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Opposition of Juvenile Justice

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Foreword

Welcome to the sixth issue of the *Journal of Juvenile Justice*. This peer-reviewed journal provides the Office of Juvenile Justice and Delinquency Prevention (OJJDP) a venue to engage the juvenile justice community and present new and significant scientific findings.

As OJJDP's new Research Coordinator, I am pleased to have the opportunity to introduce myself (and this issue) to the field. After earning a PhD in criminology from the University of Maryland, I began my career in juvenile justice, serving nearly 10 years as a research criminologist in Federal government before joining OJJDP in 2014. One of the key themes in my career to date has been the search for new ideas, new topics, and unexplored areas of criminology.

A unifying theme among the papers presented in this issue of the *Journal* is that each takes on an important and typically neglected topic. It is not a surprise to see that some types of subjects, situations, or methodologies are less prominent within the field. Individual scientific endeavors tend to focus on what is presumed to be the most pressing issue of the day, and to design a study that is as easy or efficient as possible to carry out. For example, males are more often studied in part because there are far more of them in the juvenile justice system. The same is true of research in urban areas. Crime is disproportionately high in these areas, which are typically located close to universities that generate most of the scientific research. There is also more infrastructure in urban areas, which makes research relatively easier to carry out and more valuable relative to conducting the same study in a rural area. There are more youth potentially impacted in the local urban community, and there is more political capital to possibly gain, as well as more potential funding.

Yet the net impact of such efficient choices in individual studies leads to large-scale inefficiency in the aggregate. Seeking these convenient or efficient choices means that we as a field may create a blurred vision of juvenile delinquency, the juvenile justice system, and the direction that policy should go. It is critical to recall, for example, that 80% of police agencies operate in small towns and rural areas. What are the limits of urban criminology in speaking to juvenile delinquency in these areas?

The papers presented in this issue each represent an attempt to buck this trend. One takes on treatment of confined girls. Another asks whether theories developed in urban areas can inform juvenile justice in rural areas. One looks at a special population, and special data source, rarely used in studies of delinquency: child protective service exposure. A fourth paper examines policing, but not as enforcers of law and administrators of force. Instead, it looks at the police as mentors of delinquent youth. The fifth paper examines desistance from gangs, which is not a rare topic per se, but the methodology certainly is: giving voice, and legitimacy, to gang members themselves. The idea that we, the "experts," have something to learn from delinquent youth in terms of programming or policy is too rare. The final paper takes on two neglected topics simultaneously. First, it intends to serve guardians of delinquent youth. Most of our research is intended to assist juvenile justice personnel or treatment providers. As such, most work is somewhat disempowering to parents or guardians of youth. This paper reminds us that these guardians are integral members of the youth's lives and the justice system. Second, it takes on a topic that is less prominent: sexual health of delinquents. This area of life is critical to delinquent youth, their desistance, and their broader communities.

Collectively, these six papers illuminate understudied populations and areas, underutilized methodologies or paradigms, underserved stakeholders, and underappreciated aspects of juveniles or justice workers. It is especially exciting for me to share these new ideas and insights with the field.

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Modifying Dialectical Behavior Therapy for Incarcerated Female Youth: A Pilot Study

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Abstract

The prevalence of mental and emotional disturbance is a persistent problem for youth detained in correctional facilities. Females within this population, while often considered by the social science and juvenile justice communities to be a subset of their male counterparts, present with unique biological, cultural, social, and psychological stressors, including extensive trauma histories and internalizing behaviors. In addition, organizational barriers to the implementation of many treatment models exist for females in juvenile justice settings; hence, little evidence-based mental health treatment designed specifically for this population currently exists. There is evidence that Dialectical Behavior Therapy (DBT) successfully addresses many of the types of problems presented by this population. In this study, we examined the implementation process and treatment outcomes of a modified DBT group in a correctional facility for adolescent females with a variety of mental and emotional problems. Mental health program implementation was the main focus of this study. Modifications were made to group leaders' training requirements, duration of the group, and group session format to fit the

needs of this population. A brief description of preliminary treatment outcomes is included.

