Gender Responsive Probation Model Outcome Evaluation

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1

Table of Contents

List of Tables

List of Exhibits

Executive Summary

Gender responsive care is based on the belief that effective interventions for female offenders and troubled girls must build upon gender-specific risk and protective factors. This approach recognizes the unique pathways leading to crime and delinquency for males and females, and promotes services that are age and gender appropriate. Envisioning a new standard of care for at-risk and delinquent girls, the Connecticut Court Support Services Division (CSSD) developed the Gender Responsive Probation Model (GRPM) in 2006. The overarching goals of the initiative were to improve the quality of supervision services for at-risk and delinquent girls, strengthen their unique protective factors, lower their individual risks and reduce further involvement in the system.

The GRPM incorporated principles of effective intervention and stressed the importance of qualified staff, advanced training in gender responsive care, strengths-based supervision of clients, and quality monitoring. Gender Responsive Probation Officers (GRPO) were carefully selected to serve in each of Connecticut's thirteen judicial circuits. Each GRPO had to demonstrate a desire to work exclusively with female clients, participate in extensive training and commit to the project for at least three years. Training included education and instruction in girls-only interventions such as VOICES, Girls Circle and topics related to female crime and delinquency (for example trauma, boundary setting and relational language). With this knowledge GRPOs provided strengths-based assessment, case management and supervision for girls placed on probation. With a limited caseload, GRPOs focused on relationship building, connecting clients with community-based services, and supporting them within their community.

Understanding the importance of monitoring and evaluation, the GRPM included guidelines for internal and external evaluation activities. The initiative was closely monitored internally by program administrators, and externally by independent evaluators. Data generated through the quality assurance reviews, site visits, observations and staff interviews was routinely presented to the Gender Responsive staff and used to inform supervision practices.[1]

The purpose of this program evaluation is to determine the impact of the GRPM on youth outcomes and use the results to refine and improve gender informed probation services. Using an experimental research design, eligible probationers were randomly assigned to either the GRPM or traditional supervision. Assessments using experimental techniques control for many threats to study validity, and provide true estimates of program effectiveness. All girls eligible for the GRPM between January 1, 2010 and December 31, 2010 were included in the evaluation. The analyses demonstrate that:

➢ The recidivism rate was 3.6 percent for all participants in the outcome evaluation. Compared to a recent finding of 34 percent recidivism for probationers overall, this is a very low rate.[2]

➢ Participants in the Gender Responsive Model and traditional probation had comparable recidivism outcomes six months after supervision completion.

➢ Participants in the Gender Responsive Model and traditional probation had comparable arrest outcomes six months after supervision completion.

➢ The Gender Responsive Probation Model does positively influence recidivism for some at-risk and delinquent youth (specifically girls between 13-15 years of age at first offense, white participants, and those with moderate risk and low protective factors).

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[1] The results of the process evaluation are presented in the Process Evaluation of Connecticut's 2008-2010 Gender Responsive Probation Model report (Ryon, Devers, Early and Hand, 2010).

[2] Bontrager Ryon, Winokur Early and Hand, (2011). Juvenile Probation and Residential Services Evaluation.

Introduction

The growing emphasis on evidence-based programming in child-welfare and juvenile justice systems across the nation has underscored the necessity for probation and residential services that are responsive to the unique risks, needs, and characteristics of girls. Empirical research documents that girls and boys, while at times sharing similar risk factors, become involved in the juvenile justice system for different reasons. Males and females have different pathways to delinquency, varying degrees of risk and criminogenic needs, different responsivity factors and often require different methods of intervention and treatment to effect positive behavioral change (Cooney, Small, and O'Connor, 2008). These findings demonstrate the need for gender appropriate responses to female crime and delinquency.

Gender responsive programming is "a multidimensional, strengths-based approach based on theoretical perspectives that consider females' pathways into the system and provide interventions that address social, cultural, and psychological factors," (Bloom, Owen, and Covington, 2005). Several services are essential in gender responsive programs, including: physical and sexual violence awareness; the risk of HIV and AIDS; pregnancy and motherhood; substance use; family problems and stress; support regarding safe housing; employment training; and developing empowerment and self-efficacy (Chesney- Lind and Okamoto, 2001; Greene et al., 2002). Moreover, gender responsive interventions include a variety of services, such as: girls-only groups; education and life skills sessions; individual and group counseling; parent training; and, cultural events (Wolf et al., 2009).

In October 2006, CSSD established a specialized statewide juvenile probation model for at-risk girls – the Gender Responsive Probation Model (GRPM). The model was developed in response to the growing number of girls in the Connecticut juvenile justice system; the high proportion of girls entering the system for status offenses; and gender differences in the risks,

needs, strengths and protective factors of girls.[3] The initiative included a gender informed approach to supervision; extensive training for Gender Responsive Probation Officers; administrative support; quality assurance and fidelity monitoring; and an experimental research design to evaluate program effectiveness.

An alternative to traditional probation, the model was based on the premise that strong client/officer relationships provide the foundation for successful outcomes for at-risk and delinquent girls. Building a strong, supportive relationship with clients was achieved through frequent interaction, relationship driven dialog and engaging youth at home, school and the community. Model guidelines also stipulated low caseloads for GRPOs to ensure that they had time to meet with clients frequently, offer support within the community and interact with the girls and their families.

The Gender Responsive Probation Model called for GRPOs in each jurisdiction in Connecticut. Officers for the program were carefully screened and completed extensive training between October 2006 and March 2007. The Gender Responsive training agenda included instruction in the following areas: VOICES; Adolescent Female Development and Socialization; Trauma; Relational Aggression; Boundaries and Limit Setting; Assessment Skills; Relational Language; Cultural Competency; Traumatic Events Screening Inventory (TESI) and Coping Skills; Family Mediation skills; Teambuilding; Building Community Resources; Educational Advocacy; Girls Circle; Sexual Assault and The Gender Responsive Probation Model.

In the initial model, gender responsive supervision was limited to court-involved youth between the ages of 11 and 16 who were disposed to probation. Model guidelines stipulated that screening and assessment should be completed by the GRPO using the Massachusetts Youth Screening Instrument (MAYSI), the Connecticut Juvenile Assessment Generic (JAG), the

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[3] GSPO Final Report (January 2008).

Individual Protective Factors Index (IPFI), and Child and Adolescent Needs and Strengths (CANS). GRPOs were instructed to use the assessment information to develop individual supervision plans complete with recommendations and referrals for appropriate community-based programs. Gender responsive supervision highlighted the client's strengths, used incentives to develop protective factors, stressed empowerment and trusting relationships and incorporated relational and engaged interactions. The GRPM also called for interaction with probationers at home and the within the community. Relying on the principles of effective intervention, the GRPM sought to improve the quality of supervision services for at-risk and delinquent girls, strengthen their unique protective factors, lower their individual risks and reduce further involvement in the system.

Determining the effectiveness of this approach at reducing system involvement is the focus of this assessment. The following discussion provides an overview of prior research on gender responsive programming and describes the research questions, data sources, measures, sample and procedures. The report concludes with the study findings and policy recommendations.

Prior Research

Boys and girls differ in reasons why they become involved in crime, and the types of crimes they commit. The overwhelming majority of the 2.2 million arrests of youth (under age 18) in 2006 were males (Snyder, 2008). Male juveniles were arrested for serious crimes, such as violent offenses, property offenses, drug abuse violations, and sex offenses. In contrast, girls were arrested for less serious crimes, such as running away, prostitution, and the unlawful promotion or participation in sexual activities for profit (Snyder and Sickmund, 2006). Research

also demonstrates that female delinquency is on the rise with a 35 percent increase in arrest from 1980 to 2005 (Snyder and Sickmund, 2006).

