The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title:	Reducing Crime for Girls in the Juvenile Justice System through Researcher-Practitioner Partnerships
Author(s):	Shabnam Javdani, Ph.D.
Document Number:	255997
Date Received:	January 2021
Award Number:	2014-IJ-CX-0044

**Reducing Crime for Girls in the Juvenile Justice System
through Researcher-Practitioner Partnerships**

2014-IJ-CX-0044 - Final Summary

Submitted September 28, 2020

**Building and Enhancing Criminal Justice
Researcher-Practitioner Partnerships FY14 (OMB No. 1121-0329)**

Grantee Contact
Shabnam Javdani, Ph.D.
Principal Investigator
New York University
Department of Applied Psychology
246 Green Street
New York, NY 10003
Tel: 212-992-9739
Fax: 212-998-4358
Email: shabnam.javdani@nyu.edu

Institutional Contact
New York University
Office of Sponsored Programs
Nancy S. Daneau
Director
Address: 665 Broadway, Suite 801
New York, NY 10012-2331
Tel: 212-998-2121
Fax: 212-995-4029
Email: osp.agency@nyu.edu

Purpose

Adolescent girls involved in the juvenile justice (JJ) system are at high risk for continued system involvement, particularly in relation to perpetration of violent and substance use offenses, compared to their male counterparts (Moffitt et al., 2001; Zahn et al., 2008; 2010). Girls are the fastest growing segments of the juvenile justice system (Sickmund & Snyder, 2005), and are at high risk for severe mental health challenges (e.g., depression, posttraumatic stress disorder), with documented rates higher than their male counterparts (e.g., Javdani, Sadeh, & Verona, 2011). These patterns are a significant public safety concern with well-known social sequelae including mortality, infertility, neighborhood disorganization, infant death, intergenerational poverty, and the spread of disease, including HIV/AIDS (e.g., CDC, 2010). These effects are particularly pronounced for low SES populations residing in under-resourced neighborhoods (Lang et al., 2011). Despite these patterns, there are currently no effective interventions for this population (Zahn et al., 2008; 2010). Thus, there is a critical need for the evaluation of promising programs for girls.

The overall purpose of this study is to examine the efficacy of an intervention called ROSES (Resilience, Opportunity, Safety, Education, Strength), using a 2-arm Randomized Controlled Trial (RCT) design. Specifically, we will compare outcomes for JJ-involved adolescent girls aged 12 to 17 randomly assigned to receive the ROSES treatment with outcomes for the same population randomly assigned to a control condition who do not receive the ROSES intervention. We have specified this part of the project as **Phase II**. Toward this goal, the PI has partnered with key stakeholders from the NYC Administration for Children's Services, Division of Youth and Family Justice (DYFJ). This project will evaluate ROSES through researcher placement (Area 2) within DYFJ. In addition to the primary goal of evaluating the ROSES intervention, this study also aims to better understand the systemic challenges and strategies for reducing girls' crime, as identified through in-depth interviews with a multitude of stakeholders within and outside of the local Division of Youth and Family Justice. We name this part of the project as **Phase I.** Specific objectives include:

1. Phase I: Identify key strategies and challenges for reducing girls' crime through interviews with juvenile justice system stakeholders.

2. Phase II: Examine the extent to which youth and parent-reported outcomes related to violence and delinquency, substance use and risk taking, and mental health and wellbeing are better following participation in the ROSES intervention for girls randomly assigned ROSES versus control, using a Randomized Controlled Trial Design.

Preliminary data identify key challenges and recommendations for the juvenile justice system, and the experimental evaluation of ROSES suggests promising initial results, high feasibility and fidelity, and high satisfaction reported by girls. Specifically, girls randomly assigned to receive the ROSES intervention were less likely to engage in violence and minor status offending behavior, were less likely to experience or witness community violence, reported fewer indices of substance use or misuse and sexual risk taking, reported fewer symptoms of mental health problems, and reported greater wellbeing as assessed by resilience and self-efficacy.

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Phase I: Legal System Stakeholder Interviews

Interviews (*N* = 33) were conducted with stakeholders who held positions of direct service provision to girls (e.g. probation officers, social workers, juvenile justice attorneys, detention staff, law enforcement) and stakeholders whose work indirectly impacted girls either through their creation of administrative level policies within the juvenile justice system (e.g. executive level administrators representing the child welfare and juvenile justice systems, judges) or through conducting research and organizing communities to create public opinion about the issue of girls' incarceration and experiences (researchers, advocates, and community organizers).

Table 1 presents the demographics for the entire sample (N=33) including stakeholders employed by the Division of Youth and Family Justice (DYFJ) (N=12). The sample was comprised largely of women, (n=27, 82%), approximately two-thirds (n=20, 61%) identified as non-White, people of color, and reported a broad range of ages. Participants' experience working on issues related to juvenile justice issues ranged from 1 to 30+ years. The majority reported 6-10 years of experience working on issues related to girls in the juvenile justice system (n=8, 28%), with a range of 0 to over 30 years. Almost all had attended training regarding juvenile justice issues (n=29; 94%), trauma-informed care (n=23; 85%), and girls' in juvenile justice (n= 27; 87%).