Introduction

The prevalence of mental and emotional disturbance in the juvenile justice population is a persistent problem in the United States. Over the past decade, research has consistently indicated a significantly higher level of mental and emotional disturbance among youth involved in the juvenile justice system than among youth in the general population (Otto, Greenstein, Johnson, & Friedman, 1992; Cauffman, Feldman, Waterman, & Steiner, 1998; Loeber, Farrington, & Washburn, 1998; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; National Mental Health Association, 2004; Skowyra & Cocozza, 2006; and Sedlak & McPherson, 2010). Approximately 65 to 70% of youth in the juvenile justice system meet criteria for at least one mental health diagnosis, compared to 20 to 30% of adolescents in the general population. In addition, females in the juvenile justice system have even higher levels of psychological and emotional problems than their male counterparts. For example, Sedlak and McPherson (2010) found that females in custody

reported 8 to 20% more problems with attention, hallucinations, anger, anxiety, depression/isolation, trauma, and suicidal thoughts or feelings than their male counterparts. The number of adolescent females being arrested and placed in secure correctional facilities in the United States is increasing despite the fact that the overall number of juveniles arrested for criminal offenses is declining (Cooney, Small, & O'Connor, 2008).

Unique biological, cultural, social, and psychological stressors combined with negative general life experiences have made females in the juvenile justice system especially vulnerable to specific crises once incarcerated. Females in the juvenile justice population often have a negative self-image, a history of poor and even violent relations with peers and family, and unhealthy or destructive interpersonal and romantic relationships (Chesney-Lind & Okamoto, 2001). Trauma and abuse are especially prevalent in this population, with 50 to 75% of delinquent females having a history of physical, sexual, and/or emotional abuse (Zahn, Day, Mihalic, & Tichavsky, 2009). With such high rates of trauma and abuse, girls entering the juvenile justice system are more likely than boys to experience Post-Traumatic Stress Disorder (PTSD) and other internalizing emotional problems—such as depression, anxiety, negative self-image, affective dysregulation, personality disorders, and parasuicidal behavior (McReynolds, Schwalbe, & Wasserman, 2010; Cooney et al., 2008; National Mental Health Association, 2004).

Historically, delinquent females have been treated by the juvenile justice and social science communities as a subset of their male counterparts (Chesney-Lind, Morash, & Stevens, 2008). The standard treatments—developed specifically for delinquent males—tend to focus on the acting-out and externalizing behavior that is typical of male juvenile offenders (i.e., assault, gunrelated offenses, etc.; Hoyt & Scherer, 1998). In their qualitative study of adolescents and staff in juvenile corrections facilities, Belknap, Holsinger, and Dunn (1997) found that incarcerated girls

believed corrections facilities were systemically sexist, racist, and often made their problems worse. In addition, these researchers found staff attitudes ranged from being deeply passionate about addressing the needs of girls in the system to hatred of working with girls. Though adolescent females are being arrested and incarcerated at higher rates than ever before and have a higher prevalence of mental and emotional problems, only one evidence-based program has been developed specifically to treat the mental and emotional needs of this population (Zahn et al., 2009). While there is increasing evidence of the effectiveness of gender-specific programming at lower levels of the juvenile justice system, such interventions have not been widely applied in the correctional setting. In an expansive review of programs established for girls in the juvenile justice system, Acoca and Dedel (1998) describe 11 prevention and intervention programs that include mother-daughter services, advocacy, residential care, academics, teen pregnancy, aftercare, and community-based supervision. However, only one of these programs is offered in a secure residential center.

Cooney et al. (2008) suggest that female-specific treatments have not been developed because adolescent females' delinquent behavior (i.e., status offenses, internalizing symptoms, relational aggression, etc.) often does not result in the same degree of socio-environmental costs and consequences as adolescent males' delinquent behavior. Evaluation research on the implementation of male-oriented treatment programs among females has shown mixed results. Some studies suggest no difference in effectiveness while others show these programs are less effective (Gorman-Smith, 2003) or even harmful for females (Hipwell & Loeber, 2006). Furthermore, in their 2006 study Hipwell and Loeber suggest that the detention environment (i.e., seclusion, staff insensitivity, loss of privacy, etc.) can exacerbate delinquent adolescent females' internalizing symptoms. Hubbard and Matthews (2008) support the utilization of traditional juvenile justice

treatment approaches among females, especially those involving cognitive behavioral therapy, but suggest that these treatments be modified to address the specific types of cognitive and behavioral processes that are more common among girls (i.e., self-debasing distortions and internalizing behaviors). In addition, since many types of cognitive behavioral therapy (CBT) are delivered in a group format, Hubbard and Matthews (2008) also recommend that groups be structured in a way that is strengths-focused and designed to help empower females.

Despite the lack of evidence-based treatments for adolescent females in correctional settings, effective treatments have been developed for females with similar problems in other settings. One of the most effective of these treatments is DBT.

