CJCJ staff provide support to juvenile courts through legal research services, legislative tracking, and specialized programs (Council of Juvenile Court Judges, 2016).

Overview

Workgroups were a key part of the development, evaluation, and implementation of each decision-making tool. Workgroup members provided information on policies, procedures, and uses. They also gave input on assessment vocabularies and item definitions. Workgroup members were present for the entire duration of development, evaluation, piloting, and implementation.

Separate quantitative analyses were conducted for the development of each tool, using DJJ's case-level and aggregate data related to

detentions, past legal history, risk factors, needs profile, disposition outcomes, and future arrests and adjudications.

Interventions

Georgia implemented four interventions in the form of assessments, which are described below. Each assessment was developed, implemented, and programmed into the case management system. Training and support on the assessment and related policies, processes, and procedures were provided.

Detention Assessment Instrument (DAI)

The DAI is used at the point of referral to the juvenile court from law enforcement following an arrest. It promotes structure and consistency in detention decisions and identifies the likelihood of rearrest before the adjudication hearing. The DAI produces classifications of low, medium, or high, corresponding to detention recommendations to release, release with conditions, or detain.

The DAI was developed with a workgroup comprising judges; prosecutors; public defenders; and representatives from GOCF, DJJ, the community, DFCS, independent court staff, DPS, and the State Bar of Georgia. Data for development were based on a sample of youth with a past DAI completed between March and August 2012. This included 9,985 completed DAI assessments for 7,134 unique people.

The DAI was tested for inter-rater reliability from April 12 to 21, 2014, and was field tested from May 7 to 18, 2014, in 28 counties. A survey to test usability, face validity, and implementation needs was conducted in July 2015.

The DAI was implemented into practice statewide in July 2015.

Pre-Disposition Risk Assessment (PDRA) and Structured Disposition Matrix (SDM)

The PDRA and SDM are used after a youth has been adjudicated and before the dispositional

hearing. The PDRA helps identify which youth have a higher likelihood of rearrest or readjudication, informs diversion decisions, and helps identify where to allocate resources and target interventions. The PDRA produces a risk-level classification of low, medium, or high, which then feeds into the SDM. The SDM considers the risk level from the PDRA along with the youth's most serious adjudicated offense to generate a dispositional recommendation.

The PDRA and the SDM were developed with workgroups comprising facility staff, supervisors, and managers; independent court staff; and representatives from DJJ, the judiciary, and the community. Data for development were based on a sample of 7,412 youth released to the community in 2008.

Items from the PDRA were field tested in 2013 as part of an OJJDP national evaluation of risk assessments. The PDRA was field tested from July 22 to August 2, 2013, in four counties. The PDRA and SDM were implemented statewide in January 2014.

Juvenile Needs and Strengths Assessment (JNA)

The JNA is used after a dispositional decision is made. It promotes structure and consistency in case planning by identifying the top three strengths and top three needs of a youth. The identified strengths and needs are used to guide supervision (community and facility) and case planning decisions, as well as to help identify service plan areas to target.

The JNA was developed by identifying research-informed domains and working with a workgroup comprising dependent and independent county court representatives to prioritize these domains for youth in Georgia.

The JNA was tested for inter-rater reliability from April 25 to April 30, 2014, and a survey was conducted to test usability, face validity, and implementation needs. The JNA was implemented into practice in September 2015.

Results

Practice and Process Changes

One finding of the focus groups and interviews was that the implementation process has led to improved communication and coordination between DJJ and the courts. However, respondents said continued and expanded training and support are clearly needed.

Feedback on the assessments was positive overall, with an emphasis on their usefulness in diverting youth out of the system if they are at low risk or pose low public safety risks. A theme across each focus group and interview was that the population makeup of those being detained, adjudicated, or placed in out-of-home settings was changing. The perception was that these shifts were positive and needed. Some exceptions to this theme included concerns about specific indicators and how to factor in public perceptions of offense seriousness. Others brought up cases with mental health concerns or charges relating to sex offenses as potential exceptions to the overall positive trend toward a better-focused population. These exceptions aside, feedback regarding the interventions and assessments was that they assist in better targeting of energies and interventions.

Another common theme among respondents was an appreciation of each assessment's simplicity and ease of use. People in every county and across different job functions mentioned that the instruments were clear and user friendly. Some had questions about the current state of accessing the instruments in digital form on JTS. Several questions were raised about specific types of cases in which a person's history seemed to count against him or her. Several respondents asked for clarifications on how a history of misdemeanor arrests might be differentiated from a history of felony arrests.

Beyond the feedback themes, few hindrances to implementation were found. Intervention and assessment training was offered to each county,

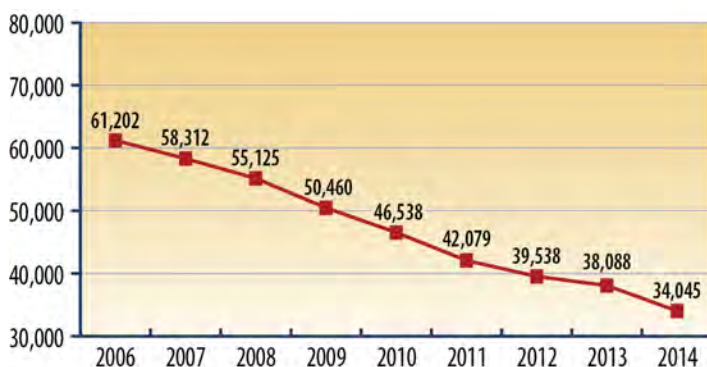
and most respondents took part. Approximately 1,000 staff participated in more than 40 DAI trainings, and about 800 staff participated in more than 50 PDRA/SDM and 30 JNA trainings. People in each job function (judge, attorney, probation worker, etc.) expressed a clear understanding of the intervention goals and implementation steps.