Table 1.
Phase I: Legal System Stakeholder Interviews: Demographics for total sample (N=33)

Background Information, Total Sample (N= 33)			
Age (%)	20 – 29 = 13% 30 – 39 = 23% 40 – 49 = 29% 50 – 59 = 23% 60+ = 13%	**Years working on juvenile justice issues (%)**	1 – 5 years = 15% 6 – 10 years = 27% 11 – 15 years = 21% 16 – 20 years = 18% 21 – 30 years = 15% 31 + years = 3%
		Years working on issues related to girls in juvenile justice (%)	0 years = 3% 1 – 5 years = 24% 6 – 10 years = 28% 11 – 15 years = 21% 16 – 20 years = 7% 21 – 30 years = 14% 31 + years = 3%
Race/Ethnicity (%)	Black: American = 18% Black: Caribbean = 21% Hispanic/Latino/a = 12% Hispanic/Latino/a: Caribbean = 9% White/Caucasian /Western European= 33% White: Other/Other= 6%	**Organizational role (%)**	Activist and researcher organization = 12% Child welfare system (direct service provider) = 27% Legal/ Child welfare system (executive) = 24% Legal system (attorneys, judges, probation) = 27%

			Mental health/ human services = 9%
Sexual Orientation (%)	Bisexual = 7% Heterosexual = 80% Homosexual = 7% Other = 7%	**Gender (%)**	Female = 82% Male = 18%

Phase II: Randomized Controlled Trial of ROSES with Adolescent Girls

ROSES received referrals for three of the four years of active data collection (November 2016-May 2019). Across the three-year period, a total of 333 referrals were received, with 314 of those referrals enrolling in the study. A majority of referrals were received directly from juvenile justice, ACS, and DYFJ (approximately 70%), with a smaller percentage referred directly from court (10%) or from girls' and families themselves (10%).

Of these referrals, 257 participants completed a baseline assessment. These participants were 257 girls, ages 11-18 (M=14.5; SD=1.6) and their legal guardians. Table 2 reports demographic statistics by ROSES and control conditions. The majority of the sample identified as Black, Hispanic, or Latino/a (n=195; 88.6%), and 21% (n=47) of girls reported sexual minority status. Almost half of girls' families reported an annual family income of $15,000 or less (n=107; 47%). Further, based on the chi squared and t-tests, ROSES and control conditions did not include participants who varied significantly on any measured demographic indicators.

Table 2.
Phase II: RCT of ROSES: Demographic and Outcome Variables for ROSES Treatment Condition (N=123) Versus Control at Time 1 (N=130)

	ROSES (n=123)	Control (n=130)	ROSES versus Control
Demographic characteristics			
Youth Race/ Ethnicity	%	%	χ2(4)=3.87, p=.42
American Indian or Alaska Native	1.9	3.7	
Asian	5.6	1.9	
Black	42.1	38.3	
Hispanic or Latina	44.9	52.3	
Other	5.6	3.7	
Youth Grade	%	%	χ2 (9)=5.87, p=.75
5th grade	1.9	2.8	
6th grade	6.6	3.8	
7th grade	13.2	13.2	
8th grade	9.4	16.0	
9th grade	24.5	24.5	
10th grade	22.6	18.9	
11th grade	14.2	17.0	
12th grade	5.7	3.8	

Youth Age	Mean 14.55	Mean 14.52	t(201)=.133, p=.895
Parental Income	%	%	χ2 (8)=7.86, p=.447
$0-15,000	48.0	45.9	
$15,000-30,000	30.0	32.4	
$30,000-45,000	11.0	11.7	
$45,000-60,000	3.0	4.5	
$60,000-75,000+	8.0	.9	
Parental Education	%	%	χ2 (7)=5.02, p=.658
Under 7 years of schooling	10.8	11.4	
Junior high school	4.5	8.8	
Partial high school	22.5	18.4	
High school graduate	31.5	36.8	
Partial college/ specialized training	18.0	13.2	
College/ university graduate	6.3	7.9	
Graduate/professional training	5.4	3.5	

* Procedures

Phase I: Legal System Stakeholder Interviews

Phase I sampling procedures. Stakeholders were identified through a purposive, criterion-based and snowball sampling method (Miles & Huberman, 1994). Consistent with qualitative work, our sample was purposive, criterion-based in that to be invited for participation for an interview, stakeholders had to be working in positions that either directly or indirectly impacted girls who are at-risk for involvement in or who are already involved in the juvenile justice system. The recruitment strategy for this component of the study was two-pronged: initially, the PI leveraged previously established working relationships with a variety of stakeholders in the local juvenile justice system to inform them about the interview component of the study and invite them to participate. Invitations were sent via email to local stakeholders at multiple levels of the juvenile justice system (from frontline staff to the executive level) (N = 49) and nationally recognized experts and activists (N = 9) on the issues of girls' justice. The second prong of the recruitment strategy for this phase employed a snowball sampling method, whereby all participants who consented to interview were invited to recommend other stakeholders whose experiences with working with girls would be valuable for the purposes of informing the overall research question. The final sample of stakeholders interviewed represents a 59% participation rate, with 33 out of 58 identified stakeholders completed an in-depth interview.

