THE GIRLS CIRCLE: AN EVALUATION OF A STRUCTURED SUPPORT GROUP PROGRAM FOR GIRLS

FINAL REPORT

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Abstract

Girls have had an increased presence in the juvenile justice system during the last 20 years and some researchers contend that these girls may require alternative programs to effectively address their specific risks, needs, and strengths, because girls differ developmentally from boys. One promising and widespread gender-specific intervention is the Girls Circle program, developed by the One Circle Foundation.

The purpose of this study was to conduct a randomized experiment of the Girls Circle model. The sample (n=168) was obtained from the Juvenile Probation and Court Services Department (JPCSD) of the Circuit Court of Cook County in Chicago, III. The treatment group received the Girls Circle program services, while the control group received traditional non–gender-specific probation services. The study's goals were to assess short-term (from intake to program completion) improvement among GC participants in four families of outcomes: risky behavior (substance use and sexual behavior), psychosocial assets, school aspirations and expectations, and perceived body image. It also assessed the impact of the Girls Circle subjects compared to the control group on recidivism at 12-months post-program completion.

A series of analyses was performed in sequential phases to assess the impact of the program. The first phase of analyses explored the differences (or lack thereof) between groups on numerous pretreatment characteristics at baseline. The second phase used paired samples t-tests which compared data from baseline to posttest to assess the short-term change over the intervention period. In addition, in order to examine the effects of dosage on selected outcomes, several regressions were run, while controlling for the pre-test measure for the outcome and dosage. And the third phase assessed the long-term impact of the Girls Circle program on recidivism through the use of survival modeling.

Overall, the results appear to favor the Girls Circle group in reducing recidivism; however, these findings were strongly moderated by the number of sessions attended. Conversely, no evidence was found initially for the short-term (from intake to program completion) improvement among Girls Circle participants along any of the four families of outcomes examined. However, like recidivism, as attendance in the Girls Circle group increased, average condom use, educational aspirations, and educational expectations significantly increased; conversely, average self-control scores significantly decreased. Policy implications are discussed.

The Girls Circle: An Evaluation of a Structured Support Group Program for Girls

Acknowledgments

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Stephen V. Gies, Principal Investigator, DSG Marcia I. Cohen, Co-Principal Investigator, DSG

Executive Summary

Highlights

Purpose: This randomized experiment of the Girls Circle model was conducted to evaluate the effectiveness of the gender-specific intervention for female juvenile offenders.

Design: This study integrated outcome and process evaluation components. A randomized design assessed short- and long-term outcomes of the Girls Circle program. The central analysis assessed the long-term impact of the Girls Circle program on recidivism, using survival models to predict time until event.

Findings: The results favored the Girls Circle group in reducing recidivism; however, these findings were strongly moderated by the number of sessions attended. Specifically, the number of sessions attended was a significant predictor of reduced odds of re-offending when considering arrests, violations, and events. There were no significant differences between groups with regard to petitions, regardless of dosage. In addition, controlling for the number of sessions attended showed a significant increase in condom average use, educational aspirations, and educational expectations. That is, as attendance in the Girls Circle groups increased, average condom use, educational aspirations, and educational expectations significantly increased. Counterintuitively, the Girls Circle participants' average self-control scores significantly decreased.

Fidelity: Findings suggest an inconsistent and unbalanced application of the Girls Circle program.

PURPOSE

Girls have had an increased presence in the juvenile justice system during the last 20 years, and some advocates contend that these girls require alternative programs to effectively address their specific risks, needs, and strengths because girls differ developmentally from boys. One of the most promising and widespread gender-specific intervention programs in use today is Girls Circle, developed by One Circle Foundation (formerly the Girls Circle Association).

The overall purpose of this study was to conduct an impact evaluation of the Girls Circle model to increase knowledge of the effects of female-specific juvenile justice system programming. An equally important purpose was to conduct a process evaluation to assess the fidelity of program implementation. Below are the process and outcome goals of this study.

In terms of the impact evaluation, the goals of the study were to assess the short- and long-term outcomes of program participants. The short-term (from intake to program completion) assessment examined the improvement among Girls Circle participants in four families of outcomes: (1) risky behavior (substance use and sexual behavior), (2) psychosocial assets, (3) school aspirations and expectations, and (4) perceived body image. The long-term assessment examined whether Girls Circle participants differed from girls in the control group in recidivism at 12 months post-program completion.

METHODOLOGY

This study integrated outcome and process evaluation components. The outcome component used a randomized design to assess program effectiveness. The process component used quantitative and qualitative methods to provide a rich context of the program treatment and structure and to assess program fidelity (i.e., whether the program was

well-designed and implemented as intended).

PARTICIPANTS

A total of 178 girls were recruited for the study and randomly assigned to either the treatment or control group (119 treatment and 59 control). Seven (five in the treatment group and two in the control group) completed neither the survey nor consent process, making them ineligible to participate in the study. Of the remaining 171 girls, three (two in the treatment group and one in the control group) were

reenrolled in the study as new participants. In each case, the original group assignment was maintained^{*} for analytical purposes. As a result, the total baseline sample consisted of 168 subjects (112 in the treatment group and 56 in the control group). The treatment group received treatment-as-usual and the Girls Circle program. The control group only received treatment-as-usual. In Chicago, treatment-as-usual included an array of alternative sanctions, including traditional probation, restitution, community service, a variety of other treatment options, home confinement, electronic monitoring, intensive probation, conditional discharge, and detention.

DATA SOURCES

Four primary data sources were used to measure variables. The principal data collection instrument for the study was the Girls Circle study participant survey. The survey was administered at two assessment periods, baseline (T0) and post-test (T1), and contained questions in the following domains: (1) demographics and family history, (2) peer relationships and social support, (3) childhood experiences, (4) attitudes toward school, (5) problem-solving and reasoning, (6) expectations and aspirations, and (7) problem behaviors.

The presence of each treatment subject at a Girls Circle session was tracked through an attendance sheet that was filled out by the group facilitator. The Girls Circle program liaison entered the attendance data into the Girls Circle tracking database, and the attendance sheets were subsequently transmitted to DSG. The number of Girls Circle sessions attended was aggregated for each treatment subject to create a measure of the Girls Circle dosage.

The Juvenile Probation and Court Services Department (JPCSD) of the Circuit Court of Cook County records of each study participant were collected 1 year after program completion by the Girls Circle program liaison. The information in these records included all arrests, charges, charges dismissed, charges pending, adjudication decisions, and dispositions. The data elements that were collected from these records included (1) dates of all arrests, (2) charges and charge codes of all associated arrests, (3) court dates and adjudication decisions for each arrest/case, and (4) adjudication dates and disposition type.

Finally, staff interviews and periodic site observation were conducted to assess the fidelity of the Girls Circle program implementation.

ANALYSIS

A series of analyses were performed in sequential phases to assess the impact of the Girls Circle program. The first phase explored the differences (or lack thereof) between groups on numerous pretreatment characteristics at baseline using paired samples t-tests. Second, to examine the effects of dosage on selected outcomes, several regressions were run, while controlling for the pretest measure for the outcome and dosage (i.e., number of sessions attended). The third phase assessed the long-term impact of the Girls Circle program on each measure of recidivism using survival models to predict time until each event.

^{*} One girl reenrolled as a treatment subject, but never attended a Girls Circle session.

RESULTS

Process Goals: Fidelity of the Girls Circle Program

This study provides evidence regarding three dimensions of program fidelity: adherence, quality of delivery, and exposure. In terms of adherence and quality of delivery, the findings suggest an inconsistent and unbalanced application of the Girls Circle program. In terms of exposure, the data revealed that while a sizable portion (43 percent) of the sample received a full or nearly full dose of the program (60 percent or more of the prescribed dosage), 14.2 percent received 20–50 percent, and 43 percent of the treatment subjects received less than 10 percent of the prescribed dose, with the majority of these minimal dose cases (70.8 percent) resulting from subjects who never attended a Girls Circle session despite being assigned to the Girls Circle group and court ordered to attend.

Outcome Goals: Effectiveness of the Girls Circle

Overall, the results appear to favor the Girls Circle group in reducing recidivism; however, these findings were strongly moderated by the number of sessions attended. Specifically, the number of sessions attended was a significant predictor of reduced odds of re-offending when considering arrests, violations, and events. There were no significant differences between groups with regard to petitions, regardless of dosage. Cox proportional hazards models (controlling for intervention group and attendance) showed that the number of days until recidivism—as measured by an arrest, delinquent petition, any event, and probation violation—was typically greater for the Girls Circle participants than their non-Girls Circle counterparts.

Conversely, Girls Circle participants did not exhibit positive short-term (from intake to program completion) improvement in the four families of outcomes examined: (1) risky behavior (substance use and sexual behavior), (2) psychosocial assets, (3) school aspirations and expectations, and (4) perceived body image. In contrast to the bivariate analysis, however, controlling for the number of sessions in the dosage analysis showed a significant increase in average condom use, educational aspirations, and educational expectations. That is, as attendance in the Girls Circle groups increased, average condom use, educational aspirations, and educational expectations all significantly increased as well. Counterintuitively, Girls Circle participants' average self-control scores significantly decreased.

POLICY IMPLICATIONS

Whether men and women are fundamentally different has been and continues to be a topic for debate among researchers. Recent research suggests that men and women, as well as boys and girls, are much more similar than they are different. Yet, quite a bit of research finds that women differ from men in certain areas or dimensions, including physiological and psychological traits.

If these gender differences are genuine, the question then becomes: How do these small variances in physiology and psychology manifest in gender differences in terms of functioning, development and behavior? And, thus, how do these differences play a role in the efficacy of diverse treatment modalities? In other words, do girls respond to therapeutic treatments differently from boys? And, is there a fundamental need for gender-specific programming to address the unique issues of girls? If so, what should this programming look like? The sections below focus on the implications of the findings from this research in terms of these policy and programming issues.

Support for Gender-Specific Programming in the Juvenile Justice System

The previous evidence for the efficacy of gender-specific programming is sparse. In fact, previous research on gender-specific programming in a juvenile justice context has found little evidence of a positive effect. The results of this study, however, support the use of gender-specific programming.

In terms of policy implications, this research suggests that programs designed specifically for girls in the juvenile justice system may be useful in reducing recidivism. If so, it is likely important to construct such a program through a therapeutic approach that reflects both the relational model advocated by the gender-responsive literature (see below) and the cognitive-behavioral model supported by evaluations of gender-nonspecific programs.

Support for Relational-Cultural Theory

The Girls Circle model is based on the relational-cultural theory (RCT) of female psychology. While there is limited empirical research to assess the application of this theory in prevention research, the results of this study support the conceptual model. Again, while strong evidence was not found for most of the psychosocial outcomes one would expect, significant results among the main findings of delinquency were observed. Thus, while it is not clear how the change occurred, the girls involved in the Girls Circle program demonstrated reduced delinquency.

Support for Motivational Interviewing

Girls Circle uses motivational interviewing techniques within the RCT framework to stimulate critical thinking and moral reasoning through creative activities and guided discussions. The findings support the application of motivational interviewing with female juvenile offenders and suggest that motivational interviewing can potentially be useful in contexts outside that of dealing with substance use problems. Also, given the relational nature of the motivational interviewing process, it has the potential to be well-suited as a method for treating girls who display gender-sensitive risk factors such as trauma, depression, and somatic symptoms.

Focus on Proper Implementation

The findings of this study demonstrate that proper program implementation is vital to positive program results. A process assessment compared the plan for what the program should have done with what it actually did to determine whether the subjects received the services with the proper integrity, quality, and prescribed quantity. Such an assessment is vital to the interpretation of the results, because many programs that fail to deliver the services as specified (i.e., implementation failure) are unlikely to make an impact.

This study also assessed three dimensions of fidelity: adherence, quality of delivery, and exposure. Despite encouraging delinquency-related findings, the Girls Circle program demonstrated a poor degree of fidelity across each dimension. An assessment of exposure found that half of the participants received less than 30 percent of the recommended dosage. And, even when subjects attended the program sessions, the adherence and quality of program delivery was uneven at best, indicating an inconsistent and unbalanced implementation of the Girls Circle program. Also, anecdotal evidence suggests that a lack of commitment and dedication among court personnel (outside of the direct program staff) and transportation issues, among other issues, had a detrimental impact on the study outcomes.

Develop a Continuum of Integrated Programs and Sanctions

As a matter of policy, JPCSD girls are not sanctioned for technical violations of probation, such as missing treatment appointments. While this position may keep juvenile offenders out of detention and avoid

the use of control techniques to reduce recidivism, the unintended consequence of this policy is that young people (particularly those who are veterans of the juvenile justice system) may not receive the sanctioned treatment associated with a more therapeutic approach.

A deterrence mechanism must be in place to ensure the receipt of treatment so the benefit of avoiding detention is not lost. As this study informs, policymakers should integrate deterrence-based sanctions into the overall therapeutic approach in order to provide judges the latitude to sanction juvenile offenders who refuse to abide by court orders. One way to accomplish this is through the use of a continuum or graduated sanctions approach, where a response or sanction to a violation is balanced by the gravity of the offense, as well as the need for public safety, and best interests of the offender. That is, a graduated system increases the likelihood that an offender with a serious violation will be incarcerated, while one who presents less danger is still sanctioned but in a less restrictive, less costly manner. Such a system also increases the probability of increased returns on treatment investments as the youth will be more likely to attend treatment services to avoid increased sanctions.

RECOMMENDATIONS

Seven recommendations flow from the findings and implications of this research.

- 1. This research suggests that programs designed specifically for girls in the juvenile justice system may be useful in reducing recidivism. As a result, we recommend the conservative application of gender-specific programming, pending more definitive research findings. Moreover, it is recommended that such programs be constructed using a therapeutic approach that reflects both the relational model advocated by the gender-responsive literature and the cognitive-behavioral model supported by evaluations of gender-nonspecific programs.
- 2. It is also recommended that policymakers maintain more traditional risk-based programming for those females who may not benefit from the gender-specific approach. Moreover, we recommend that girls be screened to determine their suitability for a gender-specific approach.
- 3. While the Girls Circle program offers manualized training and a number of other measures to ensure program adherence, it is recommend that the Girls Circle developers require additional follow-up training activities among localities that choose to implement the program, such as more frequent site visits, phone calls, booster training sessions for facilitators, as well as earlier and more frequent fidelity checking.
- 4. The implementation of the program, despite the best efforts of the program staff, was hampered by numerous issues that stemmed from an overall organizational resistance to change. Thus, it is recommended (and vital) for any program—even more so for a gender-specific program because it requires a shift in the conventional attitudes regarding how to address the needs of girls—to cultivate organizational cultures, climates, and contexts conducive to change in order to garner the support and cooperation of court and probation personnel to funnel subjects into the program.
- 5. The findings of this study demonstrate the effectiveness of Girls Circle in reducing recidivism, showing that a one-unit increase in the number of sessions attended was correlated with an 8.8 percent reduction in the likelihood that a girl would be re-arrested. It can be presumed that with improved program implementation and increased fidelity to the model, the Cook County JPCSD

Girls Circle program could have had an even larger impact on recidivism. Thus, it is recommended that the Cook County JPCSD consider implementing Girls Circle "version 2.0" by improving program implementation, increasing the court's referral mechanism, providing consistent transportation for participants, and putting "teeth" in the program to sanction girls who do not show up for treatment.

- 6. Organizational characteristics set the stage for successful program implementation, and these factors in turn ultimately impact the success of the program. Thus, it is recommended that outside sources, such as state or federal governments, focus evaluation funding on established programs embedded within the existing organizational structure that have a record of consistent, acceptable program implementation. Doing so will avoid the delays and resistance often associated with the implementation of new programs and/or the pitfalls of evaluating an under-developed version of the intended program due to poor program fidelity.
- 7. Given the required balance in any juvenile justice system between the desire for rehabilitation and the need for public safety, we recommend that policymakers integrate deterrence-based sanctions into an overall therapeutic approach in order to provide judges the latitude to use their authority to sanction juvenile offenders who refuse to abide by court orders. Such a system also increases the probability of increased returns on treatment investments because the youth will be more likely to attend treatment services to avoid increased sanctions.

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1. Background

A. INTRODUCTION

Purpose

Research indicates that girls have had an increased presence in the juvenile justice system during the last 20 years (Snyder and Sickmund 2006; Puzzanchera 2013). Some contend that these girls require alternative programs that effectively address their specific risks, needs, and strengths, because girls differ developmentally from boys (Acoca 1999; American Bar Association and National Bar Association 2001). One of the most promising and widespread gender-specific intervention programs in use today is Girls Circle, a structured support group model developed by One Circle Foundation (formerly the Girls Circle Association). The Girls Circle model integrates relational theory, resiliency practices, and skills training in a gender-specific format to increase participants' positive connections, competence, and personal and collective strengths. Using motivational interviewing and strengths-based techniques that target resiliency and protective factors, developers designed Girls Circle groups to stimulate critical thinking and moral reasoning through creative activities and guided discussions. Cultural responsivity and trauma-responsive practices enhance the potency and relevance of these applications in the group context.

While the research on Girls Circle has demonstrated some promising results, the program has yet to be thoroughly assessed with a methodologically rigorous design. The purpose of this study is to conduct a randomized experiment of the Girls Circle model. Specifically, the study's goals are to assess the short-term (from intake to program completion) and long-term (from intake to 12 months after program completion) effectiveness of the model.

B. STATEMENT OF THE PROBLEM

Increasing Numbers of Girls in the Juvenile Justice System

The delinquent behavior of girls has evolved into a topic of great controversy over the last two decades due largely to the increased presence of girls in the juvenile justice system and the inadequate response of the system to address their distinct needs. In terms of the presence of girls in the juvenile justice system, it is clear that more girls are involved in the system. For instance, girls represented only about 20 percent of all juvenile arrests in 1980 (Snyder and Sickmund 2006), but this figure rose to 29 percent by 2011. Moreover, while the trend in overall arrest rates from 1983 to 2012 followed a similar pattern for both genders—increasing until the mid-1990s and then decreasing—the female rate increased more than the male rate (73 percent versus 31 percent, respectively) and then declined less (42 percent versus 57 percent, respectively) (Puzzanchera 2013).

Perhaps more problematic is that female and male juvenile arrest rates for violent crimes have converged considerably over time. In the 1980s, the male violent crime arrest rate was nearly 8 times greater than the female rate. However, by 2011, the male rate was only 4 times greater (Puzzanchera 2013). The narrowing gender gap in arrests is particularly evident for simple assault (Strom et al. 2014), in which girls comprise 36 percent of juvenile arrests for simple assault (Puzzanchera 2013).

Similarly, girls have become more involved in juvenile court. Between 1985 and 2012, the number of delinquency cases involving girls increased 40 percent, from 223,300 to 322,200 cases; the caseload for

boys decreased 12 percent, from 935,100 to 823,600 cases. By 2011, girls accounted for 28 percent of delinquency cases handled by juvenile courts, up from 19 percent in 1985 (Sickmund, Sladky, and Kang 2015). Although the total delinquency caseload has declined since peaking in 1997, the decline for boys has outpaced girls: the male delinquency caseload decreased 42 percent from 1997 to 2012, while the female caseload decreased only 27 percent (Sickmund, Sladky, and Kang 2015).

These trends appear to suggest that girls are committing either more crimes or more serious crimes. However, the evidence for this finding is not uniform. Analyses of self-report data present convincing evidence that girls' delinquent behaviors have not increased; rather, official responses (e.g., arrest laws, changes in law enforcement policy) account for the changes in official statistics (Schwartz and Steffensmeier 2012; Zahn et al. 2008). One explanation is that such policies lower the threshold for classifying and reporting assaults. For example, domestic disputes once classified as a status offense might now be classified as simple assault, and since girls tend to fight more with family members than boys, this law enforcement policy would disproportionately affect girls (Zahn et al. 2008).

Moreover, mandatory arrest laws may disadvantage girls in other ways. For instance, first responders to a domestic dispute involving a juvenile may find it easier to arrest the juvenile rather than the adult, especially if the adult is the caretaker of other children. One probation officer noted this trend:

Politically, there was a change roughly 10 years ago... the legislature decided if the police go into a home and there's a domestic violence incident, somebody has to leave. And starting at that point the kids were the obvious ones to take out of the home. If you arrest the parents, [then] you have to shelter the kids.... So the police just make the kids go away and the numbers of kids being referred to the juvenile court for assaulting their parents or for disorderly conduct or punching walls or doors... the numbers have just been increasing tremendously because of that political change (Gaarder, Rodriguez, and Zatz 2004, 565).

In fact, Buzawa and Hotaling's (2006) study of police response to domestic assaults in a northeastern state found empirical evidence to support this observation. They found that police were more likely to arrest juveniles than parents, particularly in mutually combative situations. Also, among juveniles accused of assaulting a parent, 92 percent of girls were arrested compared with 75 percent of boys.

According to another study, in which researchers explored the assertion that the narrowing gender gap in arrests and the increase in girls' arrests for simple assault were affected by mandatory and pro-arrest domestic violence laws, juveniles were more likely to be arrested in states with mandatory or pro-arrest policies than in states with discretionary arrest policies. Moreover, the study's authors found evidence that during the 5-year study period (2000-2004), girls became more likely to be arrested for assaults against parents relative to boys beyond the effects of the domestic arrest laws (Strom et al. 2014).

Female Delinquency

Official statistics of girls involved in the juvenile justice system provide insight into the types of offenses they typically commit. In 2012, 29 percent of court-involved girls were referred to court for person offenses, 36 percent for property offenses, 9 percent for drug offenses, and 26 percent for public order offenses (Sickmund, Sladky, and Kang 2015). Although there are more boys than girls in juvenile court for each case type, girls are more likely than boys to have been charged with a person offense (29 percent versus 24 percent, respectively) but less likely to have been charged with a drug offense (9 percent versus 15 percent, respectively). Girls also tend to get involved with the juvenile justice system at a younger age than boys. Juveniles age 15 and younger make up 56 percent of all girls in juvenile

court but only 52 percent of the boys; juveniles age 16 and older make up 48 percent of the boys in juvenile court but only 44 percent of the girls (Sickmund, Sladky, and Kang 2015).

In their assessment of developmental patterns of at-risk girls, the Girls Study Group within the Department of Justice's Office of Juvenile Justice and Delinquency Prevention (OJJDP) found that although most at-risk girls were involved in delinquency at some point during childhood or adolescence, they engaged in a wide range of offending behaviors (Huizinga, Miller, and the Conduct Problems Prevention Research Group 2013). For instance, while the most common pattern throughout late childhood and adolescence was being nondelinquent (or involved in status or public disorder offenses), many girls reported involvement in minor or serious property offenses or serious assault. But, at each age or grade, different groups of girls were involved in different combinations of delinquent behaviors. Nevertheless, even when girls were involved in more serious offending, they often returned to either a status/public disorder or nondelinguent offender status after a year or two. Overall, the researchers found that the developmental sequences as they related to first-time offending behavior, consistency of offending, and offending patterns differed substantially among the at-risk girls studied. However, one similarity that stood out was that girls typically did not become involved in serious delinquency over a long period of time. Instead, "many girls are low-level and status offenders, and even the most serious female juvenile offenders tend to desist within a year or two" (Huizinga, Miller, and the Conduct Problems Prevention Research Group 2013).

The Foundation for Gender-Specific Programming

Many have argued the need for gender-specific programming to address the unique issues of this burgeoning population in part because girls differ developmentally from boys (Acoca 1999; American Bar Association and National Bar Association 2001). For instance, girls' and boys' social development patterns follow different courses, with female development emphasizing connection and relationships and male development focusing on independence and personal achievement (Brizendine 2006).

Following elementary school, self-esteem drops significantly more for girls than for boys (Chesney–Lind and Sheldon 1998). As girls enter adolescence, they encounter stressful changes (physical, emotional, and psychological) and become preoccupied with identity, appearance, family, and peer relationships (Greene et al., 1998). Girls will ignore their sense of self, instead prioritizing personal relationships (Debold, Wilson, and Malave 1993), looking to others for validation (Taylor, Gilligan, and Sullivan 1995). Adolescent girls may begin to step back from competitive situations, fearing that distinguishing themselves will present a risk of being disliked (American Bar Association and National Bar Association 2001). "They begin to see themselves as others see them, and they orient their thinking and themselves toward others" (Debold, Wilson, and Malave 1993). Furthermore, perceptions of self-worth; physical appearance; and social, academic, and athletic competence often sink to low levels (American Bar Association and National Bar Association 2001).

While such behavior is normal, it serves as a breeding ground for certain risk factors in female populations, such as victimization, substance abuse, mental illness, and abuse by intimate partners.

These findings regarding developmental differences are underscored by research that indicates systeminvolved girls substantially differ from their male counterparts.¹ For instance, system-involved girls have

¹ Not all research has found the same gender differences among system-involved youth. For example, though many studies have found that system-involved girls are more likely to suffer from internalizing disorders (e.g., Dauber and Hogue 2011), others have found no difference between system-involved boys and girls in that respect (Mayworm and Sharkey 2013).

experienced higher rates of physical, emotional, and sexual abuse than boys (Bloom et al. 2002; King et al. 2011; Sedlak and McPherson 2010; Yan and Dannerbeck 2011; Zahn et al. 2009) and are more likely to have family-related problems, such as poor relationships with parents, running away from home, victimization by child abuse or neglect, and parents who are involved in crime (Funk 1999). Although girls and boys run away from home at about the same rate, girls are arrested more frequently for this than boys (Bloom et al. 2002).

Girls in the system also have different health care needs than boys (Biswas and Vaughn. 2011; Sedlak and McPherson, 2010) and appear to have greater comorbid mental health conditions as well as more acute risks and needs (Dauber and Hogue 2011; Welch–Brewer, Stodard–Dare, and Mallet 2011; Yan and Dannerbeck 2011; Zahn et al. 2009). Girls are more likely to experience depression, posttraumatic stress disorder, separation anxiety, anger or irritability, a history of assault, and disruptive disorders (Becker et al. 2012; Huefner and Mason 2009; Vincent et al. 2008; Welch–Brewer, Stodard–Dare, and Mallet 2011; Teplin et al. 2002; Yan and Dannerbeck 2011; Zahn et al. 2009).

Additionally, mental health and delinquency may be more strongly related for girls than for boys (Graves, Frabutt, and Shelton 2007; Welch–Brewer, Stodard–Dare, and Mallet 2011) with some scholars questioning whether female delinquency itself is a symptom of significant mental health problems (Cauffman 2004).² For instance, Welch–Brewer and colleagues (2011) examined delinquent youth and found that having a mental health disorder was a stronger predictor of delinquency outcomes for girls than boys. For girls, the average number of court offenses was five (SD = 4.4), and the average time in detention was 17 days (SD = 44.6). However, having a mental health disorder increased the number of court offenses by 1.4 and increased the days in detention by 5.9 more days.

Despite these developmental differences, most traditional programming for female offenders is "based on profiles of male criminality or pathways to crime" (Covington and Bloom 2003, 10). The result of this crude focus is that programs for girls are not specifically tailored to address the unique experiences of girls in the juvenile justice system and, thus, less likely to produce the desired positive outcomes. Moreover, given that girls typically have short serious offending careers, implementing programming that has not been proven effective with girls may exacerbate problem and delinquent behavior (Huizinga, Miller, and the Conduct Problems Prevention Research Group 2013).

In tailoring programming specifically for girls in the juvenile justice system, Hubbard and Matthews (2008) suggest five essential principles:

- 1. The theoretical foundation of the program should support a "macro-level explanation that attributes girls' delinquency to societal issues such as sexism, racism, and classism that triply marginalize girls and create an environment where they are apt to get involved in destructive behaviors."
- 2. Program goals should encompass more than just the reduction of recidivism, but rather aim to empower girls and improve their overall quality of life.
- 3. While girls may be high "need" they are not necessarily high "risk" and often need services in the community instead of being locked up, which can exacerbate "some of the very problems that got them in trouble in the first place."

² The research on this issue is not conclusive. Graves, Frabutt, and Shelton (2007), using a clinical sample of children who received mental health services, found that higher levels of anxious or depressed symptoms among girls were associated with a lower likelihood of involvement in the juvenile justice system.

- 4. When it comes to the assessment and classification of girls, it is more important to "identify strengths that can be used to empower girls toward adaptive ways of coping with a sexist society" rather than "standardized, actuarial instruments" that were developed using white male samples.
- 5. A gender-specific program should promote a "strengths-based therapeutic approach that is designed to empower females and help them gain control over their lives." Specifically, Hubbard and Matthews contend that using either a trauma informed or relational therapeutic model³ that allows girls to "explore common problems in their lives and develop a sense of self-worth through intimate communication with others" is most important.