Antisocial behavior, involvement in delinquent peer groups, and beliefs and attitudes about crime are common predictors of delinquency for boys and girls. Despite these similarities there are certain predictors that make girls involvement in crime unique (Cooney et. al., 2008). Research indicates that the families of delinquent girls, in comparison to those of delinquent boys, are more likely to be severely dysfunctional (Hipwell and Loeber, 2006). Girls are also more likely to suffer from higher rates of abuse within the family. While girls and boys are equally likely to run away from home when abused by family members, girls are more likely to be arrested for such behaviors (OJJDP, 2000a). Girls are also more likely than boys to be involved with delinquent partners, suffer from mental health disorders, and develop posttraumatic stress disorder after experiencing traumatic events (Hennessey, et. al., 2006). While substance use is prominent in both girls and boys, girls are more likely to have a criminal act coupled with substance abuse issues (Gorman-Smith, 2003). More generally, girls entering the juvenile justice system tend to have unique pathways related to their delinquency such as: dysfunctional families, history of physical and sexual abuse, destructive interpersonal relationships with families and intimate partners, mental and emotional disorders and substance abuse problems.

As a result of having different pathways into crime, research has also shown that boys and girls also have different dynamic risk and need factors (Emeka and Sorensen, 2009; Mallett 2010; Maschi, 2009; Wasserman et al., 2005). For example, Wasserman and colleagues (2005) found that girls' rates of anxiety and affective disorders were higher than boys' (odds ratios=0.59 and 0.32, respectively). Moreover, male and female youth differ in likelihood of victimization (Finkelhor and Ormrod, 2000). Juveniles also exhibit different coping styles and different kinds

of mental health problems (Maschi, 2009). They also react differently to stressful experiences, such as child maltreatment. Studies have shown that while girls are more likely to internalize stress in the form of depression, boys are more likely to externalize stress in the form acting out in anger or with aggression (Baillargeon et al., 2007; Baron and Campbell, 1993; Eschenbeck et al, 2000).

Determining juveniles' levels of risk and need is essential to rehabilitate youth and to reduce recidivism. A meta-analysis conducted by Cottle and colleagues (2001) found four variables which were the most influential determinants of juvenile recidivism. They include delinquent peers, conduct problems, non-severe pathology, and ineffective use of leisure time. Other important predictors found from that assessment included, age (Harrison et al., 2001; Rasmussen, 2004; Ryan and Yang, 2005; Scott et al., 2002), age at first offense, (Benda, 2001; Benda et al., 2001; Katsiyannis et al., 2004; Schwalbe et. al., 2004; Windle and Mason, 2004), dysfunctional family relationships (Jung and Rawana, 1999; Myner et. al., 1998), having a history of mental health (Cottle et. al., 2001; Schwalbe et. al., 2006), having a criminal offense history (Benda et. al., 2001; Katsiyannis et. al., 2004; Schwalbe et. al., 2006), the seriousness of offense (Heilbrun et al., 2000; Schwalbe et al., 2006), substance and alcohol abuse history (Jung and Rawana, 1999; Myner et al., 1998), and out-of-home placements (Minor, et. al., 1999; Myner et al., 1998; Schwalbe et al., 2006). In addition to these non-gendered predictors, several gender-specific predictors of delinquency have been noted such as female juveniles' higher rate of appearances before court for status offenses, family-behavioral problems and disorderly conduct (Gavazzi et al., 2005). Furthermore, female delinquency is more likely to result from family problems, traumatic events, mental health issues, and from histories of physical abuse and sexual abuse (Chesney-Lind, 1989; Chesney-Lind and Sheldon, 1992; Funk, 1999; Gavazzi et al., 2006; Mullis, et. al., 2004).

In light of these unique pathways to crime and delinquency, social service agencies have developed gender appropriate services for female offenders and at-risk girls. In 2003, The National Institute of Corrections (NIC) released an extensive review of the empirical literature concerning gender responsive services (Bloom et. al., 2003). The report indicated that gender responsive practice can improve outcomes for female offenders by considering their histories, behaviors, and life circumstances through all aspects of the criminal justice system. It also suggested that investments in gender responsive policy and procedures will, if implemented effectively, cut costs and produce long-term dividends for the criminal justice system, the community where these services are practiced, as well as improving the lives of female offenders and their families.

Two key findings emerged from the NIC study. First, the overwhelming number of male offenders often overshadows the issues relevant to female offenders. Second, the criminal justice system often has difficulty applying policy and procedures to women offenders that have historically been designed for male offenders. The NIC delineates guiding principles and strategies, steps for implementing the principles, and the development of gender responsive policies, practices, programs, and services. It incorporates the following key findings:

> An effective system for female offenders is structured differently from a system for male offenders.

> Gender responsive policy and practice target women's pathways to criminality by providing effective interventions that address the intersecting issues of substance abuse, trauma, mental health, and economic marginality.

> Criminal justice sanctions and interventions recognize the low risk to public safety created by the typical offenses committed by female offenders.

> When delivering both sanctions and interventions, gender responsive policy considers women's relationships, especially those with their children, and their role in the community.

Since that time many agencies have recognized the need to provide services that are gender responsive to both adult and juvenile offenders (Wolf et al., 2009). However, very few gender responsive strategies have been implemented. Moreover, even fewer agencies have sought to evaluate the effects of such services (Matthews and Hubbard, 2008). Only one study was found that was similar to the model being implemented in Connecticut's GRPM.

The Reaffirming Young Sisters' Excellence (RYSE) Program very closely parallels the GRPM. The RYSE program was located in the Alameda County Probation Department's Female Continuum from July 1997 through June 2001 in California. Like the GRPM, the program trained probation officers to be responsive to the unique needs of girls. The RYSE program sought to impact participants' rate of arrest, completion of probation, completion of restitution and community-service requirements, recidivism, girls' level of offending, and improvement in school performance (NCCD, 2001). Girls were randomly assigned to treatment and control groups. The final sample consisted of 333 girls, 249 in the RYSE program and 84 in the control group.

The evaluation of the RYSE program revealed that there were several areas of girls outcomes impacted by the model. In particular, the gender-specific continuum of care was more effective than traditional probation in getting girls to adhere to their probation, restitution and community service requirements and to complete services (NCCD, 2001). Despite these positive results, there were no demonstrated effects of the intervention on recidivism. However, the severity of reoffending was less for the RYSE program girls. A subsequent examination of the evaluation findings was later conducted by Le and colleagues (2003). They reexamined the data for possible racial effects. They found that the RYSE model was more effective for African American girls. More specifically, African American girls who received gender responsive

services had significantly lower recidivism rates than Hispanic, White, and Asian girls in the RYSE program, and African American girls in the control group.

Official data demonstrate the gendered nature of crime and delinquency. Delinquent girls are arrested for less serious offenses than boys; and have different risk and needs than males. At-risk girls often have histories of abuse, mental health issues and significant family problems that make must be taken into account when developing effective interventions. Prior research supports the use of gender responsive services and suggests that a gendered approach can improve youth and system outcomes. While promising practices have been developed, there is a general lack of research on this topic. Additional inquiry is needed on gender responsive programs to accurately determine the impact of these approaches for female offenders and at-risk girls.

GRPM Evaluation Methodology

The goal of the Gender Responsive Probation Model outcome evaluation was to determine the impact of the new approach to supervision on justice system involvement for at-risk and delinquent girls. Using an experimental research design, eligible girls were assigned to either the GRPM (treatment group) or traditional supervision (control group). Process evaluation activities were put in place to ensure model fidelity throughout the initiative. After the completion of the supervision term, participants' risk, needs, offense history, demographic and justice system involvement information was collected. These data were used to answer the following research questions.

➢ Are Gender-Responsive Juvenile Probation services more effective than regular probation services at reducing the number of arrests after supervision completion?

- Are Gender-Responsive Juvenile Probation services more effective than regular probation services at reducing the number of adjudications after supervision completion?

- Are Gender-Responsive Juvenile Probation services more effective for certain types of female juvenile offenders?