In addition to implementing the decision-support tools, Georgia offers a statewide competitive grant to encourage improvements to the juvenile justice system. The Juvenile Justice Incentive Grant (JJIG) offers evidence-based programs to youth who are usually committed to DJJ, thus reducing the number of institutionalized youth. The JJIG helps juvenile courts implement these programs through funding and technical support. More than 1,100 youth benefited from programs funded by the JJIG in its first year; by the end of its second year, JJIG had served nearly 1,700 youth across the state. To reduce recidivism, JJIG programs are targeted to youth who score as moderate to high risk on the PDRA.

Law Enforcement Referrals

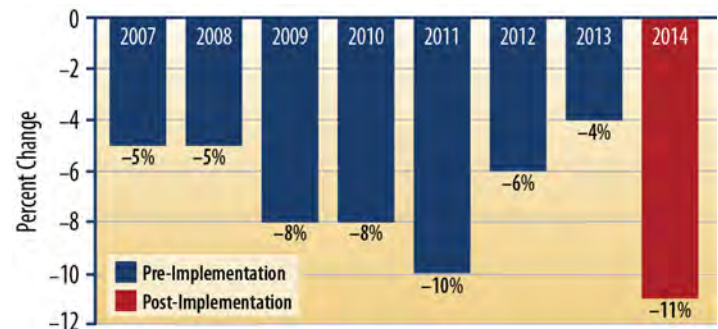
For more than a decade, law enforcement referrals to the juvenile court have been declining. Before the interventions, from 2006 to 2013, there was a 38% reduction in referrals. This trend continued through and after intervention implementation. Law enforcement made 38,088 referrals to the juvenile court in 2013. By the end of 2014, this number had decreased by more than 11%, to 34,045 referrals (Figure 1). This was part

Figure 1. Number of referrals to juvenile court by year.



of a downward trend and the largest percentage decrease seen in the past decade (Figure 2).

Figure 2. Change in number of referrals to juvenile court by year.



In terms of offenses rather than referrals, 57,970 youth were charged with an offense in 2013. This number dropped to 50,257 in 2014 and to 48,022 in 2015. This represents a decrease of 17% over the 2 years.

Secure Out-of-Home Pre-Adjudication Detentions

From 2006 to 2008, there were more than 20,000 out-of-home placements each year. The number of secure out-of-home detentions in an RYDC was 14,731 before the 2013 interventions; it decreased to 11,269 in 2015. This is consistent with a downward trend during the past decade (Figure 3). Similarly, the daily population in RYDCs for pre-adjudication placements was 710 in May 2013 (before the intervention), and 597 in May 2016 (after the intervention). During the first year of implementation, there was a 16% decrease in pre-adjudication detentions (Figure 4).

Figure 3. Number of detentions in RYDCs by year.

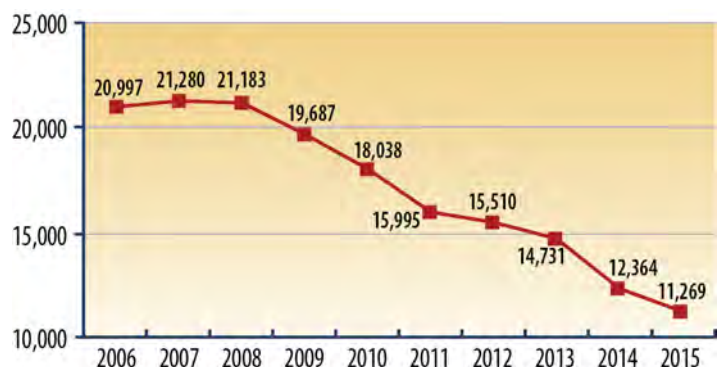


Figure 4. Change in number of detentions in RYDCs by year.



Adjudications

The total number of adjudications in 2013 was 26,228, which dropped to 20,193 in 2014 and to 19,152 in 2015. This represents a 27% reduction in adjudications.

From 2006 to 2008, there were around 3,000 new instances of commitment per year. Between 2009 and 2014, the number of commitments declined steadily each year. The number of cases resulting in a commitment to DJJ dropped from 1,750 in 2013 to 1,373 in 2015, a 22% reduction (Figure 5).

Figure 5. Number of cases resulting in commitment.