Phase II: Randomized Controlled Trial of ROSES with Adolescent Girls

Phase II Screening and Recruitment. Girls were eligible to participate in the randomized controlled trial study if they were between ages 11-18, lived in New York City, and had a history of juvenile legal system involvement or were at risk for juvenile legal

system involvement. Girls were deemed to be at risk for juvenile legal system contact if they had had previous contact with police, and/or if they were absent from school in a way that indicated excessive absenteeism or truancy based on NYC standards. In total, 314 girls and their legal guardians were screened. Of these, 314 families screened, 57 could not participate. Thus, baselined assessments were conducted with 257 girls and a caregiver after parent consent and child assent were attained. Following baseline, girls were randomized into the intervention or control group using standard randomization procedures. In total, 123 girls were randomly assigned to the ROSES intervention, and 130 girls were randomly assigned to the control condition. Only the PI had knowledge randomization condition. All baseline and follow up assessments were blind to condition. The treatment and control sample demonstrate baseline equivalence on all key outcomes under investigation.

Phase II Training of ROSES Advocates. The ROSES intervention is delivered by paraprofessionals. In this iteration, it was delivered by advanced undergraduate students from a large university, and therefore also represented an opportunity for a community-university partnership. In total, a team of 106 advocates completed the 40-hour manualized ROSES advocacy training and attended weekly in-persons advocacy supervision meetings with the PI. In total, 25 supervisors and peer supervisors have been trained on ROSES intervention supervision protocols. This has resulted in delivering over 12,120 hours of advocacy to legal system-involved girls.

Advocate training adhered to a mastery model. Topics included the science of disruptive behavior and risk for juvenile legal system involvement, the historical and socio-cultural context of girls' pathways from home, and understanding the multilayered motivations for girls' behavior. They also received training on adolescent development, crisis response skills, safety and mandatory reporting, and empathy and active listening skills (Javdani & Allen, 2012; Javdani & Allen, 2016; Sullivan, Sutherland, & Allen, 2003). Since the intervention's main focus is to increase girls' access to community resources and also make these resources more responsive to girls' needs and rights, each advocacy cohort created a comprehensive list of community resources including education-related resources, organized by neighborhood, to add to a ROSES resource binder used to support individual interventions.

* Project Design & Methods

Phase I: Legal System Stakeholder Interviews

Phase I interview design. All consenting stakeholders (N = 33) participated in a private, semi-structured, one-on-one interview with project staff. Probes were used to clarify themes that emerged over the course of all interviews. All interviews were audio recorded with participants' consent and ranged between 30 to 220 minutes, with most interviews lasting about 120 minutes. Consent forms were completed prior to each interview and participants were also invited to complete a short demographic form assessing questions on age, race, gender, sexual orientation, training on issues involving girls in the local justice system, years worked in juvenile

justice. With the exception of 8 interviews that occurred at the research site at New York University, the remaining 25 interviews occurred in participants' private offices or privately scheduled rooms in their respective organizations. Data collection for this component of the study commenced in April, 2016 and was completed in November, 2017.

Phase I interview method. One-on one interviews followed a semi-structured protocol designed by the PI and the Project Director. A wide range of topics were covered in the protocol including: (i) perceptions of justice involved girls; (ii) perceptions of the justice system; (iii) cross system connections; and (iv); perceptions of services and programs available for girls. Questions on the protocol were designed to understand participant's lived experiences at the micro level (i.e. their everyday work in their professional lives) as well as their macro level views, understandings and experiences of girls at the nexus of multiple systems: education, mental health, and child welfare. Consistent with recommendations on conducting interviews, the interview protocol was piloted with an initial sample of 8 participants, refined the protocol based on this pilot, and identified areas with need for further clarity and development (Hill, Knox, Thompson, Williams, & Hess, 2005). The expanded interview protocol probed further regarding services and programs either within their own respective organizations and/or in the juvenile justice system writ large were effective or harmful to girls; and recommendations on improvements to juvenile justice for girls. The remaining 26 interviews were conducted using the revised protocol.

Phase II: Randomized Controlled Trial of ROSES with Adolescent Girls

Phase II employs a gold star randomized controlled trial experimental design, which follows girls and their caretakes over the course of four follow ups in order to examine aims 1 and 2 of the study. Assessments were conducted at baseline, mid-intervention (six weeks post baseline), post-intervention, and three-month follow-up. All participants were compensated upon completion of the Time 1 measures (US$20), Time 2 measures (US$30), Time 3 measures (US$40) and Time 4 measures (US$60). Assessments were conducted at a location of the participant's choice, including within community settings and on the university campus. All constructs of interest were measured using youth-reported and caregiver-reported instruments validated and reliable for an adolescent juvenile justice sample. Randomization timeline and procedures are described in the previous section.

Intervention assessment methods. To assess intervention fidelity, throughout the intervention, advocates completed implementation logs to document the number of hours delivered and resources obtained. Advocates had access to supervisors, including a PhD-level faculty director, a doctoral student supervisor, and undergraduate student supervisors who were former advocates for the duration of their intervention, and received in person and written feedback. Participants in the control condition did not receive any intervention. Girls in the control condition received a list of community resources if requested at baseline, but were not given specific recommendations. To assess intervention dosage, intervention length (i.e., total number of weeks) and total number of hours spent on advocacy for the entire intervention were extracted from advocacy implementation logs and examined as potential

predictors of intervention effectiveness (e.g., Allen, Larsen, Trotter, & Sullivan, 2013; Javdani & Allen, 2016). Measures of outcomes, covariates, and other key indicators assessed across timepoints are delineated in Table 3.