Overall, Hubbard and Matthews (2008) conclude that the best therapeutic approach for girls would reflect both the relational model advocated by the gender-responsive literature and the cognitive-behavioral model supported by evaluations of gender-nonspecific programs (e.g., Lipsey, Chapman, and Landenberger 2001; Pearson et al. 2002; Wilson, Bouffard, and MacKenzie 2005). They also stress that for the cognitive-behavioral model to be most effective with girls, it should conform to girls' need for greater support, safety, and intimacy versus the confrontational tendencies of male-oriented groups and also target the types of cognitive distortions and processes more common among girls.

The Juvenile Justice System's Response to Girls

Changing the way girls are handled in the system was encouraged by Congress's reauthorization in 1992 of the Juvenile Justice and Delinquency Prevention Act, which prohibited gender bias and ensured that girls have adequate access to services (Zahn et al., 2009). Over a decade later, Foley (2008) attempted to identify existing gender-specific programs for at-risk and delinquent girls and examine their designs. She reviewed 12 studies with program descriptions and evaluations of effects. The programs were based in various locations—including probation, detention, schools, and the community—and incorporated a range of programmatic components, including gang prevention and intervention, skill building (including cognitive–behavioral skills training), peer mentoring, support groups, case management, cultural awareness and competency, and gender identity. The vast majority of the programs utilized a "strength-based perspective, fostering higher-level development of prosocial attitudes, behaviors, and interactions between people and groups." The most commonly targeted risk and protective factors were antisocial attitudes and behaviors, interpersonal skills, self-esteem, substance use, bonds to school, and academics. Of the programs incorporating a theoretical orientation, most utilized relational–cultural theory. Foley (2008) concluded that the programs did "relatively well" in addressing racial and ethnic differences, although few of the programs incorporated discussions of gender identity.

Research on Effective Programming for System-Involved Girls

Zahn and colleagues (2009), in their assessment of the evidence base for effective programs for girls in custody or under juvenile court supervision, reviewed both gender-specific and gender-nonspecific programs implemented with girls. They uncovered nine evaluations of gender-specific programs, two of which used randomized controlled research designs: the Reaffirming Young Sisters' Excellence (RYSE) program and the Working to Insure and Nurture Girls Success (WINGS) program.

RYSE is an intensive alternative probation program for adjudicated girls ages 12–17, predominantly

³ Traditional theories of psychology describe development as a transition from childhood dependence to mature independence with the ultimate goal of self-sufficiency and an autonomous self. While this model may work for men, the relational model suggests a woman's path to maturity is different. Instead, it maintains that a woman's primary motivation is to build a sense of connection with others. In other words, connection and not separation, is the guiding principle for the developmental growth of women (Covington 2007).

African American. The program attempts to prevent girls from returning to the juvenile justice system or entering the criminal justice system. The intervention includes home visits by probation officers, individual case plans, concrete funds for emergency situations, a life skills course, teen pregnancy services, and programmatic therapy. Although the evaluation found no effect on recidivism, the severity of offending was less for some RYSE girl subgroups. African American and Hispanic girls participating in RYSE recidivated at lower rates than the comparison group, but white and Asian girls participating in RYSE recidivated at higher rates. RYSE participants were however more likely than the control group to have completed probation and restitution requirements. RYSE participants were also somewhat more likely to have completed their work requirements, but the group difference was not significant. Finally, there was no significant difference for noncompletion of school (National Council on Crime and Delinquency 2001; Zahn et al. 2009).

WINGS involves girls ages 12-18 who are minimally involved in the juvenile justice system. The program is an intensive alternative probation program that uses home visitation and services based in the community and at their center. WINGS uses individualized case plans for the girls and their families and provides them with free services such as transportation, mother-daughter mediation, and programs that address drug and alcohol abuse, academics, anger management, and vocational and career support. Similar to the RYSE program evaluation, WINGS program participants were more likely to successfully complete probation, but there was little difference in delinquency and criminal activity. However, girls who successfully completed the WINGS program did have more protective factors (e.g., relationship with a prosocial adult, enrolled in a supportive school environment, self-control) and fewer risk factors (e.g., delinquent friends, truancy, socially isolated) at exit, compared to intake. In addition, program participants had more knowledge about available resources, were more successful in school, had received health care, and felt safer at home, at school, and in their neighborhood. WINGS girls were also less likely to have an institutional commitment during program participation (Zahn et al. 2009).

Less rigorous research designs were used to evaluate the other seven gender-specific programs, which included Holistic Enrichment for At-Risk Teens (HEART), Southern Oaks Girls School (SOGS) Stepping Up Program, Amicus Girls' Restorative Program, Girls and Boys Town USA (Staff Secure Detention Center for female juvenile offenders), GEMS (Girls Empowered to Move Successfully), Practical Academic Cultural Educational Center (PACE), and Girls Circle (Zahn et al. 2009). HEART and the SOGS Stepping Up Program used pre/post-test designs with an in-house comparison group.

HEART is a modified therapeutic community model program for girls ages 12-18 who are incarcerated for substance abuse and have intensive substance abuse treatment needs. HEART is designed to meet educational and treatment objectives simultaneously. Kirk and Griffith (2004) found that relative to the comparison group, girls who participated in HEART improved more in their use of social support, perceived support of friends, peer acceptance, family relationships, educational status, and school engagement (Zahn et al. 2009).

SOGS Stepping Up is a specialized unit in a residential treatment facility that provides individualized treatment and educational programming for girls ages 13-19 with acute mental health issues. The program aims to develop healthy relationship skills and independent living skills. The Wisconsin Department of Corrections (2005) examined the program and found that relative to the comparison group, fewer Stepping Up girls had at least one adult arrest within 2 years of exiting the program. Girls in the program also had fewer total charges, were charged with fewer person and felony-level offenses, and had fewer direct transfers to adult prison and state mental health institutions (Zahn et al. 2009).

Evaluations of the Amicus Girls' Restorative Program, Girls and Boys Town, GEMS, PACE and Girls Circle did not have comparison groups, so it is not possible to determine whether the programs' outcomes are due to the programs themselves or as a result of other factors, such as girls' maturation (Zahn et al. 2009).

Zahn and colleagues (2009) concluded from their review of gender-specific programs that the "current state of evaluation evidence offers mixed support" for their effectiveness.

The overall pattern regarding school success, although variously measured, seems to show that, at least during times of program intervention, there is a general increase in school success, including attendance, bonding, and grades...The randomized controlled studies did not demonstrate long-term effects, but...there are some measurement problems, making the drawing of conclusions more tentative. For the most part, these programs do have positive effects in the areas of educational success and improvements in relationships. The effects on recidivism are mixed and in the most rigorous studies do not demonstrate long-term success. Better measurement and the use of control groups in all studies are necessary to fully gauge long-term outcomes (p. 284).

Zahn and colleagues also reviewed gender-nonspecific programs implemented specifically with girls, including Multidimensional Treatment Foster Care, Mutlisystemic Therapy, Girls and Boys Town USA, The Family Solution, the Indianapolis Restorative Justice Project, and the Maricopa County Drug Court. Interesting, despite the contentions of gender-specific programming proponents, Zahn and colleagues concluded that these evidence-based gender-non-specific programs, when rigorously evaluated, appear to be effective in reducing recidivism for both girls and boys. But they also stated that,

Although it appears that gender-nonspecific programs work equally well for girls and boys involved with the juvenile justice system, this does not necessarily mean that gender-specific programs are ineffective or unnecessary. Relative to programming for boys or for both genders, gender-specific programming has only recently garnered attention from scholars, practitioners, and policy makers. As a result of their relatively recent innovation, the established methods and measures may be ill equipped to provide thorough and sound evaluations of them (p.288).

In sum, the evidence for the efficacy of female-responsive programming remains sparse (Chesney–Lind, Morash, and Stevens 2008; Zahn et al. 2009). This may be attributed to interrelated problems. Few gender-specific services are available in the juvenile justice system (Berkeley Center for Criminal Justice 2010; Bloom et al. 2002; Gaarder, Rodriguez, and Zatz 2004) and even fewer services designed specifically for African American girls (Nanda 2012). ⁴ Also, inadequate experience with and training on working with girls among staff in the juvenile justice system remains a problem (e.g., Bloom et al. 2002; Gaarder, Rodriguez, and Zatz 2004). Finally, there are fewer system-involved girls than boys, making evaluation particularly challenging (Tracy, Kempf–Leonard, and Abramoski–James 2009). Even when evaluations of gender-specific programs are done, results are often ambiguous, given the varying research strategies, methods, and measures utilized, as well as their relatively recent development (Zahn et al. 2009).

⁴ African American girls are over three times more likely than white girls to be in residential placement (Sickmund et al. 2013), receive harsher discipline (Moore and Padavic 2010), and more likely to be rearrested, specifically for nonviolent crimes, after they reenter the community (Chauhan, Burnette, and Reppucci 2010).

C. THE GIRLS CIRCLE PROGRAM

History and Background

The Girls Circle model began in the mid 1990s with the first circles facilitated by founders Beth Hossfeld and Giovanna Taormina as part of the Girls Circle Association. In 2012, the association was rebranded as One Circle Foundation to better represent the range of programs offered. In addition to Girls Circle, the One Circle Foundation has The Council for Boys and Young Men[®] and the Women's Circle. One Circle Foundation's mission is "promoting resiliency and healthy development for children, adolescents, adults and communities" (www.onecirclefoundation.org).

Theory and Goals

The Girls Circle model is intended for girls ages 9-18 and is based on relational theory, resiliency practices, and skills training in a gender-specific format to increase participants' positive connections, competence, and personal and collective strengths (www.onecirclefoundation.org). Using motivational interviewing techniques that target resiliency and protective factors, the circles are designed to stimulate critical thinking and moral reasoning through creative activities and guided discussions.

Motivational interviewing is a counseling method originally developed by Miller and Rollnick in 2002 as a means to treat adults with substance abuse problems but has since expanded to include other health concerns and age groups (Gayes and Steele 2014). The primary goal of motivational interviewing is to act on the ambivalence that exists within an individual contemplating a behavioral change. The technique uses cognitive behavioral therapy to explore life goals, examine current life situations, and identify gaps between the two (Stein et al. 2006). The selective interview questions are meant to evoke and strengthen an individual's subtle motivations to change, while the counselor supports, encourages, and helps the client overcome barriers to transformation (Miller and Rollnick 2002). The counselor identifies and addresses uncertainties toward change in an effort to solidify and sustain one's change strategy. Overall, the transformation process should be purely self-directed via the self-exploration and mindfulness obtained throughout the interview process (Grenard et al. 2005).

Motivational interviewing is an empirically supported treatment method (Lundahl et al. 2010), yet the majority of the research has been with substance abusing populations. Nonetheless, there is a growing body of evidence related to the effects of motivational interviewing for the treatment of other health concerns and age groups (Gayes and Steele 2014).

Girls Circle also integrates elements of the relational–cultural model of female psychology, which views a girl's healthy development as based on and stemming from a core experience of positive and caring relationships with those in her family, peers, culture, and community. Within the relational–cultural theory, Girls Circle aims to increase protective factors, reduce risk factors, and develop resiliency in adolescent girls through promotion of high expectations, availability of caring and supportive authority figures, and meaningful engagement in the community (Steese et al. 2006).

Finally, Girls Circle also incorporates elements of cultural responsivity and trauma-responsive practices to enhance the potency and relevance of these applications in the group context (www.onecirclefoundation.org).

Activities and Themes

Girls Circle has been used since 1994 in prevention and intervention settings with diverse populations and programs serving girls. It is administered in juvenile justice settings—such as probation, detention, residential treatment group homes, secure facilities, alternative schools, or in other community-based settings—in addition to serving the mental health and child welfare sectors and can be delivered to lowrisk populations through schools, camps, and afterschool programs.

Circles are 1.5-2 hours a session and are held weekly for 8-12 weeks. In each session, a group of girls of similar age and development meet with facilitators while the girls take turns talking and listening respectfully about their concerns and interests. Gender-relevant topics are presented through discussions and activities in which a trained facilitator explores girls' knowledge and experiences, and stimulates girls' thinking and decision-making. Girls Circle facilitators are adult women who serve as role models to the girls, a resource for information and referrals, positive authority figures, and guardians of the safe environment created by the circle.

Girls Circle facilitators conduct each session using a six-step format (Hossfeld and Taormina 1997):

- 1. *Opening Ritual.* An opening activity or ritual is performed to initiate the circle process at each session. Examples of opening rituals include lighting a candle, ringing a bell, silence, music, or holding hands and stating intentions. Once a ritual has been selected it is performed in the same manner every session.
- 2. Theme Introduction. In the first meeting of a new circle, facilitators review the group guidelines with the girls. In the circles that follow, facilitators begin with an overview of the theme for the circle and announcements, if any. Facilitators select their own themes from facilitator activity guides and often link them to the Sharing of Activity component of the circle, as discussed in Step 5. These gender-specific themes include gender issues, relationships, body image, mental/psychological health, diversity, values, female energies, activism/advocacy, "ism's" (racism, sexism, etc.), conflict, life skills, addictions, boundaries, sexuality, spirituality, and dreams and goals, etc.
- 3. *Check-In.* An important element of the Girls Circle model is the council-type format in which each circle is held. Each girl gets her own time to speak in the circle to express their current feelings while all other participants actively listen. The speaker holds a "talking piece" or an item to designate whose turn it is to speak until their turn is over. The "talking piece" is then passed to the next girl to speak to the circle. Girls may pass their speaking turn if they choose. Using the council-type format aims to increase empathy skills, self-respect, and the listener's respect for others, as well as a mutual empathic understanding in the whole group. Empathic connection, which enhances girls' psychological health (through self-efficacy, social support, and improved body image), is an integral aim of Girls Circle.
- 4. Activity. At every circle, girls participate in both verbal and creative activities that are directly related to the theme of the day. Girls explore their relationship to the theme express themselves while developing skills through guided discussions and varied creative activities, including role-playing, drama, journaling, exercise, poetry, dance, drawing, collage, clay, and community action.

- 5. *Sharing of Activity*. Once completing the day's activity, girls share with the group their experiences with, and reflections on, the activities performed and their interpretations of the activities and discussions.
- 6. *Closing Ritual.* A closing activity or ritual is performed to bring closure to the circle, and send the participants off with a tone of gratitude and respect. Examples of closing rituals include blowing out candles lit during the opening ritual, making positive statements about oneself, making statements of hopes, or a circle hug

The Girls Circle curriculum includes 13 specific themed activity guides that focus on topics such as mother-daughter circle, body image, mind, body, spirit (in both English and Spanish), friendship, diversity, relationships, and individuality. Although developed as standalone gender-specific program, Girls Circle can be integrated into other treatment services (www.onecirclefoundation.org).

Research and Evaluation

Girls Circle has been evaluated multiple times in the last 10 years. Irvine (2005) conducted a single group, pre/post-test evaluation of Girls Circle in 15 sites across seven states. Eight sites held circles for court-involved girls while the remaining seven held circles for non-court-involved girls. Circles were convened weekly over 10 weeks. The evaluators found that Girls Circle had a significant positive effect on measures of self-efficacy, body image, and perceived social support. They also found that court-involved girls were more likely than non-court-involved girls to show an increase in perceived social support.

Steese and colleagues (2006) conducted a single group, pre/post-test evaluation of Girls Circle with 63 girls ages 10–17 (mean age=13). Girls were recruited to participate in nine separate Girls Circle support group programs from across the United States and Canada. Each group consisted of 5-9 girls from various backgrounds. Before class, the facilitators administered a pretest packet that contained the following instruments: the Rosenberg Self-Esteem Scale, the Nowicki–Strickland Personal Reaction Survey, the Schwarzer's General Self-Efficacy Scale, the Body Parts Satisfaction Scale–Revised, and the Multidimensional Scale of Perceived Social Support. The researchers found that Girls Circle produced significant increases (compared with pretest scores) in post-test body-image scores (from 107.11 to 113.11), perceived social support (from 58.29 to 65.06), and level of self-efficacy (from 27.42 to 30.55). Significant effects were not found on measures of self-esteem or locus of control. The results showed significant positive changes for girls in their sense of belonging, perception and acceptance of their own bodies, and belief in their ability to accomplish meaningful actions and goals.

Roa, Irvine, and Cervantez (2007) conducted a single group, pre/post-test evaluation of 15 Girls Circle sites across 19 cities in 12 states. They surveyed 278 girls on outcome measures for short-term skills, long-term effects, self-efficacy, and overall satisfactions with Girls Circle. Girls participated in weekly circles, which lasted for 1.5 hours, over 8-14 weeks. Researchers found that Girls Circle had a significant positive effect on short-term interpersonal skills and relationships but did not have an effect on perceived body image and self-esteem. On measures for long-term effects of participation, researchers found significant positive effects on school attachment, healthy eating habits, avoiding self-harm, and alcohol use/abuse. There were no significant positive effect on measures of self-efficacy and high satisfaction ratings as well.

Irvine and Roa (2010) conducted a single group, pre/post-test evaluation of an adaptation of Girls Circle, called Circles Across Sonoma (Calif.), as part of a larger study on federal Title-II-funded programs. Three hundred and seventy four court-involved girls participated in Circles Across Sonoma as part of a court-mandated term of probation, diversion, or an alternative to detention. The 8-week program took place in primarily community-based settings. Researchers found that Girls Circle produced significant improvements in perceived body image, communicating needs to adults, and self-efficacy measures. There was no significant effect on alcohol use.

While these evaluations demonstrated promising results on Girls Circle participants' perceived body image, perceived social support, communication with adults and self-efficacy, there were no changes in measures of self-esteem, locus of control, or alcohol use. Despite having study samples with girls involved in the juvenile justice system, the studies did not examine the impact of the program on recidivism or other justice-related outcomes. Moreover, none of the studies cited used a control or comparison group. Nor did they follow up with the girls after program completion.

Therefore, this randomized experiment of the Girls Circle program represents the most stringent test of the program to date and the first that measures its effect on recidivism.

D. THE STUDY GOALS

Goals

Despite the growing attention given to girls in the juvenile justice system, precious little evidence is currently available regarding the effectiveness of gender-specific programming. The overall purpose of this study was to conduct an experimental evaluation of the Girls Circle model to increase knowledge of the effects of female-specific juvenile justice system programming. An equally important purpose was to conduct a process evaluation to assess the fidelity of program implementation. Below are the process and outcome goals of this study.

Process Goals:

- 1. Assess the extent to which the program services are delivered as designed (i.e., staff trained appropriately, using the correct materials and protocols).
- 2. Assess the extent to which individuals in the treatment group are exposed to the treatment in terms of frequency and length of treatment.
- 3. Assess the quality of the program delivery.

Outcome Goals:

- 1. Assess the short-term (discharge) effectiveness of the Girls Circle model on program participants in comparison with females who receive traditional probation services.
- 2. Assess the long-term (12-month post-program) effectiveness of the Girls Circle model on program participants in comparison with females who receive traditional probation services.

Objectives

To meet these goals, this project has set several specific objectives to measure the success of each goal. Below are the specific objectives of the project organized by goal.

1) Assess the extent to which the program services are delivered as designed (i.e., staff trained appropriately, using the correct materials and protocols).

- a. Determine whether the training provided to staff administering the Girls Circle curriculum was appropriate.
- b. Determine whether prescribed protocols were followed.

2) Assess the extent to which individuals in the treatment group are exposed to the treatment in terms of frequency and duration.

- c. Ascertain the number of treatment hours provided (frequency).
- d. Ascertain the length of the treatment provided (duration).

3) Assess the quality of the program delivery.

- e. Substantiate the degree to which the staffing patterns (i.e., background, skills, and experience of staff) of the program are appropriate.
- f. Substantiate the degree to which the perception of the service among staff is positive.
- g. Substantiate the degree to which the perception of the service among the participants is positive.

4) Assess the short-term (program completion) effectiveness of the Girls Circle model on program participants in comparison with females who receive traditional probation services.

- h. Determine whether Girls Circle girls demonstrate reduced risky behavior (substance use and sexual behavior) at program completion.
- i. Determine whether Girls Circle girls demonstrate improved psychosocial assets (empathy, efficacy, responsible choices, self-control scale, and social support).
- j. Determine whether Girls Circle girls demonstrate improved educational expectations and aspirations.
- k. Determine whether Girls Circle girls demonstrate improved body image at program completion.

5) Assess the long-term (12-month post-program) effectiveness of the Girls Circle model on program participants in comparison with females who receive traditional probation services.

I. Determine whether Girls Circle girls differ from comparison girls in recidivism at 12-month post-program completion.

2. Methodology

A. OVERVIEW

This study integrates outcome and process evaluation components. The outcome component uses a randomized design to assess short- and long-term outcomes. The short-term (from intake to program completion) assessment examines the improvement among Girls Circle participants in four families of outcomes:

- 1) Risky behavior (substance use and sexual behavior)
- 2) Psychosocial assets
- 3) Educational expectations and aspirations
- 4) Perceived body image

The long-term assessment examines whether the Girls Circle participants differ from control girls in recidivism at 12-months post-program completion. The study population was obtained from the Juvenile Probation and Court Services Department (JPCSD) of the Circuit Court of Cook County in Chicago, III. The process component (see Chapter 4) uses quantitative and qualitative methods to provide a rich context to the program treatment and structure and to assess program fidelity (i.e., whether the program was well-designed and implemented as intended).

B. SAMPLE

The sample was obtained from the JPCSD of the Circuit Court of Cook County in Chicago, III. Approximately 200 subjects were randomly assigned to either the experimental group or a control group. The treatment group received the Girls Circle program services (as described in Chapter 1), while the control group received traditional non–gender-specific probation services.

Site

Every year in Cook County, more than 10,000 children under the age of 17 appear before the circuit court. The JPCSD provides a continuum of services to those minors and families who are referred to the court. Through an extensive collaboration with community-based social service agencies, JPCSD works to ensure that every child under its supervision receives appropriate secular guidance, structured programming, and appropriate services.

One of these services offered by JPCSD is the Female Offender Services Program, a case management initiative that addresses the special needs of girls active with the JPCSD through the use of probation officers who have undergone gender-specific training. Under this unique program, one probation officer is assigned to a female minor throughout her entire involvement with JPCSD. The program also uses specialized casework supervision and the 10-week Girls Circle program to empower girls and help them learn healthy ways to cope with a history of trauma, family, and personal issues.

Subjects

Recruitment of participants into the study started on May 17, 2011, and was completed June 30, 2013. By the end of the recruitment period (25 months), 178 girls were randomly assigned (119 treatment¹ and 59 control). Seven (five in the treatment and two in the control groups) never completed either the survey or consent process and were thus ineligible to participate in the study. Of the remaining 171 girls, three (two in the treatment and one in the control groups) were reenrolled in the study as new participants. In each case, the original group assignment was maintained² for analytical purposes. As a result, the total baseline sample consisted of 168 subjects (112 in the treatment and 56 in the control groups).

Girls Circle Group Panel Formation. Subjects who were selected to be in the treatment group were placed sequentially into a Girls Circle panel that consisted of 8-10 members. When one Girls Circle panel reached capacity, the formation of a second panel was initiated.

Treatment Group. The treatment group consisted of 112 girls. These girls received treatment-as-usual, plus the Girls Circle program. Overall, 79 of 112 (71 percent) assigned treatment girls attended at least one session of a Girls Circle panel. Eleven Girls Circle panels were conducted during the course of the study. (See Chapter 4 for more details on the Girls Circle panels.)

Control Group. The control group consisted of 56 girls. These girls received treatment-as-usual. In Chicago, treatment-as-usual included an array of alternative sanctions, including but not limited to traditional probation, restitution, community service, a variety of treatment program, home confinement, electronic monitoring, intensive probation, conditional discharge, and detention. One girl assigned to the control group attended six Girls Circle sessions. Again, the original group assignment was maintained for analytical purposes.

Study Procedures

Randomization Procedure. Each girl who agreed to participate in the study received a consent package that contained a unique survey identification code. The code corresponded to a list of identification numbers that were previously assigned randomly to the treatment or control condition using a commercially available random number generator function. The corresponding number from the list of previously randomized IDs designates the group assignment. Each consent package was externally identical to prevent recruitment staff and potential subjects from self-selecting in or out of the Girls Circle group.

Role and Training of the Girls Circle Program Liaison. The responsibility of the Girls Circle program liaison was to coordinate the recruitment process, train the recruitment specialists, and oversee the study. The liaison was required to be a certified Girls Circle group trainer. The liaison trained the recruitment specialists to ensure that the subject and her legal guardian understood the purpose of the research, the activities involved in participation, and that they had the right to decline participation. As part of the training, each recruitment specialist role-played the assent/consent process with the liaison and walked through the assessment procedure before actively engaging actual subjects. The determination of when the recruitment specialist was ready to recruit subjects into the study was made by the liaison and based on the quality of responses during the role-play activity.

¹The treatment group was oversampled because of GC group attendance concerns.

² One girl reenrolled as a treatment subject, but never attended a Girls Circle session.

Role and Training of Recruitment Specialists. The recruitment specialist positions were held by six court interns. Court interns generally work 1 or 2 days a week. By having six interns in this position, at least one could be present during each court session. The interns came from various backgrounds, but all were pursuing degrees—either in social work, criminal justice, or psychology—at local area universities. Two interns were master's-level students in social work; the other four were undergraduates in either social work, psychology, or criminal justice.

Recruitment. Each new girl who came before the court was assigned by the deputy chief probation officer to a probation officer. Case assignment was conducted through traditional JPCSD methodology, which normally entailed choosing the probation officer based on geographical area. After receiving the case, the probation officer conducted a social investigation, which typically took 15 to 60 days but was completed before the sentencing date.

At the end of the investigation period, the youth and her parents return to court on the designated sentencing date. Based on the result of the social investigation, the probation officer made a formal recommendation to the judge regarding sentencing. While the judge has discretion regarding sentencing, the recommendation of the probation officer typically is accepted. If the judge determines that the girl will receive probation services (based on the social investigation), she is required to meet immediately with the probation officer.

For the study, the deputy chief probation officer monitored the court docket daily to identify potential subjects (i.e., any girl charged with a delinquent offense). When a potential subject was identified, the deputy chief probation officer notified a specially trained recruitment specialist dedicated to the study recruitment process. On the day of her sentencing while the girl was waiting to go before the judge, the recruitment specialist introduced the study to the girl using the study flyer and talking points. During this introduction, the recruitment specialist made clear that participation in the study was optional. If the girl agreed to participate, the recruitment specialist executed the following steps:

- 1. Opened the consent package (consent forms, participant code, locator card, and group assignment card).
- 2. Obtained the assent of the girl.
- 3. Obtained the consent of a parent/guardian.
- 4. Obtained contact information via the locator card.
- 5. Handed the girl the participant code form.
- 6. Displayed the group assignment card to let the girl know what group she is in.

If assigned to the treatment group, the recruitment specialist would present the girl with the treatment group notification letter. This letter informed the subject that they had been placed into the treatment group. It also provided the day/time and location for the next scheduled meeting. If assigned to the control group, the recruitment specialist presented the girl with the control group notification letter. This letter informed they had been placed in the control group notification letter. This letter informed the subject that they had been placed in the control group and that they will be contacted in about 3 months and again 1 year to take the follow-up surveys.³

³The original study design assessed the groups using a repeated measure analysis that included one between-group factor (group) and three levels of time (baseline [t0]; at the completion of the GC program [t1]; and 12 months' post-program completion [t2]]. This plan was modified by eliminating the t1 assessment for the control group and the t2 assessment for both groups. The t1 assessment was administered to the treatment group subjects at program completion. The reason for this modification was that the project team needed to spend much more time dealing with group attendance issues than originally anticipated. The result of all of these activities increased the cost of managing this project. Thus, to reallocate funds to account

Administer Baseline Participant Survey. In either case, both groups of girls immediately completed the baseline survey. The Girls Circle program liaison administered the baseline participant survey via a laptop computer. The liaison made sure the girl entered the participant code obtained from the consent package to initiate the survey. (See data collection below for more details on the survey items.)