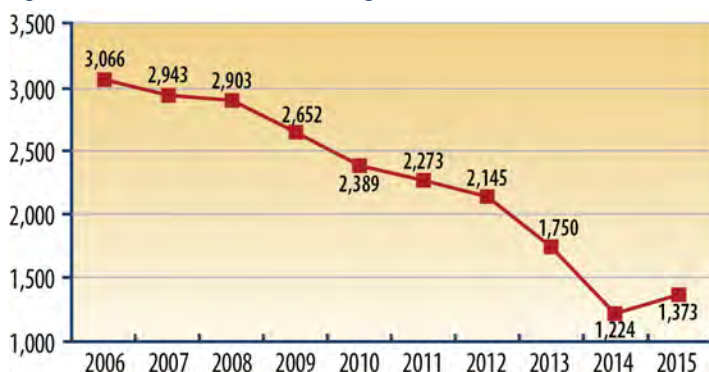


Figure 6. Change in number of cases resulting in commitment by year.



This was part of a downward trend nearly spanning the last decade (Figure 6). Although there is an uptick in commitments in 2015, as a proportion of all adjudications, commitments to DJJ dropped from approximately 4.5% to approximately 3.5%.

Dispositions to Out-of-Home Placements

New commitments to a YDC dropped from 1,420 in 2013, to 1,245 in 2014, and to 1,178 in 2015 (Figure 7). Dispositions to a short-term placement (STP) also dropped, from 460 in 2013 to 231 in 2014; the number rose again to 327 in 2015. Taken together, this represents a decrease of 21% in dispositions to out-of-home placements, followed by an uptick of 2% (Figure 8). The percentage change for 2014 and 2015 in the number of dispositions to YDCs since implementation is shown in Figure 9.

Figure 7. Dispositions to out-of-home placements, 2013–2015.

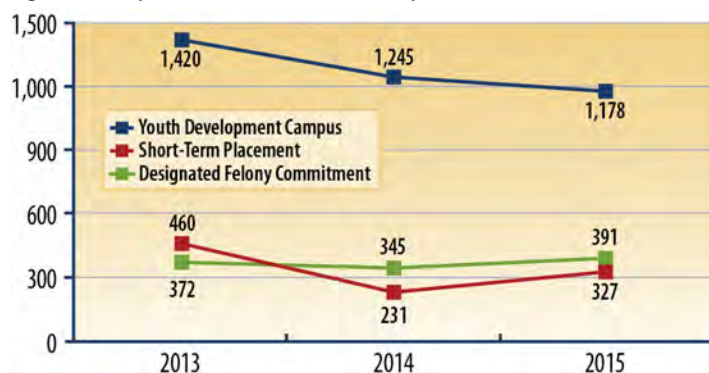


Figure 8. Change in number of dispositions to out-of-home placements since implementation.

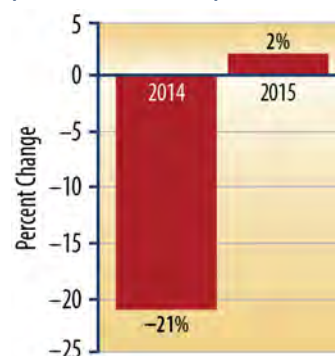
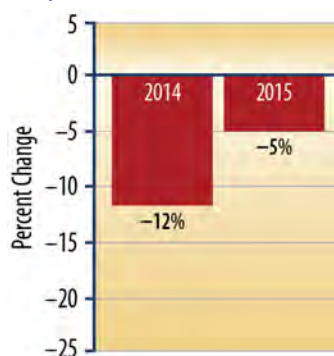


Figure 9. Change in number of dispositions to YDCs since implementation.



Dispositions for designated felony commitments ([DFC] as set out in statute as distinct from other commitments) remained approximately the same over the same period: 372 in 2013, 345 in 2014, and 391 in 2015. Two youth were screened into a Department of Corrections placement in 2013, 3 in 2014, and none in 2015.

Discussion

Outcomes

These results demonstrate that Research Question 1 (“Have observable practice and process changes been implemented?”) can be answered in the affirmative. Changes in assessments, training, coordination, and financial incentives were all observed directly, along with an assessment of implementation fidelity.

Research Question 2 (“Has the number of law enforcement referrals to the juvenile court changed?”) can also be answered in the affirmative, but contrarily to our hypothesis. We hypothesized that law enforcement referrals would be unchanged; however, referrals from law enforcement decreased by 11% from 2013 to 2014. This affirms the suggestion that the observed practice and process changes have not resulted in an increase in referrals, which further suggests that criminal behavior has not increased.

The findings suggest that Research Question 3 (“Has the number of secure out-of-home pre-adjudication detentions declined?”) also was supported by the evidence. Both secure out-of-home detentions in RYDCs generally, and those specifically pre-adjudication, declined markedly—by 24% and 16%, respectively.

Research Question 4 (“Has the number of adjudications declined?”) also can be affirmed: The number of adjudications clearly declined. The number of adjudications observed dropped by 27%, and the number of adjudications leading to a commitment to DJJ also dropped, by 44%, from 2013 to 2015.

The answer to Research Question 5 (“Has the number of dispositions to out-of-home placements declined?”) was similarly positive. The number of dispositions resulting in an out-of-home placement into a YDC or STP dropped by 20%.

Based on daily bed-count data, the number of young people incarcerated in the state of Georgia has dropped dramatically. In May 2013, counting both YDC and RYDC placements, 1,842 youth were in secure placements (Georgia Department of Juvenile Justice, 2016b). In May 2016, 1,441 youth were in secure placements. Between those two May days, more than 400 additional young people in Georgia slept in their own beds. Though at a slower pace, Georgia also has steadily reduced its capacity by closing some facilities and replacing others, which totaled 2,607 in 2008 and 2,008 in 2016 (Georgia Juvenile Justice Data Clearinghouse, 2016).