Table 3.
Phase II Measures Across Timepoints

CONSTRUCT	MEASURE	REPORTER
COVARIATES		
Social Support	Multidimensional Scale of Perceived Social Support	Youth and Parent
	Access to Resources	Youth and Parent
Demographic Information	Demographic Form	Youth and Parent
	Neighborhood Attachment	Parent
	Social Relationships	Parent
Psychiatric Treatment History	Treatment History Questionnaire	Youth and Parent
	Revised Children's Manifest Anxiety Scale	Youth
OUTCOMES		
Mental Health	Youth Self Report	Youth
	Child behavior Checklist	Parent
	Massachusetts Youth Screening Instrument	Youth
	Brief Symptom Inventory	Parent
	Strengths and Difficulties Questionnaire	Parent
Risky Behaviors	Youth Risk Behavior Surveillance System	Youth
	Adolescent Sexual Activity Index	Youth
Substance Use	CRAFT	Youth
	Massachusetts Youth Screening Instrument	Youth
	Youth Self Report / Child behavior Checklist	Youth and Parent
Delinquency	Self-Report of Offending Scale	Youth
	School Discipline, Belonging, Beliefs, and Support	Youth
	Antisocial Process Screening Device	Parent
Wellbeing and Social Action	Brief Resilience Scale	Youth
	General Self Efficacy Scale	Youth
	Civic Engagement Scale	Youth
	Children's Hope Scale	Youth
	Critical Consciousness Scale	Youth and Parent
	System Justification Scales	Youth and Parent
RELATIONSHIPS and TRAUMA		
Trauma, Abuse, Violence Victimization	Childhood Trauma Questionnaire	Youth
	Finkelhor Abuse History	Youth
	Conflict in Adolescent Dating Relationships Inventory	Youth
	Experiences with Sexism	Youth
	Daily Life Experiences Scale	Youth and Parent
	Children's Reported Exposure to Violence	Youth and Parent
	UCLA Posttraumatic Stress Disorder Inventory	Parent
Parents and Peers	Inventory of Parent and Peer Attachment	Youth
	Parenting Style Questionnaire	Youth and Parent
	Network of Relationship and Peer Behavior Inventory	Youth
	Communication of Disapproval	Parent
	Parenting Practices Scale	Parent
Affect and Gender	State Shame and Guilt Scale	Youth
	Silencing the Self Scale	Youth
	Adolescent Femininity Ideology Scale	Youth
	Adolescent Masculinity Ideology in Relationships	Youth
	Attitudes Towards Women Scale	Youth and Parent

For phase II, multivariate and repeated measures analysis of variance and covariance will examine changes in outcomes between intervention and control groups over time. For phase I, consensual qualitative research generates emergent themes in stakeholder interviews.

Phase I: Legal System Stakeholder Interviews

Phase I Data Analytic Plan: Data analysis for qualitative data includes transcription of all recorded qualitative interviews with system actors or stakeholders. Following transcription, all identifying information was removed (e.g., specific job titles, information that could viably link responses back to a participation) from all transcripts. A coding scheme was created in order to document the themes generated based on analysis of qualitative data (see Table 4). De-identified transcripts were uploaded into NVIVO qualitative software. This software allowed for the coding of themes generated based on interview data. Consensual Qualitative Research (CQR; Hill, 2005) methods were used to generate, validate, and check themes. Data were coded based on the coding scheme, which emerged both deductively based on theory and research and inductively as themes emerged based on stakeholder interviews, allowing the coding scheme to be adapted and generate new sub-themes. These methods are consistent with CQR methodology.

Phase I Preliminary Results: Phase I Interview Coding. The research team undertook a thematic analysis (Braun & Clarke, 2006) and coded the interview data to identify emergent themes around (i) the juvenile justice system's current response to girls, and (ii) key strategies and challenges within the juvenile justice system's response to girls' crime and delinquency. The coding process was iterative and the research team worked collaboratively to generate consensus around each emergent theme. All interviews took place prior to the launch of the ROSES randomized controlled trial. Table 4 presents a summary of all themes, sub-themes, and their frequencies.

Table 4.
Phase I: Preliminary Analysis of Legal and Child Welfare System Interviews (N=33)

Theme/Domain	Sub-themes/Core Ideas	Frequency
Recommendations for the System	• Gender-responsive mental health services	General
	• Comprehensive alternatives to incarceration	Variant
	• Coordination between systems	Variant
	• Prevention of School-to-prison pipeline	Rare
Patterns of Girls' Crime and Delinquency	• Through families, who need resources	Typical
	• Gendered expectations of girls	Variant
	• Boys and trauma as a pathway to initial involvement	Typical
	• Lack of alternative ways to get girls resources	Variant
Current Structure of the System	• High burnout, underpaid frontline workforce, that is increasingly "temporary"	Variant
	• The system asks a lot of girls' families, despite a family to juvenile justice pathway	Variant
	• Colorblind and genderblind attitudes require training and coaching	Typical
	• When the system does change, it is often in response to a crisis (e.g., sexual assault) and these changes are limited	Rare
Key Challenges	• Emotional burnout towards girls due to high caseload	Variant
	• Bureaucracy limits reform	Variant
	• Girls get placed or detained due to lack of housing options	Rare
	• Girls of color are treated less fairly and more severely	Typical
Key Strengths	• Lower census of girls in detention and placement, making it easier to provide alternatives for our smaller census	Variant
	• There is interest in multi-agency task force/partnerships focused on girls	Typical
	• System leadership is motivated to focus on low risk, high need populations like girls	Variant