Participant Notifications. All study subjects were contacted by the program liaison either through email, letter, or both. The note thanked the participant for agreeing to take part in the study and reminded her of the group assignment. If she was assigned to the treatment group, the letter provided her with the start date/time and location of the next Girls Circle group meeting. The communication was also supplemented by reminders from the probation officer. Finally, a text message was sent the day of the meeting by the Girls Circle program liaison to remind the participants of the group start time. If the subject was assigned to the control group, a similar letter was sent to thank the subject for participating in the study.

Transportation. During the initial implementation of the program, subjects were afforded reimbursement for indirect, unguided transportation (i.e., bus tokens) in lieu of direct transportation. The result of this offering was severely low attendance. In response to this problem, the deputy chief probation officer and Girls Circle program liaison arranged to provide direct, supervised transportation to and from the Girls Circle panel session for each subject. This measure improved attendance at the group sessions.

Incentives. Incentives were offered to study participants to gain their cooperation and engagement throughout the course of the study. All control group participants were offered a \$15 retail gift card as remuneration for their participation. Treatment group participants were offered the same during the follow-up survey. And, all participants who completed the follow-up survey were entered into a raffle, the winner of which received a \$500 retail gift card.

C. DATA SOURCES

Four primary data sources were used to measure variables:

- 1) Baseline and posttest surveys
- 2) Girls Circle attendance data
- 3) JPCSD records
- 4) Staff interviews and site observation

Girls Circle Study Participant Survey

The principal data collection instrument for the study was the Girls Circle study participant survey (see Appendix A for survey). The survey was administered at two assessment periods (baseline (T0), and posttest (T1)). The survey includes a modified version of the Girls Circle Association Evaluation Toolkit for programs using the curriculum. The Girls Circle toolkit was supplemented with additional survey items under the direction of the principal investigator and reviewed and modified by the members of the project team. Ultimately, the survey instrument contained questions in the following domains:

for the increased costs, the research team considered the t1 assessment of the control subjects and the t2 assessment of all subjects expendable in favor of focusing on the 1 year delinquency outcome using official arrest data from JCPSD.

- 1. Demographics and family history
- 2. Peer relationships and social support
- 3. Childhood experiences
- 4. Attitudes toward school
- 5. Problem-solving and reasoning
- 6. Expectations and aspirations
- 7. Problem behaviors

These domains were derived from evaluation aims related to outcomes (e.g., recidivism), as well as mediating and short-term impact domains developed from in-depth discussions with Girls Circle program developers regarding the mechanisms of change inherent in the model and what should be measured to capture those mechanisms of change. This was viewed as important for evaluating the model itself as well as its effectiveness.

Once domains were identified, a review of validated/available measures in those domains was conducted, seeking scales that had been validated with populations demographically similar to the Girls Circle age group and the acceptable reliability information (Cronbach's alpha). In addition, any scales selected needed to be brief enough so that the entire instrument did not pose a respondent burden. Once the scales were selected and the initial instrument drafted, it was pilot-tested for time, comprehension, and language, and then revised as the final instrument.

A pilot study with a small group (four participants) was conducted in April and May 2011 to obtain feedback on the consent procedures and to test the survey layout and duration, as well as the lucidity of individual survey items. The pilot study was also useful in allowing the Girls Circle facilitators the opportunity to practice administering the curriculum. The results of the pilot indicated minimal need for revisions to the instrument or procedures. These changes were not substantive; they were format and language changes to ensure clarity. The Institutional Review Board approved the changes in May 2011.

Attendance

The presence of each treatment subject at a Girls Circle session was tracked through an attendance sheet filled out by the group facilitator during the course of the study. The Girls Circle program liaison entered the attendance data into the Girls Circle tracking database, and the attendance sheets were subsequently transmitted to DSG. The number of Girls Circle sessions attended was aggregated for each treatment subject to create a measure of Girls Circle dosage. Then, to assess the percent of prescribed dosage (10 sessions) that was received, the number of sessions attended by each subject was divided by the number of prescribed sessions. (See Chapter 4 for more information on attendance.)

JPCSD Records

JPCSD records of each study participant were collected 1 year after program completion by the Girls Circle program liaison. The information in these records includes all arrests, charges, charges dismissed, charges pending, adjudication decisions, and dispositions. The data elements that were collected from these records include 1) dates of all arrests, 2) charges and charge codes of all associated arrests, 3) court dates and adjudication decisions for each arrest/case, and 4) adjudication dates and disposition type.

The delinquent records for study participants were collected in two waves. A formal request for the first wave of 70 subjects was forwarded to JPCSD of the Circuit Court of Cook County in October 2013. The request was approved in November 2013. After approval, the Girls Circle program liaison was granted

permission to access the JPCSD system and print a copy of the record for each subject. These printed records were then mailed to the principal investigator to be securely stored in a locked file cabinet. In this wave, 68 of 70 (97 percent) of the records were received. The records for two subjects could not be located. The final wave of data collection was completed in August 2014. In this wave, 98 of 98 (100 percent) of the records were received. In addition, all records from the first wave were located. As a result, 100 percent of the records for each of the 168 subjects were received.

These records were abstracted—the process by which criminal and delinquent event data are extracted from an unformatted hard copy (i.e., a RAP sheet)—into an electronic database by four trained research assistants. While many data elements in the arrest record are straightforward, abstraction from RAP sheets can often involve a degree of interpretation owing to the "noise" (e.g., surplus and vague information) in unstructured, hardcopy documents. The problem with relying on abstracters to interpret too much of the information is that it can lead to different people abstracting the same data differently. This is a potential source of error. To reduce the potential for error, all abstracters were carefully trained on the protocol and procedures, data elements of interest, data collection system, and (most important) data definitions and their interpretation. The training also included a test abstraction to measure validity and interrater reliability.

The arrest records for all 168 participants were abstracted into the Girls Circle delinquent event database. The delinquent records (arrests, probation violations, and case dispositions) of all subjects were downloaded from the database and cleaned to identify and correct (or remove) any incomplete, incorrect, inaccurate, or irrelevant data. The data were also recoded to convert string values to numeric values, change value ranges, and create new composite measures.

Staff and Key Leader Interviews

Staff interviews, focus groups, and site observation were conducted to assess the site environment and integrity of the program while girls received services. These activities occurred during the first and fourth year of data collection.

Two process site visits (February and November 2012) were made to the Girls Circle program during the first year of the study to understand the JPCSD operating environment. During these site visits, interviews were held with three judges, the deputy chief probation officer, eight probation supervisors and probation officers, an intern, and the director of juvenile probation. A focus group was also held with six Girls Circle facilitators. In addition, biweekly phone calls with the deputy chief probation officer and Girls Circle staff were held throughout the entire project. Also, the DSG program liaisons observed sessions throughout the entire data collection period.

In addition, two fidelity site visits (June and August 2013), in which the application of the program model was measured using the program fidelity instrument, were conducted. To maintain reliability across observations, the Girls Circle director of training conducted both visits. The program fidelity instrument was adapted from the Girls Circle quality-assurance tool. It contained 28 close-ended questions distributed across five domains, with several targeted objectives within each domain. The domains were

- 1. Group preparation
- 2. Environment
- 3. Group facilitation skills
- 4. Curriculum integrity
- 5. Communication skills

D. MEASURES

This study assessed both short-term (from intake to program completion) and long term outcomes (1 year post program intake). The short-term outcomes include four families of outcomes:

- 1) Risky behavior (substance use and sexual behavior)
- 2) Psychosocial assets
- 3) Educational expectations and aspirations
- 4) Perceived body image

The long-term assessment examines whether the Girls Circle participants differ from control girls in delinquent behavior at 12-months post-program completion.

Delinquency

Delinquency was based on the official crime history reports of each youth provided by JPCSD. The reports were coded to obtain the dates of all arrests (and charges associated with each arrest), delinquency petitions, delinquency findings, and probation violations. All events were categorized as either prior or post-intervention events. All post-intervention events were transformed into the time until the event by subtracting the date of the program entry from the date of the event.

Risky Behavior

Substance Use. Substance use was assessed using a modified version of two survey items from the Monitoring the Future Study: A Continuing Study of American Youth (Johnston et al. 2005), which is a long-term study of American adolescents, college students, and adults through age 50. It has been conducted annually by the University of Michigan's Institute for Social Research since 1975.

Monitoring the Future uses a standard set of three questions to determine usage levels for the various drugs. For example, the study asks:

On how many occasions (if any) have you used marijuana

- a) ... in your lifetime?
- b) ... during the past 12 months?
- c) ... during the last 30 days?

Each of the three questions is answered on the same answer scale: 0, 1-2, 3-5, 6-9, 10-19, 20-39, and 40 or more occasions. The reliability of these measures was found to be high (O'Malley et al. 1983; Bachman et al. 2001). To limit the completion time of the survey, this study concentrated on usage in the last 30 days and questioned youth about alcohol and marijuana use.

Risky Sexual Behavior. Risky sexual behavior was measured using four survey items adapted from the Youth Risk Behavior Surveillance System (YRBSS) conducted by the Centers for Disease Control and Prevention. The YRBSS assesses six categories of priority health risk behaviors:

- 1) Behaviors that contribute to unintentional injuries and violence
- 2) Tobacco use
- 3) Alcohol and other drug use

- 4) Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection
- 5) Unhealthy dietary behaviors
- 6) Physical inactivity

In a test–retest study of 4,619 high school students spanning 2 weeks, the reliability of adolescent reports of sexual practices was found to be substantial (mean kappa=62.7 percent) (Brenner et al. 2002). The four items used in this survey were designed to measure involvement in risky sexual practices.

The first item—"Have you ever had sexual intercourse?"—measures involvement in sexual activity. The responses were dichotomous. The second item—"How many times did you have sex in the last 3 months?"—measures the frequency of involvement. The responses for this item were on a six-point scale ranging from never to more than nine times. The third item—"With how many different people did you have sex in the last 3 months?"—measures the number of sexual partners. Again, the responses were on a six-point scale ranging from none to five people or more. Finally, the fourth item—"How many times did you use a condom during sex in the last 3 months?"—assesses the frequency of condom use.

The responses were on a four-point scale ranging from never to every time. The responses for the last three measures were transformed into a four-point scale (none, low, medium, high), then summed for each subject and divided by the number of valid responses to construct a measure of risky sexual behavior. If a respondent reported no sexual intercourse, the measure is set to 0. The scale ranges from 0 to 3, with higher values equating to riskier behavior. The internal reliability of the measure with this sample was good (α =0.88).

Pyschosocial Assets

Empathy. Empathy was measured using eight survey items adapted from the Interpersonal Reactivity Index (Davis 1980, 1983), a measure of dispositional empathy that takes as its starting point the notion that empathy consists of a set of separate but related constructs. The instrument contains four sevenitem subscales, each tapping a separate facet of empathy. This survey focuses on the perspective-taking scale and measures the reported tendency to spontaneously adopt the psychological point of view of others in everyday life. Respondents were asked to indicate how strongly they agree or disagree with each statement:

- Before criticizing somebody, I try to imagine how I would feel if I were in their place.
- If I'm sure I'm right about something, I don't waste much time listening to other people's argument.
- I sometimes try to understand my friends better by imagining how things look from their perspective.
- I believe that there are two sides to every question and try to look at them both.
- I sometimes find it difficult to see things from the other person's point of view.
- I try to look at everybody's side of a disagreement before I make a decision.
- When I'm upset at someone, I usually try to "put myself in his or her shoes" for a while.

Responses ranged from 1=strongly agree to 4=strongly disagree. The items were summed for each respondent and then divided by the number of valid items with high scores indicating high empathy. The internal reliability coefficients were computed for each of the four subscales with over 1,000 students

from introductory psychology classes at the University of Texas at Austin. Results (Davis 1980) found that this scale exhibited good internal reliability with females (Cronbach's α = .78). In this study sample, this scale exhibited acceptable internal reliability (Cronbach's α = .62).

Self-Efficacy. Self-efficacy was measured using 10 survey items adapted from the General Perceived Self-Efficacy Scale (Schwarzer and Born 1997). Respondents were asked to indicate how true each of the following statements was at the time:

- I can always manage to solve difficult problems if I try hard enough.
- If someone disagrees with me, I can find a way to work out the problem.
- It is easy for me to stick to my plans and accomplish my goals.
- When an unexpected thing happens, I am confident that I can deal with it successfully.
- I can find ways to handle new situations.
- I can solve most problems if I put in the necessary effort.
- When something stressful happens, I can stay calm and figure out how to deal with it.
- When I have a problem, I can usually find several solutions.
- If I am in trouble, I can usually think of a solution.
- I can usually handle whatever comes my way.

Responses ranged from 1=not at all true to 4=exactly true. The items were summed for each respondent and then divided by the number of valid items with high scores indicating high self-efficacy. In this study sample, this scale exhibited high internal reliability (Cronbach's α = .88).

Responsible Choices. Responsible choices were measured using six survey items adapted from the Youth Asset Survey (Oman 2002), a 37-item questionnaire used to assess six youth developmental constructs. These constructs include family communication, peer role models, future aspirations, responsible choices, community involvement, and non-parental role models. This study focused on the responsible choices construct, which has been demonstrated to exhibit acceptable internal reliability (Cronbach's $\alpha = .69$). Respondents were asked to indicate how much each of the following statements is like them:

- You can say no to activities that you think are wrong.
- You can identify the positive and negative consequences of behavior.
- You try to make sure that everyone in a group is treated fairly.
- You think you should work to get something, if you really want it.
- You make decisions to help achieve your goals.
- You know how to organize your time to get all your work done.

Responses ranged from 1=not at all like you to 4=very much like you. The items were summed for each respondent and then divided by the number of valid items with high scores indicating responsible choices. In this study sample, this scale exhibited good internal reliability (Cronbach's α = .87).

Self-Control. Self-Control was measured through six survey items adapted from the Individual Protective Factors Index (IPFI). Developed by EMT Associates, the IPFI measures adolescent protective factors related to resiliency, including social bonding, personal competence, and social competence. Subconstructs for each of these three resiliency domains are:

- 1) Social bonding: school; family; pro-social norms.
- 2) Personal competence: self-concept; self-control; self-efficacy; positive outlook.
- 3) Social competence: assertiveness; confidence; cooperation.

The self-control construct has demonstrated acceptable internal consistency (Cronbach's α = .65) with low income students in grades 7-11 (Gabriel, 1994). The items include

- Sometimes I have to physically fight to get what I want.
- I get mad easy.
- I do whatever I feel like doing.
- When I am mad, I yell at people.
- Sometimes I break things on purpose.
- If I feel like it, I hit people.

Respondents were asked to indicate how true each statement was at the time. Responses ranged from 1=very true to 4=not at all true. The items were summed for each respondent and then divided by the number of valid items with high scores indicating high self-control. In this study sample, this scale exhibited good internal reliability (Cronbach's $\alpha = .86$).

Social Support. Social support was assessed using nine items developed specifically for this evaluation. Each respondent was asked to indicate how true each of the statements was in matching their feelings. A sample of the statements included:

- 1) There are people I can depend on to help me if I really need it.
- 2) If something went wrong, no one would come to my assistance.
- 3) There is no one I can depend on for help if I really need it.
- 4) There is a special person in my life who cares about my feelings.

The responses for all items were on a four-point scale ranging from very true to very false. Point values were summed for each respondent and then divided by the number of valid items. High scores indicate more social support. The internal reliability of this scale for this sample was good (Cronbach's $\alpha = .78$).

Educational Expectations/Aspirations. Developed for the Pittsburgh Youth Study (Loeber, Stouthamer-Loeber, van Kammen & Farrington, 1991), educational expectations and educational aspiration were each measured by a single item regarding a youth's view of (1) how far they would *like* to go in school; and (2) how far they *think* they will go in school. Each item offered a range of six choices from 1 (high school graduate) to 6 (other).

Perceived Body Image. Perceived body image was assessed using the six item Appearance Scale from the Physical Self-Description Questionnaire (Marsh et al., 1994). Respondents were asked to indicate which statements best describe themselves. The statements include

- I am attractive for my age.
- I have a nice looking face.
- I'm better looking than most my friends.
- I am ugly.
- I am good looking.

• Nobody thinks that I'm good looking.

Responses included "Completely False," "Somewhat False, "Neutral," "Somewhat True," and "Completely True." The internal reliability of this scale for this sample was good (Cronbach's α = .81).

Other Measures

Girls Circle Treatment. The main variable of interest is the Girls Circle Treatment. This variable was defined in two ways. First, we utilize an ITT approach that simply defines treatment as dichotomous measure that reflects group assignment (0=control; 1=treatment). However, a number of subjects refused treatment by not attending the Girls Circle sessions. Thus in order to control the number of Girls Circle subjects who never received treatment, we also introduced an interaction effect (Girls Circle x Dosage) that takes into account the number of Girls Circle sessions attended.

Residential Stability. Residential stability was measured by a single item regarding the length of time a youth has resided at a single location. Specifically, the item asks "How long have you lived at your current location?" The item offers a range of six choices from 1 (less than 6 months) to 6 (4 years or more) with higher scores indicating more stability.

Presence of Caring Adults. Presence of caring adults was measured through nine items of the Presence of Caring–Individual Protective Factors Index which assess the respondent's sense of support from an adult (Phillips and Springer, 1992). Respondents were asked to indicate how true each of the statements was in matching their feelings. The statements include

- There are people I can depend on to help me if I really need it.
- There is not an adult I can turn to for guidance in times of stress.
- If something went wrong, no one would come to my assistance.
- There is an adult I could talk to about important decisions in my life.
- There is a trustworthy adult I could turn to for advice if I were having problems.
- There is no one I can depend on for help if I really need it.
- There is no adult I can feel comfortable talking about my problems with.
- There are people I can count on in an emergency.
- There is a special person in my life who cares about my feelings.

The responses for all items were on a four-point scale with "YES!" when a statement is very true, "yes" if a statement was somewhat true, "no" if a statement was somewhat false, and "NO!" if the statement was very false. Point values were summed for each respondent and adjusted when two or few items are blank. High scores indicate a strong presence of caring adults. The presence of caring adults construct has demonstrated acceptable internal consistency (Cronbach's α = .65) with low income students in grades 7-11 (Gabriel, 1994).

Negative/Positive Peers. Negative and positive peer associations were measured using an adapted scale from the SAFER Latinos evaluation (Edberg et al., 2010).

Negative peer associations is an 11-item adaptation of similar measures from the National Youth Survey (Elliott, Huizinga, and Ageton, 1985). These items measure the strength of the relationship between a youth and antisocial peers. Respondents were asked to indicate on a three-point scale how many of their friends have participated in various acts. Some of the acts are

- Skip school
- Do drugs
- Get into fights
- Have been arrested.

The response categories were 3=all of your friends, 2=some of your friends, and 1=none of your friends). Point values were summed for each respondent and then divided by the number of valid items. The scores ranged from 1 to 3. Higher scores indicate more negative peer relations. The internal reliability of this scale was high (α =0.87).

Similarly, positive peer associations is an 9-item adaptation of similar measures from the National Youth Survey (Elliott, Huizinga, and Ageton, 1985). These items measure the strength of the relationship between a youth and prosocial peers. Respondents were asked to indicate on a three-point scale how many of their friends have participated in various acts. Some of the acts are

- Are in school
- Participate in school-related activities
- Have volunteer for an organization or a cause.

Again, the response categories were 3=all of your friends, 2=some of your friends, and 1=none of your friends). Point values were summed for each respondent and then divided by the number of valid items. The scores ranged from 1 to 3. Higher scores indicate more positive peer relations. The internal reliability of this scale was acceptable (α =0.71).

E. STATISTICAL OVERVIEW

Attrition

There was no attrition for the juvenile-justice-related outcomes; 100 percent of the arrest records were collected from JPCSD. Attrition was high, however, in terms of the survey assessment. We intended to collect posttest information only on the treatment subjects because the control subjects were less engaged in the study and difficult to locate. In addition, the short time span from pretest to posttest was unlikely to reveal much change. However, of the 112 treatment subjects, only 50 participants (45 percent) completed the posttest. This low figure was a direct result of low program attendance (see Chapter 4 for more details). While it was intended that subjects would take the posttest on the last group session, if the subjects did not attend the last session, they did not take the survey. While steps were taken to increase the rate of completion of the posttest, and in some instances these procedures were successful, overall the girls were reluctant to meet after the completion of the program.

Treatment Outcome Analyses

A series of analyses was performed in sequential phases to assess the impact of the Girls Circle program. The first phase of analyses explored the differences (or lack thereof) between groups on numerous pretreatment characteristics at baseline.

The second phase compared data from baseline to posttest to assess the short-term change over the intervention period. To assess these impacts, paired samples t-tests were conducted for each outcome measure including substance use, sexual behavior, empathy, efficacy, responsible choices, self-control,

and social support, and perceived body image. In addition, in order to examine the effects of dosage on selected outcomes related to delinquency and risky behavior, psychosocial assets, school-related aspirations and expectations, and positive body image, several regressions were run, while controlling for the pre-test measure for the outcome and dosage (i.e., number of sessions attended).

The third phase assessed the long-term impact of the Girls Circle program on each measure of recidivism. Survival models were used to predict time until each event (Allison 2014; Baumer 1997; Schmidt and Witte 1988; Gainey, Payne, and O'Toole 2000). A survival model is a "time-to-event" comparison that determines the probability that one recidivates, while controlling for time until that event, in addition to other covariates. The broadly applicable Cox proportional-hazards regression model, the most widely used method of survival analysis, was used to assess the time-to-event data and report the hazard ratio for each outcome.

Four regression analyses were conducted, with each outcome reflecting a measure of recidivism during the first year of program participation: probation violation, delinquency petition, arrest, and any event (i.e., petition or arrest). An intent-to-treat approach was initially employed in order to maintain the prognostic balance generated from the original random treatment allocation. However, the model failed to produce any significant findings. Given the problems with attendance, a second set of similar models were employed to control for treatment dosage, or the number of Girls Circle sessions attended, which significantly moderated results.

As suggested by Allison (2014), we tested the proportional hazard assumption of this model in two ways. First, for discrete variables such as group status, we graphically examined the proportional hazards for the two groups. Visual inspections of these curves supported the use of the Cox regressions. Second, we created interaction terms with time to assess whether the effect of the variable changed over time (see Allison 2014). In all, the proportional hazard assumption was met.

In addition, participants in the Girls Circle program were enrolled in different panels throughout the study period, resulting in different "clusters" within the treatment group. To account for this clustering, the model was run controlling for the panel clusters using two different methods. Initially, a panel was coded as an ordinal measure, with 1 indicative of the first panel implemented and 12 indicative of the last panel implemented. Then, each panel was coded into one of two groups: earlier groups and later groups. The purpose of these coding methods was to explore whether changes in program implementation over time affected outcomes as new panels were added throughout the course of the study. Interaction terms between treatment and panel number were also tested using Cox proportional models to assess panel effects. Results showed no significant effects of the role of treatment panels; therefore, corrections for panel clustering were not employed in the treatment analysis.

The results of the dosage analysis is presented in Chapter 3. The magnitude and significance of each predictor variable on the likelihood of recidivating is indicated by the likelihood coefficient, otherwise known as the "hazard ratio." In this instance, the hazard ratio represents the magnitude of change in hazards (i.e., the likelihood that one recidivates) when there is a one-unit increase in the predictor variable (i.e., group attendance), with values greater than one indicating an increase in odds of the outcome and values less than one indicating a decrease in odds of that outcome.

3. Results

A. BASELINE CHARACTERISTICS

Baseline equivalence was tested by comparing the groups on 47 different variables using independent samples t-tests for continuous measures and chi-square tests for binary measures. These measures include demographics, family/household information, sexual practices, personal responsibility, school attitudes and enrollment, positive/negative peer influences, substance use, and offense history. Several of the demographic and baseline characteristics of the sample are displayed in Table 3.1. There were no significant differences between the groups on any baseline measure.

Table 3.1. Comparison of Baseline Characteristics: Girls Circle and Control Groups					
MEASURE	CONTROL	GIRLS CIRCLE	TEST STATISTIC		
Race					
Percent African American	83.93%	87.5%	$\chi^2 = 0.403$		
Percent Hispanic	14.29%	8.93%	$\chi^2 = 1.120$		
Percent White	1.79%	1.79%	$\chi^{2} = 0.0$		
Percent Other (Asian or American Indian)	0%	1.79%	$\chi^2 = 1.012$		
Age in Years					
Age in Years, Range: 12-18 (M, SD)	15.875, 0.178	15.785, 0.112	t = 0.440		
Family & Household					
Number of Siblings (M, SD)	3.911, 1.297	3.5, 1.633	t = 1.640		
Residential Stability, Scale: 1-6 (M, SD)	3.929, 1.736	3.670, 1.833	t = 0.878		
Percent with Children	10.71%	10.71%	$\chi^2 = 0.0791$		
Number of Children, Range: 1-2 (M, SD)	0.125, 0.384	0.116, 0.349	t = 0.151		
Presence of Caring Adults, Scale: 1-4 (M, SD)	3.126, 0.598	3.157, 0.584	t = -0.325		
Other					
Age at First Menstrual Period ^a (M, SD)	12.182, 1.541	12.268, 2.097	t = -0.270		
Percent Heterosexual	77.78%	86.61%	$\chi^2 = 2.086$		
Peers					
Negative Friends, Scale: 1-3 (M, SD)	1.631, 0.409	1.552, 0.350	t = 1.295		
Positive Friends, Scale: 1-3 (M, SD)	1.864, 0.367	1.90, 0.324	t = -0.650		

format, resulting in some rounding for upper and lower bounds. M = mean and SD = standard deviation

Measure	CONTROL	GIRLS CIRCLE	TEST STATISTIC
Substance Use			
Alcohol Use Scale: 0-3 (M, SD)	0.364, 0.557	0.268, 0.465	t = 1.171
Marijuana Use Scale: 0-3 (M, SD)	0.648, 0.974	.5, .771	t = 1.062
Sexual Behavior			
Percent Sexually Active	74.55%	67.86%	$\chi^2 = 0.787$
Age at First Sexual Encounter ^a (M, SD)	14.439, 1.266	14.447, 1.321	t = -0.033
Sexual Encounters Last 3 Mos., Scale: 0-5 (M, SD)	1.709, 1.652	1.348, 1.463	t = 1.435
Condoms Used Last 3 Mos., Scale: 1-4 (M, SD)	1.764, 1.610	1.777, 1.733	t = -0.047
Number of Partners in Last 3 Mos. (M, SD)	0.891, 0.854	0.741, 0.791	t = 1.121
Risky Sexual Behaviors Scale: 0-3 (M, SD)	1.200, 0.964	0.959, 0.901	t = 1.127
Psychosocial Assets			
Empathy Scale: 1-4 (M, SD)	2.920, 0.455	2.800, 0.461	t = 1.517
Self-Efficacy Scale: 1-4 (M, SD)	3.040, 0.587	3.053, 0.550	t = -0.137
Responsible Choices Scale: 1-4 (M, SD)	3.357, 0.677	3.361, 0.653	t = -0.031
Self-Control Scale: 1-4 (M, SD)	2.782, 0.822	2.726, 0.739	t = 0.442
Social Support Scale: 1-5 (M, SD)	3.886, 1.062	3.865, 0.804	t = 0.141
School			
Percent Enrolled in School	80.0%	80.36%	χ2 = 0.003
Positive Attitudes Toward School, Scale: 1-4 (M, SD)	2.993, 0.560	2.933, 0.501	t = 0.696
Educational Aspirations Scale, Scale: 1-5 (M, SD)	4.115, 1.166	4.211, 1.131	t = -0.497
Educational Expectations Scale, Scale: 1-5 (M, SD)	3.852, 1.279	3.925, 1.344	t = -0.332
Perceived Body Image			
Body Image Scale: 1-5 (M, SD)	4.345, 0.811	4.511, 0.558	t = -1.563
Prior Delinquency			
Percent Any Arrest	94.64%	95.54%	$\chi^2 = 0.066$
Prior Violations, Range: 0-3 (M, SD)	0.179, 0.606	0.152, 0.523	t = 0.296
Prior Arrests, Range: 0-19 (M, SD)	2.500, 1.829	2.464, 2.592	t = 0.092
Prior Petitions, Range: 0-10 (M, SD)	1.232, 0.687	1.357, 1.169	t = -0.738
Prior Arrests/Petitions, Range: 0-20 (M, SD)	2.661, 1.709	2.661, 2.673	t = 0.0

format, resulting in some rounding for upper and lower bounds. M = mean and SD = standard deviation

Gender, Race, and Age

Sample inclusion was restricted to girls. The treatment group, Girls Circle, and the control group, consisted mostly of African Americans (88 and 84 percent, respectively), with some participants of Hispanic ethnicity (9 and 14 percent, respectively). The sample also included small proportions of whites (1.79 percent in each group) and other races (1.79 percent in the treatment group only). The mean age of the full sample was about 15.8 years at the time of program enrollment (see Table 3.2). There were no statistically significant differences between the groups on any of these characteristics.