Establishing a methodology for evaluating the effectiveness of programs designed to prevent youth from further justice system involvement is a complex endeavor. Outcome evaluation research that involves the comparison of two or more treatment options is dependent on having a sufficient number of cases for analysis, and uniform information for all cases under study. For instance, when comparing youth who have been released from various services (community-based supervision, residential, parole) it is essential to have consistent outcome, risk/needs, demographic and offense information for all subjects included in the study. Further, it is important that the research design account for the various pathways juveniles take through the system and the services they receive.

To address these issues, the study utilized an experimental research design for the evaluation. Experimental studies rely on random assignment procedures to place eligible participants into various treatment options. For this study, eligible cases were randomly assigned to one of two conditions: Gender Responsive Probation or traditional Probation. Randomized experiments reduce bias in the study groups, and minimize threats to validity. In plain terms, random experiments help establish two equal research groups; thereby allowing for a true estimate of program effect on the desired outcomes.

Data Sources

The outcome assessment includes official youth, program and justice system data from the CSSD Case Management and Information System (CMIS). CMIS records demographic,

delinquency referral, placement, detention, disposition, adjudication, and risk and needs information for every juvenile in the Juvenile Justice system. Adult arrest and conviction data were generated from the Connecticut Computerized Criminal History (CCH) records system.

Measures

The evaluation data included information on youth demographic characteristics such as age, race and gender. The files also included information on referral and offense history, dispositions, placements and risk and needs. Finally, juvenile and adult justice system involvement after release was provided by CSSD. A full list of measures in the final evaluation data set is presented in Appendix A.

Demographics

The analysis includes measures of the clients' age at admission to the program and race/ethnicity (African American, white, Hispanic), as reported to CSSD. The evaluation also incorporates the delinquent's age at first offense. Information on the clients' hometown is also available for regional analysis.

Placements

Unique probation placement and assignment duration was calculated using standardized criteria. Disposition data were used to define the type of placement: Gender Responsive probation or traditional probation; and admission and release dates were used to define assignment duration. The beginning of supervision was determined by the admission date provided in the data. The completion of services was established by the close date which captured when the youth actually completed services (as opposed to the probation end date which could change over the course of a probation term). CSSD data systems do not record completion reasons, only release or end dates with the assumptions that those with an end date

successfully completed their probation term. Therefore completion was defined as any youth released from probation supervision, and not placed into a residential setting or supervision term within 30 days of program end date. Establishing a completion date ensures that the study captures subsequent justice system involvement after the youth completes the full intervention. Measuring youth outcomes from assignment date does not allow time for the program to impact behavior; and inflates recidivism rates. Finally, disposition information was used to distinguish between intake and supervision services - the two most common elements of Juvenile Probation. Intake services typically involve a small number of probationer/JPO interactions, client assessment and referral to community-based programs. Intake cases are not supervised by Probation Officers and their involvement with the case generally ends after assessment. Supervision cases also include assessment and referrals, as well as regular interaction with probationers to monitoring their progress and activities for a period of time determined by the courts. Supervision cases are consistent with common definitions of probation and involve regular interaction with clients and close monitoring of education, employment, peers, family relationships, health and other activities.

Risk and Needs

CSSD evaluates juvenile risk and need using the Juvenile Assessment Generic (JAG), a validated risk measurement instrument. The JAG measures criminal history, substance use, risk-taking behaviors, family functioning, peer relationships, clients' stake in conformity, and personal values. Scores are aggregated into total protective and risk values. Summary risk and protective scores are presented for criminal, substance use, family, peer and personal domains. Roughly half (53 percent) of all study participants had complete JAG information; however, the other 47 percent did not have this data available for the analysis. This finding is not unexpected given the composition of the sample; many of whom (for example, dismissals, community-based

services) would not generally be administered the JAG. Of those disposed to supervision, 86 percent had completed JAG assessments.

The analysis also includes seriousness index scores for prior referrals and adjudications. These measures capture offense gravity for both prior referral/arrest and adjudication/conviction. A weighted system assigns point values to specific offense types. As crime seriousness increases, so does the index score (violent felony = 8, property or other felony = 5, misdemeanors = 2, and other offenses = 1). Finally, referral information was used to determine the type of charge (delinquency or status offense) related to the case and disposition.

Justice System Outcomes

Probation violations, juvenile referrals, adult arrests, and adjudications and convictions, are common indicators of involvement in the justice system. Referrals and arrests demonstrate client contact with law enforcement, and may point to deviant or delinquent behaviors. Adjudication or conviction is generally considered more accurate measures of delinquent behavior and involvement with the juvenile or criminal justice systems than referral or arrest. Justice system outcomes are operationalized in this report as (1) any juvenile adjudication or adult conviction, or (2) any juvenile referral or adult arrest; within six months of program completion. **Recidivism**, operationally defined as any adjudication or conviction within six months of program completion, is the primary focus of the assessment; however, re-arrest analyses are also presented in the discussion below.

Sample

Juvenile girls were considered eligible for participation in the GRPM if they resided within one of the 10 geographical areas included in the pilot program, and were not otherwise

precluded from participation.[4] For evaluation purposes, only 9 of the original 10 jurisdictions are included in the study.[5]   A random assignment instrument was implemented to determine eligibility and placement. Probation supervisors completed the intake and eligibility form for all girls appropriate for Probation. Supervisors randomly placed every second client with a Gender Responsive Probation Officer. Between January 1, 2010 and December 31, 2010, two hundred and twenty-two girls received supervision or intake services through the Gender Responsive initiative and 305 girls were served through traditional probation. For the analyses, the sample was further divided into two unique groups. The first group, referred to as 'intake' cases, included those who had intake and assessment services from CSSD Probation Officers; but were not disposed by the courts to Probation (i.e., the services did not include monitoring by Probation Officers). Group two, referred to as 'supervision' cases, includes those who were assessed by CSSD Probation Officers and subsequently disposed by the courts to Probation (i.e. those who were supervised by a CSSD Probation Officer for a period of time set by the courts). The intake services sample included 445 at-risk and delinquent girls, and the supervision sample was comprised of 82 youth. Results are presented below for the full sample of Gender Responsive and traditional probation participants; and then separately for intake and supervision cases.

TABLE 1: GENDER RESPONSIVE PROBATION MODEL EVALUATION SAMPLE

Total Youth Served January 1, 2010 and December 31, 2010	527
Gender Responsive Cases (Treatment Group, Intake Only)	180
Traditional Probation (Control Group, Intake Only)	265
Gender Responsive Cases (Treatment Group, Supervision Only)	42
Traditional Probation (Control Group, Supervision Only)	40
Total Outcome Evaluation Sample (Intake Only)	445
Total Outcome Evaluation Sample (Supervision Only)	82

[4]Girls between 11 and 16 were eligible for the program. Clients with a sibling on supervision were excluded from the study so that they could be assigned to the same Probation Officer as their sibling. Supervision cases originating from a Youth in Crisis referral were also excluded from the study. Finally, any case resulting in a residential placement was excluded from the program.

[5] One of the jurisdictions had staffing issues during implementation and was excluded from the evaluation.

Procedures and Data Analysis

The program assessment incorporates the following analytic techniques: descriptive statistics, simple hypothesis testing (using t statistics) and logistic regression. Descriptive statistics demonstrate baseline sample characteristics and outcome measures. Simple hypothesis tests highlight differences in the two groups (Gender Responsive probationers and traditional probationers); and help determine which factors potentially affect youth outcomes.

Logistic regression, a more complex statistical tool, allows for more robust modeling of recidivism that controls for potential confounding factors known to impact justice system involvement. The logistic regression results demonstrate the expected outcomes (or predicted probability) of recidivism, given the juveniles' demographics, risks, needs, legal factors, offense histories and other extra-legal factors. Analyses can then be conducted to predict the likelihood for future system involvement based on factors found in the research literature to be correlated with delinquency.