Phase I: Results of Interviews with System Stakeholders

A majority of system actors interviewed reported that the juvenile justice system was not, by and large, serving the short or long term needs of girls. As one stakeholder put it succinctly: "everything you put your hands on is designed with boys in mind." This causes "girls [to] get lost in the system". This stakeholder also suggested that the system is only as strong as its most vulnerable youth, stating that, "to have an equitable system you have to look at who you're serving the least". Thus, there was general consensus that system reforms were necessary to serve the needs of girls. Stakeholders also suggested that the system is positioned to take on this task because it is "poised to take a better look at what works and what doesn't", but the method should be about, "using scientific evidence as the basis" rather than "react[ing] and respond[ing] to anecdotes." Indeed, a typical strength cited by system actors was the

broad interest in multi-agency partnerships focused on girls and, more rarely cited, a motivated leadership and a low relative number of girls to serve with higher quality programming.

Key system challenges reported by system actors included understanding and mitigating the harsher sanctions experienced by girls who are viewed as gender non-conforming or who identify as racial or ethnic minorities. This was a typical theme, emerging in more than half of the stakeholder interviews. Another challenge relates to the emotional burnout and high caseloads of frontline system actors, combined with the bureaucratic challenges to reforming practice and policy. A common assessment was that girls' have a greater complexity of needs, and a single case for a girl is not generally the same as a single case for a boy. This is further complicated by the fact that bureaucratic challenges make largescale reform challenging. For instance, about half of the stakeholders interviewed suggested that there is a lack of effective programming for girls, but there are mandates that youth receive some form of programming. System actors expressed frustration with being accountable to this protocol when they knew that girls typically fail out of particular types of *existing* programs, and they did not want to set girls up for failure (e.g., "I'm not gonna make a decision [because I have to] when I know it's gonna hurt my [client's] family"). Similarly, system actors articulated that the rules meant to serve girls are perceived by youth as "a setup." One stakeholder explained, "they give you a curfew…you have to go to school…it's just a lot to put on teenage kids….Sometimes kids play sports, they don't get out of sports 'till 6:00…it just doesn't work." They went on to underscore the harmful impact of these protocols and processes for getting girls further involved in the legal system. Namely, these protocols can put girls at risk for violating probation for "missing curfew or…programs," despite not "committing other [new] crimes."

Further, one of the **major pathways to girls' involvement in the system** cited was their lack of access to basic needs, such as housing and safety. Speaking about one young woman who was in a violent relationship with an adult male, one stakeholder said: "so then we decided, let's put her into multidimensional treatment foster care...she should have been placed from six to nine months with therapy for the parent at home, [and] therapy for her while she's in foster care….This is a child that we promised to help and we failed...because we don't have the right tools to actually help them...houses, safe houses...the community at large, we need to do better by our children and we're not doing it." This stakeholder is underscoring a common pathway for girls – confining them because of fear of their own safety, and not because they are viewed as a threat to public safety. Because there was no safe housing alternative for this girl, she was kept in a confined and punitive setting instead of provided with viable housing alternatives. The general sentiment among stakeholders was that this pattern of being confined "for their own safety" happens more for girls than boys. As one stakeholder put it: "I fear that as a system, we could be paternalistic when it comes to adolescent girls in contrast to…young men… [and this]...may work against...girl[s]...because it has a harsher outcome in disposition than it would for boy[s]." Incarceration, in turn, can act as a further traumatizing event for girls who already have high levels of trauma, and which "deprive[s] the liberty of the young person and

[deprives them of] normalcy… to then treat a young person and it's a much more difficult…[to] have the kind of outcomes that you want of normalizing the experience for young person so that they can succeed in the community."

Several **key recommendations** were also suggested by stakeholders. The most common of these was to provide gender-responsive programming that could target girls' mental health and health needs. These services would ideally be tailored, individualized, high quality and allow girls to be "made to feel like they are contributors and leaders." One stakeholder summarized this sentiment by saying, ""if you're not gonna send anyone from your family there [to the services], then don't send [girls] there...don't treat them like they're on the assembly line." In addition, there was typical agreement around the importance prioritizing girls' developmental needs by providing programming that is age appropriate and strengths-based. One stakeholder suggested that, rather than punishing girls' agency, it is important to recognize that "they're advocating for themselves, [which] is seen as defiant and…dealt with punitively…but the girls are such strong advocates for themselves…if you sit down and talk to them they'll tell you exactly what you need to know." Another shared this perspective, "[girls also] need outlets, they need…to do something that they like to do" or to be offered to do something "they take pride in, and they enjoy being able to do." A key part of the programming recommended for girls included some kind of mentoring component and an ability to work with an adult. As on administrator suggested, "true mentoring will…look different, depending on individual girls' needs…I can't help but think [they] need adults who care about them, who are invested in them and meet them where they are in a non-judgmental way."

A second set of recommendations was toward better coordination between systems, with a focus on reducing the school-to-prison pipeline for girls. For instance, it was noted as important for the juvenile justice system to have staff that could "help [the families] navigate the educational system, let them know about the resources that are out there." This focus on connection to helpful resources was a common theme among this set of recommendations. One stakeholder summarized this well by underscoring a need to widely disseminate quality resources instead of just give families a list of phone numbers to call; "[t]here're a lot of resources out there and I think we need to do a better job…really letting families know about these resources because…a lot of families want their children to do better, but they just don't have the resources available." In line with the "for her own safety" pathway mentioned above, stakeholders also underscored that some of these resource needs were largescale, especially for families experiences chronic poverty, including, " "housing needs, consumer debt needs, foreclosures, losing their homes…child support needs."