Potential Limitations

Because this research is applied to the real world, rather than performed in a laboratory, it is not possible to isolate the impact made only by the practice and process changes. It can be difficult to separate the effects of specific aspects of the interventions. For example, the executive orders issued by the governor, the leadership of the Special Council on Criminal Justice Reform, the legislative action on code change, and the presence of technical assistance providers are likely to have influenced the results, independently of the actual practice and process changes. We cannot say for sure which of these factors, either independently or in combination, was critical to achieving these outcomes.

Similarly, there may be confounding of the intervention with ongoing changes in the juvenile justice field, both in underlying youth criminality and behavior and in police practices. Notable downward national trends in arrests and violent behaviors offer a background for the current study.

Implications

The findings have several theoretical and practical implications. Theoretically, they demonstrate that a risk assessment–driven approach to reducing out-of-home placements can be consistent with public safety, a reduction in referrals to the juvenile court, and cost savings at the state level. Rather than spurring an increase in arrests for criminal behavior, the changes in placement practices—including diversions of youth with low risk scores and restricting the use of commitments and out-of-home placements—all occurred with a reduction in referrals to juvenile court from law enforcement.

Practically, the efforts made in Georgia and the current study outline a path of successful system improvement. Other states and jurisdictions can look to the combined efforts made in Georgia to shape their own system improvement efforts. Reducing out-of-home placements by using decision-making structures such as risk assessments—along with strong leadership, financial incentives, and legislative support—can support young people, help to maintain community safety, and more precisely target the allocation of resources to where they can be most effective.

Further research could explore the relationship between specific system improvement changes and the reduction in the number of arrests for criminal behavior. Offering comparisons with other states and jurisdictions, as well as more comparisons across time, could strengthen the current study. Future research efforts could consider how practice and process changes can support legislative and policy changes.

Conclusions

This study shows the effectiveness of this approach in improving the accuracy, consistency, and equity of decision-making in juvenile justice.

It demonstrates that states can safely reduce the numbers of youth placed in secure settings while also doing more to support their positive development.

Although more research, empirical findings, and data should and can be brought to bear on this topic, the work in Georgia highlights a potential path forward for other states seeking to improve their systems. Leaders in other state systems should feel encouraged by this demonstration that the application of research, data, and structured decision-making in the context of committed political support can have a marked impact on how the juvenile court responds to young people charged with an offense. This study shows a way to decrease recidivism and equip young people with a better chance at successfully transitioning to adulthood, without becoming trapped in the current juvenile justice system's singular focus on costly and harmful punitive approaches.

About the Authors

Jesse Russell, MA, PhD, specializes in guiding sound strategic choices, offering clients organizational insights, and engaging stakeholders. Dr. Russell enjoys working with partners to understand their organization from a long-term strategic perspective. He believes that analytics means more than just numbers and statistics, but about how we can tell the story of real-world impact.

Erin Manske, BA, works nationally with juvenile justice organizations as a researcher and consultant on their development, implementation, and use of structured decision-making tools. She helps produce actionable insights by combining data expertise with extensive content knowledge. Ms. Manske is dedicated to supporting agencies to achieve both short- and long-term change.

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The Benefits of Community and Juvenile Justice Involvement in Organizational Research

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Keywords: *organizational research, implementation research, behavioral health, evidence-based treatment, substance use*

Abstract

The Juvenile Justice (JJ) system has a number of local behavioral health service community linkages for substance abuse, mental health, and HIV services. However, there have only been a few systemic studies that examine and seek to improve these community behavioral health linkages for justice-involved youth. Implementation research is a way of identifying, testing, and understanding effective strategies for translating evidence-based treatment and prevention approaches into service delivery. This article explores benefits and challenges of participatory research within the context of the National Institute on Drug Abuse (NIDA)'s Juvenile Justice Translational Research on Interventions for Adolescents in the Legal System (JJ-TRIALS) implementation behavioral health study. The JJ-TRIALS study involved JJ partners (representatives from state-level JJ agencies) throughout the study development, design, and implementation. Proponents of participatory research argue that such participation strengthens relations between the community and academia; ensures the relevancy of research questions; increases the capacity of data collection; and enhances program recruitment, sustainability, and extension. The extent of the impact that JJ partners have had on the JJ-TRIALS study is discussed, as well as the benefits local JJ agencies can derive from both short- and long-term participation. Issues associated with the site selection, participation, and implementation of evidence-based practices are also discussed.