DBT (Linehan, 1993a; Linehan, Heard, & Armstrong, 1993) is a derivative of CBT and was originally developed for the treatment of chronically suicidal and self-harming adult females with Borderline Personality Disorder (BPD). DBT incorporates behavioral therapy, dialectical philosophy, and Zen Buddhist practice and philosophy (Linehan, 1993a). The complete DBT protocol consists of five treatment components: individual therapy, group skills training, telephone coaching, case management, and a therapist consultation team. While DBT was originally developed to treat females with Borderline Personality Disorder (BPD), DBT has demonstrated effectiveness in the treatment of adults and adolescents with a variety of mental disorders, including depression (Wineman, 2009; Blackford & Love, 2011), PTSD (Spoont, Sayer, Thuras, Erbes, & Winston, 2003), and deliberate self-harm (Katz, Cox, Gunasekara, & Miller, 2004; Wineman, 2009). In addition, females in juvenile corrections facilities have been found to exhibit behavioral and affective symptoms similar to those of women with Borderline Personality Disorder, including emotional dysregulation (i.e., mood disturbance, affective lability, and uncontrolled anger), behavioral disturbance (i.e., violent aggression, self-harm, and poor impulse control), self-destructive behavior (i.e., substance

abuse and sexual and criminal behaviors in adolescence), and severe relational problems, i.e., childhood sexual/physical abuse, poor/inconsistent self-image, and violent/abusive relationships (Teplin et al., 2002; Trupin, Stewart, Beach, & Boesky, 2002). It is important to note that the use of DBT with this population does not imply an increased potential for personality disorders. While the behavioral and affective symptoms prevalent among incarcerated female youth often overlap with the symptoms of BPD, no existing research suggests that juvenile justice–involved girls are more likely to be diagnosed with BPD than females in the general population.

Dialectical Behavior Therapy in Incarcerated Female Youth

Although the majority of literature published on DBT is based on work done in mental health or research settings, DBT has also been implemented in juvenile correctional settings to treat adolescent females diagnosed with a variety of mental health problems (Trupin et al., 2002). Trupin et al. (2002) adapted and implemented a DBT program in a juvenile rehabilitation facility housing incarcerated females. Researchers adapted DBT for this population by changing behavioral targets to better fit an adolescent forensic population and by training all staff in administering DBT. Youth in the study were separated into three groups: 1) a mental health treatment group (e.g., youth receiving mental health treatment) who received DBT; 2) a mental health treatment group that did not receive DBT; and 3) a non-mental health treatment group that received DBT. The mental health group that did not receive DBT received treatment as was usually offered. Youth in the DBT mental health group exhibited a significant reduction in behavior problems, while youth in the non-mental health treatment group who received DBT did not. Risk assessment scores showed no significant differences between DBT and non-DBT treatment groups, but these scores did show a significant decrease within groups. Researchers suggested these mixed results could

partially be attributed to regular transfer of youth into and out of the mental health group due to suicidal or other aggressive behavior. Such transfer maintained the high rates of behavioral problems throughout the study period. In addition, researchers emphasized the importance of comprehensive staff training in DBT in effectively reducing problematic behavior.

However, we suggest extensive staff training and several other factors may actually serve as barriers to the implementation of DBT in juvenile correctional settings.

Barriers to Implementation

Historically, skeptics of evidence-based treatment implementation have posed the question, "Is it realistic to attempt to organize, deliver, and evaluate mental health treatments in correctional settings?" (Cullen & Gendreau, 2000). In the process of treatment implementation, researchers and therapists may experience a variety of problems due to systemic barriers such as: making initial contact and maintaining a working relationship with those who work in the correctional setting; lacking an understanding of the setting's feasibility to host evidence-based treatments; lacking confidence in the institution's stability; sensing incongruence between the values or interests of the setting's stakeholders and treatment providers/evaluators; and having difficulty maintaining funding streams (Gendreau, Goggin, & Smith, 1999). Researchers agree that the implementation of evidence-based treatments in "real world" correctional settings can be an arduous process, but maintain that it is a worthy and possible pursuit (Bourgon & Armstrong, 2005; Gendreau, et al., 1999).

DBT is no exception. While there is evidence of the effectiveness of DBT in a correctional setting, there are potential barriers to the application of the full DBT protocol due to high costs, clinician training requirements, and organizational barriers. First, treatment costs for adolescents in juvenile justice facilities rest with state governments.