 Finally, about half of the stakeholders interviewed agreed that a better investment into communities in general, and girls involved the juvenile justice system in particular, would be to reduce reliance on incarceration and instead create real alternatives to placement and confinement. One stakeholder summarized, "if I had a magic button or lever there would…be an already existing alternative to placement model for girls to choose to opt into.…that's rooted in workforce development and financial management

and…academic support." These stakeholders recognized that this front-end investment would produce community and individual level safety for girls, and ultimately support a better society for all. Contending with this notion, one top stakeholder shared, "any [of the programs] that I'm talking about today costs money but so does building more prisons and jails, and so does keeping people incarcerated, and so does society's cost when young people are growing up in places of incarceration, as opposed to going to school and getting an education and being able to survive in our society…you either pay that cost at the front-end or you're gonna be paying it at the back-end." Taken together, these stakeholder interviews provided an important foundation for this Area 2 university-community collaboration project by identifying the need for Phase II of this project, and suggesting broad support for providing innovating, cost-effective, individualized and strengths based programming for girls across the juvenile justice continuum.

Phase II: Randomized Controlled Trial (RCT) of ROSES with Adolescent Girls

Phase II Preliminary Results: Attrition. A total of 255 participants completed the baseline assessment and were randomized. Further, 236 (93%) of participants were retained in the study prospectively and completed at least one follow up assessment. Attrition at post-intervention ranged from 5 to 20%. These levels of attrition were relatively small compared to other interventions in community settings for adolescents (Lockwood & Harris, 2015; Tully & Hunt, 2016; Wamser-Nanney & Steinzor, 2017). There were no attrition differences between the experimental and control group at post-intervention ($\chi 2= 1.07$, p=.30) or at the 3-month follow-up ($\chi 2= .21$, p=.64).

Phase II Preliminary Results: Program Satisfaction and Fidelity. Fidelity of the ROSES intervention was monitored on a weekly basis through advocacy supervision, which included a face-to-face meeting with supervisors, written feedback from supervisors, and submission of weekly logs of intervention activities and goals. At Time 3, girls who received advocacy responded to items that assessed satisfaction and fidelity to tenets of advocacy. At post-intervention, girls in advocacy on average reported that the intervention was highly consistent with principles of advocacy as defined by Sullivan et al. (2003) including connection to community resources, youth guided, strengths-based, and emotionally supportive. Additionally, 87% of participants were "pleased" or "mostly pleased" with their overall participation in ROSES, 89% were "pleased" or "mostly pleased" with their work with their advocate, 81% were "pleased" or "mostly pleased with the degree to which the intervention was youth-led, 84% were "pleased" or "mostly pleased" with the degree to which their needs were met, and 82% were "pleased" or "mostly pleased" with the degree to which they met their goals overall. According to progress reports that advocates submitted on a weekly basis, advocates spent on average 120 total hours on intervention activities (SD= 51.8), and on average 21.82 of those hours were face to face meetings with participants (SD=15.66). Advocates

reported spending on average 11.85 hours per week on advocacy-related activities, and reported a mean of 1.11 face to face contacts per week (SD=0.5), suggesting the intervention was delivered with correct dosage. Table 5 reports intervention characteristics.

Table 5.
Phase II Descriptive Statistics on Goals, Fidelity, Satisfaction, and Program Characteristics for Youth Randomly Assigned to the ROSES Treatment Condition (N=123)

	N	Mean	Median	SD	Range
Participant Characteristics					
Age	109	14.55	15	1.68	11-18
Intervention Characteristics					
Sum hours (Total hours for entire intervention)	102	120.21	127.62	51.8	1.92-251.50
Calendar length weeks	103	16.48	15.14	17.47	4-42.86
Fidelity					
Overall fidelity	126	1.92	1.83	0.84	1-5
Community resources	126	1.85	1.87	0.86	1-5
Youth guided	117	1.87	1.75	0.91	1-5
Strengths-based	126	1.90	1.67	0.88	1-5
Emotional support	126	1.98	2.00	0.94	1-5
Satisfaction					
Overall program satisfaction	118	1.5	1	0.88	1-4
Satisfaction with work with advocate	104	1.44	1	0.95	1-7
Satisfaction with degree to which work was youth-led	102	1.62	1	1.06	1-7
Satisfaction with degree to which needs were met	112	1.63	1	0.94	1-4
Satisfaction with degree that overall goals were met	111	1.75	1	1.01	1-7
Importance of Program Characteristics					
Community resources	117	3.92	4	1.12	1-5
Informal time	116	4.02	4	1.04	1-5
Regular, weekly support	116	4.07	4	1.06	1-5
Youth guided	116	4.14	5	1.11	1-5
Non-judgmental attitude	117	4.1	5	1.15	1-5
Learn new skills or practice existing ones	117	4.03	4	1.14	1-5

Note. Program fidelity range from 1 = strongly agree to 5 = strongly disagree; program satisfaction range from 1 = extremely pleased to 7 = terrible; importance of program characteristics range from 1 = not at all important to 5 = very important