Table 3.2. Age Comparisons: Girls Circle and Control Groups				
MEASURE	CONTROL	GIRLS CIRCLE		
Age	N = 56	N=112		
12	1.79%	0.0%		
13	3.57%	2.68%		
14	5.36%	12.5%		
15	28.57% 24.11%			
16	26.79%	30.36%		
17	23.21%	25.0%		
18	10.71%	5.36%		
Notes: No sig	nificant differences.			

Family, Household, and Other Characteristics

Girls in control and treatment groups had approximately four siblings (averaging 3.9 and 3.5, respectively). About 11 percent of girls in each group had one or two children (averages are shown in Table 3.1). The composite scale for residential stability ranged from 1-6, with higher numbers indicative of greater levels of residential stability. Overall, residential stability appeared fairly constant for control and treatment groups, with average scores of 3.9 and 3.7, respectively. Similarly, girls reported a moderate presence of caring adults in their lives, as measured by the Caring Adults Scale. On average, girls in control and treatment groups rated this item 3.1 and 3.2, respectively, out of 4. Girls in both groups were around age 12 the first time they experienced menstruation. And, a majority identified as heterosexual (78 percent in the control group and 87 percent in the treatment group). There were no statistically significant differences between the groups on any of these characteristics.

Psychosocial Assets

Five composite scales were developed to measure the following psychosocial assets: empathy, self-efficacy, responsibility, self-control, and social support. Aggregate mean scores were almost identical for control and treatment groups. The control group averaged a score of 2.92 on the empathy scale; the intervention group was slightly lower at 2.8. Responses on the self-efficacy scale were 3.04 for the control group and 3.05 for the treatment group, while the responsible choices scores for both groups averaged approximately 3.4. Similarly, mean scores for the self-control measure were approximately 2.8 for the control group and 2.7 for the treatment group. Group aggregate means were again similar for the social support scale; the control group averaged 3.89 and the treatment group averaged 3.86. There were no statistically significant differences between the groups on any of these measures.

Peers

The majority (80 percent) of girls in both groups were enrolled in school during the study period. Positive attitudes toward school were assessed using a four-item scale, with approximated aggregate scores of 3 for both groups (2.99 and 2.93 for control and treatment groups, respectively). Indications of positive and negative peer association were similarly measured, with scores ranging from 1-3 for both scales and higher scores representing greater levels of peer influence. Aggregate mean scores that represented negative peer associations were approximately 1.63 for the control group and 1.55 for the treatment group. Aggregate scores for the positive friend scale were 1.86 for the control group and 1.9 for the treatment group. There were no statistically significant differences between the groups in regards to these characteristics.

School

Educational aspirations and expectations were also presented ordinally, with responses ranging from 1-5 and higher numbers indicative of greater aspirations and expectations. Mean scores for the control group at baseline were 4.1 and 3.9 for school aspirations and expectations scales, respectively. Similarly, the treatment group reported aggregate means of 4.2 and 2.9 for educational aspirations and expectations, respectively. There were no statistically significant differences between the groups in regards to these characteristics.

Substance Use

Marijuana and alcohol use were measured using a scale of ordinal responses ranging from 0-4, with higher values indicative of more frequent use. Overall, self-reported substance use was minimal, with average scores related to alcohol use of 0.36 and 0.27 for control and treatment groups, respectively. Aggregated scores regarding marijuana use were 0.6 for the control group and 0.5 for the treatment group. Percentages are displayed in Table 3.3. There were no statistically significant differences between groups regarding selfreported alcohol or marijuana use.

Table 3.3. Self-Reported Alcohol and Marijuana Use: Girls Circle and Control Groups							
MEASURE	MEASURE CONTROL GIRLS CIRCLE						
Alcohol Use	N = 55	N=112					
Not at all	67.27%	74.11%					
A few times	29.09%	25.0%					
Many times	3.64%	0.89%					
Marijuana Use N = 54 N=112							
Not at all	61.11%	63.39%					
A few times	22.22%	26.79%					
Many times	7.41%	6.25%					
Every day	9.26%	3.57%					
Notes: No significant differences.							

Sexual Practices

A majority of the girls were sexually active: 74.5 percent of the control group and 67.8 percent of the treatment group indicated they had previously engaged in sexual intercourse at baseline. The average age of first sexual encounter was approximately 14.5 years for both groups. Recent sexual activity (past 90 days) was also examined in the aggregate. Girls in the control group reported having approximately 1.7 sexual encounters with about one partner in the past 90 days. For this group, condoms were used "a few times," based on the mean score of 1.7 out of 4 using an ordinal response measure. Similarly, girls in the treatment group had approximately 1.3 sexual encounters with approximately one partner in the past 90 days, when examined at the aggregate level. Condoms were used "a few times," indicated by a mean score of 1.7 out of 4 generated by ordinal response categories. A composite measure, ranging from 0-3, was used to assess overall risky sexual behaviors, with higher scores indicative of more risky behavior. The groups were statistically equivalent at baseline (aggregate scores of 1.2 for the control group and 0.96 for the treatment group, n.s.) There were no statistically significant differences between groups regarding these characteristics.

Prior Delinquency

GENERAL. Overall, the groups appear to have similar criminal histories, with no significant differences between them. According to official arrest records, the majority of girls had been arrested at least once previously: 95 percent of the control group and 96 percent of the treatment group. Four measures were used to assess prior criminal behavior: prior probation violations, prior arrests, prior petitions,¹ and prior

¹ A juvenile court matter comes to the court's attention when the police apprehend a minor for violating a statute or a school official, parent, or guardian refers a problem with a juvenile to the court. If the matter comes to the court's attention outside of police jurisdiction, it's possible a petition is filed with no record of arrest.

"events" (i.e., the sum of all past petitions and arrests). Group comparisons of baseline criminal activity are displayed in Table 3.4. There were no statistically significant differences between groups on any of the baseline criminal activity measures.

PROBATION VIOLATION. More than 90 percent of each group had zero prior violations, with averages of 0.18 for the control group and 0.15 for the treatment group.

ARREST. Prior arrests followed a different trend, with a mean of approximately 2.5 arrests for both groups. A small portion had no prior arrests,² including about 9 percent of the control group and 8 percent of the treatment group. About 29 percent of the control group had one prior arrest in comparison to 37 percent of the treatment group. Similarly, approximately 20 percent and 18 percent of the control group had two or three prior arrests, respectively, compared to 21 percent and 16 percent of the treatment group. Twenty-five percent of the control group had four or more past arrests compared to nearly 20 percent of the treatment group.

PETITION. Trends regarding past petitions were similar to prior arrest trends, with an average of 1.2 and 1.4 petitions for control and treatment groups, respectively. A majority of girls had only one past petition, which is illustrated by high percentages of

Table 3.4. Comparison of Baseline Criminal Activity: Girls Circle and Control Groups					
MEASURE	CONTROL	GIRLS CIRCLE			
Prior Violations	N = 56	N=112			
0	91.07%	90.18%			
1	1.79%	6.25%			
2	5.36%	1.79%			
3	1.79%	1.79%			
Prior Arrests	N = 56	N=112			
0	8.93%	8.04%			
1	28.57%	36.61%			
2	19.64%	20.54%			
3	17.86%	15.18%			
4-5	19.65%	11.6%			
6-7	3.57%	4.46%			
8 or more	1.79%	3.56%			
Prior Petitions	N = 56	N=112			
0	7.14%	5.36%			
1	67.86%	73.21%			
2	21.43%	12.50%			
3	1.79%	5.36%			
4 or more	1.79%	3.57%			
Prior Events (i. e., Petitions/Arrests)	N = 56	N=112			
1	33.93%	42.86%			
2	21.43%	20.54%			
3	17.86%	16.96%			
4-5	21.43%	8.93%			
6-7	3.57%	6.25%			
8 or more	1.79%	4.46%			
Notes. No significant differe	ences.				

control and treatment groups: about 68 percent and 73 percent, respectively.

ANY EVENT. Since a juvenile petition is similar to an arrest, the final measure, prior events, includes a sum of juveniles' past petitions *and* arrests. On average, both treatment and control groups had about 2.7 prior events on record. Most commonly, girls had one past event: 34 and 43 percent of control and treatment groups. Approximately 21 percent of girls from each group had two prior events on record. Girls with three prior events on record comprised 18 percent of the control group and about 17 percent of the treatment group. A little more than 26 percent of the control group had four or more prior events, compared to about 20 percent of the treatment group.

² This group of subjects were referred to the court by means other than law enforcement and the court filed a petition (i.e., there was no official arrest).

	PRE	TEST	Post	-TEST		
MEASURE	MEAN	SD	MEAN	SD	N	T-VALUE
Risky Behavior						
Alcohol Use Scale: 0-3	0.240	0.476	0.260	0.487	50	-0.240
Marijuana Use Scale: 0-3	0.458	0.743	0.354	0.601	48	1.093
Sexual Encounters Last 3 Months, Scale: 0-5	1.38	1.576	1.9	1.681	50	-2.385*
Condoms Used Last 3 Months, Scale: 1-4	1.82	1.837	2.04	1.653	50	-0.747
Number of Partners in Last 3 Months	0.68	0.713	0.72	0.497	50	-0.405
Risky Sexual Behaviors Scale: 0-3 ^a	0.887	0.879	1.2	0.893	50	-2.436*
Psychosocial Assets						
Empathy Scale: 1-4	2.814	0.368	2.782	0.404	50	0.486
Efficacy Scale: 1-4	3.073	0.502	3.051	0.645	49	0.191
Responsibility Scale: 1-4	3.365	0.666	3.335	0.598	49	0.266
Self-Control Scale: 1-4	2.799	0.740	2.650	0.726	49	1.679
Social Support Scale: 1-5	3.853	0.826	3.938	0.930	50	-0.659
Education						
Educational Aspirations Scale, Scale: 1-5 (M, SD)	4.31	0.949	4.51	0.589	45	-1.387
Educational Expectations Scale, Scale: 1-5 (M, SD)	4.18	1.202	4.24	1.011	48	-0.312
Perceived Body Image						
Body Image Scale: 1-5	4.535	0.518	4.512	0.686	49	0.217

B. PRE-POST TEST

Girls Circle participants were examined exclusively in a pre-post study design that compared data from baseline and follow-up periods to assess change throughout the intervention. To assess impacts of the Girls Circle intervention, paired samples t-tests were conducted for 14 measures across 4 families of outcomes: (1) risky behavior (substance use and sexual behavior); (2) psychosocial assets; (3) school aspirations and expectations; and (4) perceived body image. The scales presented are composite measures based on other questions related to the variables indicated. For these composite measures, higher numbers are indicative of more frequent occurrence of the outcome variable. The majority of the comparisons revealed no significant differences between baseline and follow-up measures for program participants, excluding one significant difference regarding sexual activity (binary measure). Key findings are highlighted in Table 3.5.

Substance Use

Marijuana and alcohol use were measured using a scale of ordinal responses ranging from 0-4, with higher values indicative of more frequent use. Aggregate scores related to alcohol use increased slightly, from a mean of 0.24 at baseline to 0.26 at follow-up. Aggregate mean scores regarding marijuana use did decrease slightly from 0.458 to 0.354 during the intervention period. Percentages related to each category of substance abuse for pre- and post-test measures are displayed in Table 3.6. The analyses revealed no statistically significant differences from baseline to follow-up on these characteristics,

indicating that the Girls Circle intervention had no measurable effect on participants' substance use.

Sexual Practices

Recent sexual activity (within the past 90 days) was examined at the aggregate level to assess changes in sexual promiscuity before and after the Girls Circle program. Frequency of condom use within the past 30 days was assessed ordinally, with responses ranging from 1-4. Girls Circle participants averaged 1.82 at baseline and 2.04 at follow-up (both paralleling a response of "a few times"). Number of partners in the past 3 months increased from an average of 0.68 to 0.72 throughout the intervention period. None of these results were statistically significant, indicating that

Table 3.6. Self-Reported Alcohol and Marijuana Use: Girls Circle Participants						
MEASURE PRE-TEST POST-TEST						
Alcohol Use	N = 112	N = 50				
Not at all	74.1%	75.5%				
A few times	25.0%	22.4%				
Many times	0.9%	2.0%				
Marijuana Use	N =112	N = 48				
Not at all	63.4%	70.2%				
A few times	26.8%	23.4%				
Many times	6.3%	6.4%				
Every day	3.6%	0.0%				
No significant differences.	-					

statistically significant, indicating that the treatment did not impact number of sexual partners nor condom use frequency.

The number of sexual encounters within the past 3 months was measured using an ordinal scale ranging from 0-5, with the Girls Circle group averaging 1.38 at baseline and 1.9 at follow-up, a significant difference (t=-2.38; p<.05). A composite measure ranging from 0-3 was used to assess overall risky sexual behaviors (including the number of partners), for which the Girls Circle group experienced a statistically significant increase from 0.887 to 1.2 when examined at the aggregate level (t=-2.436; p<.05).

Further regression analyses indicated that age was a significant predictor of risky sexual behavior scores at pre-test (t=4.1; p<.001) and post-test (t=2.08; p<.05) while controlling for Girls Circle participation. Similarly, age was significantly and positively related to the number of sexual encounters within the past 90 days at pre-test (t=3.92; p<.001) and post-test (t=2.28; p<.05). Age was also significantly related to the sexual activity binary measure at baseline (t=5.5, p<.001).

It is possible that the increase in sexual behavior is related to the increasing development of the girls or other covariates. For instance, the likelihood of sexual intercourse by the 12th birthday is less than 10 percent for girls. By the 14th birthday, the likelihood of sexual intercourse is up to 20 percent or less for girls; and by the 16th birthday, the probability of sexual intercourse is at about 40 percent or less for most girls (except for African American females [55 percent] [Cavazos-Rehg et al. 2009]). Moreover, other research has shown that when controlling for age, onset of sexual intercourse was strongly associated with substance use, school attachment problems, antisocial peer association, depression, and overall delinquency (Zimmer-Gembeck and Helfand 2008).

Psychosocial Assets

Five composite scales were developed to measure empathy, self-efficacy, responsibility, self-control, and social support. Aggregate mean scores were similar when comparing pre- and post-test results. Throughout the intervention period, Girls Circle participants' responses on the empathy scale decreased slightly from 2.81 to 2.78. Similarly, responses on the self-efficacy scale decreased from 3.07 to 3.05,

and the responsible choices score decreased from 3.37 to 3.34. Similarly, the mean score for the selfcontrol measure decreased from 2.79 to 2.65. Social support aggregate scores increased, from a mean of 3.85 at pre-test to 3.94 at post-test. None of these changes were statistically significant, indicating that the Girls Circle intervention did not significantly affect girls' psychosocial assets.

Body Image

Body image was assessed using a six-item physical appearance scale, with scores ranging from 1-5. Aggregate mean scores were similar when comparing Girls Circle participants' baseline and follow-up assessments. During the intervention period, body image scores decreased minimally from 4.54 to 4.51. This comparison was not statistically significant, indicating that the Girls Circle intervention did not impact levels of positive body image.

C. DOSAGE

Regression analyses were conducted to examine the effects of dosage on selected outcomes related to delinquency and risky behavior, psychosocial assets, school-related aspirations and expectations, and positive body image. Several regressions were run on 14 outcome measures, while controlling for pretest and dosage (i.e., number of sessions attended). Like the previous paired samples t-test analysis, the scales presented are composite measures, based on questions related to the variables indicated. For these composite measures, higher numbers are indicative of more frequent occurrence of the outcome variable. Interestingly, unlike the bivariate analysis, some outcomes were significantly moderated by number of sessions attended. Key findings are highlighted in Table 3.7.

Table 3.7. Dosage Effects: Girls Circle Group						
Оитсоме	N		TEST STATISTIC	P-VALUE		
Risky Behavior						
Alcohol Use Scale: 0-3	50	0.183	1.4	0.168		
Marijuana Use Scale: 0-3	48	0.044	0.30	0.764		
Sexual Encounters Last 3 Months, Scale: 0-5	50	-0.353	-0.92	0.361		
Condoms Used Last 3 Months, Scale: 1-4	50	1.14	2.82	0.007**		
Number of Partners in Last 3 Months	50	0.086	0.68	0.499		
Risky Sexual Behaviors Scale: 0-3ª	50	-0.166	-0.77	0.444		
Psychosocial Assets						
Empathy Scale: 1-4	50	-0.163	-1.55	0.128		
Efficacy Scale: 1-4	49	-0.210	-1.17	0.247		
Responsibility Scale: 1-4	49	-0.066	-0.41	0.687		
Self-Control Scale: 1-4	49	-0.335	-2.17	0.035*		
Social Support Scale: 1-5	50	-0.042	-0.18	0.856		
Education						
Educational Aspirations Scale: 1-5	45	0.618	4.65	≈0.00***		
Educational Expectations Scale: 1-5	48	0.86	3.43	0.001***		
Perceived Body Image						
Body Image Scale: 1-5	49	-0.072	-0.37	0.711		
^a If a respondent reported no sexual intercourse, the measure is set to 0. The scale ranges from 0 to 3, with higher values equating to riskier behavior. * $p \le .05$. ** $p \le .01$. *** $p \le .001$						

Risky Behavior

Like the bivariate analysis, neither the number of sexual encounters nor the number of partners in the past 3 months was related to attendance. In contrast, the frequency of condom use within the past 30 days was significantly moderated by the number of sessions attended (p=.007; β =0.231). The positive coefficient of 0.231 shows that for every one-unit increase in sessions attended, the girls' scores on the condom use scale increased by about 0.231 points. In other words, girls who attended the Girls Circle group sessions were more likely to use condoms during intercourse. Moreover, the unfavorable associations among the number of partners and overall risky sexual behavior within the intervention group disappear when the number of sessions attended is accounted for. Again, this negates the iatrogenic effect observed in the bivariate analysis. Finally, regressions indicate that neither alcohol use nor marijuana use were related to Girls Circle program attendance.

Psychosocial Assets

Five composite scales were developed to measure empathy, self-efficacy, responsibility, self-control, and social support. Self-control scores were significantly related to attendance ($p\approx.000$; $\beta=0.677$). Counterintuitively, the negative coefficient for the attendance covariate revealed that for every increase in number of sessions attended, Girls Circle participants' self-control decreased by about 0.335 points, on average.

Education

Regression analyses indicated some change in school aspirations and expectations for Girls Circle participants throughout program duration. Educational expectations and aspirations were both measured ordinally ranging from 1-5, with higher numbers representing greater educational aspirations and expectations. Educational expectations were significantly associated with program attendance (p=.001; β =0.86). The attendance covariate shows a positive coefficient of 0.86, meaning that for every one-unit increase in number of sessions attended, girls' school expectation scores increased by about 0.86 points, on average. Similarly, girls' scores on the educational aspirations scale also increased by about 0.62 points on average for every additional session attended (p≈.000; β =0.62). In other words, the Girls Circle program intervention appears to have had a positive effect on both school aspirations and well as school expectations.

Perceived Body Image

Aggregate mean scores for perceived body image were not significantly related to the number of sessions attended.

D. OUTCOME ANALYSIS

Post-program recidivism was based on the official crime history reports of each girl. The survival analysis examined post-intervention delinquency using the following four measures to assess reoffending: probation violation, delinquency petition, arrest, and any event (i.e., petition or arrest). These measures are indicators of the occurrence of offending behavior. Violations are typically used to measure probation noncompliance that may or may not constitute a new crime. While arrests remain the most popular and convenient measure of crime available, delinquency petitions can be used interchangeably to constitute a juvenile arrest. With that in mind, the final measure assessing recidivism includes petitions *or* arrests (post-intervention), and from this point forward will be referred to as "any event."

Separate multivariate survival models were used for each of the four recidivism outcome measures. These survival analyses depict whether there are differences in recidivism rates of juveniles participating in the Girls Circle program versus those in the control group, while controlling for dosage.

Recidivism

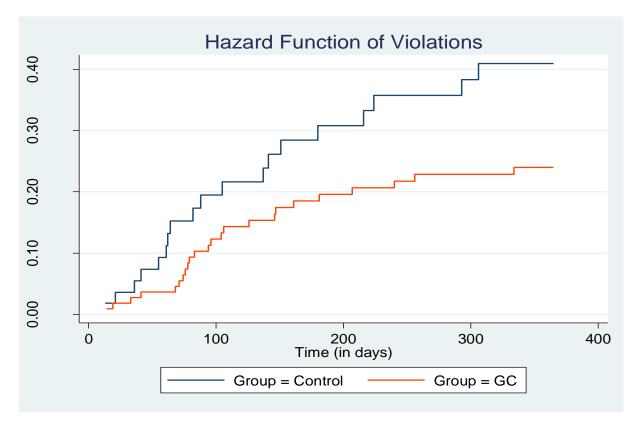
GENERAL. First, an examination of bivariate statistics indicate that Girls Circle participants (21.4 percent) are no more likely than their non-Girls Circle counterparts (33.9 percent) to receive a probationary violation ($\chi^2 = .306$, n.s.). Additionally, Girls Circle participants (34.8 percent) are equally likely to be rearrested when compared to the control group (42.9 percent, $\chi^2 = .310$, n.s.). The percentage of girls who received petitions post-program was also identical between groups (12.5 percent of each group, $\chi^2 = 0.0$, n.s.). In terms of post-program events, bivariate analysis again showed no significant differences between the groups, with 35.7 percent of the Girls Circle participants and 44.6 percent of the non-Girls Circle probationers who received any event (petition or arrest) at some point after program intake ($\chi^2 = 1.25$, n.s.).

Following the bivariate analyses, a multivariate survival analysis (Cox regression) was used to examine recidivism rates of the two groups while accounting for varying times at risk (from program intake until occurrence of the specified event). Each measure was transformed into the time until the event by subtracting the date of the program entry from the date of the event. Survival times were censored at 365 days if the event did not occur within the first year. The final survival model presented in this report included controls for intervention condition (Girls Circle = 1) and attendance (number of sessions attended).

	CONTROL	GIRLS CIRCLE	HAZARD RATIO		GOODNESS OF FIT
Measure	N= 56	N= 112	(95% CI)	P-VALUE	χ^2 (P-value)
Violations					11.69 (0.002**)
Group Status			0.998 (0.516, 1.933)	0.996	
Attendance			0.843 (0.744, 0.956)	0.008**	
Rate (%)	33.9%	21.4%			
Mean Survival Time in Days (Standard Deviation)	282 (128)	312 (108)			
Arrests					5.68 (0.055)
Group Status			1.089 (0.617, 1.923)	0.769	
Attendance			0.912 (0.837, 0.994)	0.035*	
Rate (%)	42.9%	34.8%			
Mean Survival Time in Days (Standard Deviation)	270 (134)	285 (129)			
Petitions					1.17 (0.55)
Group Status			1.285 (0.469, 3.522)	0.625	
Attendance			0.927 (0.805, 1.068)	0.296	
Rate (%)	12.5%	12.5%			
Mean Survival Time in Days (Standard Deviation)	329 (96)	336 (85)			
Arrests/Petitions					6.81 (0.033*)
Group Status			1.087 (0.622, 1.899)	0.769	
With Attendance			0.905 (0.831, 0.986)	0.023*	
Rate (%)	44.6%	35.7%			
Mean Survival Time in Days (Standard Deviation)	265 (136)	283 (129)			

Notes: All models control for dosage (i.e., sessions attended). Offender survival times were censored at 365 days if the event did not occur in the first year. Two hazard ratios are presented for each dependent variable, with the first one denoting Intervention group and the latter denoting attendance. * $p \le .05$. ** $p \le .01$. *** $p \le .001$

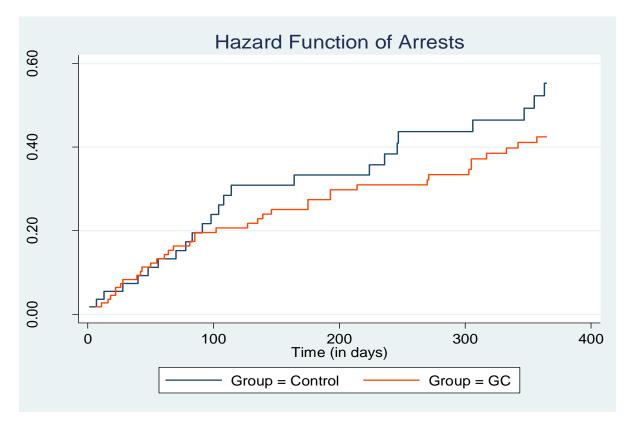




PROBATION VIOLATIONS. During the course of a supervision period, a juvenile may violate conditions of probation (technical violation) without actually committing a new crime. Table 3.8 provides information on probation violations among those assigned to the Girls Circle intervention compared with the control group. Specifically, the table reports the percent of control and intervention groups who violated probation, along with the mean survival times, hazard ratios, and associated confidence intervals for time to violation following program intake. The second model presented in this report compares the two groups using a binary measure of whether a violation occurred during the intervention period, while controlling for dosage (i.e., the number of Girls Circle sessions attended).

As indicated above, 33.9 percent of the control group received a new violation, compared to 21.4 percent of the Girls Circle participants (χ^2 =0.306, n.s.). However, when controlling for dosage (i.e., sessions attended), results indicated that a one-unit increase in the number of sessions attended was correlated with a 15.7 percent reduction in the likelihood that one violates probation, as demonstrated by the hazard ratio. This finding was significant at the alpha level 0.01. In addition, an examination of the mean survival time indicates that, on average, the first post-program violation for the control group occurred around 9.4 months (282 days), compared to the average survival time of 10.4 months (312 days) for the Girls Circle group—a difference of about one month, favoring the Girls Circle group. Figure 1 shows the hazard function curves for probation violations for both Girls Circle and control groups. Specifically, it depicts a pattern where violation rates are higher for the control group than for the Girls Circle participants, and this gap increases gradually throughout the yearlong study period.

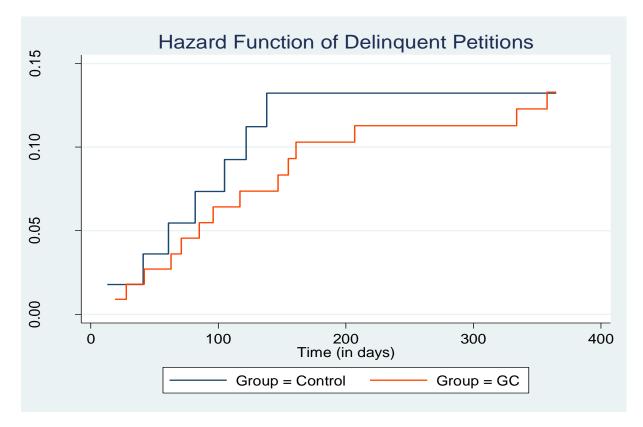




ARREST. Table 3.8 provides information on re-arrests among those assigned to the Girls Circle intervention compared with the control group. Specifically, the table reports the percent of control and intervention groups who were re-arrested, along with the mean survival times, hazard ratios, and associated confidence intervals for time to re-arrest following program intake. The final model presented in this report compares the two groups using a binary measure of whether re-arrest occurred during the intervention period, while controlling for the number of Girls Circle sessions attended.

Nearly 43 percent of the control group was re-arrested throughout the year following baseline assessments, compared with 34.8 percent of the Girls Circle group ($\chi^2 = 0.310$, n.s.). However, when controlling for dosage (i.e., sessions attended), results indicated that a one-unit increase in number of sessions attended was significantly correlated with an 8.8 percent reduction in the likelihood that one is re-arrested, as demonstrated by the hazard ratio. This finding was significant at the alpha level 0.05. In addition, an examination of the mean survival time indicates that on average the first post-program arrest for the control group occurred around 9 months (270 days), compared with the average survival time of 9.5 months (285 days) for the Girls Circle group—a difference of about 2 weeks, favoring the Girls Circle group. Figure 2 shows the hazard function curves for re-arrest rates for both groups. As shown in the figure, re-arrest rates are initially very similar between groups for approximately the first 3 months. Throughout the yearlong study period, overall re-arrest rates increased for both groups, with the control group re-arrests increasing at a higher rate. In sum, this graph is consistent with other results that length of time spent in the Girls Circle program is positively correlated with more favorable arrest outcomes.