Shrinking budgets and resources make covering costs for intensive, long-term treatment challenging (Stephani, 2004). Second, fidelity to the DBT model requires extensive clinical training and consultation provided by approved DBT specialists. Access to this level of training and consultation can be difficult in juvenile justice correctional facilities due to the significant amount of time required and financial demands, as well as high turnover rates. Third, some DBT components such as the 24-hour phone consultation—are not suitable or practical in juvenile correctional settings. Fourth, the frequent movement of youth into and out of correctional facilities makes it difficult to complete the full DBT protocol, which can require between 1 and 4 years of treatment (Linehan, 1993b).

DBT Skills Training Group: A Potential Solution

Despite the many barriers to using the standard DBT protocol in a juvenile corrections setting, there may be significant value in identifying and applying a set of core DBT skills aimed at affect regulation, internalizing symptoms, and interpersonal effectiveness, which would specifically target the identified needs of this population. Part of the larger DBT protocol, the DBT skillstraining group is potentially a practical and more cost effective means of implementing DBT within the juvenile correctional setting. This group setting allows for multiple youth to be treated simultaneously over a shorter period of time than is possible with the standard DBT protocol. Also, therapists participating in DBT skills-training may require less intensive training than those using the standard protocol, since the skills training group utilizes a highly manualized protocol (Linehan, 1993b). Researchers have implemented modified DBT skills-training groups only with similar populations and have had positive outcomes (Nelson-Gray et al., 2006; Salerno, 2005).

DBT skills training takes place weekly in a psychoeducational group in which the leader teaches skills in four main modules: core mindfulness, interpersonal effectiveness, emotional regulation, and distress tolerance. Homework is assigned weekly to provide skills practice. Clients also use daily diary cards to document emotions, behaviors, and skills used each week. Completion of all four skill modules typically requires a total of 6 months in weekly group skills training.

The DBT skills-training group may be appropriate for females in juvenile justice correctional settings because it is a short-term, cost-effective, evidence-based treatment. DBT includes a broad set of skills that have been shown to benefit female adolescents who have difficulty with emotion regulation, interpersonal relationships, behavioral control, and coping with extensive trauma. Although similar treatments have been implemented in correctional settings for adult and adolescent females, there is no evidence as to whether the DBT skills-training component only can be modified and implemented in a juvenile justice correctional facility for females, in a way that maximizes cost effectiveness, attention to systemic barriers, and treatment outcomes.

Framework for Implementation

Based on years of clinical experience in correctional settings, Gendreau, Goggin, & Smith (1999) created a taxonomical framework that outlines four core areas of successful treatment program implementation in correctional settings: organizational factors, program factors, change agent(s), and staff factors. Organizational factors pertain to the host setting where the program will be implemented. These include the managerial, structural, and cultural characteristics of the setting. Program factors refer to the clinical and fiscal components of the treatment program that will be implemented. The program should be scientifically validated and should cause as few resource and financial strains on the setting as possible. The change agent(s) is described as the person(s) who is primarily responsible for initiating and leading the treatment implementation process. The change agent should be knowledgeable about the setting and the treatment, appropriately credentialed, and aligned with the

setting's mission and goals. Staff factors include characteristics of the persons who will directly deliver the treatment, as well as treatment supervisors. Staff should be in consistent contact with the change agent, be trained in the implemented treatment, and play an active role in the design of the treatment program. In this study, we utilized this framework to assess the process and effectiveness of the group implementation of DBT skills-training.

Purpose of Study

In this pilot study, we examined the implementation process of a modified DBT skills-training group for females with emotional and behavioral problems at a juvenile correctional facility. Our primary goal in this study was to determine the feasibility of successfully implementing a modified version of a DBT skills-training group in a correctional juvenile justice facility. A secondary goal of this study was to use existing clinical outcomes measures to assess participant progress.

Method

Participants

Twelve female adolescents participated in a DBT skills-training group in a secure correctional facility for adolescent females. The facility houses approximately 20 to 25 females between the ages of 13 and 18 years who meet at least one of the following criteria: (a) she has been adjudicated for a violent or attempted violent offense; (b) she has a history of adjudication offenses resulting in determinate placement; (c) she has been adjudicated for a sexual offense for which she has not received treatment; (d) she has been adjudicated for or has a history of three or more felony offenses; or (e) she has absconded from community placement and has been charged with a subsequent offense (State of Tennessee Department of Children's Services, 2011).