Phase II RCT Data Analytic Plan: Data analyses for RCT data included a combination of multivariate analysis of covariance (MANCOVA; for multiple dependent variables), analysis of covariance (ANCOVA; for single dependent variables), and repeated measures analysis of variance to examine the extent to which violence and delinquency, substance use and risk taking, and mental health and wellbeing demonstrate significant differences between the treatment and control groups, and over time. For all analyses, baseline levels of each outcome were modeled in order to account for baseline levels, to control for baseline variability in outcomes, or to model changes in outcomes over time. All measures presented demonstrated adequate reliability (Cronbach's alphas > .70). For key

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outcomes, the assumptions of linearity, homogeneity of regression, and homogeneity of variance were screened prior to all analyses, none of which were violated. As all other assumptions were met, and because MANCOVA and ANCOVA are robust to deviations from normality (Stickle, Marini, & Thomas, 2012), all necessary skewed and kurtotic variables were transformed using log 10 transformation of the raw values. Results using each type of transformation were consistent with results using data that had not been transformed. For all key outcomes discussed below, baseline equivalence tests were conducted to ensure that the baseline scores for girls randomized to ROSES were statistically equivalent to those for girls randomized to the Control condition. Assumptions of baseline equivalence were met for all outcomes, confirming the effectiveness of the randomization-to-group procedures.

Phase II RCT Results: Effect on Key Outcomes[i]

Violence and Delinquency. Participants in the ROSES group demonstrated significantly less violence at post-intervention and follow up compared to their counterparts in the control condition [$F(8, 210) = 2.0$, $p<.05$], as assessed with 8 items from the Youth Risk Behavior Surveillance Survey. Of note, whereas 31% of girls in ROSES reported engaging in a physical fight in the 3 months following intervention, 62% of girls in the Control group reported the same ($p<.02$). Further, 8% of girls in ROSES reported missing school due to fear of safety/violence whereas 32% of Control girls did the same ($p<.02$). Similar patterns emerged for other items assessed, in that half as many girls reported being in a physical fight on school property, carrying weapons or guns, or engaging in or receiving threats within or outside of school.

Importantly, the violence that girls in ROSES engaged in was no less likely to come to the attention of law enforcement as compared to acts of violence engaged in by the Control group. Specifically, as assessed by the Self-Reported Offending Scale, police contact for violence was not significantly different in the ROSES compared to the Control conditions ($ps>.05$). Further, as assessed by the parent-reported Antisocial Process Screening Device, girls in ROSES did not show significant changes or differences in their personality characteristics related to impulsivity or callousness/unemotionality ($ps>.05$). These results suggest a relatively stable pattern of personality characteristics over the course of the intervention and follow up period.

However, both direct and indirect exposure to violence in the community were significantly less for the ROSES condition as compared to Control, as assessed via the parent-reported children's experience of violence scale (CREV-2-P). [$F(6, 171) = 3.5$, $p<.05$]. Specifically, according to their caregiver/parent, girls in ROSES were significantly less likely to be direct victims of violence or to witness or hear reports of violence in their communities reported against people they know ($ps<.05$). Post-hoc analyses revealed no significant difference among ROSES versus Control girls with respect to witnessing or hearing about violence committed against strangers ($ps >.05$).

In addition, participants in the ROSES group demonstrated significantly less status offending and minor delinquency at post-intervention and follow up compared to their counterparts in the control condition [$F(3, 184) = 2.7$, $p<.05$], as assessed by the Self-Reported Offending Scale. Specifically, girls reported fewer instances of disorderly public conduct, running away from home, and absences from school after participating in the ROSES intervention compared to those randomized to Control. Notably, in the 3 months following intervention, girls receiving ROSES reported 1.6 average days of school missed compared to 3.3 days missed by girls in the Control group ($p<.02$) and reported almost no nights away from home without permission, compared to .35 nights away for girls in the Control group.

Finally, due to the need to focus on the school-to-prison pipeline (see Phase I results), we conducted separate specific analyses on school-related delinquency. There was a significant effect of condition on the outcome "I got in trouble for not following school rules" ($F(2, 209)= 7.75$, $p<.01$), with girls in the ROSES reported significantly lower scores compared to their counterparts in the Control condition. There was also a significant effect of condition on the outcome "I was transferred to another school for disciplinary reasons" ($F(2, 213)= 9.69$, $p<.01$), with girls in the ROSES reported significantly lower scores compared to their counterparts in the Control condition. These additional analyses suggest an important impact of ROSES on school-related delinquency, which is a key pathway to girls' incarceration.

Substance Use and Risk Taking. Participants in the ROSES group demonstrated significantly less substance use and abuse at post-intervention follow up compared to their counterparts in the control condition [$F(1, 223) = 5.3$, $p<.05$], as assessed via the CRAFFT. This instrument is a robust screening diagnostic for dangerous alcohol and drug use and abuse, and includes items assessing using "alcohol or drugs to relax, feel better about yourself, or fit in", "alcohol or drugs while you are by yourself alone", "forgetting things you did while using alcohol or drugs", "family or friends telling you to cut down on your drinking or drug use", and "getting in trouble while using alcohol or drugs". Girls in the ROSES condition had significantly less alcohol and drug use across these items, compared to girls in Control, with a mean CRAFFT score of .12, which is well below the CRAFFT's clinical threshold for screening problematic substance use.