Youth Profile

This section profiles the outcome evaluation sample of youth assigned to Gender Responsive or traditional Probation. This analysis provides a basic description of these youth, their risk levels, needs and prior offending. Youth outcomes are considered in Exhibits 1 and 2.

Demographic, Prior History and Risk/Needs

Table 2 presents summary statistics for at-risk and delinquent girls placed on Gender Responsive Probation between January 1, 2010 and December 31, 2010. The sample (N=222) includes a comparable number of white (54%) and non-white clients (46%). The average age at first offense for all youth in this sample is 14 years old. Gender responsive clients had an

average prior referral seriousness index score of 2.94 (the range was 0 to 67). The average prior adjudication seriousness index score was .80 with a range of 0 to 52. The average Juvenile Assessment Generic (JAG) risk and protective scores are 10 and 39, respectively. Eighty-one percent of the youth assigned to the Gender Responsive Probation Model received intake services (N=180) and the remaining 19 percent were supervised for the duration of their probationary period (N=42). Supervision cases had slightly lower risk scores, and trivial increases in protective factors; in comparison to intake only cases. Of the youth assigned to the GRPM, 66 and 98 percent of intake and supervision cases (respectively) had delinquency charges associated with that placement.

TABLE 2: GENDER RESPONSIVE SAMPLE DESCRIPTIVE STATISTICS

		Entire Sample (N=222)			Intake (N=180)		Supervision (N=42)	
Gender Responsive Probation	*Min.*	*Max.*	*Mean*	*St. Dev.*	*Mean*	*St. Dev.*	*Mean*	*St. Dev.*
Age at first offense	6.75	16.94	14.31	1.83	14.40	1.72	13.91	2.22
Race (0=Other, 1=White)	0.00	1.00	0.54	0.50	0.53	0.50	0.56	0.50
Prior charge seriousness index	0.00	67.00	2.94	7.99	5.13	37.50	3.79	6.12
Prior adjudication seriousness index	0.00	52.00	0.80	4.13	0.86	4.48	0.55	2.12
JAG Total Risk Score	1.00	30.00	10.00	5.17	10.41	5.61	9.18	4.09
JAG Total Protective Score	15.00	56.00	39.08	6.96	38.32	7.31	40.63	5.98
JAG Total Criminal Score	0.00	3.00	0.49	0.72	0.43	0.67	0.60	0.81
JAG Total Substance Use Risk Score	0.00	6.00	0.58	1.20	0.65	1.23	0.43	1.13
JAG Total Substance Use Protective Score	0.00	12.00	10.79	2.05	10.70	2.19	10.95	1.74
JAG Total Family Risk Score	0.00	9.00	3.54	1.80	3.51	1.78	3.60	1.86
JAG Total Family Protective Score	1.00	9.00	4.76	1.58	4.67	1.56	4.95	1.62
JAG Total Peer Risk Score	0.00	13.00	2.97	2.79	3.27	2.98	2.35	2.27
JAG Total Peer Protective Score	0.00	27.00	16.94	4.36	16.48	4.48	17.88	4.00
JAG Total Personal Risk Score	0.00	7.00	2.43	1.74	2.54	1.76	2.20	1.70
JAG Total Personal Protective Score	0.00	9.00	6.60	1.90	6.47	1.96	6.85	1.76
Delinquency Charge	0.00	1.00	0.72	0.45	0.66	0.48	0.98	0.15

Demographics, offense seriousness and JAG assessment statistics for the traditional probation control group (N=305) are presented in Table 3. Most of the youth in the sample were non-white (59 percent). The average age at first offense was approximately 14.7 years old. The average prior referral seriousness index score for all releases is 1.61 (the range is 0 to 59). The

average prior adjudication seriousness index range is 0 to 49; and the average is .43. The average Juvenile Assessment Generic (JAG) risk and protective scores are 10 and 38, respectively. Most youth assigned to traditional probation received intake services (87 percent) and a smaller number (13 percent) were supervised for the duration of their probationary period. As expected, supervision cases have significantly higher risk scores than those receiving only assessment and referrals as part of their probation. Of the youth assigned to the GRPM, 71 and 98 percent of intake and supervision cases (respectively) had delinquency charges associated with that placement.

TABLE 3: TRADITIONAL PROBATION SAMPLE DESCRIPTIVE STATISTICS

			Entire Sample (N=305)		Intake (N=265)		Supervision (N=40)	
Traditional Probation	Min.	Max.	Mean	St. Dev.	Mean	St. Dev.	Mean	St. Dev.
Age at first offense	7.85	17.78	14.68	1.56	14.73	1.57	14.35	1.52
Race (0=Other, 1=White)	0.00	1.00	0.41	0.49	0.41	0.49	0.41	0.50
Prior charge seriousness index	0.00	59.00	1.61	5.66	1.62	5.99	1.55	2.64
Prior adjudication seriousness index	0.00	49.00	0.43	3.50	0.45	3.73	0.25	1.30
JAG Total Risk Score	1.00	25.00	9.78	5.92	9.14	5.85	12.32	5.61
JAG Total Protective Score	11.00	55.00	37.63	6.94	38.08	6.79	35.84	7.37
JAG Total Criminal Score	0.00	3.00	0.30	0.57	0.31	0.59	0.26	0.51
JAG Total Substance Use Risk Score	0.00	9.00	0.62	1.39	0.48	1.28	1.16	1.70
JAG Total Substance Use Protective Score	0.00	12.00	10.29	2.23	10.42	2.20	9.74	2.32
JAG Total Family Risk Score	0.00	10.00	3.47	2.25	3.32	2.27	4.10	2.10
JAG Total Family Protective Score	0.00	9.00	4.50	1.94	4.63	2.00	3.97	1.58
JAG Total Peer Risk Score	0.00	13.00	3.04	2.55	2.85	2.46	3.84	2.77
JAG Total Peer Protective Score	4.00	25.00	16.71	3.42	16.85	3.27	16.16	4.00
JAG Total Personal Risk Score	0.00	8.00	2.34	2.00	2.18	2.00	2.97	1.94
JAG Total Personal Protective Score	0.00	9.00	6.13	1.73	6.18	1.73	5.97	1.72
Delinquency Charge	0.00	1.00	0.75	0.44	0.71	0.45	0.98	0.16

A chi square analysis of Gender Responsive and traditional probation client characteristics show significant differences in age at first offense, race, prior record seriousness index and JAG protective and criminal risk scores. The Gender Responsive clients had a lower age at first offense, higher criminal risk, and higher average referral index scores - all indicative of higher risk for system involvement. However, the higher protective factor scores and greater

proportion of White clients may offset the risk for system involvement for the Gender Responsive group. For the supervision subsample the Gender Responsive clients appear to have lower risk for system involvement due to significantly lower total risk scores and higher protective factors. There were significant differences in age at first offense and race for the intake subsample. In this analysis, the Gender Responsive group had a significantly lower age at first offense (indicting higher risk for system involvement) but substantially more White participants than the control group (indicating lower risk for system involvement).

These findings suggest that overall the Gender Responsive sample includes clients with some high risk for recidivism indicators (age, prior record) than those in the traditional probation control group. This expectation is reversed for the supervision subsample with the findings clearly suggesting that the Gender Responsive clients are at lower risk for additional system involvement than traditional probation girls. The findings for the intake subsample is not as clear with some indicators suggestion higher risk for Gender Responsive clients and others pointing to lower risk for system involvement. Logistic regression should address these disparities, but the differences potentially impact the study in important ways. The primary concern is that the recidivism rate for the Gender Responsive participants will be higher than that of the traditional probation control group because the former has higher risk clients; not because of the services provided through the GRPM. With the supervision cases, having lower risk Gender Responsive girls increases the chance of positive outcomes for this group in comparison to traditional probation clients.