Introduction

The juvenile justice (JJ) system (i.e., police, court, juvenile probation, and institutional and community-based correctional services) has a number of community linkages with local behavioral health services. These linkages are critical, given the high prevalence of substance abuse, mental health problems, and HIV within the JJ system. Justice-involved youth report substance

use at higher rates than their counterparts who are not justice involved. An estimated 78% of arrested juveniles have prior drug involvement (National Center on Addiction and Substance Abuse [CASA], 2004). In comparison, national surveys of the general population indicate that approximately 9% to 38% of American youth report consuming alcohol in the past month; another 9.5% to 16.8% report using illicit drugs in the past month (Johnston, O'Malley, Bachman, & Schulenberg, 2013; Substance Abuse and Mental Health Services Administration, 2013). Adolescent substance use is associated with a number of immediate negative consequences and is a risk factor for substance use disorder in both adolescence (Winters & Lee, 2008) and adulthood (Englund, Egeland, Olivia, & Collins, 2008; Stone, Becker, Huber, & Catalano, 2012; Swift, Coffey, Carlin, Degenhardt, & Patton, 2008). Substance use is also linked to a multitude of negative outcomes, including delinquency, psychopathology, social problems, risky sex and sexually transmitted infections (STIs), and health problems (Chan, Dennis, & Funk, 2008; Kandel et al., 1999; Wasserman, McReynolds, Schwalbe, Keating, & Shane, 2010). However, a large proportion of justice-involved youth do not access treatment services (Young, Dembo, & Henderson, 2007). The relatively few services are typically reserved for incarcerated offenders and are not available to justice-involved juveniles in community settings, such as those on probation or parole (Weiss, 2013).

Given the link between substance use problems and justice system involvement, it is important that the JJ system screen for substance use problems (Binard & Prichard, 2008). In an ideal system, this initial screening would lead to linkage to appropriate evidence-based assessments and community services. Many evidence-based interventions targeting adolescent substance abuse currently exist (e.g., Multidimensional Family Therapy; Liddle, Rowe, Dakof, Henderson, & Greenbaum, 2009; for more information see Leukefeld et al., 2015). Unfortunately,

implementation of these interventions within the JJ system is variable, incomplete, and non-systematic at best. However, there have been a few systematic studies that examine and seek to improve community behavioral health linkages for justice-involved individuals with substance use problems (Friedmann et al., 2015; Welsh et al., 2016).

The National Institute on Drug Abuse (NIDA) launched the Juvenile Justice Translational Research on Interventions for Adolescents in the Legal System (JJ-TRIALS) initiative in 2013 to target system-wide improvement in substance use services. JJ-TRIALS is a multisite cooperative agreement grant designed to improve the uptake of evidence-based strategies for addressing substance use among justice-involved youth. JJ-TRIALS includes academic partners from 6 university research centers, 6 state-level JJ partners, a coordinating center, and a NIDA project scientist. Table 1 lists the university research centers and state-level JJ partners who participated in JJ-TRIALS. Collectively, the academic partners, JJ partners, coordinating center, and NIDA project scientist formed the initiative's Steering Committee, which was chaired by a senior justice researcher from a seventh university. The Steering Committee was tasked with developing large-scale projects designed to compare implementation strategies. The goal for these projects was to improve the delivery of evidence-based substance abuse and HIV prevention and treatment services for justice-involved youth. For the first 6 months of the cooperative, the Steering Committee engaged in an intensive collaborative planning process to develop a plan to meet this directive. Throughout the process of designing these studies, the JJ partners were active participants in helping shape the research questions and overall design.

One of 3 projects resulting from this collaborative planning effort was a 36-site randomized controlled trial to improve implementation of evidence-based practices around youth substance use. This JJ-TRIALS implementation study

Table 1. *JJ-TRIALS Research Centers and Juvenile Justice Partners*

| Research Center | State-Level JJ Partner Organization | JJ Partner & Steering Committee Member |
|------------------------------|---|---|
| Columbia University | New York State Division of Criminal Justice Services, Office of Probation and Correctional Alternatives | Patricia Donohue, Community Corrections Representative and Juvenile Operations and Training Director, New York State Division of Criminal Justice Services, Office of Probation and Correctional Alternatives |
| Emory University | Georgia Department of Juvenile Justice | Margaret Cawood, Assistant Deputy Commissioner Michelle Staples-Horne, Medical Director |
| Mississippi State University | Division of Youth Services, Mississippi Department of Human Services | James Maccarrone, Director, Division of Youth Services |
| Texas Christian University | Texas Juvenile Justice Department | Nancy Arrigona, Research Manager, Council of State Governments Justice Center; formerly Director of Research and Planning (retired), Texas Juvenile Justice Department |
| Temple University | Florida Department of Juvenile Justice | Judy Roysden, Chief Probation Officer C-13 |
| University of Kentucky | Kentucky Department of Juvenile Justice | Veronica Koontz, Classification Branch Manager, Division of Placement Services |

involved delivering a 7-month multicomponent training and technical assistance intervention to 36 sites, each with local change teams comprised of a JJ agency (primarily probation departments) and their behavioral health partners (see Figure 1). Three additional pilot sites participated in parts of the intervention as it was being developed, but they did not receive the full intervention and were not included in analyses. This training and technical assistance primarily focused on helping identify and select goals to reduce unmet needs for substance use treatment among the youth these agencies served. Half of these sites were then randomly selected to receive 1 year of external facilitation of the local

Figure 1. JJ-TRIALS composition.

The Steering Committee oversees the 6 research centers. Each research center oversees 6 JJ sites, each comprised of a JJ Agency and at least one Behavioral Health Partner.



change team tasked with pursuing their selected goals. At the time of this writing, data collection was ongoing. The overall design of the 36-site randomized controlled trial is described in detail by Knight and colleagues (2016).