In relation to substance use risk, participants in the ROSES group demonstrated significantly less sexual risk taking at post-intervention and follow up compared to their counterparts in the control condition [$F(3, 184) = 3.6$, $p<.05$], as assessed by 3 items from the Youth Risk Behavior Surveillance Survey. Of note, girls in ROSES were less likely to drink alcohol or use drugs before sexual intercourse (5% ROSES compared to 12% Control; $p<.05$) and to use sexual protection prior to last intercourse (36% ROSES compared to 20% Control $p<.05$). Girls in ROSES also reported having fewer sexual partners in the months following receiving intervention, though the post-hoc test of this difference did not suggest a large enough effect to reach significance.

Mental Health and Wellbeing. Participants in the ROSES group demonstrated significantly fewer symptoms of broadband internalizing (e.g., depression, anxiety) and externalizing (e.g., anger) mental health challenges at post-intervention and follow up compared to their counterparts in the control condition [$F(8, 210) = 2.0$, $p<.05$], as assessed with 21 items from the Massachusetts Youth Screening Instrument (MAYSI-2), which is specifically designed to assess mental health in a juvenile justice population. These items correspond to the broadband symptoms along the mental health spectrum and assess depressed mood, anger, irritability, anxiety, somatic complaints, and anhedonia. These lower mental health symptoms are further corroborated by findings suggesting that girls in ROSES report higher levels of wellbeing, as assessed by the Brief Resilience and General Self Efficacy Scales [$F(2, 171) = 3.0$, $p<.05$]. These items assess girls' ability to solve difficult problems, remain calm in the face of challenges, engage in meaning making around their lives, and feel determined and proud. Across these 18 items, girls in ROSES report higher levels of resilience and self-efficacy after completing the ROSES intervention compared to their counterparts in the Control condition.

Implications for Criminal Justice Policy in the United States

There are several implications for criminal justice policy and practice, both direct and indirect in terms of reducing girls' violence, substance use, and enhancing mental health. This project will allow for the dissemination of a treatment to under-resourced individuals and rigorous evaluation of its efficacy. The ROSES treatment has strong potential to directly affect others by a) continuing to be implemented locally, b) being implemented in other settings and c) being integrated into local and national policy. Indeed, a major strength of the current project is its direct translation of knowledge to practice.

Specifically, the ROSES advocacy model is inherently transferrable and can be used by a variety of communities. In addition, ROSES can be implemented and evaluated with non-student paraprofessionals and is currently being incorporated into some traditional human service settings by Sullivan, Allen and colleagues (Hess, Barr, & Hunt, 2009). In addition, reliance on students has the potential to build University-Community partnerships, which can be mutually beneficial, addressing the training needs of students and simultaneously providing low cost or (in this case) free of charge interventions (Holsinger, 2008; 2012). Indeed, this intervention model has been used across a wide variety of University-based settings with, for example, survivors of domestic violence (Sullivan & Bybee, 1999; Allen et al., 2013a). Moreover, the reliance on students and University-based settings does not inherently limit sustainability per se. Indeed, research suggests that the strong collaborative ties between Universities and communities can result in highly sustainable models, particularly if ROSES is incorporated into the curriculum of University settings (Holsinger, 2008), as was demonstrated by the feasibility and high implementation fidelity underscored by the current results.

Because of these factors, the implementation of the intervention itself is extremely cost effective but simultaneously able to provide comprehensive and individualized services. Further, ROSES can directly reduce burden on the JJ system and other public

health agencies with whom girls and their family are multiply connected. This is done through the linkage of, and follow through regarding, girls and multiple formal (e.g., housing, education) and informal resources (e.g., effective communication, natural support systems) in a way that is drastically more comprehensive than case management alone (Javdani & Allen, 2014). In addition, ROSES could become an alternative to incarceration, allowing girls to complete terms of probation more quickly, and reducing engagement in technical violations, all of which represent priority NIJ strategies. In tandem, these strategies can work to reduce risk across several areas, including: homelessness, sexual risk taking, unwanted teen pregnancy, engagement in sex work, and addiction.

The model of ROSES itself is also one that can have "rippling" effects across communities. Because the program teaches girls how to "be their own advocates," participants can learn generalizable skills and take them back to their own communities in ways that have positive impact. Indeed, a key potential impact (and next step) of ROSES is to examine peer advocacy models, whereby previous ROSES participants are supervised and trained in becoming peer advocates for other girls involved in the JJ system (a model with which the PI has extensive experiences). Thus, ROSES can directly and indirectly impact criminal justice policy and practice by functioning as an intensive program for girls within detention centers, girls existing detention and/or on probation (i.e., as a re-entry program), serve as an alternative to incarceration, and improve knowledge and awareness of community resources; enhancing and targeting youths' contextual competence (Pederson et al., 2010).

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[i] Some participants measures are not included due to data collection and university closures due to COVID-19 (ns <10 participants). As such, these results should be considered initial and preliminary. These represent intent to treat analyses and retain the maximum number of youth randomized to intervention for each outcome. In cases were fewer than 10% of data were missing on an outcome and data were missing at random and equally across ROSES and Control conditions, the last outcome score was carried forward to retain statistical power. Depending on the analysis, demographic and other covariates were included in RCT outcome analyses but did not change the overall pattern of results presented. For all pairwise post-hoc analyses, Bonferroni adjustments were used to reduce the chance of type I error.