Justice System Involvement

Exhibits 1 and 2 present the justice system involvement for all youth completing Gender Responsive and traditional probation; all youth receiving intake services through either Gender

Responsive or traditional probation; and all youth receiving supervision through either Gender Responsive or traditional probation during the study timeframe. Of the 222 Gender Responsive participants, five percent had a juvenile adjudication or adult conviction within six months of completing probation services. Of those assigned to traditional probation, 1.3 percent had an adjudication or conviction within six months of completing their probation term. Examining recidivism rates by services received - intake or supervision - demonstrates similar results. For probationers who received intake services only, recidivism is 3.3 percent for Gender Responsive participants and less than one percent for those on traditional probation - which runs counter to expectations given the relative lower risk of Gender Responsive clients in the intake sample.
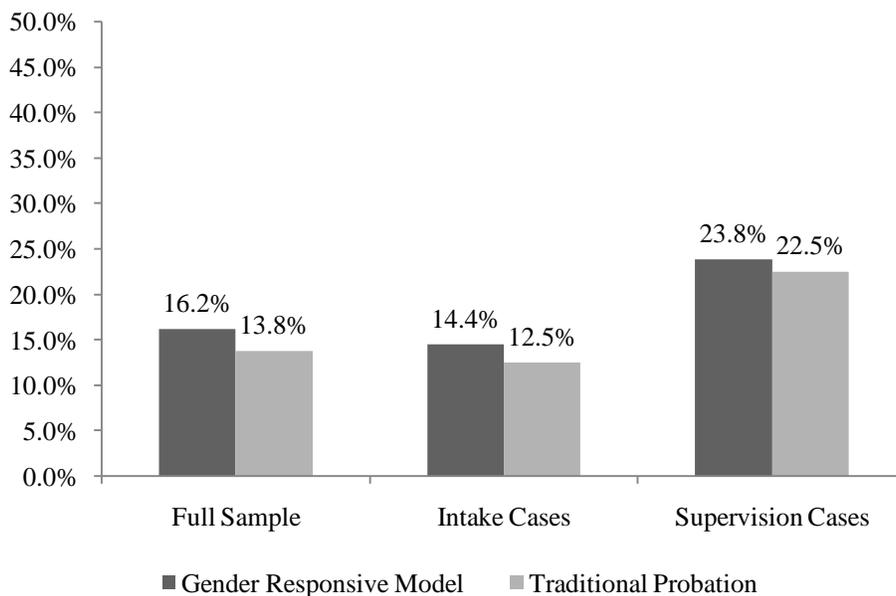
EXHIBIT 1: GENDER RESPONSIVE AND TRADITIONAL PROBATION OUTCOMES - RECIDIVISM
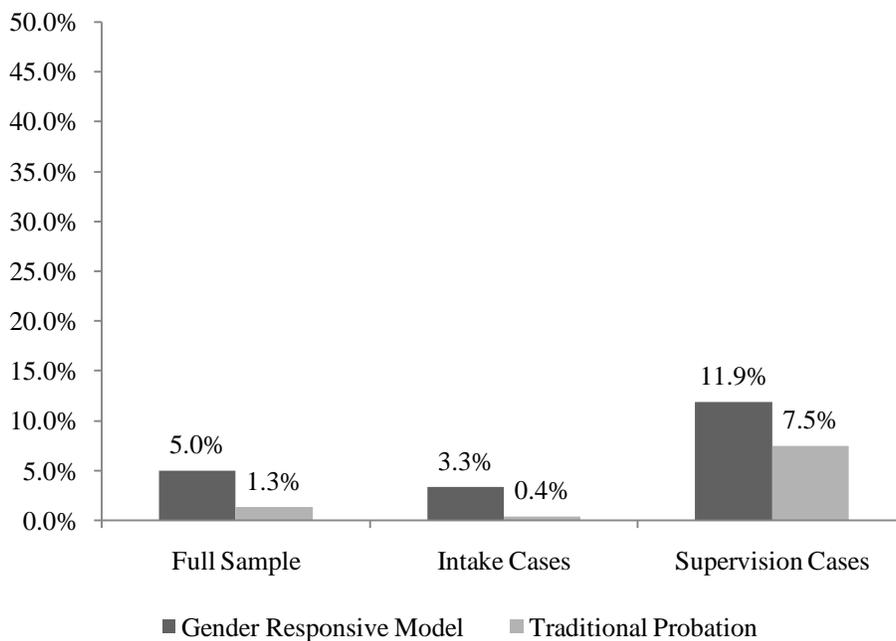
For supervised cases, the recidivism rate was 11.9 percent for Gender Responsive youth and 7.5 percent for those on standard probation. Higher system involvement figures for the Gender Responsive clients overall and in the supervision subsample are not unexpected given the relative risk of clients served through the GRPM.

The juvenile referral or adult arrest figures were higher for both Gender Responsive and traditional probation clients. Sixteen percent of the Gender Responsive girls and 13.8 percent of the probation group had an arrest or referral within six months of completing supervision. Examining recidivism rates by services received - intake or supervision - demonstrates similar results.

EXHIBIT 2: GENDER RESPONSIVE AND TRADITIONAL PROBATION OUTCOMES - ARREST

For clients who received intake services only, recidivism is 14.4 percent for Gender Responsive participants and 12.5 percent for those on traditional probation. For supervised cases, the recidivism rate was 23.8 percent for Gender Responsive youth and 22.5 percent for those served through traditional probation.

Results

The following statistical analyses examined Gender Responsive and probation client information drawn from CSSD data systems. Client and program information was included in the assessment, as well as offense history, demographics and youth risk and needs. The study results provide answers to the following questions:

1. Are Gender-Responsive Juvenile Probation services more effective than regular probation services at reducing recidivism after supervision completion?

2. Are Gender-Responsive Juvenile Probation services more effective than regular probation services at reducing the number of arrest after supervision completion?

3. Are Gender-Responsive Juvenile Probation services more effective for certain types of female juvenile offenders?

Justice System Outcomes

The analysis used simple statistics to evaluate the null hypothesis - that there was no difference in average recidivism rates between the Gender Responsive girls and traditional probation clients. The computed t statistic was -2.28 and the critical value was 2.33($t_{(.01,526)} = 2.33$). A comparison of the observed statistic to the critical value demonstrated that there were no significant differences in average recidivism. Turning to average arrest rates, the analysis tested the null hypothesis - that there were no differences in average arrest rates between Gender Responsive and traditional probation clients. The computed t statistic was -.771 and the critical value was 2.33 ($t_{(.01,526)} = 2.33$). A comparison of the observed statistic to the critical value demonstrated that there were no significant differences between the two groups in terms of the average juvenile referral and adult arrest rates.

T-test: Intake Cases

Turning to the intake services sample, the analysis tested the null hypothesis: there is no difference in recidivism or arrest outcomes for those receiving intake services through Gender Responsive and traditional Probation. The computed t statistic was -2.12 and the critical value was 2.33 ($t_{(.01,444)} = 2.33$). A comparison of the observed statistic to the critical value demonstrated that there were no significant differences in average recidivism. Looking next at

average arrest rates, the analysis tested the null hypothesis - that there were no differences in average arrest rates between Gender Responsive and traditional probation clients. The computed t statistic was -.600 and the critical value was $2.33(t_{(.01,444)} = 2.33)$. A comparison of the observed statistic to the critical value demonstrated that there were no significant differences between the two groups in terms of the average juvenile referral and adult arrest rates.

T-test: Supervision Cases

Examining the supervision services sample, the analysis tested the null hypothesis: there is no difference in recidivism for those receiving supervision through Gender Responsive and traditional Probation. The computed t statistic was -.669 and the critical value was $2.37(t_{(.01,81)} = 2.37)$. A comparison of the observed statistic to the critical value demonstrated that there were no significant differences in average recidivism for Gender Responsive and traditional probation supervision cases. Looking next at average arrest rates, the analysis tested the null hypothesis - that there were no differences in average arrest rates between Gender Responsive and traditional probation clients. The computed t statistic was -.139 and the critical value was $2.37(t_{(.01,81)} = 2.37)$. A comparison of the observed statistic to the critical value demonstrated that there were no significant differences between the two groups in terms of the average juvenile referral and adult arrest rates.