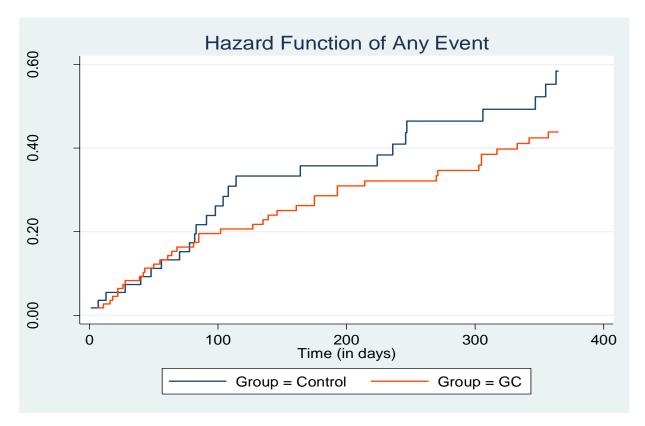




DELINQUENT PETITION. Table 3.8 provides information on subsequent petitions among those assigned to the Girls Circle intervention compared with the control group. Specifically, Table 3.8 reports the percent of control and intervention groups who were re-petitioned, along with the mean survival times, hazard ratios, and associated confidence intervals for time to re-petition following program intake. The final model presented in this report compares the two groups using a binary measure of whether a petition occurred during the intervention period, while controlling for dosage.

Nearly 13 percent of the control group and the treatment group were re-petitioned throughout the year following baseline assessments ($\chi^2 = 0.0$, n.s.). A one-unit increase in the number of sessions attended was correlated with a 7.3 percent reduction in the likelihood that one is re-arrested, as demonstrated by the hazard ratio, but this finding was not statistically significant. In addition, an examination of the mean survival time indicates that, on average, the first post-program petition for the control group occurred around 11 months (330 days), compared with the average survival time of 11.2 months (336 days) for the Girls Circle group. Figure 3 shows the hazard function curves for delinquent petition rates throughout the study period. As shown in Figure 3, petition rates are similar between groups, specifically at the beginning and end of the study period. As the petition rates increased over time for both groups, petition rates for the control group appeared higher than those for the Girls Circle group from approximately months 4 through 11. There were however no statistically significant differences in the hazard ratio for delinquent petitions (p=0.625), which also did not appear to be moderated by attendance (p=0.296).





ANY EVENT. Table 3.8 provides information on recidivism as defined by any event (petition *or* arrest) among those assigned to the Girls Circle intervention compared to the control group. Specifically, Table 3.8 reports the percent of control and intervention groups who had an event, along with the mean survival times, hazard ratios, and associated confidence intervals for time to event following program intake. The final model presented in this report compares the two groups using a binary measure of whether either event occurred during the intervention period, while controlling for dosage (i.e., the number of Girls Circle sessions attended).

Almost 45 percent of the control group experienced either event throughout the year following baseline assessments, compared to 35.7 percent of the Girls Circle group ($\chi^2 = 1.25$, n.s.). Like that of probation violations and arrests, however, when controlling for dosage, the results indicated that a one-unit increase in the number of sessions attended was correlated with a 9.5 percent reduction in the likelihood that one receives any event, as demonstrated by the hazard ratio. This finding was significant at the alpha level 0.05. An examination of the mean survival time indicated that, on average, the first post-program event for the control group occurred at about 8.8 months (265 days), compared to the average survival time of 9.4 months (283 days) for the Girls Circle group—a difference of about three weeks favoring the Girls Circle group. Figure 4 shows the hazard function curves for event rates, where re-arrest/petition rates initially appear similar between groups for approximately the first 3 months. Throughout the yearlong study, overall event rates increased for both groups, with the control group recidivism rates increasing at a higher frequency. This graph is consistent with other results, suggesting that the longer duration of time spent in the Girls Circle program is indicative of more favorable recidivism outcomes.

4. Process Evaluation

A. OVERVIEW

In conjunction with the outcome evaluation, a process evaluation was conducted to assess the service delivery and comprehensively understand the context in which the program was delivered. Assessing service delivery requires comparing program implementation with what it should have done. This requires determining whether the subjects receive the services with the proper integrity, quality, and in the prescribed quantity.

An assessment of service delivery is important because many programs that fail to show an impact typically failed to deliver the services as specified (i.e., implementation failure). Thus, among programs that do not demonstrate success, it is useful to distinguish between those that were implemented correctly and those that were not.

In general, there are three types of implementation failure (Rossi, Lipsey, and Freeman 2004). First, if the subjects don't receive the *sufficient level of services* with integrity, any observation of the intended outcomes may be viewed with skepticism. Second, the services may be *delivered incorrectly* as the result of poorly trained or motivated staff. In this case, while the services received by the participants may resemble the intended treatment, poor knowledge and proficiency regarding the program activities renders it an inferior facsimile. And third, services that leave too much discretion during implementation can *vary significantly across sites* which make conclusions regarding the impacts difficult to assess. Ideally, a written protocol or manual will describe the intended services, how they are to be delivered, and in what amount. In addition, staff delivering the services should also be adequately trained.

This process evaluation assessed three components of service delivery of the Girls Circle program in Chicago:

- 1. Adherence (or integrity): Whether the program services are being delivered as designed (i.e., with all core components being delivered to the appropriate population; staff trained appropriately; using the right protocols, techniques, and materials; and in the locations or contexts prescribed).
- 2. **Exposure (or dosage):** The measured quantity of a program. It may include any of the following: the number of sessions implemented, the length of each session, or the frequency with which program techniques were implemented.
- 3. **Quality of delivery:** The manner in which a teacher, volunteer, or staff member delivers a program (e.g., skill in using the techniques or methods prescribed by the program, enthusiasm, preparedness, or attitude).

B. DATA Sources

Three sources were used to collect data for the process evaluation:

- 1. Program observation data
- 2. Attendance data
- 3. Key leader interviews, probation staff interviews, and focus groups with staff and participants.

Program Observation Data

A program fidelity instrument was developed to observe and rate the implementation of the Girls Circle model. The tool was adapted from the Girls Circle quality-assurance tool. It contains 28 close-ended questions distributed across five domains, with several targeted objectives within each domain (see Appendix B for the instrument). The domains were divided between adherence (group preparation, curriculum integrity, and environment) and program delivery (group facilitation skills and communication skills).

A rater was asked to note the degree to which the facilitator effectively met the targeted objectives within each domain by using the following scale:

- 1. Missed: No visible signs of implementation. Or completely incorrect.
- 2. Nearly met: Some signs of implementation, but implementation is not complete.
- 3. Met: Basic implementation occurs correctly.
- 4. Exceeded: Clear evidence of proficient implementation. Exceeds basic requirements.
- 5. Not applicable: No opportunity to observe.

Two site visits were conducted by the One Circle Foundation to assess program fidelity, the first in June 2013 and the second in August 2013. Each program fidelity site visit was conducted by a quality assurance coach who, in both cases, was the Girls Circle program senior training manager.

Attendance Data

The presence of each treatment subject at a Girls Circle session was tracked through an attendance sheet, which the group facilitator filled out during the course of the study, and it was collected by the Girls Circle program liaison, who entered the attendance data into the Girls Circle tracking database. The attendance sheets were then transmitted to DSG. The number of Girls Circle sessions attended was aggregated for each treatment subject to create a measure of Girls Circle dosage.

Interviews, Observations, and Focus Groups

Process-oriented site visits and interviews were conducted by the principal and co-principal investigator in February and November 2012 to understand the context in which the program was delivered. Separate hour-long interviews were held with three judges, the deputy chief probation officer (DCPO), and eight probation supervisors and probation officers. Interviews were also held with an intern and the director of juvenile probation. In addition, focus groups were held with six Girls Circle facilitators.

C. PROGRAM FIDELITY

The first fidelity site visit produced a global (adherence combined with program delivery) fidelity score of 2.63 and the second site visit score was 3.20 (The scores ranged from 1 to 4 with 1=no visible sign of implementation; and 4=clear evidence of proficient implementation), indicating a somewhat uneven application of the program throughout the course of the evaluation period. The narrative report from the quality assurance coach confirms the results.

In the first fidelity site visit, the group session was attended by six girls (one of them for the first time and one girl who returned after not attending since the beginning). In the narrative report of the visit, the quality assurance coach noted that While the facilitator(s) demonstrates familiarity with Girls Circle curriculum in content...fidelity and adherence to the Girls Circle program model is not reflected during this observation...The session was run as a fairly typical "girls group" and at times tending towards more of a psychoeducational or teaching approach. The lack of meaningfulness in utilizing the six-step model, not engaging girls by eliciting peer support and social connection, as well as not recognizing the relevance of trauma and establishing safety as a priority is indicative of an overall inconsistency, and lack of fidelity to the Girls Circle model. The minimum expectation in observing this program was to ensure that Cook County was providing girls a safe space to express themselves in their own authentic voices while experiencing a sense of belonging with other girls, making healthy connections in a supportive group of peers and adults as they explore the complexities and challenges of their adolescent experiences through guided activities and discussion in the predictable and consistent application of the six-step model, which was not evident.

The quality assurance coach noted a number of deficiencies, including:

- Lack of meaningful implementation;
- Inadequate preparation of the room and space for the session;
- No posting of or reference to group guidelines of agreements, establishing behavior guidelines or suggesting group agreement on how to treat one another;
- No sharing of the leadership by the facilitators;
- Facilitators used a teaching/presentation approach, rather than facilitating from within the group as part of the group;
- Inconsistent attendance of the subjects;
- Inadequate meeting space which undermines predictability and consistency which is core to the GC model.
- No true discussion in either the verbal activity or the sharing of activity after the collage creative activity.

Interestingly, the finding from the quality assurance coach's observations in the second visit contrasted strikingly with the first:

[It] was an excellent demonstration of the Girls Circle program in fidelity, effectiveness and the spirit of a gender-specific approach.....[She] is a skilled facilitator with not only a depth of understanding juvenile programming, group facilitation skills, curriculum content, female adolescent development; she also models the core values and principles of the Girls Circle program in her compassion, enthusiasm, engagement, and care of and for the girls in her group.

In reaching this conclusion, the quality assurance coach noted a number of strengths, including:

- The six steps of the model were well demonstrated in the session;
- The facilitator guided the girls through the Girls Circle process with confidence and ease, maintaining the structure of the group without overtly controlling or directing.
- The facilitator was well-prepared ahead of time and ensured the room and the circle were ready and inviting to the girls upon their arrival.
- The facilitator followed the curriculum with confidence and a sense of practice, understanding the purpose of activities and the Girls Circle process to engage the girls in true to life topics

while in the context of developing and influencing them in pro-social thinking to reduce risky behaviors.

Table 4.1. Adherence					
DOMAIN	ASSESSMENT 1	ASSESSMENT 2			
Group Preparation	1.50	3.00			
Curriculum Integrity	2.88	3.25			
Environment	2.33	3.33			
Adherence Total	2.54	3.23			

• The facilitator's familiarity and connection with the program is evident in her work directly with the girls as the girls respect her, connect with her, and have fun with her within established healthy boundaries and role modeling. She easily participates in the circle, sharing about herself and her thoughts, while maintaining high expectations of the girls, fostering resiliency.

In contrast to the first observed group, the QA noted that "this was an excellent observation of Girls Circle." The facilitator clearly demonstrated fidelity in the quality of her delivery, facilitation, and engagement of the program.

Adherence

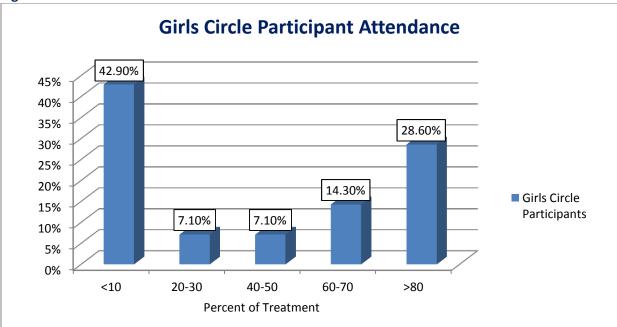
Adherence (or integrity) refers to whether the program service or intervention is being delivered as it was designed or written (i.e., with all core components being delivered to the appropriate population; staff trained appropriately; using the right protocols, techniques, and materials; and in the locations or contexts prescribed). As shown in table 4.1, adherence was measured via three domains: group preparation, curriculum integrity, and environment. Like the global fidelity rating, a comparison of the first and second fidelity assessment periods reveals inconsistent and conflicting adherence scores. The first assessment period produced an overall adherence score of 2.54, indicating that the program facilitators failed to meet basic implementation standards. The second assessment period revealed an overall fidelity score of 3.23, indicating that the program facilitators slightly exceeded basic implementation standards. While the second assessment period outscored the first in each dimension, the largest discrepancy was in group preparation, validating the qualitative observations.

Program Delivery

Program delivery is the manner in which a teacher, volunteer, or staff member delivers a program (e.g., skill in using the techniques or methods prescribed by the program, enthusiasm, preparedness, or attitude). It was measured through two distinct domains: facilitation skills and communication skills. Again, like the global fidelity rating and overall adherence, program delivery was erratic between the two assessment periods. Similar to the adherence scores, the first assessment period produced an overall program delivery score of 2.71, indicating that the quality of delivery among the program facilitators failed to meet basic implementation standards. The second assessment period produced an overall fidelity score of 3.17, indicating that the quality of the program delivered by the facilitators increased to exceed the basic implementation standards. Finally, the second assessment period outscored the first on facilitation skills, but both visits scored a 3.0 on communication skills.

Table 4.2. Program Delivery						
DOMAIN ASSESSMENT 1 ASSESSMENT 2						
Facilitation Skills	2.56	3.29				
Communication Skills	3.00	3.00				
Program Delivery Total	2.71	3.17				





Exposure

Exposure (or dosage) refers to the measured quantity of a program. It may include any of the following: the number of sessions implemented; the length of each session; or the frequency with which program techniques were implemented. In this case, exposure was assessed through the attendance data. It was used to calculate both program coverage and individual exposure. Program coverage is a global measure defined as the extent to which the target population achieves the full scope of the program specified in the program design. It is calculated as the ratio of total number of program sessions received to the total number of program sessions expected.

An assessment of program coverage suggests that exposure to the program was low with less than half (42 percent) of the recommended dosage received by the participants. The overall program exposure was expected to cover 1,120 program sessions (112 subjects x 10 sessions), but the actual coverage was only 471 sessions.

The individual level data confirms the aggregate assessment. Individually, only 79 of 112 (71 percent) treatment subjects attended at least one session of a Girls Circle panel. On average, these subjects attended roughly four sessions per panel (mean=4.15) with a range of 0-15 sessions¹. In fact, as described in figure 1, 42.9 percent of the subjects received less than 10 percent of the prescribed dose,

¹ The combination of some low attendance panels permitted some subjects to attend more than the required number of sessions (N=10).

with the majority of these minimal dose cases (70.8 percent) resulting from subjects who never attended a Girls Circle session despite being assigned to the Girls Circle group and court ordered to attend. On the other end of the spectrum, an equally sizable portion of the sample received a full or nearly full dose of the program, with 43 percent of the participants receiving 60 percent or more of the prescribed dose. Moreover, of the participants who attended at least one session, the average number of attended sessions jumps up to from four to six (mean=5.96).

Overall, 11 Girls Circle panels were conducted. The panels are described in more detail below:

- ✓ Panel A was initiated on July 14, 2011. No girls attended the panel². All girls were invited to participate in the next panel.
- ✓ Panel B was initiated on Oct. 4, 2011 and ended December 13, 2011. Five girls attended at least one session.
- ✓ Panel C was initiated on Nov. 19, 2011, and ended on April 14, 2012. Seven girls attended at least one session.
- ✓ Panel D was initiated on Jan. 11, 2012, and ended on April 18, 2012. Ten girls attended at least one session.
- ✓ Because of low attendance, Panel EF was formed by combining Panel E and Panel F. Panel EF was initiated on March 27, 2012, and ended June 19, 2012. Twelve girls attended at least one session.
- ✓ Panel G was initiated on June 26, 2012, and ended on Sept. 12, 2012. Six girls attended at least one session.
- ✓ Panel H was initiated on July 31, 2012, and ended on Oct. 30, 2012. Seven girls attended at least one session.
- ✓ Panel I was initiated on Sept. 5, 2012, and was completed Jan. 9, 2013. Nine girls attended at least one session.
- ✓ Panel J was initiated on Oct. 27, 2012, and was completed on Feb. 2, 2013. Four girls attended at least one session.
- ✓ Because of scheduling conflicts, Panel KL was formed by combining Panel K and Panel L. Panel KL was initiated on March 27, 2013, and was completed on June 13, 2013. Thirteen girls attended at least one session.
- ✓ Panel M was initiated on June 19, 2013, and was completed on Sept. 23, 2013. Six girls attended at least one session.

D. Program Context

Two process-oriented site visits were made to the Chicago Girls Circle program during the course of the study to observe and assess the context in which the program was delivered. The first was held on Feb. 16-17, 2012, and the second on Nov. 14, 2012. During these site visits, interviews were held with three judges, the deputy chief probation officer, eight probation supervisors and probation officers, an intern, and the director of juvenile probation. In addition, a focus group was held with six Girls Circle facilitators. As mentioned in Chapter 2, biweekly phone calls with the DCPO and Girls Circle staff were held throughout the entire project. Also, the DSG program liaisons observed sessions throughout the entire data collection period.

² See discussion on attendance problems for more details.

Throughout the study, the PI and Co-PI were continually apprised of any issues. Chief among the issues were:

- Recruitment of girls into the study
- Attendance of the girls at the Girls Circle sessions
- Probation officer attitudes toward the program
- Frequency of incentives
- Mixing girls of varying stages of development in circles
- Locating girls for the follow-up

The discussion that follows is based on an analysis using all of the data sources cited above. Below is a discussion of each major issue.

Recruitment Issues

Several recruitment issues caused accrual problems and prolonged the data collection period. First, judges did not refer girls into the program at the rate that had been anticipated. In interviews with the judges, they expressed support for the Girls Circle program and its potential positive impact on girls. However, they said that other judges may not remember to mandate girls into the program and other programs, such as Multisystemic Therapy, are considered more important. They also suggested that some judges might not be aware of the program or have not "bought into" the program.

To remedy this, the judges requested that the adjudicator be told to remind judges of the Girls Circle program's availability at the time of the court hearing and that probation officers add it to social investigations and on court orders. They also asked the DCPO to attend the judges' monthly meetings to encourage all judges to order girls into Girls Circle and bring them back to court if they don't attend.

Also, it was noted that, after a girl on probation was identified to take part in the study, the process of randomization was generally implemented smoothly and effectively. Interns were trained each semester to approach parents about the study and conduct the consent process. Protocols were followed. Parents generally assented and girls consented on the day of the hearing, and treatment and control group girls took the survey (generally on the same day as the hearing). The main consent issue that arose was when cases were continued. In these instances, girls and their families would leave the courtroom before the intern could approach them to recruit them into the study and obtain assent and consent. This made considerable work for the DCPO and intern to then travel to the girl's house to obtain assent and consent and administer the baseline survey.

To remedy this, girls and their families were asked to remain in the courtroom after the hearing and wait for the DCPO or the intern to talk to them about the study. It was also suggested that the PO could assist with the consenting process when a parent or guardian didn't sign the form at the court hearing. However, POs did not see this as part of their job and rarely carried this out.

Attendance and Attrition Issues

From the beginning of the Girls Circle implementation, poor attendance at group sessions and high attrition were major problems. Prior to the start of group meetings, it was decided by the planning group³ that a Girls Circle group should not be initiated if there were fewer than five girls in attendance. The One Circle Foundation staff said that between six and eight girls was the "magic number" for a

³ The planning group consisted of the PI, Co-PI, deputy chief probation officer, One Circle Foundation president and director of training, and met every two weeks throughout the study.

session to be effective. However, starting with the pilot test in March 2011, while six girls were selected for the pilot, only three attended. Generally, if 10 girls were scheduled to attend a weekly session, only three or four actually attended (sometimes fewer). After this, the DCPO invited at least 20 girls before starting a new group.

There were many reasons for the girls' poor attendance, chief among them was that the Juvenile Probation and Court Services Department (JPCSD) did not, for the most part, choose to violate girls for failing to meet the conditions of their probation. Thus, POs did not convey to the girls that they had to go to the Girls Circle program. For example, by August 2011, the DCPO reported that 80 girls had been invited to attend the Girls Circle program but only 11 had shown up to an assigned group. Several discussions were held with the DCPO, the OJJDP program manager, and others regarding the need to put more "teeth" into the program and provide more consequences if girls violated probation. It was clear, however, that this was not going to happen, primarily because the Circuit Court of Cook County was under a consent decree that mandated a reduction of overcrowding in its detention center. Violating girls for probation violations would only increase the detention population.

Other reasons for attendance problems included:

- During the first year, bus cards or tokens were provided to girls at the end of each meeting so they could get home and return the following week (\$2.25 each way). This generally did not increase attendance, because girls either lost, gave away, or sold the bus tokens.
- Because circles were held at the court after school (generally starting at 4 p.m. or 4:30 p.m.), some parents complained that their children were getting home too late; others said that girls had other appointments or activities after school that took priority.
- Girls were told at study intake that their attendance was voluntary, though the judge had ordered them into the program. Some probation staff and the interns said that girls were sometimes confused about whether the program was voluntary or required.
- Some girls had to report to the Evening Reporting Center program, which conflicted with attending the Girls Circle program.⁴

Numerous attempts were made to improve girls' attendance and reduce attrition. When girls did not have tokens or did not live on bus routes, Girls Circle staff would sometimes drive them home as a last resort. In November 2012, the JPCSD assumed the transportation costs of a van and driver, who transported girls to and from home on Saturdays, and drove girls home after Wednesday-night sessions. While more costly, this solution proved highly effective in improving attendance. It also provided the program liaison and facilitator an opportunity to continue to bond with the girls, and girls could continue to bond with each other and friend each other on Facebook.

Starting sessions earlier in the day and holding Saturday sessions were other successful solutions. While at first, the Saturday sessions did not improve attendance, they became very popular over time. There were issues regarding time-and-a-half pay for facilitators who were probation officers. Especially when the court's budget was cut and furloughs were initiated, this extra money was no longer available. However, to avoid the overtime pay issue, Saturday sessions were conducted voluntarily by the DCPO or with other non-JPCSD staff.

⁴ The court considered implementing the program at the Evening Reporting Center but a private room large enough for the program was not available.

One other solution that had mixed results was holding Girls Circle in the community. Up until then, sessions were held at the court. It could take girls from the north side of Chicago about an hour-and-a-half to get to the court. It was thought that community settings on the north side, south side, and central section of Chicago would save girls considerable travel time. One problem with this was that not enough girls to make a group were coming just from the north or south side and some lived much closer to the court, so there wasn't always a sufficient number of girls in a group to warrant moving the program to a particular community location. Eventually, several community locations were selected and groups were held at the South Side Community Center and in a church location, Precious Blood. However, several mothers said that the church was in too dangerous a location since their daughters had to cross rival gang territory to get there. Because of this, use of that location was discontinued for a while. In May 2012, it was decided that the community locations were not leading to improved attendance and they were discontinued for a time but started up again at Precious Blood in March 2013, with some girls being picked up and driven home.

A number of additional techniques were tried (with limited success) to improve attendance and reduce attrition. These included:

- Texting and calling the girls the day before and the day of the Girls Circle session. The main problem with this was that girls change cell phones frequently and the numbers are disconnected so this had little effect.
- Handing out a postcard with information about the session on it (also had little effect).
- Referring girls who missed three or more sessions to the Evening Reporting Center as a sanction for a 21-day sentence or adding girls sentenced to the Evening Reporting Center as a source of referrals (this was also not pursued because some ERC girls were not adjudicated and it was not possible to randomly assign these girls into the study).
- Having the probation officers call the girls who don't show up and tell them they must attend or they will be brought back to court. The DCPO encouraged increased contact with the probation officers and, while this solution did not gain much traction at first, it was repeatedly brought up as a solution. In the probation officers/supervisors focus group, it was clear that they were not incentivized to handle this problem. However, in the last year and a half of the study, the DSG program liaison was instructed to contact the PO when a girl did not show up. The PO was asked to contact the girl and tell her to attend. After the second missed session, the PO was instructed to inform the judge. Also, in March 2012, the director of juvenile probation held meetings with the POs (there are 350 POs in the Cook County Circuit Court), and informed them that girls who did not attend Girls Circle would have to be called back to court. This combination of activities, along with improved transportation, significantly improved attendance.

Probation Officer Attitudes Toward Girls Circle

In the focus group with POs and probation supervisors, several participants said that they thought the Girls Circle program was "fantastic." They felt it was good for growth and development and a way to channel girls' energy. However, some POs said that their probationers were refusing to attend and did not feel that they had to. They suggested that Girls Circle should be more "fun" and that perhaps it could be more "like a club or sorority." They also said that state's attorneys don't know about Girls Circle and the DCPO needed to meet with them so it is made a part of their social investigation. They also did not think PO supervisors know the Girls Circle program is court ordered and that the program needs to be "sold" more to POs. One PO suggested that one of them could bring a girl who has been through the program to the meeting with the state's attorneys. After the focus group, the DCPO initiated meetings with the seven probation divisions so they could encourage girls' attendance, which proved to be helpful

to reduce attrition.

Frequency of Incentives

Girls were given \$15 gift cards for taking the baseline survey. Given the low attendance at the first session, the planning group decided that girls needed an additional incentive to show up at the initial session. Girls were given an additional \$15 gift card at the first session and told that they would be eligible for a \$500 gift card raffle when they completed all 10 sessions. An extra gift card was also given at the sixth session. As an added incentive, girls' attendance at Girls Circle would count toward community service hours.

The DCPO and facilitators felt that food provided an incentive for girls to attend each session. However, under the rules for Office of Juvenile Justice and Delinquency Prevention (OJJDP) grants, food could not be charged to the grant. During the first year of implementation, DSG had asked for a waiver of this rule and additional funding to cover food, since it was considered essential to successful implementation. However, this additional funding was not forthcoming. As a result, the DCPO and the facilitators took over the responsibility of purchasing or preparing food for each session on their own, at no cost to the study. DSG and OJJDP expressed their gratitude to the Juvenile Probation and Court Services Department during a meeting in November 2012.

Mixing Girls of Varying Stages of Development in Circles

The focus group with Girls Circle facilitators elicited positive and negative experiences with conducting circles. Some facilitators said that girls could be resistant to talking in the beginning and that facilitators need to understand the population. It took time to establish trust, especially in the sessions about girls' feelings and problems with their mothers. Facilitators felt that these sessions about getting along with their mothers should be pushed back later and more time should be spent on it, perhaps making it into two sessions. They asked for advice on this from the One Circle Foundation trainers.

Facilitators also expressed concern about mixing girls in different stages of development in the same group. For example, in one Saturday group, two girls had babies, one was pregnant, and one was younger and not sexually active. Facilitators said they were uncomfortable with this mix of girls and needed additional guidance from the One Circle Foundation trainers on how to handle this group. They suggested that the program may want to limit the mix of ages in a group and set up a group for girls who are parents.

Locating Girls for the Follow-up Survey

The DSG program liaison administered the follow-up survey. Numerous methods were used to locate girls to take this survey. Girls received postcards, phone calls, and emails that asked them to take the online survey. They were sent another gift card as a thank you for taking the survey. The program liaison noted that it took numerous emails and phone calls to get through to the girls.

E. Summary

The Girls Circle program demonstrated a poor degree of fidelity across each dimension. An assessment of exposure suggests that 50 percent of the participants received less than 30 percent of the recommended dosage. And, even when subjects attended the program sessions, the adherence and quality of program delivery was uneven at best.

For adherence, three domains in the Girls Circle fidelity checklist were used to assess whether the facilitators properly prepared for the group (group preparation), program services were provided using the correct protocols and materials (curriculum integrity), and in the locations or contexts prescribed (environment). The two fidelity assessment periods revealed an inconsistent and unbalanced implementation of the Girls Circle program. The first assessment period produced an adherence rating of 2.54, indicating that the program facilitators failed to meet basic implementation standards. The second assessment period revealed an adherence rating of 3.23, indicating that the program facilitators slightly exceeded basic implementation standards.