The authors of this paper include 4 of the 6 JJ partners participating in JJ-TRIALS, 2 academic research partners who are members of the Steering Committee, the NIDA project scientist, and several academic partners who have been actively involved in establishing partnerships with participating JJ TRIALS sites. The purpose of this article is to share our collective reflections on the benefits and challenges of the participatory research framework that guided JJ-TRIALS in developing a rigorous implementation study and also in executing that study, which entailed new partnerships between JJ agencies and community treatment partners.

Implementation Research

To date, behavioral health research has focused on developing interventions to address public health concerns, such as mental health and substance use problems, and also, to some extent, the dissemination of evidence-based programs to real-world settings (Proctor et al., 2009). Despite this investment in identifying effective interventions, very little of this research is actually translated into practice and policy—or when it is, the deployment process often lacks systematization (Tabak, Khoong, Chambers, & Brownson, 2012).

Recently, there has been a shift in resources by behavioral health researchers, justice agencies, primary care facilities, and funders toward implementation research. Such research is a way of identifying, testing, and understanding effective strategies for translating treatment and prevention evidence-based approaches into service delivery. The systematic study of integrating evidence-based programs from controlled laboratory settings to real-world contexts (e.g., JJ agencies) has become recognized as an essential component to effective intervention design and dissemination (Peters, Adam, Alonge, Agyepong, & Tran, 2013). Even with this shift, however, calls persist for more efforts to “bridge the yawning gap between best evidence and common practice” (Bhattacharyya, Reeves, & Zwarenstein, 2009) to ensure that the most effective treatments are used, particularly with vulnerable populations.

Though numerous prior studies have sought to improve substance use services for justice-involved youth, to our knowledge, JJ-TRIALS is the largest effort to date to systematically test different implementation strategies for putting evidence-based practices into place in the JJ system. JJ-TRIALS builds on a similar effort funded by NIDA previously, which showed the promise of using local change teams and implementation strategies to improve HIV services and the use of medication-assisted treatment for opiate addiction in adult criminal justice settings (Friedmann et al., 2015; Pearson et al., 2014; Welsh et al., 2016). JJ-TRIALS is engaged in implementation research as a means of identifying, testing, and understanding effective strategies to translate

evidence-based screening, referral, and linkage to treatment for substance-using youth under community supervision. Although the application of evidence-based programming within JJ treatment service-delivery agencies has been growing (Greenwood & Welsh, 2012), a more systematic study of implementation processes is essential for standardization of practices (Walker, Bumbarger, & Phillippi, 2015).

JJ-TRIALS as an Example of Participatory Research

The active collaborative approach of JJ-TRIALS is a form of participatory research, which is a strategy used in implementation research to increase the likelihood of sustained change through emphasis on collective action and input (Scott & Shore, 1979). The resulting convergence of perspectives—one focused on science, the other on practice—allows growth and understanding for both researchers and participants (Bergold & Thomas, 2012). Research has shown that participatory research also strengthens relations between organizational partners and academia and increases the capacity of data collection, analysis, and interpretation of findings to sustain program changes (Cashman et al., 2008; Israel, Schulz, Parker, & Becker, 1998). Our experiences are consistent with these findings.

JJ partners participated in all aspects of the JJ-TRIALS study design. As equal voting members of the JJ-TRIALS Steering Committee, JJ partners play an active role in determining the policies that govern the cooperative, developing and approving research protocols, ensuring that protocols comply with ethical guidelines and regulatory approval processes, monitoring the study protocol process, ensuring data quality, and reviewing study results before dissemination (see Figure 1). In addition to serving on the steering committee, JJ partners participate in study workgroups, advise on key design issues and study approaches, review and comment on study procedures and documents, assist in recruiting and in securing study sites, and co-author presentations and articles.

Examples of JJ Partner Influence on Study Design and Execution

This section outlines specific examples of ways JJ partners have actively influenced the overall study design and execution.

JJ Partner Influences on JJ-TRIALS Study Design

JJ-TRIALS was designed to be a rigorous implementation study, which required standardization across sites to the best extent possible (see Knight et al., 2016, for details). To standardize implementation at each site, a JJ-TRIALS structured training package was developed, which includes manuals, PowerPoint slides, practice exercises to reinforce didactic training, and tools for sites to use. Trainers were encouraged to tailor training to take into account local conditions. However, extensive efforts were made to ensure that the core training was delivered as consistently as possible and that site-level variations were documented and discussed routinely to ensure consistency across all 36 sites. The key activity of the JJ-TRIALS training for participating sites revolved around establishing a local change team and setting a measureable goal(s) that would reduce the unmet needs of the youth they served with regard to screening, assessment, and referral for substance use services.

JJ-TRIALS drew on the organizational change and strategic planning literature to develop a training system focused on using the SMART goal selection approach (i.e., Specific, Measurable, Achievable, Relevant and Time-bound goals; Bovend'Eerd, Botell, & Wade, 2009). Local change teams also received training on Data-Driven Decision-Making (DDDM; Orwin, Edwards, Buchanan, Flewelling, & Landy, 2012; Schuyler Ikemoto & Marsh, 2007); Continuous Quality Improvement (CQI) (Dean & Bowen, 1994); and the use of "Plan-Do-Study-Act" (PDSA) cycles to "test" small, incremental steps that can lead to goal achievement (Moule, Evans, & Pollard, 2012; Taylor et al., 2014; Wilkinson & Lynn, 2011). The focus on SMART goals and DDDM was the

direct result of a JJ partner suggestion. During an intensive 2-day brainstorming meeting in the first months of JJ-TRIALS, the Kentucky JJ partner made the case that training on data and how to use data was a critical need for the JJ system. The academic partners immediately saw that this was an opportunity where their expertise could be effectively leveraged. This observation from an active, engaged JJ partner was instrumental in determining the design and ultimate vision for JJ-TRIALS.