Logistic regression allows for a robust analysis of factors related to recidivism for those released from probation services by controlling for factors known to impact juvenile recidivism including age, race, risk and needs, and prior record. Generally randomized experiments naturally control for the potential influence of such factors; however, a comparison of the Gender Responsive and traditional probation groups reveals significant differences in age at first offense, prior offending and client risk despite the study design. To ensure an unbiased estimate of the

effectiveness of the Gender Responsive approach, logistic regression techniques were employed. The logistic regression results demonstrate expected recidivism controlling for the juveniles' placement (Gender Responsive or standard probation), age at first offense, JAG Risk Scores and prior record. Results, presented in the first row of Table 4, show that the odds of recidivism are not significantly different for those on Gender Responsive supervision and those assigned to traditional probation (odds ratio=3.03, p value=.07, critical p value=.05).[6]

TABLE 4: JUVENILE ADJUDICATION OR ADULT CONVICTION WITHIN 6 MONTHS

	Coefficient	S.E.	Sig.	Exp(B)
Placement (0=Probation, 1=Gender Responsive)	1.11	0.62	0.07	3.03
Age at first offense	-0.24	0.15	0.11	0.79
Referral Seriousness Index	0.00	0.09	0.99	1.00
JAG Total Risk Score	0.05	0.05	0.31	1.05

The analysis of juvenile referral and adult arrests produced similar results (Table 5, first row). Clients completing Gender Responsive probation did not have significantly better arrest outcomes when compared to those placed on traditional probation (odds ratio=1.23, obtained p value=.49, critical p value = .05).

TABLE 5: JUVENILE REFERRAL OR ADULT ARREST WITHIN 6 MONTHS

	Coefficient	S.E.	Sig.	Exp(B)
Placement (0=Probation, 1=Gender Responsive)	0.21	0.30	0.49	1.23
Age at first offense	-0.08	0.09	0.37	0.92
Referral Seriousness Index	0.01	0.02	0.75	1.01
JAG Total Risk Score	0.07	0.03	0.01	1.07

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[6] Significance is determined by comparing the obtained p value to the critical p value. If the obtained value is less than the critical value then the coefficient is significant. For example, the obtained p value for Gender Responsive probation is .10 and the critical value is .05; therefore the coefficient is not significant.

Logistic Regression: Intake Cases

The logistic regression results for the intake cases demonstrate expected recidivism controlling for the juveniles' placement (Gender Responsive or standard probation), age at first offense, and race. Results, presented in the first row of Table 6, show that the odds of recidivism are not significantly different for those on Gender Responsive supervision and those assigned to traditional probation (odds ratio=8.27, p value=.06, critical p value=.05).

TABLE 6: JUVENILE ADJUDICATION OR ADULT CONVICTION WITHIN 6 MONTHS

	Coefficient	S.E.	Sig.	Exp(B)
Placement (0=Probation, 1=Gender Responsive)	2.11	1.12	0.06	8.27
Age at first offense	-0.41	0.19	0.04	0.67
Race	-17.68	3012.66	1.00	0.00

The analysis of juvenile referral and adult arrests produced similar results (Table 7, first row). Clients completing Gender Responsive probation did not have significantly better arrest outcomes when compared to those placed on traditional probation (odds ratio=1.11, obtained p value=.74, critical p value = .05).

TABLE 7: JUVENILE REFERRAL OR ADULT ARREST WITHIN 6 MONTHS

	Coefficient	S.E.	Sig.	Exp(B)
Placement (0=Probation, 1=Gender Responsive)	0.10	0.31	0.74	1.11
Age at first offense	-0.19	0.09	0.03	0.82
Race	-0.20	0.32	0.53	0.82

Logistic Regression: Supervision Cases

The logistic regression results for the supervision cases demonstrate expected recidivism controlling for the juveniles' placement (Gender Responsive or standard probation), JAG Risk Scores and prior record. Results, presented in the first row of Table 8, show that the odds of recidivism are not significantly different for those on Gender Responsive supervision and those assigned to traditional probation (odds ratio=1.25, p value=.79, critical p value=.05).

TABLE 8: JUVENILE ADJUDICATION OR ADULT CONVICTION WITHIN 6 MONTHS

	Coefficient	S.E.	Sig.	Exp(B)
Placement (0=Probation, 1=Gender Responsive)	0.22	0.83	0.79	1.25
Referral Seriousness Index	0.03	0.06	0.60	1.03
JAG Total Risk Score	0.00	0.08	0.97	1.00

The analysis of juvenile referral and adult arrests produced similar results (Table 9, first row). Clients completing Gender Responsive probation did not have significantly better arrest outcomes when compared to those placed on traditional probation (odds ratio=1.12, obtained p value=.85, critical p value = .05).

TABLE 9: JUVENILE REFERRAL OR ADULT ARREST WITHIN 6 MONTHS

	Coefficient	S.E.	Sig.	Exp(B)
Placement (0=Probation, 1=Gender Responsive)	0.11	0.61	0.85	1.12
Referral Seriousness Index	0.04	0.05	0.47	1.04
JAG Total Risk Score	0.12	0.06	0.05	1.13

Context of Age, Race & Risk and Protective Factors

Determining which probation placements are likely to benefit from the Gender Responsive approach is explored in Exhibits 3 through 6. These graphs depict the actual recidivism for Gender Responsive and traditional probation clients in a variety of contexts.[7] Exhibit 3 shows recidivism outcomes by placement (Gender Responsive or standard supervision) and age at first offense. Youth 12 or younger at first offense placed on Gender Responsive probation have significantly higher recidivism when compared to those from the same age category placed on traditional probation (12.5 percent compared to zero percent).

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[7] Due to sample size limitations, this analysis utilizes all clients disposed to probation and does not replicate the findings for intake and supervision cases.
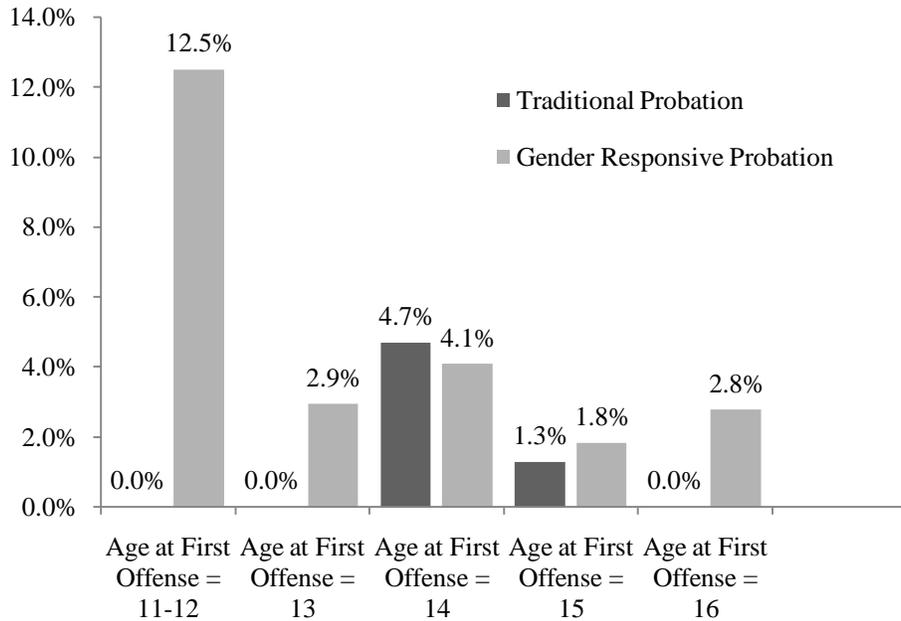
Recidivism rates for those placed on Gender Responsive probation fall dramatically as age at first offense increase (for instance 12.5 percent for the 12 or younger group and 2.9 percent for the 13 year old category). Shown in this context, Gender Responsive probation seems to be least effective for girls who were very young when they committed their first offense; and most effective for girls 13, 14 or 15 years old at first offense (chi square analyses of differences among Gender Responsive age groups were significant for the 12 year old and 13 year old categories).