Similarly, for program delivery, two domains of the Girls Circle fidelity checklist were used to assess the facilitation (facilitation skills) and communication (communication skills) techniques of the group facilitators. Like that of adherence, the two assessment periods revealed irregular application of the program. The first assessment period generated a program delivery rating of 2.71, indicating that the quality of delivery among the program facilitators failed to meet basic implementation standards. The second assessment period produced a rating of 3.17, indicating that the quality of the program delivered by the facilitators increased to exceed the basic implementation standards.

The temporal sequencing of these improved ratings in both adherence and program delivery suggest that the program facilitators experienced some early implementation problems common to newly installed programs. It takes time for both organizers and implementers to gain proficiency with newly assigned activities. And then, throughout the course of a program, the facilitators become more adept with the activities and apply the program protocols in a more suitable and accomplished manner.

However, a closer examination revealed that both assessment periods occurred toward the end of the evaluation period, negating evidence of a learning curve. It is possible that the learning curve was exceedingly steep or the poor scores of the first assessment period provided constructive feedback that prompted better-quality application. But, an equally likely culprit for the cause of fluctuating program adherence was the disproportionate skill level of the facilitators. Different facilitators were leading the groups in each of the two assessment periods. Unfortunately, data from only two assessment points make it impossible to disentangle the two hypotheses.

Finally, an assessment of program coverage found that the program fell short of full coverage. The ratio of total number of program sessions received to the total number of program sessions was 0.42. In other words, if all treatment subjects attended each of the 10 group sessions the program coverage was expected to yield 1,120 discrete program sessions (112 subjects x 10 sessions), but the actual coverage yielded only 471 sessions. While a sizable portion (43 percent) of the sample received a full or nearly full dose of the program (60–80 percent or more of the prescribed dosage), 14.2 percent received 20–50 percent and 43 percent of the treatment subjects attended only one session of a Girls Circle panel. This contrast suggests that those participants who were curious or interested enough to participate in a session or two may have become engaged, enthusiastic, or otherwise motivated enough to participate fully.

5. Discussion

A. SUMMARY

Many researchers and practitioners have argued the need for gender-specific programming to address the unique issues of girls in the juvenile justice system, in part, because girls differ developmentally from boys (Acoca 1999; American Bar Association and National Bar Association 2001). However, only a few earlier studies have examined the effectiveness of gender-specific programs; even fewer focused on female juvenile offenders.

In their assessment of programs for system-involved girls, Zahn and colleagues (2009) reviewed both gender-specific and gender-nonspecific programs implemented *with girls*. They uncovered only nine evaluations of gender-specific programs. Just two of these evaluations involved randomized, controlled research designs, and neither found any effects on recidivism.

The results of this Girls Circle study add to the body of literature concerning gender-specific programs for girls involved in the juvenile justice system. Contrary to previous research, the findings of this study suggest that gender-specific programming may be useful in reducing the delinquent behavior of girls.

The randomization procedure produced well-matched groups that revealed no statistically significant differences between groups. Baseline equivalence was tested by comparing the groups on 47 different variables, using independent sample t-tests for continuous measures and chi-square tests for binary measures. These measures included demographics, family/household information, sexual practices, personal responsibility, school attitudes and enrollment, positive/negative peer influences, substance use, and offense history. Despite these baseline similarities, a clear pattern of divergence in delinquency-related outcomes emerged at the 1-year post-program study period.

Overall, the results appear to favor the Girls Circle group in reducing recidivism; however, these findings were strongly moderated by the number of sessions attended. That is, the number of sessions attended was a significant predictor of reduced odds of re-offending when considering arrests, violations, and events.

There were no significant differences between groups with regard to petitions, regardless of dosage. Cox proportional hazards models (controlling for intervention group and attendance) showed that the number of days until recidivism—as measured by an arrest, delinquent petition, any event, and probation violation—was typically greater for the Girls Circle participants than their non-Girls Circle counterparts. It showed that a one-unit increase in the number of sessions attended was correlated with an 8.8 percent reduction in the likelihood that a participant would be re-arrested, as demonstrated by the hazard ratio. Since the groups were statistically equivalent at baseline, these reductions in recidivism were likely due to the intervention.

Conversely, Girls Circle participants did not exhibit any positive short-term (from intake to program completion) improvement in the four families of outcomes examined:

- 1. Risky behavior (substance use and sexual behavior)
- 2. Psychosocial assets
- 3. School aspirations and expectations

4. Perceived body image

The pre/post-test comparison indicated that the subjects in the Girls Circle group were generally unaffected by the intervention with regard to substance use, educational expectations and aspirations, empathy, personal responsibility, social support, positive body image, condom use frequency, and number of sexual partners in the last 3 months. Upon program completion, girls were no less likely to engage in drug use. Additionally, levels of empathy, responsibility, social support, and body image remained unimproved post intervention. The binary measures of sexual activity, number of sexual encounters in the past 3 months, and overall risky sexual behaviors all increased significantly from preto post-test. However, further analyses revealed age to be a significant predictor of these phenomena. Thus, it is unlikely that these increases resulted directly from the intervention.

In contrast to the bivariate analysis above, controlling for the number of sessions in the dosage analysis showed a significant increase in average condom use, educational aspirations, and educational expectations. That is, as attendance in the Girls Circle groups increased, average condom use, educational aspirations, and educational expectations also significantly increased.

Counterintuitively, the Girls Circle participants' average self-control scores significantly decreased. One possible explanation for this finding is that the Girls Circle subjects initially may have felt in control of their lives. But, revealing and acknowledging their past behaviors in the group setting may have caused them to recognize a lack of effective impulse control or emotion management that led to one or more negative or destructive events in their lives, which resulted in lower, *rather than higher*, scores in measures of self-control at the post-test.

This study also provides evidence regarding program fidelity (i.e., degree to which the program services were delivered as designed). Three dimensions of fidelity were reviewed: adherence, quality of delivery, and exposure. Despite encouraging delinquency-related findings, the Girls Circle program demonstrated a poor degree of fidelity across each dimension; an assessment of exposure suggests that 50 percent of the participants received less than 30 percent of the recommended dosage. And, even when subjects attended the program sessions, the adherence and quality of program delivery was uneven at best.

In terms of adherence, three domains in the Girls Circle fidelity checklist were used to assess whether

- 1. The facilitators properly prepared for the group (group preparation);
- 2. Program services were provided using the correct protocols and materials (curriculum integrity); and
- 3. Program services were provided in the locations or contexts prescribed (environment).

The findings suggest an inconsistent and unbalanced implementation of the Girls Circle program. The first assessment period produced an adherence rating of 2.54, indicating that the program facilitators failed to meet basic implementation standards. The second assessment period revealed an adherence rating of 3.23, indicating that the program facilitators slightly exceeded basic implementation standards. Similarly, with program delivery, two domains of the Girls Circle fidelity checklist were used to assess the group facilitators' facilitation (facilitation skills) and communication (communication skills) techniques. Like that of adherence, the two assessment periods revealed irregular implementation of the program.

Finally, an assessment of exposure found that the program fell short of full coverage. While a sizable portion (29 percent) of the sample received a full or nearly full dose of the program (80 percent or more

of the prescribed dosage), only 79 of 112 (71 percent) treatment subjects attended at least one session of a Girls Circle panel. This stark contrast may suggest that those participants who were curious or interested enough to participate in a session or two may have become engaged, enthusiastic, or otherwise motivated enough to participate fully.

B. PRACTICAL AND POLICY IMPLICATIONS FOR IMPLEMENTING GENDER-SPECIFIC PROGRAMS

Recent research suggests that men and women, as well as boys and girls, are much more similar than they are different. An analysis of 46 meta-analyses conducted in the 1980s and 1990s found that men and women are more or less alike in terms of personality and cognitive ability. Specifically, the researchers found that men and women from childhood to adulthood are more alike than different on most psychological variables, resulting in the "Gender Similarities Hypothesis" (Hyde 2005).

Nevertheless, there is quite a bit of research that finds that women differ from men in certain areas or dimensions, including physiological and psychological traits. Some of these differences are further influenced by environmental factors. For example, beyond the obvious (e.g., height and weight differences), men differ from women in terms of several important physiological traits, including both the neuroanatomy and neurochemistry of the brain. While these differences are not well understood, it is possible or even likely that these differences have critical implications for practical functioning (Ngun et al. 2011). (For a thorough review of the research on biological gender differences, see Ngun et al. 2011).

As for psychological traits, research has shown small gender differences in the following domains: mathematics performance, verbal skills, certain personality dimensions (e.g., gregariousness and conscientiousness), reward sensitivity, negative affectivity, relational aggression, tentative speech, certain aspects of sexuality (e.g., oral sex experience, attitudes about extramarital sex, and attitudes about masturbation), leadership effectiveness, self-esteem, and academic self-concept. Domains in which gender differences are larger include certain visuospatial dimensions (e.g., 3-D mental rotation), certain personality dimensions (e.g., agreeableness), sensation-seeking behavior, interest in things versus people, physical aggression, certain sexual behaviors (masturbation and pornography use), and attitudes about casual sex (Hyde, 2014). (For a thorough review of the research on psychological gender differences, see Hyde 2014).

Can these small differences, or perhaps an accumulation of small differences, make a big difference? Certainly, in other areas of human development, the answer is unequivocally "yes." For instance, Charles Darwin in 1871 surmised that humans were evolutionarily closer to the African apes than to any other species alive. The sequencing of the gorilla and chimpanzee genomes confirms that supposition and provides a clear view of how connected humans are to chimps and gorillas, as chimps share approximately 99 percent of our DNA and gorillas share 98 percent (Wong 2014). Yet, that tiny portion of unshared DNA makes a world of difference; it offers humans a bipedal stance, the ability to build cities, harness electricity, fly airplanes, and send a spacecraft to the far boundaries of our solar system, among many other things.

Similarly, if these aforementioned gender differences are genuine, the question then is: How do these albeit perhaps small variances in physiology and psychology manifest differently in men and women's functioning, development, and behavior? And thus how do these differences play a role in the efficacy of diverse treatment modalities? In other words, do girls respond to therapeutic treatments differently

than boys? And, is there a fundamental need for gender-specific programming to address the unique issues of girls? If so, what should this programming look like?

The sections below focus on the practical and policy implications of the findings from this Girls Circle study in terms of these policy and programming issues.

Support for Gender-Specific Programming in the Juvenile Justice System

The previous evidence for the efficacy of gender-specific programming is sparse (Chesney–Lind, Morash, and Stevens 2008; Zahn et al. 2009). In fact, previous research on gender-specific programming in a juvenile justice context has found little evidence of a positive effect. For example, a randomized trial of the RYSE program, which aims to prevent girls from returning to the juvenile justice system or entering the criminal justice system, found no effect on recidivism (National Council on Crime and Delinquency 2001; Zahn et al. 2009). Similarly, while a randomized controlled trial of the WINGS program, an intensive alternative probation program that uses home visitation and services to address the needs of girls in the juvenile justice system, found that participants were more likely to successfully complete probation; there was little difference in delinquency and criminal activity.

Conversely, using a quasi-experimental design with a propensity score matched sample of 188 detained youth, Day and colleagues (2015) found that compared to traditional programming, gender-responsive programming was associated with a lower risk of recidivism for girls with gender-sensitive risk factors but a higher risk of recidivism among girls without these factors.

Other gender-specific programs have produced favorable results, but they were evaluated using less rigorous research designs. For example, girls who participated in HEART, a modified therapeutic community model program for girls ages 12–18 who are incarcerated for substance abuse and have intensive substance abuse treatment needs, improved more than the comparison group in their use of social support, perceived support of friends, peer acceptance, family relationships, educational status, and school engagement (Kirk and Griffith 2004). In addition, Wisconsin Department of Corrections (2005) researchers found that, relative to the comparison group, fewer girls who participated in SOGS Stepping Up, a specialized unit in a residential treatment facility that provides individualized treatment and educational programming for girls ages 13–19 with acute mental health issues, had at least one adult arrest within 2 years of exiting the program. Girls in the program also had fewer total charges, were charged with fewer person and felony-level offenses, and had fewer direct transfers to adult prison and state mental health institutions.

The Girls Circle study supports the use of gender-specific programming as a means for reducing recidivism. While there was little evidence to support improvements in the psychosocial outcomes, it is the first randomized controlled trial of a gender-specific program to find a reduction in delinquency-related outcomes. In terms of policy implications, the Girls Circle study suggests that programs designed specifically for girls in the juvenile justice system may be useful in reducing recidivism. If so, it is likely important to construct such a program through a therapeutic approach that reflects both the relational model advocated by the gender-responsive literature (see below) and the cognitive-behavioral model supported by evaluations of gender-nonspecific programs (see for example Lipsey, Chapman, and Landenberger 2001; Pearson et al. 2002; Wilson, Bouffard, and MacKenzie 2005).

Support for Relational-Cultural Theory

The Girls' Circle model is based on the relational-cultural theory (RCT) of female psychology, identified and developed by Miller (1991) and refined in relation to adolescent girls by feminist and relational

theorists and scholars (Brown and Gilligan 1992; Ward 2000; Jordan 1991; Ross–Leadbeater and Way 1996). RCT is a theoretical orientation built on the assumption that meaningful, shared connection with others leads to the development of a healthy self. And, while both genders need both connection with others as well as differentiation from others, women and girls are more inclined to connection while men and boys are more inclined toward differentiation (Jordan 1997). Bylington (1997) explained this connection:

Theoretically, girls perceive themselves to be more similar than different to their earliest maternal caretakers, so they do not have to differentiate from their mothers in order to continue to develop their identities. This is in contrast to boys, who must develop an identity that is different from the mother's in order to continue their development. Thus, women's psychological growth and development occur through adding to rather than separating from relationships. Consequently, defining themselves as similar to others through relationships is fundamental to women's identities (p. 35).

While there is limited direct empirical evidence to support the theory, James Q. Wilson (1993), in a review of the existing literature on the difference between men and women, observed that women appear to "assign a higher value to ongoing relationships than do men" (p. 181). As evidence, he noted research by Major and Deaux (1982), who found that when a woman has performed better than her partner in some common task, she tends to split the reward equally, while a man will divide the reward equitably (in proportion to the value that each contributed). Most importantly, however, these findings hold true only under one important condition: the participants expect to have further interactions with their partners. When they don't—when they perform the task with somebody they never expect to see again—men and women allocate rewards in the same way.

Little empirical research has assessed the application of RCT to prevention research. Nevertheless, one such study examined a manualized RCT model for women who received psychotherapy services in a community-based setting. The study collected data on five occasions between initial screening and 6 months post-treatment (Oakley, Addison, and Piran 2004). Participants reported

- Significant improvement between pre- and post-therapy on measures of depression, anxiety, alexithymia, self-silencing, self-esteem, and psychological well-being;
- Attainment of treatment goals; and
- Maintenance of gains at 3- and 6-month follow-ups.

Another study that found support for RCT compared short-term cognitive behavior therapy and RCT groups for women who were either diagnosed with bulimia nervosa or binge-eating disorder (Tantillo and Sanftner 2003). Participants were randomly assigned to the groups, both of which were offered a manualized, 16-week intervention. Data on frequency of binge episodes, frequency of vomiting episodes, bulimic behaviors, depression, and mutuality was collected on five occasions between baseline and 12 months post-treatment. The researchers reported that the treatments were equally effective, although participants in the RCT group reported higher levels of perceived mutuality with other group members.

More recent research, however, suggests that not all girls may respond to gender-responsive programs in the same way. For instance, Day and colleagues (2015) found that girls with histories of trauma and who displayed issues with depression/anxiety, anger/irritability, alcohol/drug use, and somatic complaints responded better to a relational approach while girls who did not have similar past

experiences and who lacked the same degree of social-psychological problems responded better to traditional programs that targeted general criminogenic factors. The researchers hypothesized that girls who do not exhibit these gender-sensitive risk factors may find a relational approach frustrating, because it requires them to deal with problems they just do not have, thus rendering the treatment ineffective or, even worse, harmful.

The results of the Girls Circle study tentatively support the growing body of literature about RCT, in that it is useful for at least a subset population of girls who experience gender-sensitive risk factors. While this study controlled for psychosocial assets, it did not specifically test for the interaction of gendersensitive risk factors, making it impossible to differentiate the findings for each group of girls. Nevertheless, the implication of this body of research is that the more the relational approach is employed via gender-responsive programs, the better some girls tend to respond. Again, while strong evidence was not found for most of the psychosocial outcomes one would expect, significant results among the main findings of delinquency were observed, which suggests that encouraging girls to talk about their emotions instead of focusing on their externalized behaviors is an effective way of addressing delinquency for some girls.

Support for Motivational Interviewing

The findings of the Girls Circle study support the application of motivational interviewing with female juvenile offenders. Girls Circle used motivational interviewing techniques within the RCT framework to stimulate critical thinking and moral reasoning through creative activities and guided discussions.

Developed by Miller and Rollnick (2002), motivational interviewing is a directive, client-centered counseling style for eliciting behavior change by helping clients explore and resolve ambivalence. Compared with nondirective counseling, it is more focused and goal-directed (Rollnick and Miller 1995). It involves an empathic, conversational style of therapy in which professionals and clients work together to discover the client's own reasons to make positive behavioral changes and strengthen their commitment to change. Selective interview questions are meant to evoke and strengthen an individual's subtle motivations to change, while the counselor supports, encourages, and helps the client overcome barriers to transformation (Miller and Rollnick 2002). The technique requires the counselor to identify and address uncertainties toward change in an effort to solidify and sustain one's change strategy. Overall, the transformation process should be purely self-directed via the self-exploration and mindfulness obtained throughout the interview process (Grenard et al. 2006).

Originally designed to treat adults with substance abuse problems, motivational interviewing has expanded to include a range of problem behaviors, such as smoking, gambling, or eating disorders (Gayes and Steele 2014). While the majority of empirical support has been with substance-using populations (Smedslund 2011), there is a growing body of evidence related to the effects of motivational interviewing for the treatment of other health concerns and age groups (Gayes and Steele 2014). For example, Lundahl and colleagues (2010) examined 119 studies of motivational interviewing that targeted various outcomes, including substance use (tobacco, alcohol, drugs, marijuana), health-related behaviors (diet, exercise, safe sex), gambling, and engagement in treatment variables. Overall, the authors found that motivational interviewing produced statistically significant, durable results in the small effect range (average g = 0.28); although, when judged against specific treatments, it produced no significant results (average g = 0.09).

The Girls Circle study contributes to this body of motivational interviewing research by suggesting that it can potentially be useful in contexts outside that of dealing with substance use problems. Moreover,

given the relational nature of the motivational interviewing process, it has the potential to be wellsuited as a method for treating girls who display gender-sensitive risk factors, such as trauma, depression, and somatic symptoms (Day et al. 2015).

Focus on Proper Implementation

The findings of this study support the notion that proper program implementation is vital to positive program results. The process assessment compared the plan for what the program should have done with what it actually did. It determined whether the subjects received the services with the proper integrity, quality, and prescribed quantity.

Such an assessment is vital to the interpretation of the results, because many programs that fail to deliver the services as specified (i.e., implementation failure) are unlikely to make an impact. For example, in a meta-analysis of over 500 controlled studies, Lipsey and colleagues (2010) identified implementation factors as key program characteristics associated with positive effects on recidivism. Specifically, among the four characteristics found to be most relevant when considering what works best for reducing subsequent offense rates, the two implementation factors discussed below stood out as the most salient.

Exposure: Treatment Dose or Amount. Lipsey and colleagues (2010) noted that for each program type, recidivism reductions were associated with the duration of the service (days from start to termination) and total contact hours of service the juvenile received. To obtain at least the average effect on recidivism for that program type, the program duration and hours of contact must at least reach the average values for the programs of that type included in the meta-analysis.

In this study, an assessment of exposure found that the majority of subjects in the Girls Circle program did not receive a full dose of the program. In fact, 42.9 percent of the treatment group received less than 10 percent of the prescribed dosage, thus making it difficult to have an impact on the lives of the girls. Several issues contributed to this lack of program attendance—chief among them, many judges failed to mandate girls into the program in favor of other treatment options. Further, due to the court order mandating a reduction in the court's detention center population, probation officers were unable to coerce attendance by threat of reprimand. Finally, transportation to the program remained a problem throughout the duration of the study, making it difficult for girls to attend the sessions even if they wanted to.

On the other hand, when these implementation obstacles were transcended, an equally sizable portion (43 percent) of the sample received a full or nearly full dose of the program (60 percent or more of the prescribed dosage). This blunt contrast may suggest that those participants who were curious or interested enough to participate in a session or two may have become engaged, enthusiastic, or otherwise motivated enough to participate fully. More importantly, however, this participation appears to have led to positive results in terms of delinquent behavior, lending support to the notion that dosage is a critical element of intervention programming.

Program Delivery Quality. The quality of the program implementation is also an important factor, directly related to the magnitude of the program effects (Lipsey et al. 2010). While this aspect is not well-reported in many of studies, indications of problems (e.g., high dropout rates, staff turnover, poorly trained personnel, and incomplete service delivery) are often associated with smaller effects.

Many of the aforementioned implementation issues were evident in the implementation of the Girls

Circle program in Chicago. For instance, site visits with program staff suggested that many probation officers failed to embrace the program as a significant and valuable treatment option. Instead, officers continued to prioritize traditional departmental services over the Girls Circle program. And, as if to confirm the anecdotal evidence, the first assessment period generated a program delivery rating of 2.71, indicating that the quality of delivery among the program facilitators failed to meet basic implementation standards. The second assessment period produced a rating of 3.17, indicating that the quality of the program delivered by the facilitators increased to exceed the basic implementation standards.

The temporal sequencing of improved ratings in adherence and program delivery suggest that program facilitators experienced some early implementation problems common to newly installed programs, since it takes time for service providers to gain proficiency with newly assigned activities. And then, throughout the course of the program, the facilitators became more adept with the activities and applied the program protocols in a more suitable and accomplished manner.

However, a closer examination reveals that both assessment periods occurred toward the end of the evaluation period, thus negating evidence of a learning curve. While it is possible that the learning curve was exceedingly steep or the poor scores of the first assessment period provided constructive feedback that prompted better-quality application, an equally likely culprit for the cause of fluctuating program adherence was the disproportionate skill level of the facilitators, since different facilitators were leading the groups in each of the two assessment periods. Unfortunately, data from only two assessment points make it impossible to disentangle the two hypotheses.

Develop a Continuum of Integrated Programs and Sanctions

In a massive meta-analysis of all the available research on the effects of interventions for juvenile offenders, Lipsey (2009) demonstrated that the overarching philosophy of the program was particularly important in terms of recidivism. Program "philosophy" in this context was coded into two broad categories. The first category featured programs that included external control techniques for suppressing delinquency. The second, contrasting philosophy included programs that attempt to achieve behavioral change through a therapeutic regimen (i.e., improved skills, relationships, insight, etc.) (Lipsey et al, 2010).

When the mean effects on re-offense rates were compared for the programs associated with these two broad categories, the programs with a therapeutic philosophy were notably more effective than those with a control philosophy (Lipsey 2009). Lipsey and colleagues (2010) noted that the obvious implication from this research was that to boost the effects on recidivism, programs from the therapeutic categories should be favored over those from the control categories as much as possible.

The key phrase here is "as much as possible." One of the more important process evaluation findings of the Girls Circle study is that subjects in the treatment group as well as virtually all girls in the JPCSD were not sanctioned for technical violations of probation (more than 90 percent of the study subjects had no prior violations). The major reason for this reluctance is that JPCSD participates in the Juvenile Detention Alternative Initiative, which is a program designed to reduce reliance on local confinement of court-involved youth. As an initiative participant, JPCSD has taken the position that it will not sanction a juvenile offender for any technical violations (e.g., not attending a court-ordered treatment group). While this position may keep juvenile offenders out of detention and avoid the use of control techniques as a means of reducing recidivism, the unintended consequence of this policy is that young people (particularly those who are veterans of the juvenile justice system) may not receive the treatment

associated with the more therapeutic approach. Of particular importance for this study is that many girls quickly realized that there were no repercussions should they decide to abscond from the treatment group, despite the court order that mandated their attendance. Unsurprisingly, few girls consistently attended the Girls Circle program sessions or any other treatment service offered by the court.

To safeguard against this behavior, some sort of deterrence mechanism must be put in place. Deterrence is based on the notion that all behavior is the result of rational calculations of cost versus reward and that, to prevent crime, the costs must outweigh the expected rewards (Friedman and Savage 1948; Becker 1968; Block and Heineke 1973). In general, advocates of deterrence theory concentrate almost exclusively on manipulating the costs of crime through punishment. As a result, the majority of deterrence research concentrates on the three principles of punishment: severity, certainty, and celerity. While some research supports the deterrent effect of severe punishment (see Donohue 2009), the overall evidence for the severity of punishment is negligible (Decker, Wright, and Logie 1993; Nagin and Paternoster 1993). Also, punitive sanctions without services for youthful offenders have not demonstrated a significant effect on re-offending (Gatti et al. 2009).

Conversely, research has consistently demonstrated that when the certainty of punishment (both objective and perceived) is high, criminal behavior is deterred (Braga 2007; Weisburd and Braga 2006; Horney and Marshall 1992; Parker and Grasmick 1979; Paternoster et al. 1985). While much of this research involved adults, the principles of deterrence have been found to be more or less consistent with juveniles. Using longitudinal data on offending and perceptions of risks and punishment costs in a large sample of serious juvenile offenders, Loughran and colleagues (2011) identified significant heterogeneity in sanction threat perceptions generally and across different types of offenders. These differences in perception reflect variation among offenders in the amount of prior information of offending on which individuals may base their perceptions. There likely exists a potential ceiling and floor of sanction threat perceptions, indicating that there are deterrence boundaries beyond which some types of offenders may be more amenable to sanction threats, whereas others may be undeterred by sanction threats.

Consequently, policymakers should integrate deterrence-based sanctions into the overall therapeutic approach in order to provide judges the latitude to use their authority to sanction juvenile offenders who refuse to abide by court orders. One way to accomplish this is through the use of a continuum or graduated sanctions approach in which a response or sanction to a violation is balanced by the gravity of the offense, need for public safety, and the best interests of the offender. That is, a graduated system increases the likelihood that an offender with a serious violation will be incarcerated, while one who presents less danger is still sanctioned but in a less restrictive, less costly manner. Such a system also increases the probability of increased returns on treatment investments because the youth will be more likely to attend treatment services to avoid increased sanctions. Typical sanctions in such a system include more restrictive conditions on probation, increased structured supervision, substance abuse testing and monitoring, reprimands, and halfway house placement.

C. RECOMMENDATIONS

The findings and implications of this research generate seven important recommendations.

- This research suggests that programs designed specifically for girls in the juvenile justice system may be useful in reducing recidivism. As a result, we recommend the conservative application of gender-specific programming, pending more definitive research findings. Moreover, it is recommended that such programs be constructed using a therapeutic approach that reflects both the relational model advocated by the gender-responsive literature and the cognitivebehavioral model supported by evaluations of gender-nonspecific programs.
- 2. It is also recommended that policymakers maintain more traditional risk-based programming for those females who may not benefit from the gender-specific approach. Moreover, we recommend that girls be screened to determine their suitability for a gender-specific approach. The research to date suggests that gender responsive programming works for girls who are depressed, angry, traumatized, have substance abuse problems, or report high levels of somatic complaints (Day et al. 2015). Girls who do not display these gender-sensitive risk factors tend to benefit more from cognitive-behavioral programming. One useful tool to determine suitability is MAYSI-2, a paper-and-pencil self-report inventory of 52 questions designed to assist juvenile justice facilities in identifying youths 12 to 17 years old who may have special mental health needs. Of particular importance for gender-responsive programming are the seven subscales that include: Alcohol/Drug Use, Angry-Irritable, Depressed-Anxious, Somatic Complaints, Suicide Ideation, Thought Disturbance, and Traumatic Experiences. However, the MAYSI-2 is not without its limitations as it does not measure the source, severity, and chronicity of youths' experiences with trauma. Consequently, the field may benefit by developing more refined measures of gender-sensitive risk factors.
- 3. While the Girls Circle program offers manualized training and a number of other measures to ensure program adherence, it is recommend that the Girls Circle developers require follow-up training activities among localities that choose to implement the program, such as more frequent site visits, phone calls, booster training sessions for facilitators, as well as earlier and more frequent fidelity checking.
- 4. The implementation of the program, despite the best efforts of the program staff, was hampered by numerous issues that stemmed from an overall organizational resistance to change. Thus, it is recommended (and vital) for any program—even more so for a gender-specific program because it requires a shift in the conventional attitudes regarding how to address the needs of girls—to cultivate organizational cultures, climates, and contexts conducive to change in order to garner the support and cooperation of court and probation personnel to funnel subjects into the program.
- 5. The findings of this study demonstrate the effectiveness of Girls Circle in reducing recidivism, showing that a one-unit increase in the number of sessions attended was correlated with an 8.8 percent reduction in the likelihood that a girl would be re-arrested. It can be presumed that with improved program implementation and increased fidelity to the model, the Cook County JPCSD Girls Circle program could have had an even larger impact on recidivism. Thus, it is recommended that the Cook County JPCSD consider implementing Girls Circle "version 2.0" by

improving program implementation, increasing the court's referral mechanism, providing consistent transportation for participants, and putting "teeth" in the program to sanction girls who do not show up for treatment.