The training and goal selection was an intensive 7-month process that provided local sites extensive data and rich feedback on each site's current strengths, as well as opportunities for improvement in addressing substance abuse among the youth served by their respective site. Goal selection was the final step in this process, after which each local change team was expected to pursue their selected goal and to identify new goals as needed. The academic research team checked in with each site monthly to assess progress. The central research question in JJ-TRIALS compared outcomes of those change efforts driven internally by JJ staff, compared with those facilitated by an external coach affiliated with the university-based research teams (see Knight et al., 2016, for more details). The selection of this central research question was also influenced by JJ partner participation. During the design phases of JJ-TRIALS, JJ partner participation helped the academic partners focus on the practical implications of all proposed designs. The design that was ultimately selected was chosen because it was viewed as most informative, from both a scientific and practical perspective, *even if* it failed to show a difference between the two conditions (i.e., facilitated vs. unfacilitated local change teams). In traditional academic research, such an outcome is often considered a failure. In JJ-TRIALS, finding no differences between these two conditions could indicate that the additional expense and infrastructure of external facilitators is unnecessary—a finding of both practical and scientific value. (Data were also collected

to evaluate the overall effect of the training and other components of JJ-TRIALS.)

JJ Partner Involvement in Recruiting JJ Sites

JJ partners were instrumental in helping the academic partners identify, connect with, and select potential JJ sites. Collaboratively, JJ-TRIALS academic research partners and JJ partners identified key characteristics that were essential for ensuring the ability of sites to participate in the study as designed (see Knight et al., 2016). These criteria were meant to be as inclusive as possible, ensuring that the protocol would be flexible enough to meet partner needs while also ensuring fidelity to the requirements of the overall protocol. JJ partners played an active role in helping the academic partners identify sites in their state that would meet these criteria and navigate any unique issues within each system. JJ partner support also gave JJ-TRIALS investigators credibility when they approached potential sites. In New York State, for example, the 6 local sites (local county probation departments) were selected by the JJ partner, who works in a state-level agency responsible for funding and regulation of all 58 local probation departments in New York. The JJ partner from New York helped identify the sites based on her knowledge of their openness to engage in such initiatives, as well as their capacity to meet the technical requirements for participation.

In Georgia, the JJ partner was the Assistant Deputy Commissioner of Juvenile Justice for the state. She helped JJ investigators navigate a state system that is highly variable in local organization, including geographic location, judicial jurisdiction, and administrative oversight. As such, the successful collaboration with the academic partner required sensitivity to the unique processes, jargon, and culture of each JJ partner. Extensive communication facilitated common understanding of JJ-TRIALS and clarified what participation would involve. With the assistance of the Assistant Deputy Commissioner, 6 main trial sites and 1 pilot site were successfully

recruited to participate in Georgia. In 2 sites, which were both independent agencies located in an urban area, the youth served by the participating justice agency were committed to the Georgia Department of Juvenile Justice with an assigned probation officer. The other 5 sites were considered dependent courts, staffed by probation officers. Youth served in these counties were either committed or probated. Partner involvement was essential for research partners to navigate this complex system.

Partner Involvement in Intervention Activities

The idea of *fidelity with flexibility* was a foundation of the JJ-TRIALS protocol. The success of JJ-TRIALS required balancing fidelity to the overall protocol to ensure scientific rigor (a priority for academic partners) with flexibility to address diversity among participating sites. To be sure, this concept required responsiveness to needs and desires (a priority for JJ partners and participating sites). JJ partners were crucial to achieving this balance as they functioned as a liaison between the JJ-TRIALS academic partners and local sites. Throughout the JJ-TRIALS project (but especially when the study launched), JJ partners facilitated a feedback loop whereby the research team received constructive feedback from sites that allowed them to quickly make any necessary changes to the protocol. Sometimes feedback from sites was contradictory, but discussions that included JJ partners and academic partners led to solutions that often allowed flexible tailoring to site needs while maintaining scientific rigor. In New York, for example, sites were particularly interested in the JJ-TRIALS behavioral health training, which included online informational sessions and web-based live-activity sessions. However, interest in the behavioral health training was highly variable across sites and states. JJ partners helped the academic researchers understand the variations across states (e.g., continuing education requirements) that contributed to these diverse reactions to JJ-TRIALS components. Ultimately, JJ-TRIALS developed a

flexible framework to address and document this site diversity.