Exhibit 4 demonstrates the relative impact of race and placement type on recidivism for at-risk girls. Nonwhite clients placed on Gender Responsive probation have higher recidivism than those on traditional supervision (9.5 percent compared to 1.5 percent); a statistically significant difference. Recidivism rates for white clients did not vary substantively by placement type.
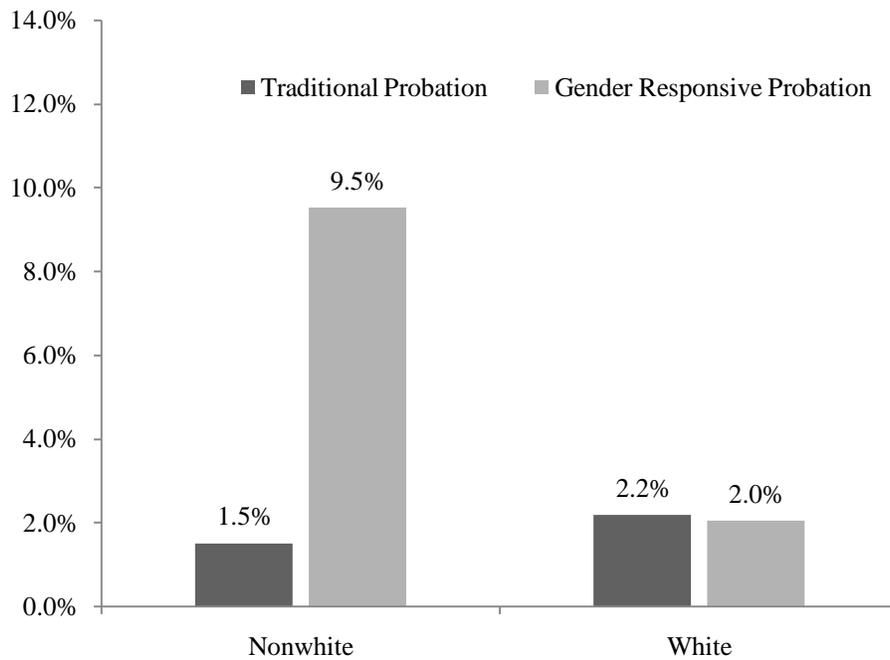
A comparison of recidivism for white and nonwhite Gender Responsive clients shows better outcomes for the white Gender Responsive group (9.5 percent compared to 2 percent); suggesting that this approach may be more effective for white probationers (however chi square analysis was not statistically significant).

Exhibits 5 and 6 examine the effectiveness of Gender Responsive probation for clients with varying levels of risk and protective factors (as determined by the JAG).[8] Recidivism rates for Gender Responsive clients are highest (10.4 percent) for low-risk participants (score of 0-10) and lowest (zero percent) for high risk youth (score of 21 or more). Gender Responsive probation is also more effective at reducing recidivism for the moderate risk clients than for low risk clients (5.9 percent compared to 10.4 percent).

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[8] JAG data were only available for 53 percent of clients in the sample, and missing information makes further analysis by JAG risk and protective domains impossible. Low, moderate and high groups were created using the sample mean and standard deviation.
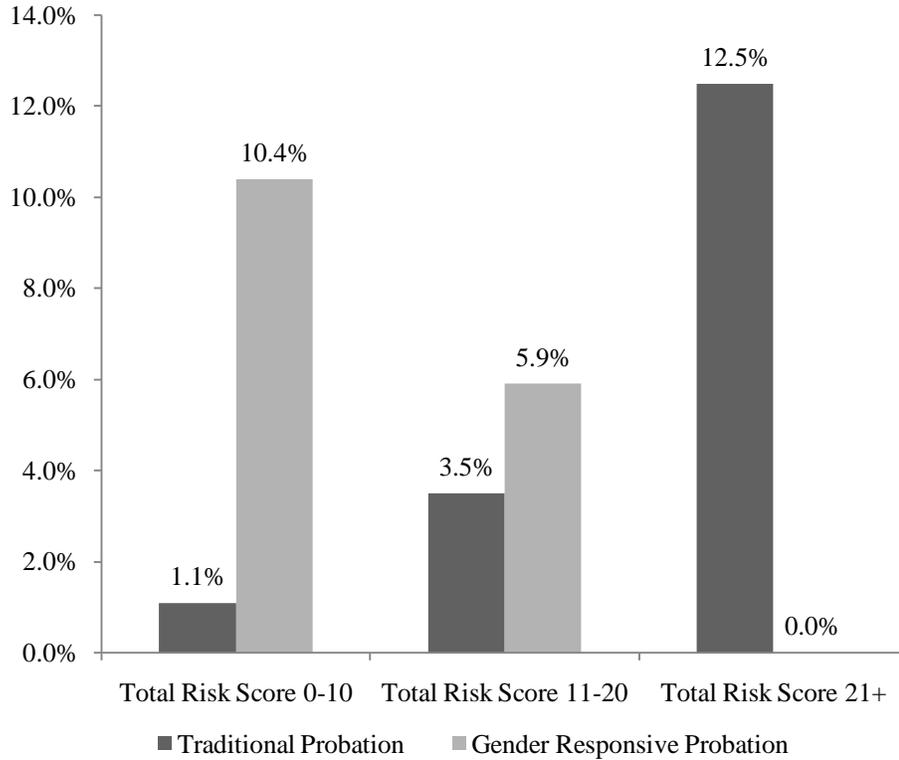
These results suggest that the influence of this approach is strongest for girls with moderate to high risk; and least effective for low risk probationers (chi square analyses of differences among Gender Responsive risk groups were not significant).

The effectiveness of Gender Responsive probation also fluctuates according to pre-existing protective factors (as measured by the JAG). Consistent with evidence-based research, clients with low protective factors (scores between 0 and 30) appear to benefit the most from Gender Responsive probation.
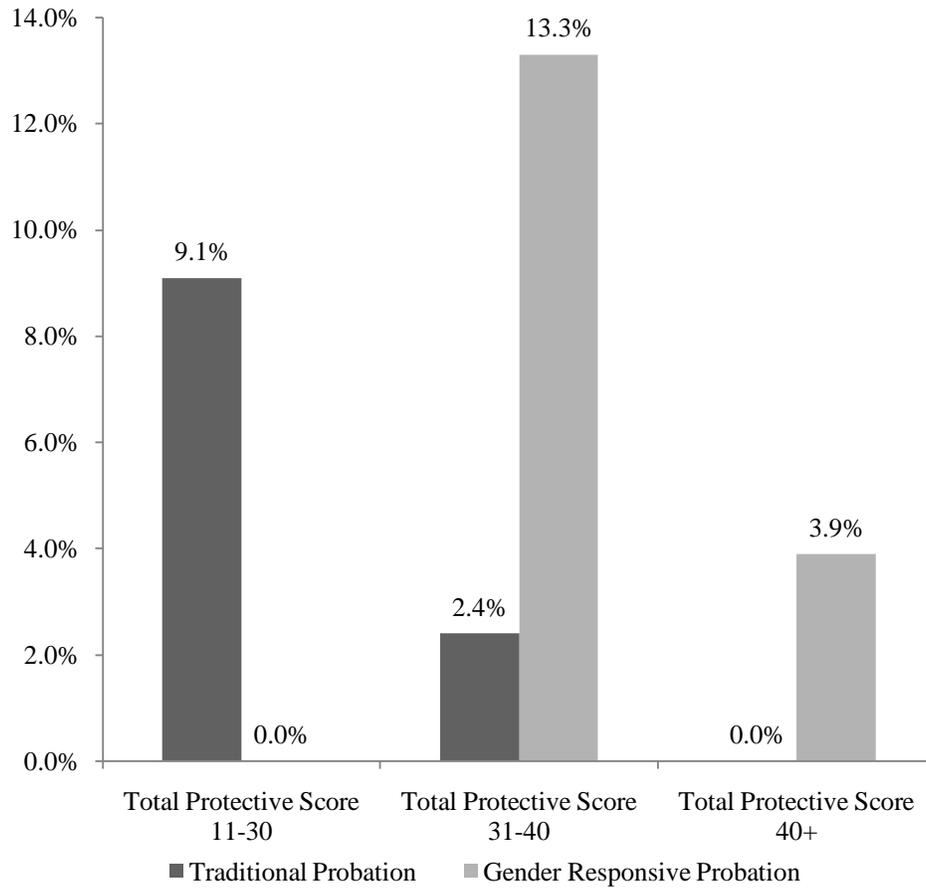
Their recidivism rate is zero percent for clients with low protective factors compared to 13.3 percent for clients with moderate protective factors assigned to Gender Responsive probation. As pre-existing protective factors increase, the influence of Gender Responsive probation relative to traditional probation, decreases. For the moderate protective factor group, recidivism is significantly higher for the Gender Responsive clients. These results indicate that Gender Responsive probation is most effective for girls with few protective factors (chi square analyses of differences between the low and moderate Gender Responsive protective categories was significant).