- 6. Organizational characteristics set the stage for successful program implementation, and these factors in turn ultimately impact the success of the program. Thus, it is recommended that outside sources, such as state or federal governments, focus evaluation funding on established programs embedded within the existing organizational structure that have a record of consistent, acceptable program implementation. Doing so will avoid the delays and resistance often associated with the implementation of new programs and/or the pitfalls of evaluating an under-developed version of the intended program due to poor program fidelity.
- 7. Given the required balance in any juvenile justice system between the desire for rehabilitation and the need for public safety, we recommend that policymakers integrate deterrence-based sanctions into an overall therapeutic approach in order to provide judges the latitude to use their authority to sanction juvenile offenders who refuse to abide by court orders. Such a system also increases the probability of increased returns on treatment investments because the youth will be more likely to attend treatment services to avoid increased sanctions.

D. LIMITATIONS

Several limitations of this study should be noted. While the randomization procedure appeared to produce equivalent groups, the chief limitation was that program attendance was generally inconsistent. There was no mechanism to enforce group attendance, and more savvy girls understood this court policy. As a result, it is possible the observed effect resulted from a selection issue and not the program. In other words, girls who attended the Girls Circle group were in some way different from girls who did not. As a result, additional analyses were conducted to explore whether there were any baseline differences between the girls who received the high or low dosage.

A series of one-way ANOVA tests compared the three dosage groups: no dosage (0 sessions attended), low dosage (1–6 sessions attended), and high dosage (7 or more sessions attended). One significant finding emerged. Groups differed significantly at baseline regarding whether they were enrolled in school (p = .01). Subsequently, a Bonferroni post-hoc test revealed that girls receiving no dosage differed significantly from the girls receiving a high dosage. Specifically, 67.6 percent of girls who received no dosage were enrolled in school at baseline compared to 94.9 percent of the girls in the high-dosage category, for a difference of approximately 27 percent (p = .01). No significant differences were found between the low-dosage group and the other two groups. Nevertheless, these differences suggest that the observed increase in educational aspirations and educational expectations may be the result of a selection effect rather than a program effect.

Program delivery is another limitation. Two aspects of program delivery are particularly troubling. First, an assessment of the program coverage found that the program fell short of providing a full dose to all participants. Second, the site visit data suggest that the treatment may have been delivered incorrectly as the result of poorly trained or motivated staff. Combined, these findings are significant because, in general, it is difficult to observe intended outcomes if participants do not receive a sufficient level of treatment. Nevertheless, contrary to the expectation under these circumstances, the results indicate that the number of sessions attended was a significant predictor of reduced odds of re-offending.

Another limitation is that outcomes were compared with subjects who received traditional probation services; not a cohort of untreated subjects. If the subjects in the Girls Circle group and the control subjects both had substantial and positive treatment effects of roughly equivalent magnitudes, this would register in the model as an observation of no difference in outcomes between groups. The design cannot comment on the absolute treatment effect but only on the apparent effect relative to that of the control group. This sets a difficult standard for demonstrating program effectiveness and likely results in a misleadingly conservative characterization of the Girls Circle program. However, if not placed in Girls Circle, the subjects in this study typically would have received traditional probation services. Thus, the comparison is quite relevant for policymakers trying to determine the best method of addressing delinquent behavior among juvenile females.

Similarly, a fourth limitation deals with other probation services. The treatment and control group subjects received a range of other treatment options, making it difficult to determine the precise impact of the Girls Circle treatment on the outcomes. While the range of services likely varied in quality across subjects and the effects likely washed away, all other rendered services were not specifically accounted for.

A further limitation was the lack of a control group for short-term outcomes derived from the survey data. While the treatment group subjects did not always, on average, demonstrate improvement across all of the psychosocial asset outcomes, it is possible that they remained stable in these areas while the control group subjects, on average, worsened.

A final limitation common to most research in this area is that the data used in the analyses were collected through official arrest statistics collected by the JPCSD of the Circuit Court of Cook County. Arrest data are collected only for those criminal and delinquent events that come to the attention of the police and result in an arrest (Hawkins et al. 2000). Crimes that do not come to the attention of public officials go undocumented, resulting in a clear underreporting of crime. In addition, changes in organization activities or policy can have an effect on official data, which should not be mistaken for changes in crime. Nevertheless, as long as the evaluator is aware of the potential pitfalls of these data and represents them in the report, official records are a valuable source of evaluation data.

E. NEXT STEPS

The study results warrant further investigation. For example, while the evaluation produced minimal findings in psychosocial outcomes, it is possible such effects could manifest at a later time. Consequently, a follow-up in terms of the psychosocial outcomes with the control group could add another potentially interesting dimension to the research. In addition, while a 1-year follow-up offers compelling evidence regarding the impact of the Girls Circle program on delinquency, it remains to be seen whether these findings are sustainable over a longer period of time.

Going forward, it may be helpful to examine the transformational pathway of juvenile offenders. Specifically, further research is warranted to disentangle the effects of education, mental health issues, and social connectedness on recidivism-based outcomes and whether the temporal order of these factors would affect program success. Some research exists regarding different pathways to offending, which can be moderated by various factors (Walters 2014a; Walters 2014b; Deutsch et al. 2012; Begle et al. 2011). Similarly, it would be helpful to understand whether specific pathways to desistance exist and,

if so, which might be significant moderators. It is possible that these pathways may vary based on gender, past trauma, mental health issues, or other past experiences. Thus, implications for future research include more critical analysis of these factors and the significance they have in the pathway to desistance.

References

 Aarons, Gregory A.; Jonathan D. Horowitz; Lauren R. Dlugosz; and Mark G. Ehrhart. 2012. "The Roles of Organizational Processes in Dissemination and Implementation Research." In Ross C. Brownson, Graham A. Colditz, and Enola K. Proctor (eds.) *Dissemination and Implementation Research in Health.* New York, N.Y.: Oxford, 128-153.

Acoca, Leslie. 1999. "Investing in Girls: A 21st Century Strategy." Juvenile Justice 4(1):3-13.

- Allison, Paul D. 2014. *Event History and Survival Models: Regression for Longitudinal Event Data*. Beverly Hills, Calif.: Sage Publications.
- American Bar Association and National Bar Association. 2001. Justice by Gender: The Lack of Appropriate Prevention, Diversion and Treatment Alternatives for Girls in the Justice System. Washington, D.C. <u>http://www.americanbar.org/content/dam/aba/publishing/criminal_justice_section_newsletter/cri</u> <u>mjust_juvjus_justicebygenderweb.authcheckdam.pdf</u>
- Bachman, J. G.; L.D. Johnston; and P.M. O'Malley. 2001. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors, 2000.* Ann Arbor, Mich.: Institute for Social Research, 380.
- Becker, Gary S. 1968. "Crime and Punishment: An Economic Approach." *Journal of Political Economy* 78:189-217.
- Becker, Stephen P.; Patricia K. Kerig; Ji-Young Lim; and Rebecca N. Ezechukwu. 2012. "Predictors of Recidivism among Delinquent Youth: Interrelations among Ethnicity, Gender, Age, Mental Health Problems, and Posttraumatic Stress." *Journal of Child & Adolescent Trauma* 5(2):145-60.
- Begle, Angela M.; Rochelle F. Hanson; Carla Kmett Danielson; Michael R. McCart; Kenneth J. Ruggiero;
 Ananda B. Amstadter; Heidi S. Resnick; Benjamin E. Saunders; and Dean G. Kilpatrick. 2001.
 "Longitudinal Pathways of Victimization, Substance Use, and Delinquency: Findings from the National Survey of Adolescents." Addictive Behaviors 36(7): 682-689.
- Berkeley Center for Criminal Justice. 2010. "Juvenile Justice Policy Brief Series: Gender Responsiveness and Equity in California's Juvenile Justice System." Berkeley, Calif.: University of California. https://www.law.berkeley.edu/img/Gender Responsiveness and Equity.pdf
- Biswas, Bipasha, and Michael G. Vaughn. 2011. "Really Troubled Girls: Gender Differences in Risky Sexual Behavior and its Correlates in a Sample of Juvenile Offenders." *Children and Youth Services Review* 33(11):2386-91.
- Block, Michael K., and John M. Heineke. 1973. "The Allocation of Effort Under Uncertainty: The Case of Risk Averse Behavior." *Journal of Political Economy* 81:376-85.
- Bloom, Barbara E.; Barbara Owen; Elizabeth P. Deschenes; and Jill Rosenbaum. 2002. "Improving Juvenile Justice for Females: A Statewide Assessment in California." *Crime & Delinquency* 48(4):526.
- Braga, Anthony A. 2007. "The Effects of Hot Spots Policing on Crime." *Campbell Systematic Reviews* 1:1-36.
- Brener, N.D.; L Kann; T. McManus; S.A. Kinchen; E.C. Sundberg; and J.G Ross. 2002. "Reliability of the 1999 Youth Risk Behavior Survey Questionnaire." *Journal of Adolescent Health* 31:336-42.

Brizendine, Louann. 2006. The Female Brain. New York, N.Y.: Broadway Books.

- Brown, L.M. and C. Gilligan. 1992. *Meeting at the Crossroads: Women's Psychology and Girls' Development*. Cambridge, Mass.: Harvard University Press.
- Buzawa, Eve S., and Gerald T. Hotaling. 2006. "The Impact of Relationship Status, Gender, and Minor Status in the Police Response to Domestic Assaults." *Victims & Offenders: An International Journal of Evidence-Based Research, Policy, and Practice* 1(4):323-60.

Bylington, D. 1997. "Applying Relational Theory to Addiction Treatment." In S.L.A. Straussner and E. Zelvin (eds.) *Gender and Addictions: Men and Women in Treatment*. Northvale, N.J.: Aronson, 33-45.

Cavazos-Rehg, Patricia A.; Melissa J. Krauss; Edward L. Spitznagel; Mario Schootman; Kathleen K.

Bucholz; Jeffrey F. Peipert; Vetta Sanders-Thompson; Linda B. Cottler; and Laura J. Bierut. 2009. "Age of Sexual Debut among U.S. Adolescents." *Contraception* 80(2): 158-162

- Cauffman, E. 2004. "A Statewide Assessment of Mental Health Symptoms among Juvenile Offenders in Detention." *Journal of the American Academy of Child and Adolescent Psychiatry* 43(4):430–39.
- Chauhan, Preeti; M.L. Burnette; and N.D. Reppucci. 2010. "Racial Disparities among Female Juvenile Offenders: The Contribution of Neighborhood Disadvantage and Exposure to Violence in Antisocial Behavior." *Court Review* 46(1-2):10-15.
- Chesney-Lind, Meda, and Randall G. Sheldon. 1998. *Girls, Delinquency, and Juvenile Justice (2nd ed.)*. Pacific Grove, Calif.: Brooks/Cole.
- Chesney-Lind, Meda; Merry Morash; and Tia Stevens. 2008. "Girls' Troubles, Girls' Delinquency, and Gender-Responsive Programming: A Review." *Australian and New Zealand Journal of Criminology* 41(1):162–89.
- Covington, Stephanie S., and Barbara E. Bloom. 2003. "Gendered Justice:Women in the Criminal Justice System." In Barbara E. Bloom (ed.) *Gendered Justice: Addressing Female Offenders*. Durham, N.C.: Carolina Academic Press.
- Davis, M.H. 1980. "A Multidimensional Approach to Individual Differences in Empathy". JSAS Catalog of Selected Documents in Psychology 10: 85.
- Davis, M.H. 1983. "Measuring Individual Differences in Empathy: Evidence for a Multidimensional Approach." Journal of Personality and Social Psychology 44, 113–126
- Dauber, Sarah, and Aaron Hogue. 2011. "Profiles of Systems Involvement in a Sample of High-Risk Urban Adolescents with Unmet Treatment Needs." *Children and Youth Services Review*, *33*(10):2018–26.
- Day, Jacob C.; Margaret A Zahn, and Lisa Tichavsky. 2015. "What Works for Whom? The Effects of Gender Responsive Programming on Girls and Boys in Secure Detention." *Journal of Research in Crime and Delinquency* 52(1): 93-129
- Debold, Elizabeth; Marie C. Wilson; and Idelisse Malave. 1993. *Mother Daughter Revolution: From Good Girls to Great Women*. New York, N.Y.: Bantam Books.
- Decker, Scott; Richard Wright; and Robert Logie. 1993. "Perceptual Deterrence among Actual Residential Burglars: A Research Note." *Criminology* 31:135–47.
- Deutsch, Arielle R.; Lisa J. Crockett; Jennifer M. Wolff; and Stephen T. Russell. 2012. "Parent and Peer Pathways to Adolescent Delinquency: Variations by Ethnicity and Neighborhood Context." *Journal of Youth and Adolescence* 41(8): 1078-1094.
- Donohue, J. 2009. "Assessing the Relative Benefits of Incarceration: The Overall Change over the Previous Decades and the Benefits on the Margin." In S. Raphael and M. Stoll, (eds.) *Do Prisons Make Us Safer? The Benefits and Costs of the Prison Boom*. New York, N.Y.: Russell Sage Foundation Publications.
- Elliott, Delbert S.; D. Huizinga; and S.S. Ageton. 1985. *Explaining Delinquency and Drug Use*. Beverly Hills, Calif.: Sage Publications.
- Friedman, Milton, and L.J. Savage. 1948. "The Utility Analysis of Choices Involving Risk." *Journal of Political Economy* 56:279–304.
- Foley, Allison. 2008. "The Current State of Gender-Specific Delinquency Programming." *Journal of Criminal Justice* 36:262–9.
- Funk, Stephanie J. 1999. "Risk Assessment for Juveniles on Probation." *Criminal Justice and Behavior* 26(44):44-68.
- Gaarder, Emily; Nancy Rodriguez; and Marjorie S. Zatz. 2004. "Criers, Liars, and Manipulators: Probation Officers' Views of Girls." Justice Quarterly 21(3):547–78.
- Gabriel, R.M. 1994. Self Enhancement, Inc. Violence Prevention Program, Grades 7, 8 and 9: Year 1 Evaluation Report. Portland, Or.: RMC Research Corporation. (Unpublished)
- Gainey, Randy R.; Brian K. Payne; and Mike O'Toole. 2000. "The relationships between time in jail, time

on electronic monitoring, and recidivism: An event history analysis of a jail-based program." Justice Quarterly 17(4):733–52.

- Gatti, Uberto; R.E. Tremblay; and F. Vitaro. 2009. "Iatrogenic Effect of Juvenile Justice." Journal of Child Pyschology and Psychiatry 50(8) 991-998.
- Gayes, Laurie, and R.G. Steele. 2014. "A Meta-Analysis of Motivational Interviewing Interventions for Pediatric Health Behavior Change." *Journal of Consulting and Clinical Psychology* 82(3): 521-35.
- Graves, Kelly N.; James M. Frabutt; and Terri L. Shelton. 2007. "Factors Associated with Mental Health and Juvenile Justice Involvement among Children with Severe Emotional Disturbance." *Youth Violence and Juvenile Justice*, *5*, 147-167.
- Greene, Peters, & Associates, and Northwest Regional Educational Laboratory. 1998. *Guiding Principles for Promising Female Programming: An Inventory of Best Practices.* Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Grenard, J.L.; S.L. Ames; M.A. Pentz; and S. Sussman. 2006. "Motivational Interviewing with Adolescents and Young Adults for Drug-Related Problems." *International Journal of Adolescent Medicine and Health* 18:53-67.
- Hawkins, Darnell F.; John H. Laub; Janet L. Lauritsen; and Lynn Cothern. 2000. *Race, Ethnicity, and Serious and Violent Juvenile Offending*. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Horney, Julie, and Ineke H. Marshall. 1992. "Risk Perceptions among Serious Offenders: The Role of Crime and Punishment." *Criminology* 30:574-92.
- Hossfeld, B., and G. Taormina. 1997. Girls Circle Facilitator Manual. Cotati, Calif.: One Circle Foundation.
- Hubbard, Dana J., and Betsy Matthews. 2008. "Reconciling the Differences Between the 'Gender-Responsive' and the 'What Works' Literatures to Improve Services for Girls." *Crime & Delinquency* 54(2):225-58.
- Huefner, Jonathan, and Alex Mason. 2009. "Examining Gender Differences in Adolescents in Residential Treatment." *Data News You Can Use!* 8(3):1-2.
- Huizinga, David; Shari Miller; and Conduct Problems Prevention Research Group. 2013. *Developmental Sequences of Girls' Delinquent Behavior*. Washington, D.C.: Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, Girls Study Group.
- Hyde, J.S. 2005. "The Gender Similarities Hypothesis." American Psychologist 60(6): 581.
- Hyde, J.S. 2014. "Gender Similarities and Differences." Annual Review of Psychology 65: 373-398.
- Johnston, L. D.; P.M O'Malley; J.G. Bachman; and J.E. Schulenberg. 2005. *Monitoring the Future National Results on Adolescent Drug Use: Overview of Key Findings, 2004*. Bethesda, Md.: National Institute on Drug Abuse.
- Jordan, Judith V.; Alexandra G. Kaplan; Irene P. Stiver; Janet L. Surrey; and Jean Baker. 1991. *Women's Growth in Connection: Writings from the Stone Center.* New York, N.Y.: Guilford Press.
- King, Devon C.; Karen M. Abram; Erin G. Romero; Jason J. Washburn; Leah J. Welty; and Linda A. Teplin. 2011. "Childhood Maltreatment and Psychiatric Disorders among Detained Youths." *Psychiatric Services* 62(12):1430-38.
- Kirk, R., and D. Griffith. 2004. End-of-Year Report to the Department of Juvenile Justice and Delinquency Prevention for State Fiscal Year 2004: Evaluation Summary of Assessment Information for Residents of the HEART and BEST Programs at the Samarkand Youth Development Center. Chapel Hill, N.C.: University of North Carolina, Chapel Hill, Jordan Institute for Families, School of Social Work.
- Irvine, A. 2005. *Girls Circle: Summary of Outcomes for Girls in the Juvenile Justice System*. Santa Cruz, Calif.: Ceres Policy Research.
- Irvine, A., and J. Roa. 2010. *Title II Evaluation: Gender Specific Program in Sonoma and Santa Cruz Counties 2007-2010*. Santa Cruz, Calif.: Ceres Policy Research.

- Lanctôt, Nadine; Marie-Hélène Ayotte; Mathilde Turcotte; and Thérèse Besnard. 2012. "Youth Care Workers' Views on the Challenges of Working with Girls: An Analysis of the Mediating Influence of Practitioner Gender and Prior Experience with Girls." Children and Youth Services Review 34 (11):2240-46.
- Lipsey, Mark. W. (2009). "The primary factors that characterize effective interventions with juvenile offenders: A meta-analytic overview." Victims and Offenders, 4: 124–147.
- Lipsey, Mark W.; Gabrielle L. Chapman; and Nana A. Landenberger. 2001. "Cognitive-Behavioral Programs for Offenders." Annals of the American Academy of Political and Social Science 578: 144-157.
- Lipsey, Mark W.; James C. Howell; Marion R. Kelly; Gabrielle Chapman; and Darin Carver. 2010. Improving the Effectiveness of Juvenile Justice Programs: A New Perspective on Evidence-Based Practice. Washington, D.C.: Center for Juvenile Justice Reform.
- Loughran, Thomas A.; Alex R. Piquero; Jeffrey Fagan; and Edward P. Mulvey. 2011. "Differential Deterrence: Studying Heterogeneity and Changes in Perceptual Deterrence among Serious Youthful Offenders." Crime and Delinguency 58: 3-27.
- Lundahl, B.; C. Kunz; C. Brownell; D. Tollefson; and B. Burke. 2010. "A Meta-Analysis of Motivational Interviewing: Twenty-Five Years of Empirical Studies." Research on Social Work Practice 20:137-160.
- Marsh, H.W.; G.E. Richards; J. Johnson; et al. 1994. "Physical Self-Description Questionnaire: Psychometric Properties and a Multitrait-Multimethod Analysis of Relations to Existing Instruments." Journal of Sport and Exercise Psychology 16: 270-305.
- Mayworm, Ashley M., and Jill D. Sharkey. 2013. "Gender-Specific Mental Health Outcomes of a Community-Based Delinquency Intervention." Journal of Juvenile Justice 3(1):15-35.
- Miller, W.R., and S. Rollnick. 2002. Motivational Interviewing: Preparing People for Change (2nd ed.). New York, N.Y.: Guilford Press.
- Moore, Lori D., and Irene Padavic. 2010. "Racial and Ethnic Disparities in Girls' Sentencing in the Juvenile Justice System." Feminist Criminology 5:263-85.
- Nagin, Daniel S., and Raymond Paternoster. 1993. "Enduring Individual Differences and Rational Choice Theories of Crime." Law and Society Review 27:467-96.
- Nanda, Jyoti. 2012. "Blind Discretion: Girls of Color & Delinquency in the Juvenile Justice System." UCLA Law Review 59:1502-39.
- National Council on Crime and Delinquency. 2001. Evaluation of the RYSE program, Alameda County Probation Department: A Report Prepared for Alameda County Probation Department. Oakland, Calif.: National Council on Crime and Delinguency.

http://www.nccdglobal.org/sites/default/files/publication_pdf/ryse-program.pdf

- Ngun, Tuck C.; Negar Ghahramani; Francisco J. Sanchez; Sven Bocklandt; and Eric Vilain. 2011. "The Genetics of Sex Differences in Brain and Behavior." Frontiers in Neuroendocrinology 32(2): 227–246.
- O'Malley, P. M.; J.G. Bachman; and L.D. Johnston. 1983. "Reliability and Consistency in Self-Reports of Drug Use." The International Journal of the Addictions 18: 805-824.
- Oakley, M. Anne; Shirley Addison; Niva Piran; Gary Johnson; Mary Damianakis; and Joyce Curry. 2013. "Outcome Study of Brief Relational-Cultural Therapy in a Women's Mental Health Center." Psychotherapy Research 23(2):137-51
- Oman, R.F.; S.K. Vesely; K.R. McLeroy; V. Harris-Wyatt; C.B. Aspy; S. Rodine; and L. Marshall. 2002. "Reliability and validity of the Youth Asset Survey (YAS)." Journal of Adolescent Health. 31:247-255
- One Circle Foundation. 2012. About Us. Retrieved 2014, from One Circle Foundation: https://onecirclefoundation.org/about us.aspx

One Circle Foundation. 2012. Girls Circle. Retrieved 2014, from One Circle Foundation: https://onecirclefoundation.org/GC.aspx

One Circle Foundation. 2012. Girls Circle Curricula. Retrieved 2014, from One Circle Foundation:

https://onecirclefoundation.org/material-gc.aspx

- One Circle Foundation. *Is Girls Circle Evidence-Based?* San Rafael, CA: One Circle Foundation. Retrieved 2014, from <u>https://onecirclefoundation.org/docs/EB-Principles-GC.pdf</u>
- Parker, Jerry, and Harold G. Grasmick. 1979. "Linking Actual and Perceived Certainty of Punishment." *Criminology* 33:111-39.
- Paternoster, Raymond; Linda E. Saltzman; Gordon P. Waldo; and Theodore G. Chiricos. 1985. "Assessments of Risk and Behavioral Experience: An Exploratory Study of Change." *Criminology* 23:417-33.
- Pearson, Frank S.; Douglas S. Lipton; Charles M. Cleland; and Dorline S. Yee. 2002. "The Effects of Behavioral/Cognitive–Behavioral Programs on Recidivism." *Crime and Delinquency* 48 (3):476–96.
- Phillips, J., and F. Springer. 1992. Extended National Youth Sports Program 1991-92 Evaluation
 Highlights, Part Two: Individual Protective Factors Index (IPFI) and Risk Assessment Study. Report
 Prepared for the NCAA. Sacramento, Calif.: EMT Associates. Unpublished.
- Puzzanchera, Charles. 2013. "Juvenile Arrests 2011." *Juvenile Offenders and Victims: National Report Series*. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Roa, J.; A. Irvine; and K. Cervantez. (2007). *Girls Circle National Research Project. Santa Cruz, Calif.*: Ceres Policy Research.
- Rollnick S., and W.R. Miller. 1995. "What is Motivational Interviewing?" *Behavioural and Cognitive Psychotherapy* 23: 325-334.
- Rodriquez, Nancy, and Elizabeth Eell. 2013. An Impact Evaluation of Three Strategies Created to Reduce Disproportionate Minority Contact and the Detention Population. Final Report. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Ross-Leadbeater, Bonnie, and Niobe Way (eds). 1996. Urban Girls: Resisting Stereotypes, Creating Identities, New York: New York University Press.
- Rossi, Peter H.; Mark W. Lipsey; and Howard E. Freeman. 2004. *Evaluation: A Systematic Approach (7th edition).* Thousand Oaks, Calif: Sage.
- Schmidt, Peter, and Ann D. Witte. 1988. Predicting Recidivism Using Survival Models. New York, N.Y.: Springer–Verlag.
- Schwartz, Jennifer, and Darrell Steffensmeier. 2012. "Stability and Change in Girls' Delinquency and the Gender Gap: Trends in Violence and Alcohol Offending Across Multiple Sources of Evidence." In S. Miller, L. D. Leve, and P. K. Kerig (eds.), *Delinquent Girls: Contexts, Relationships, and Adaptation*. New York, N.Y.: Springer, 3-23.
- Schwarzer, R., and A. Born. 1997. "Optimistic Self-Beliefs: Assessment of General Perceived Self-Efficacy in Thirteen Cultures." *World Psychology* 3 (1-2): 177-190.
- Sedlak, Andrea J., and Karla S. McPherson. 2010. "Youth's Needs and Services: Findings from the Survey of Youth in Residential Placement." *OJJDP Juvenile Justice Bulletin.*
- Sickmund, M.; A. Sladky; and W. Kang. 2015. "Easy Access to Juvenile Court Statistics: 1985-2012." http://www.ojjdp.gov/ojstatbb/ezajcs
- Sickmund, M.; T.J. Sladky; W. Kang; and C. Puzzanchera. 2013. "Easy Access to the Census of Juveniles in Residential Placement." <u>http://www.ojjdp.gov/ojstatbb/ezacjrp</u>
- Steese, S.; M. Dollete; W. Phillips; B. Hossfeld; and G. Taormina. 2006. "Understanding Girls Circle as an Intervention on Perceived Social Support, Body Image, Self-Efficacy, Locus of Control and Self-Esteem." Adolescence, 41(161).
- Smedslund, Geir; Rigmor C. Berg; Karianne T. Hammerstrøm; Asbjørn Steiro; Kari A. Leiknes; Helene M. Dahl; and Kjetil Karlsen. 2011. "Motivational Interviewing for Substance Abuse." *Campbell Systematic Reviews* 6.