Another example of partners ensuring fidelity with flexibility was in the criteria that were used to determine change team composition. Across all JJ sites, local JJ staff identified one or two behavioral health partners to join them as part of the local change team. Like the criteria for selecting sites, the criteria for selecting behavioral health partners were intentionally flexible. Similarly, the criteria for local change team composition were left generally broad, with the primary requirement being that both JJ staff and local behavioral health partners participated. Across JJ-TRIALS, local change teams consisted of 8 to 10 members, though the composition of these teams was diverse. A prototypical local change team would include, for example, a chief probation officer, the program director of a local behavioral health agency, a juvenile court administrator, and a JJ DATA manager, along with frontline staff. Sites were allowed to determine membership of their local change team with few constraints. This commitment flexibility allowed local sites to adapt the intervention to meet their needs.

JJ partners also helped academic partners understand major system changes that would be relevant to local sites. For example, immediately before launching JJ-TRIALS, Georgia had adopted legal mandates requiring the use of evidence-based treatment programs. Even so, many JJ youth were not successfully accessing or participating in services. The JJ-TRIALS intervention was an opportunity for sites in Georgia, which included local JJ agencies as well as partnering behavioral health agencies, to openly discuss perceived challenges to implementation of these mandates. Similar conversations about locally relevant issues took place at all sites participating in JJ-TRIALS. JJ partner participation ensured that JJ-TRIALS investigators were also informed of such issues, which enabled the latter to produce tailored materials for each site.

Reflections on the Benefits and Challenges of a Participatory Model

The participatory, flexible development of the JJ-TRIALS has benefited all involved partners. JJ partners benefit by establishing and building relationships with academic research partners and by leading efforts to improve their state systems in a way that furthers existing research but also ensures practical benefits to participating sites. JJ partners made many contributions to the design that increased the practical benefits of JJ-TRIALS participation for JJ sites. In addition to the anecdotes mentioned in this article, active JJ partner participation resulted in improved study materials and reports, as well as better site feedback, training, and targeted data collection from sites. JJ partner participation has ensured that the burden of participation in sites is always a consideration when intervention activities or data-collection activities are proposed. Active JJ partner participation ensures that the scientific objectives of JJ-TRIALS are always considered in balance with the practical and long-term usefulness and value from the perspective of participating JJ sites. Ensuring practical usefulness also enhances the scientific value of JJ-TRIALS by increasing the likelihood that changes will be sustained even after the research project ends—a key concern in implementation science (Proctor et al., 2015; Wiltsey Stirman et al., 2012).

Partnerships of the sort described herein are not without their challenges, however. For JJ partners, participation in a collaborative effort such as JJ-TRIALS required a large commitment of time, an interest in learning new jargon, and dedication to issues that may seem largely esoteric and unrelated to the day-to-day challenges they face. Partners also needed to champion the value of participation and research to sites and other state-level leaders. For academic partners, participation in this collaborative effort required a willingness to factor in additional processes and time for soliciting feedback from partners; to be open and respectful to different perspectives; and, at times, to be open to rethinking a

preferred approach entirely. The tension inherent in the concept of fidelity with flexibility requires creative methodological thinking on the part of researchers and extensive ongoing conversations to maintain a commitment to this principle.

For participating JJ sites, the benefits of participation in this initiative were counterbalanced by the additional time and reporting requirements inherent in any research endeavor. For a system that is notoriously underfunded and overworked, participation in a research study such as this required a commitment of time, energy, and resources that can be difficult to muster. Our experiences suggest that participatory research will not work without a deep commitment from both partners and a profound respect for the perspective of the other parties. Strong leadership is necessary, as is a respect for the extra time and ongoing process that is involved in seeking out the diverse perspectives of those participating in JJ-TRIALS.

Summary, Recommendations, and Conclusions

For future investigators who hope to follow in the path of JJ-TRIALS, we recommend academic researchers ensure that JJ partners are treated as true partners with a voice in all aspects of study design. Researchers should engage with JJ partners from study conception through the dissemination of findings. Biannual in-person meetings and frequent phone meetings, which include both JJ and academic partners, have built a strong sense of camaraderie and interpersonal and professional respect within JJ-TRIALS. This respect was built by a commitment to allocating time at meetings for JJ partners to offer feedback, ensuring that JJ partners are voting members of the Steering Committee, and including interested JJ partners as active participants in the overall scientific design process.

Further, we recommend that JJ-TRIALS partners co-author papers and serve as presenters and discussants at scientific conferences. We also suggest that they participate in work groups tasked with solving difficult methodological challenges.

Academic partners are interested and willing to work with JJ partners to develop presentations at professional conferences that the JJ partners routinely attend. Common slides have been developed for JJ-TRIALS presentations, and these slides ensure that the contributions of JJ partners are recognized, along with academic partners, in each presentation on JJ-TRIALS. In short, academic partners and JJ partners hold each other in high regard and are committed to making this a valuable experience for all involved parties.

This type of collaboration—between the worlds of academia and of juvenile corrections—represented by JJ-TRIALS is often rare due to diverse cultural and, at times, competing interests of stakeholders (Aarons et al., 2014). Despite the challenges involved in collaboration between academia and the justice systems, our experiences reveal numerous benefits of such partnerships. We encourage other researchers to engage in this challenging but highly rewarding process. JJ partner involvement in JJ-TRIALS has been crucial to the development of a study we all believe will be influential on the field as a whole when it is completed in 2018. Together, we are building models for successful collaboration and approaches to improve the ability of the justice system to adopt and implement evidence-based policies and procedures to better address justice-involved youth in need of substance abuse, mental health, and HIV services.

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