33

Discussion and Recommendations

Summary of results

The initial analyses focused on the impact of youth placement in either Gender Responsive or traditional probation on recidivism and arrest outcomes. The purpose was to determine if outcomes for Gender Responsive participants were significantly better than those for clients placed in traditional supervision. The results demonstrate that juvenile and adult system involvement was not significantly lower or higher for at-risk youth randomly assigned to Gender Responsive probation.

Logistic analysis, which moves from observed to predicted recidivism outcomes, controls for factors such as age, race, gender, prior offending, and risk and need. These analyses indicate that for at-risk girls, Gender Responsive and traditional probation result in comparable recidivism within six months of supervision completion. The juvenile referral and arrest analysis demonstrated similar results for Gender Responsive and standard probation clients.

Examining the influence of Gender Responsive probation by age at first offense, race and risk/protective factors provided a more detailed assessment of how this approach impacts future justice system involvement. Gender Responsive probation appears to be more effective for

- girls between 13 and 15 years of age at their first offense.
- white youth.
- girls with moderate to high risk and low protective factors.

Statistical testing of recidivism rates by placement type, age, race and JAG protective and risk factors, did not always point to significant changes in justice system outcomes for Gender Responsive probation clients. Incomplete risk and needs information and a small sample size likely contribute to the lack of substantive differences among the specific age, race and risk

groupings. While not always statistically significant, these results provide useful information for further program development and highlight potential growth areas for the Gender Responsive initiative.

The study examined how individual characteristics, prior offending, program placement, and risk and needs impacted justice system involvement. The findings suggest that overall Gender Responsive probation is not significantly more effective at reducing recidivism when compared to traditional supervision. However, the study did find that Gender Responsive probation was more effective than traditional probation for clients with certain characteristics – which highlights the need for targeted intervention. These results suggest that this approach may be an appropriate and superior response for clients with higher risk and needs.

Finally, the study does not include a cost-benefit analysis. However, the two approaches utilize similar staff, supervision and facility configurations; and appear to have comparable budgets. If this is the case, targeting Gender Responsive services for higher risk delinquent girls could lead to better outcomes without incurring increased costs.

Limitations

Data collection during the study timeframe was limited to the variables presented in Appendix A. Information on the specific community-based interventions utilized in each case, and/or the frequency and intensity of the treatment were not consistently available for all clients. This limits the discussion in important ways. First, it is possible that differences in outcomes are related to the type of intervention commonly used (for example, family treatments or substance use programming) as opposed to the type of placement. In addition, this information would be beneficial in further understanding the best approach to reducing recidivism given a client's specific criminogenic, family, peer and personal risk and protective factors.

The analysis was also restricted by the absence of key risk and need information. Roughly half of the sample did not have JAG data, and key risk and needs indicators were not available for statistical analyses. As a result, the logistic modeling did not control for client risk and needs in predicting recidivism. The findings should be interpreted with caution since factors commonly associated with post release success were not included in the modeling process. In addition, the risk and protective factor analysis suggest that the Gender Responsive model may have more impact on girls with specific risk and needs; something that warrants further exploration.

In addition, the Gender Responsive and traditional Probation Officers all received training in Motivational Interviewing and Strengths-based Case Management prior to and during the evaluation. This training touched on many of the core elements of the Gender Responsive Model including relationship building, motivation and strengths building. As a result, all Juvenile Probation Officers were implementing practice standards consistent with some elements of the GRPM. This overlap diminished the distinction between the GRPM and traditional probation, and made significant differences between the two approaches less likely.

Finally, the results of the study may be partially impacted by the timing of the evaluation. The outcome assessment utilized data from the second year of the Gender Responsive Probation Model. Implementation research suggests that, "a test of evidence-based practice or program effectiveness at implementation sites should occur only after they are fully operational, that is, at the point where the interventions and the systems supporting those interventions within an agency are well integrated and have a chance to be fully implemented" (Fixen, Naoom, Blase, Friedman, & Wallace, 2005, p. 18). Estimates of full implementation range from two to four years (Simpson and Flynn, 2007) and it is possible that the study is premature. In fact, there is

some evidence that outcomes for Gender Responsive participants were improving over time but the limited time frame (12 months) made this type of statistical analysis impossible.

Recommendations

This study marks an important first step in understanding the impact of gender specific probation services on justice system involvement for at-risk and delinquent girls. The results suggest that recidivism rates for those placed on Gender Responsive probation are comparable to recidivism rates for those on traditional supervision. However, the detailed assessment of specific subsamples suggests that the Gendered approach may be more effective than standard probation at reducing recidivism for some delinquent girls.

Future research on the Gender Responsive Probation Model should focus on how client characteristics interact with the approach; and who is most likely to benefit from this model. Evaluation efforts should also seek out additional risk and needs information to provide a complete assessment of program effectiveness. The Gender Responsive Probation model should also be given time to fully mature and administration should continue with rigorous evaluation methods to fully assess model impact in the future.

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Appendix A: Evaluation Measures

Demographic Characteristics
Age at first offense
Race (0=Other, 1=White)

Program Measures
Length of stay
Placement Type (Gender Responsive Supervision or Probation)
Service Type (Intake or Supervision)

Offense History
Index of prior referral seriousness
Index of prior adjudication seriousness
Total charges before program
Total felony charges before program
Total misdemeanor charges before program
Total adjudicated charges before program
Total adjudicated delinquent charges before program
Total adjudicated FWSN before program
Total adjudicated YIC before program
Total felonies adjudicated charges before program
Total misdemeanor adjudicated charges before program
Category of worst referral before program
Category of worst adjudication before program

Risk and Needs Indicators
JAG Total Risk Score
JAG Total Protective Score
JAG Criminal Risk Score
JAG Total Substance Use Risk Score
JAG Total Substance Use Protective Score
JAG Total Family Risk Score
JAG Total Family Protective Score
JAG Total Peer Risk Score
JAG Total Peer Protective Score
JAG Total Personal Risk Score
JAG Total Personal Protective Score
Charge Type (Delinquency or Status Offense)

Six Month Justice System Involvement
Juvenile referral or adult arrest within 6 months
Juvenile adjudication or adult conviction within 6 months
Referral within 6 months of program completion
Felony referral within 6 months of program completion
Adjudicated for delinquency charge within 6 months of program completion
Felony adjudication within 6 months of program completion
Adjudication for FWSN charge within 6 months of program completion
Adjudication for YIC charge within 6 months of program completion
Worst charges within in 6 months
Worst adjudicated charge within 6 months
Adult arrest within 6 months after program completion
Adult conviction within 6 months of program completion