- Snyder, Howard N., and Melissa Sickmund. 2006. *Juvenile Offenders and Victims: 2006 National Report*. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Strom, Kevin J.; Tara D. Warner; Lisa Tichavsky; and Margaret A. Zahn. 2014. "Policing Juveniles: Domestic Violence Arrest, Policies, Gender, and Police Response to Child-Parent Violence." *Crime and Delinquency* 60(3):427-50.
- Tantillo, M., and J. Sanftner. 2003. "The Relationship between Perceived Mutuality and Bulimic Symptoms, Depression, and Therapeutic Change in Group." *Eating Behavior* 3(4):349-364.
- Taylor, Jill M.; Carol Gilligan; and Amy M. Sullivan. 1995. *Between Voice and Silence: Women and Girls, Race and Relationship*. Cambridge, Mass.: Harvard University Press.
- Teplin, Linda; Karen M. Abram; Gary M. McClelland; Mina K. Dulcan; and Amy A. Mericle. 2002.
 "Psychiatric Disorders in Youth in Juvenile Detention." Archives of General Psychiatry 59(12):1133-43.
- Tracy, Paul E.; Kimberly Kempf-Leonard; and Stephanie Abramoski-James. 2009. "Gender Differences in Delinquency and Juvenile Justice Processing: Evidence From National Data." *Crime & Delinquency* 55(2):171-215.
- Vincent, Gina M.; Thomas Grisso; Anna Terry; and Steven Banks. 2008. "Sex and Race Differences in Mental Health Symptoms in Juvenile Justice: The MAYSI–2 National Meta-Analysis." *Journal of the American Academy of Child and Adolescent Psychiatry* 47(3):282.
- Vincent, G.M.; L.S. Guy; B.G. Gershenson; and P. McCabe. 2012. "Does Risk Assessment Make a Difference? Results of Implementing the SAVRY in Juvenile Probation." *Behavioral Sciences and the Law* 30: 384-405.
- Walters, Glenn D. 2014a. "Sex as a Moderator and Perceived Peer Pressure as a Mediator of the Externalizing-Delinquency Relationship: A Test of Gendered Pathways Theory." *Journal of Criminal Justice* 42(3): 299-305.
- Walters, Glenn D. 2014b. "Pathways to Early Delinquency: Exploring the Individual and Collective Contributions of Difficult Temperament, Low Maternal Involvement, and Externalizing Behavior." *Journal of Criminal Justice* 42(4): 321-326.
- Ward, T. 2000. "Sexual Offenders' Cognition and Distortion as Implicit Theories." *Aggression and Behavior* 5: 491-507.
- Welch-Brewer, Chiquitia L.; Patricia Stoddard-Dare; and Christopher A. Mallett. 2011. "Race, Substance Abuse, and Mental Health Disorders as Predictors of Juvenile Court Outcomes: Do They Vary by Gender"? *Child and Adolescent Social Work Journal* 28: 229-41.
- Weisburd, David L., and Anthony A. Braga. 2006. *Police Innovation: Contrasting Perspectives*. Cambridge, MA: Cambridge University Press.
- Wilson, James Q. 1993. The Moral Sense. New York, N.Y.: The Free Press.
- Wilson, David B.; Leana A. Bouffard; and Doris L. MacKenzie. 2005. "A Quantitative Review of Structured, Group-Oriented, Cognitive–Behavioral Programs for Offenders." *Journal of Criminal Justice and Behavior* 32(2):172-204.
- Wisconsin Department of Corrections. 2005. Southern Oaks Girls School: 10 Years of Reaching Out and Improving Lives: 2004-2005 Annual Report. Union Grove, Wisc.: Wisconsin Department of Corrections, 6.
- Wong, Kate. 2014. "Tiny Genetic Differences between Humans and Other Primate Pervade the Genome." Scientific American 311(3). <u>http://www.scientificamerican.com/article/tiny-genetic-differences-between-humans-and-other-primates-pervade-the-genome/</u>
- Yan, Jiahui, and Anne Dannerbeck. 2011. "Exploring the Relationship between Gender, Mental Health Needs, and Treatment Orders in a Metropolitan Juvenile Court." *Journal of Child and Family Studies* 20(1):9-22.

Zahn, Margaret A.; Jacob C. Day; Sharon F. Mihalic; and Lisa Tichavsky. 2009. "Determining What Works for Girls in the Juvenile Justice System." *Crime & Delinquency* 55(2):266-93.

Zahn, Margaret A.; Susan Bumbaugh; Darrell Steffensmeier; Barry C. Feld; Merry Morash; Meda Chesney-Lind; Jody Miller; Alliso A. Payne; Denise C. Gottfredson; and Candace Kruttshnitt. 2008. *Violence by Teenage Girls: Trends and Context*. Washington, D.C.: Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, Girls Study Group. <u>https://www.ncjrs.gov/pdffiles1/ojjdp/218905.pdf</u>

1. Introduction

Thank you for accepting the invitation to participate in this research study.

This survey is about youth activities. It has been developed so you can tell us about the things you do. The information you give will be used to improve the court system for young people like yourself. For this evaluation to be helpful, it is important that you answer each question as thoughtfully and honestly as possible. All of your answers are private and will be completely private. None of your answers will be shared with anyone outside of the research team, not even your parents/guardians or the court.

Taking part in this study is totally up to you. You can choose to not answer a question or drop out of the study at any time. The decision to take part or not will not change the programs or services you get. We expect the survey to take about 20 to 30 minutes.

*****1. Please enter your study ID.

2. General Information and Family History In this section, I would like to ask some general questions about you, your family, and your friends. First, I would like to know some general information about you. Let's get started. * 2. What is your birth date? MM DD YYYY My birthday is '' '' '' 3. How would you describe yourself? (Select all that apply.) African American Caucasian (White) Hispanic/Latina American Indian/Alaska Native Asian/Pacific Islander Other 4. Think of where you lived most of the time in the last year. Which of the following people lived with you? (Select all that apply.) Mother Father Father Unrelated Adults Stepmother Stepfather Grandfather Friends/Roommates Aunt Uncle Your Child/Baby	DJJDP-DSC	G Girls Circle	Baseline		
information about you. Let's get started. *2. What is your birth date? MM DD YYYY My birthday is	2. General Ir	formation and	Family History		
MM DD YYYY MM DD YYYY Standard Contractions and the probability of the pr		-	ral questions about you, your family,	and your friends	. First, I would like to know some general
My birthday is ////////////////////////////////////	*2. W hat is y	our birth date?			
3. How would you describe yourself? (Select all that apply.) African American Caucasian (White) Hispanic/Latina American Indian/Alaska Native Asian/Pacific Islander Other 4. Think of where you lived most of the time in the last year. Which of the following people lived with you? (Select all that apply.) Other Mother Father Brother/Sisters Foster Mother Foster Father Unrelated Adults Stepmother Stepfather Boyfriend/Girlfriend Grandmother Grandfather Friends/Roommates		MM DD YYYY			
African American Caucasian (White) Hispanic/Latina American Indian/Alaska Native Asian/Pacific Islander Other 4. Think of where you lived most of the time in the last year. Which of the following people lived with you? (Select all that apply.) Mother Father Foster Mother Foster Father Stepmother Stepfather Grandmother Grandfather Aunt Uncle	My birthday is				
American Indian/Alaska Native Asian/Pacific Islander Other 4. Think of where you lived most of the time in the last year. Which of the following people lived with you? (Select all that apply.) Mother Father Nother Father Foster Mother Foster Father Stepmother Stepfather Grandmother Grandfather Aunt Uncle	3. How would	you describe yo	ourself? (Select all that a	apply.)	
4. Think of where you lived most of the time in the last year. Which of the following people lived with you? (Select all that application of the following people application of the following peopletee application of the following people application of	African Americ	an	Caucasian (White)		Hispanic/Latina
Ived with you? (Select all that apply.) Mother Father Foster Mother Foster Father Stepmother Stepfather Grandmother Grandfather Aunt Uncle	American India	n/Alaska Native	Asian/Pacific Islander		Other
Ived with you? (Select all that apply.) Mother Father Foster Mother Foster Father Stepmother Stepfather Grandmother Grandfather Aunt Uncle	4. Think of wi	nere vou lived m	ost of the time in the las	t vear. Whi	ch of the following people
Foster Mother Foster Father Unrelated Adults Stepmother Stepfather Boyfriend/Girlfriend Grandmother Grandfather Friends/Roommates Aunt Uncle Your Child/Baby		-			
Stepmother Stepfather Boyfriend/Girlfriend Grandmother Grandfather Friends/Roommates Aunt Uncle Your Child/Baby	Mother		Father		Brother/Sisters
Grandmother Grandfather Friends/Roommates Aunt Uncle Your Child/Baby	Foster Mother		Foster Father		Unrelated Adults
Aunt Uncle Your Child/Baby	Stepmother		Stepfather		Boyfriend/Girlfriend
	Grandmother		Grandfather		Friends/Roommates
Other (please specify)	Aunt		Uncle		Your Child/Baby
	Other (please s	pecify)			
	-	brothers and sig	sters (including steppro	thers and s	itepsisters) do you naver
5. How many brothers and sisters (including stepbrothers and stepsisters) do you have?					
(Select one.)					
(Select one.)					
(Select one.) None One					
(Select one.) None One Two 					
(Select one.) None One Two Three					
<pre>(Select one.) None One Two Three Four</pre>	O More than four				
(Select one.) None One Two Three					
<pre>(Select one.) None One Two Three Four</pre>					
<pre>(Select one.) None One Two Three Four</pre>					

6. How long have you lived at your current location? (Select one.)

- C Less than 6 months
- O 6 months to 1 year
- O 1 to 2 years
- C 2 to 3 years
- O 3 to 4 years
- O 4 years or more

7. Have you lived outside the Chicago area in the past 5 years? (Select one.)

- O Yes
- No

***8.** Have you ever lived in a foster home or a group home? (Select one.)

- O Yes
- No

3. General Information and Family History--Question Follow-Up

9. In the past year, have you lived in a foster home or group home? (Select one.)

O Yes

No

4. General Information and Family History--Continued

*****10. Have you ever been pregnant? (Select one.)

- O Yes
- No

5. General Information and Family History--Question Follow-Up

11. Do you have any children? (Select one.)

- O Yes
- No
- Skip this question

If yes, how many children do you have?

6. General Information and Family History--Continued

12. Do you consider yourself to be heterosexual, straight, bisexual, gay/lesbian, or transgender?(Select one.)

- O Heterosexual ("Straight")
- O Bisexual
- C Gay/Lesbian
- C Transgender
- O Other

7. Things That Have Happened to You

In this section, I would like to know a little about things that have happened to you or that you have seen.

13. Please read each statement carefully and mark the box that best describes you. Please remember all your answers are confidential (secret).

	Yes	No
Have you ever been in a serious car accident, or serious accident at work or somewhere else?	0	C
Have you ever had a life-threatening illness, such as cancer, a heart attack, leukemia, AIDS, multiple sclerosis, and so forth?	O	C
Have you ever been attacked, beaten up, or mugged by anyone, including friends, family members, or strangers?	C	C
As a child, were you ever psychically punished or beaten by a parent, caretaker, or teacher so that you were very frightened; or thought you would be injured; or you received bruises, cuts, welts, lumps, or other injuries?	O	O
Have you ever been in a situation in which someone made or pressured you into having some type of unwanted sexual contact?	O	C
Have you ever been in any other situation in which you were seriously injured? Have you ever been in any other situation in which you feared you might be seriously injured or killed?	O	C
Have you ever witnessed a situation in which someone was seriously injured or killed? Have you ever witnessed a situation in which you feared someone would be seriously injured or killed?	O	C
Have any close family members or friends died violently, for example, in a serious car crash, mugging, or attack?	O	C

14. Have you ever been bullied or harassed because you are not feminine enough?

- O Yes
- No

15. Have you ever been bullied or harassed because of your sexual orientation (i.e., being lesbian, bisexual, etc)?

- O Yes
- O No
- O Not Applicable

8. Thoughts and Feelings

In this section, I would like to know a little about your thoughts and feelings.

16. Please read each statement carefully and mark the box that best describes you. Please remember that all your answers are confidential (secret).

	Strongly Agree	Agree	Disagree	Strongly Disagree
Before criticizing somebody, I try to imagine how I would feel if I were in their place.	O	0	O	O
If I'm sure I'm right about something, I don't waste much time listening to other people's argument.	O	C	Õ	O
I sometimes try to understand my friends better by imagining how things look from their perspective.	0	0	O	O
I believe that there are two sides to every question and try to look at them both.	O	0	O	C
I sometimes find it difficult to see things from the other person's point of view.	\odot	0	\odot	O
I try to look at everybody's side of a disagreement before I make a decision.	0	\odot	O	O
When I'm upset at someone, I usually try to "put myself in his or her shoes" for a while.	0	0	C	C

17. Next, we would like to ask you some general questions about how you feel about yourself. Read each statement below carefully. Please indicate the answer that most appropriately applies to you. In each case, make your choice in terms of how you might feel right now. There is no right or wrong answer for any question. It is important to answer honestly.

	Not at All True	Hardly True	Moderately True	Exactly True
I can always manage to solve difficult problems if I try hard enough.	0	0	O	O
If someone disagrees with me, I can find a way to work out the problem.	0	0	\circ	O
It is easy for me to stick to my plans and accomplish my goals.	0	O	O	O
When an unexpected thing happens, I am confident that I can deal with it successful	у. О	0	\circ	O
I can find ways to handle new situations.	O	0	\odot	O
I can solve most problems if I put in the necessary effort.	\odot	0	\circ	O
When something stressful happens, I can stay calm and figure out how to deal with it.	O	0	\odot	O
When I have a problem, I can usually find several solutions.	\odot	0	\circ	O
If I am in trouble, I can usually think of a solution.	O	0	\odot	O
I can usually handle whatever comes my way.	\odot	0	\odot	O

18. The following are some statements about how you see yourself and your appearance. Check the box that best describes you.

	Completely False	Somewhat False	Neutral	Somewhat True	Completely True
I am attractive for my age.	0	\odot	O	O	0
I have a nice looking face.	O	0	\odot	Õ	0
I'm better looking than most my friends.	C	O	O	C	0
I am ugly.	O	O	O	O	0
I am good looking.	C	O	O	C	0
Nobody thinks that I'm good looking.	\odot	0	\odot	Õ	O

9. Problem Solving and Communication

In this section, I would like to ask you some questions about how you handle problems that come up and communicate with people about your thoughts and feelings.

19. Please read the following statements carefully. Each one describes how you might feel about certain problems in your life. Please indicate whether you agree or disagree with each statement. In each case, make your choice in terms of how you feel right now. Again, remember there is no right or wrong answer for any question.

	Agree	Disagree	I Don't Know
As far as I'm concerned, there are no big problems in my life.	O	0	0
I'm doing what I need to do and there's nothing that I really need to change about my situation.	O	O	C
I know that some of the things I do are not good for me.	0	0	0
I've been thinking that I might want to change something about my life.	\odot	0	O
I would really like to talk with someone about problems in my life and what to do about them.	O	0	О
I would like to start doing what it takes to make my life different.	O	0	O

20. Check the answer that best shows how much each of the following statements is like you.

	Not at All Like You	A Little Like You	Mostly Like You	Very Much Like You
You can say no to activities that you think are wrong.	O	О	O	C
You can identify the positive and negative consequences of behavior.	C	O	C	O
You try to make sure that everyone in a group is treated fairly.	0	O	C	O
You think you should work to get something, if you really want it.	O	O	O	O
You make decisions to help achieve your goals.	O	0	O	O
You know how to organize your time to get all your work done.	O	O	C	O

21. Check the answer that best shows how much each of the following statements is true for you. Check "YES!" if the statement is very true, "yes" if it is somewhat true, "no" if it is somewhat false, and "NO!" if it is very false.

	YES!	Yes	No	NO!
Sometimes I have to physically fight to get what I want.	\odot	\odot	O	0
l get mad easy.	C	C	O	O
I do whatever I feel like doing.	O	O	O	0
When I am mad, I yell at people.	C	C	C	\odot
Sometimes I break things on purpose.	O	O	O	0
If I feel like it, I hit people.	C	O	O	O

10. School

In this section, I would like to ask you some questions about your experiences with and feelings about school.

22. Are you currently enrolled in school?

- O Yes
- O No

23. Have you ever been suspended or expelled from school?

- O Yes
- No

24. What is the highest level of education you have reached?

- C Attended junior high school or less
- C Attended high school/still attending high school
- C Graduated from high school
- C Received GED or other equivalency degree
- C Attending a technical school or program

25. Below is a list of statements about school. Please read each statement and indicate how strongly you agree or disagree with each of the items.

	Strongly Agree	Agree	Disagree	Strongly Disagree
Homework is a waste of time.	0	O	0	O
I try hard at school.	O	O	O	O
Education is so important that it's worth it to put up with things about school that I don't like.	0	O	O	C
In general, I like school.	O	O	O	O
I don't care what teachers think of me.	0	O	0	O

11. Family, Friends, and Community

In this section, I would like to ask you some questions about your experience with and feelings about your family, your friends, and your community.

26. Check the answer that shows how much you agree or disagree with each of the following statements.

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
I feel disconnected from the world around me.	O	0	O	O	O
Even around people I know, I don't feel that I really belong.	O	O	\circ	C	C
I feel so distant from people.	C	O	\odot	O	O
I have no sense of togetherness with my peers.	O	O	0	O	O
I don't feel related to anyone.	C	O	\odot	O	O
I catch myself losing all sense of connectedness with society.	O	O	0	O	O
Even among my friends, there is no sense of brother/sisterhood.	O	\odot	\odot	\odot	O
I don't feel that I participate with anyone or any group.	C	C	0	C	O

27. Check the answer that best shows how much each of the following statements is true for you. Check "YES!" if the statement is very true, "yes" if it is somewhat true, "no" if it is somewhat false, and "NO!" if it is very false.

	YES!	Yes	No	NO!
There are people I can depend on to help me if I really need it.	O	O	0	O
There is not an adult I can turn to for guidance in times of stress.	O	O	C	C
If something went wrong, no one would come to my assistance.	O	O	O	C
There is an adult I could talk to about important decisions in my life.	O	O	C	C
There is a trustworthy adult I could turn to for advice if I were having problems.	0	0	O	O
There is no one I can depend on for help if I really need it.	C	O	C	C
There is no adult I can feel comfortable talking about my problems with.	\odot	\odot	O	C
There are people I can count on in an emergency.	\circ	\odot	O	C
There is a special person in my life who cares about my feelings.	\odot	\odot	O	O

12. Your Future

In this section, I would like to ask you some questions about different goals and activities in life.

28. After reading each question, please indicate if it is Very Important, Important, Not Very Important, or Not Important at All. Check the best answer.

How important is it for you...

	Very Important	Important	Not Very Important	Not Important at All
To have a well-paying job later?	C	0	0	O
To have a good reputation in the community?	O	O	C	C
To be of service to the community?	O	O	O	C
To work hard to get ahead?	O	O	C	C
To save money for the future?	O	O	O	C
To be careful about how much money you spend?	O	O	C	O
To have a happy family life?	O	O	O	O

29. How far would you LIKE to go in school or college?

- High school graduate
- C Vocational/technical school
- Some college
- C College graduate
- O More than college
- O Other

30. How far do you THINK you will go in school?

- C High school graduate
- C Vocational/technical school
- Some college
- C College graduate
- O More than college
- Other

31. Now think about your future. After reading each question, please indicate if it Will Happen, Might Happen, Might not Happen, or Won't Happen. Check the best answer.

Do you think that in the future, you...

	Will Happen	Might Happen	Might not Happen	Won't Happen
Will have a well-paying job?	O	0	0	O
Will have a steady job?	C	0	O	0
Will have a good reputation in the community?	C	0	O	\odot
Will work hard to get ahead?	C	O	O	0
Will save money for the future?	C	O	C	\odot
Will be careful about how much money you spend?	C	\circ	C	0
Will marry?	C	0	C	O
Will have children?	O	\odot	O	0
Will be a good mother/father?	\odot	O	C	\odot
Will have a happy family life?	\odot	O	O	\odot
Will own a home?	O	O	C	\odot
Will be in trouble with the police?	O	O	O	O
Will stay in touch with your parents?	\odot	O	C	\odot

32. What kind of a job would you LIKE to get?

33. How likely are you to get that job?

- O Will Happen
- O Might Happen
- O Might not Happen
- O Won't Happen

13. Arrests and System Involvement

In this section, I would like to ask you a few questions about any contacts you have had with the police and the local court system.

* 34. Have you ever been arrested by the police? (Select one.)

O Yes

O No

14. Arrests and System Involvement--Question Follow-Up

35. How many times have you been arrested by the police--in your lifetime?

(Specify)

36. How many times have you been arrested by the police--in the past year?

- O None
- One or more (specify number)

15. Other Activites and Experiences

In this section, I would like to know some things about your own activities, experiences, and interests. I'd like to remind you that all of your answers are confidential (secret).

The next few questions ask you about your experiences with drugs and alcohol.

37. How often (if at all) have you had alcoholic beverages (beer, wine, wine coolers, liquor) to drink--more than just a few sips--during the last 30 days? (Select one.)

- O Not at all
- A few times
- A lot of times
- C Every day

38. How often (if at all) have you used any illegal drugs (marijuana, cocaine or crack, methamphetamines, heroin, hallucinogens) during the last 30 days? (Select one.)

- O Not at all
- A few times
- A lot of times
- C Every day

The next few questions ask about your sexual experiences.

39. How old were you when you had your first menstrual period? (Select one.)

- 10 years or younger
- C 11 years old
- 12 years old
- 13 years old

- 14 years old15 years old
- O 16 years or older
- O Never

*40. Have you ever had sex (intercourse)?

- O Yes
- No

16. Other Activites and Experiences--Question Follow-Up

41. How old were you when you had sex for the first time? (Select one.)

0	10 years or younger	0	14 years old
0	11 years old	0	15 years old
0	12 years old	0	16 years old
0	13 years old	0	17 years or older

42. How many times did you have sex in the last 3 months? (Select one.)

- O Never
- O 1 time
- O 2 to 3 times
- O 4 to 5 times
- C 6 to 9 times
- O More than 9 times

43. How many times did you use a condom during sex in the last 3 months? (Select one.)

- O Never
- A few times
- A lot of times
- C Every time

44. With how many different people did you have sex in the last 3 months? (Select one.)

- O 1 person
- O 2 people
- O 3 people
- 4 people
- O 5 people or more

17. Other Activites and Experiences--Continued

The next few questions ask about how you deal with anger and other strong emotions.

45. In the past 30 days, how often (if at all) did you do any of the following things in order to calm down after getting upset?

	Not at All	A Few Times	A Lot of Times	Every Day
Take a walk	O	O	C	C
Sit quietly	O	O	igodot	O
Meditate	O	C	O	O
Breathe deeply	C	igodot	igodot	O
Other	O	\mathbf{C}	C	O

*46. Have you ever tried to hurt or cut yourself? (Select one.)

O Yes

No

OJJDP-DSG Girls Circle Baseline

18. Other Activites and Experiences--Question Follow-Up

47. In the past 30 days, how many times have you tried to hurt or cut yourself? (Select one.)

- O Not at all
- A few times
- O A lot of times
- C Every day

OJJDP-DSG Girls Circle Baseline

19. Other Activites and Experiences--Continued

The next few questions ask about your eating habits and physical activity.

48. In the past 7 days, how often (if at all) did you do any of the following?

	Not at All	A Few Times	A Lot of Times	Every Day
Eat fruit such as oranges or apples?	0	O	O	C
Eat vegetables such as peas or carrots?	0	O	O	O
Drink a can or glass of soda (not including diet soda)?	0	O	O	O
Engage in physical activity for at least 30 minutes?	\odot	O	O	O
Watch TV for at least 30 minutes?	0	O	O	O
Play video games or play on the computer for at least 30 minutes?	0	C	O	C
Play sports or other fitness activity?	0	O	O	O

49. Now I'd like to ask you some questions about your friends.

How many of your friends...

	All	Some	None
Are in school?	0	О	C
Participate in school-related activities?	O	0	O
Graduated from high school or a GED program?	O	0	C
Are legally employed?	O	0	O
Joined the military?	O	0	O
Volunteer for an organization or cause?	O	0	O
Have done something to help the community?	O	0	O
Do their homework?	O	O	O
Do exercise?	0	0	O

OJJDP-DSG Girls Circle Baseline

50. How many of your friends				
	All	Some	None	
Skip school?	lacksquare	\odot	\odot	
Smoke cigarettes?	C	C	C	
Drink alcohol?	C	C	C	
Do drugs?	\odot	Ō	O	
Steal things from stores?	O	O	O	
Write graffiti on walls or break windows?	\odot	Ō	O	
Carry a weapon?	O	O	O	
Get into fights?	\odot	Ō	O	
Are a member of a gang?	O	C	C	
Have been arrested?	\odot	Õ	Ō	
Have been in jail?	igodoldoldoldoldoldoldoldoldoldoldoldoldol	\odot	igodot	

20. Conclusion

51. Were there any specific questions that made you feel particularly uncomfortable?

-

21. Survey Complete

The survey is complete!

Thank you for taking the time to participate in this study. Please remember that all responses are private. None of your answers will be shared with anyone outside of the research team, not even your parents/guardians, the court, or probation department staff.

Because some aspects of the survey involved discussing difficult aspects of your life, you may experience feelings of sadness or anger. If you experience any of these feelings or would just like to talk further, it is important that you talk to the staff person who helped you with the survey so they can assist you further.

Thank you for taking this survey!



FIDELITY TOOL

Facilitator/s Name	
Program Name/Location	
Theme/Topic/Week #	
Date/Time	
Length of Session	
Number of Girls	
QA Coach Name	
Facilitator/s Name	

Instructions: The Girls Circle Quality Insurance Tool is comprised of five Domains with several targeted objectives within each domain. The domains include:

- A. Group Preparation
- B. Environment
- C. Group Facilitation Skills
- D. Curriculum Integrity
- E. Communication Skills

Please note the degree to which the facilitator effectively met the targeted objectives within each domain by using the following scale. If the session did not offer the opportunity to observe a particular objective please note it by marking *Not Applicable*.

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

GROUP PREPARATION

A. Demonstrates adequate preparation for the session, using the *Facilitator Guide* as well as gathering suggested materials

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

B. Greets participants and models punctuality

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

C. Introduces basic concepts of Girls Circle program (session 1 only)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

Comments/Summary:

ENVIRONMENT

A. Fosters a space that is emotionally and physically safe (i.e., free from violence, abuse or teasing)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

B. Provides one-on-one service and/or referral (if necessary)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

C. Is culturally responsive to girls (i.e., understanding of girls' lives in terms of their socialization and identity, culture and class, as well as the female adolescent experience)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

D. Displays group guidelines (and exceptions) clearly

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

Comments/Summary:

GROUP FACILITATION SKILLS

A. Follows the Girls Circle "Group Discussion Model" during discussions (as appropriate)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

B. Ends discussion with *application* question

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

C. Allows girls to "pass" during activities and/or offers second and third opportunities to engage

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

D. Uses audio-visual and/or manual aids in the form of expressive arts (e.g., journals, collages, posters, magazines, media materials, etc.) for creative activities

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

E. Establishes and refers to group guidelines(as necessary)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

F. Effectively engages girls in critical thinking and decision-making processes

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

G. Effectively manages group dynamics using appropriate strategies (e.g., validation, normalizing, strengths-based approach, and group support)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

H. Demonstrates passion and enthusiasm for curriculum

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

I. Balances adherence to learning objectives with flexibility in curriculum delivery to meet group needs

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

Comments/Summaries:

CURRICULUM INTEGRITY

A. Follows the 6-Step Circle Format (opening, theme introduction, check-in, activity (verbal and creative), sharing, and closing)

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

B. Briefly introduces topics and themes in limited lecture format

Missed:	No visible signs of implementation OR completely incorrect
Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

C. Demonstrates a clear understanding of the material

Missed:	No visible signs of implementation OR completely incorrect
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Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

D. Links prior sessions/prior learning to provide continuity

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Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

E. Applies material to real life circumstances through group examples/larger social influences

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Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

F. Commits significant opportunity for experiential learning activities

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Not Applicable	No opportunity to observe

G. Uses Facilitator Activity Guide appropriately

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Not Applicable	No opportunity to observe

H. Uses Talking Piece to foster a listening environment

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Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

Comments/Summaries:

COMMUNICATION SKILLS

A. Utilizes open-ended questions

Missed:	No visible signs of implementation OR completely incorrect	
Nearly Met:	Some signs of implementation, but implementation is not complete	
Met:	Basic implementation occurs correctly	
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements	
Not Applicable	No opportunity to observe	

B. Utilizes affirmations appropriately

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Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

C. Utilizes reflective statements appropriately

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Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

D. Uses a strengths-based approach (i.e., identifies and enhances strengths of the participants)

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Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

E. Demonstrates the spirit of *Motivational Interviewing* (e.g., empathy, collaboration, positive reinforcement, and self-determination)

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Nearly Met:	Some signs of implementation, but implementation is not complete
Met:	Basic implementation occurs correctly
Exceeded:	Clear evidence of proficient implementation. Exceeds basic requirements
Not Applicable	No opportunity to observe

Comments/Summaries:

SUMMARY

Strengths:

Improvements Needed:

Additional Note(s):