We collected data before and after treatment for 9 of the 12 participants. Demographic data were

collected at intake to the facility. Participants ranged in age from 14 to 18 years (M = 16, SD = 1.33) and were predominantly Caucasian (70%), with 19% African American and 11% Hispanic. Education levels varied: 33% had less than an 8th grade education; 33% had completed some high school; and 33% had a high school diploma or GED. The participants' age of onset for emotional or behavioral problems was 7.8 years (SD = 3.65) and the average age for first treatment or counseling session was 10.5 years (SD = 3.24). The majority of group members reported that someone else recommended they participate in the DBT skills-training group (67%) and 22% reported participating in the group against their will. As this was a pilot group, it was not part of the individual programming mandated as part of the youth's stay in the facility. Participation in the DBT skills-training group was recommended by the facility's treatment team, but the youth's release was not contingent upon participation or completion (as was the case with mandated treatment components, such as individual therapy and family therapy). We did not obtain diagnostic information for the purpose of this study; however, mental health symptoms data were collected before and after treatment.

Treatment Modification and Implementation

The primary goal of this pilot study was to examine whether a DBT skills-training group could be successfully modified and implemented in a correctional facility for adolescent females.

Treatment in this facility was provided as part of a contract with the State of Tennessee, thus clinicians were vendors working within the structure of the state juvenile correctional setting. Clinicians and interns were present in the facility full-time during the work week. They were integrated into the facility's treatment team structure and collaborated with administrators in evidence-based program planning and implementation of treatment and milieu interventions. Being in the role of a contract vendor in a state facility added another level of coordination and engagement

with the hosting agency around program development. Collaboration included suggestions and consultation around evidence-based practice and protocol; however, final decisions regarding what type of program and services were implemented were made by the state agency. While the training clinicians implemented the modified DBT skills-group as a treatment pilot, the purpose of this study was to assess feasibility from a program development perspective.

The full DBT protocol (e.g., individual therapy and skills group provided by fully trained DBT therapists, 24-hour telephone coaching) was not implemented due to systematic barriers unique to this environment (e.g., budget constraints, short duration of participants' residence in the facility, and lack of clinicians' formal DBT training). It was especially important to utilize a treatment that simultaneously met the therapeutic needs of the participants while accommodating the unique constraints of the setting. This group was modified and implemented to meet these needs.

Linehan (1993b) stated that the "mixing and matching to suit particular needs and treatment philosophies" (p. 11) is permissible and often required. Our DBT skills-training group was pared down from the 6 months typically provided for DBT skills training to 12 weeks. As release and transfer to different facilities was common, the 12-week treatment duration allowed all participants to complete skills training without interruption or attrition.

We followed standard pre/post measures used by the Vanderbilt University Community Mental Health Center in administering assessments, which required no additional training or cost. Furthermore, due to the highly manualized nature of the DBT skills-training group, group leaders were able to consolidate and follow the DBT skills-training manuals (Linehan, 1993b; Spradlin, 2003) with no formal training in DBT. Group leaders received weekly supervision from an on-site licensed professional counselor with formal DBT training. Leaders discussed and planned the

Table 1. DBT Skills Group Implementation

Organizational Factors					
The agency has a history of adopting new initiatives.	Vanderbilt Department of Psychiatry and the State of Tennessee Youth Development Centers (YDCs) have a longstanding history of collaboration. This partnership has aimed to serve the needs of female youth in the juvenile correctional setting since the opening of New Visions YDC in 2005. This includes consistent endeavors to seek out and provide evidence-based gender specific treatment, structure, and milieu interventions.				
The agency efficiently puts its new initiatives into place.	The DBT skills group was the only initiative assessed in this study. The group was proposed and completed within the year that the group leaders were at the agency.				
The bureaucratic structure is moderately decentralized, thus allowing for a flexible response to problematic issues.	The direct administrative staff in the agency was easily accessible and committed to making changes to support the needs of the population. Regular weekly meetings were held between facility administration and treatment providers, which addressed programming needs, as well as issues with individual youth.				
Issues are resolved in a timely fashion.	Not assessed in this study.				
Issues are resolved in a non-confrontational manner.	No significant issues reported, therefore not assessed in this study.				
There is little task/emotional-personal conflict within the organization at the interdepartmental, staff, management, and/or management-staff levels.	Generally contract treatment providers working within this female adolescent juvenile correctional setting expressed feeling supported by the administration at the institution, with little conflict.				
Staff turnover at all levels has been less than 25% during the previous 2 years.	Not assessed in this study.				
The organization offers a formal program of instruction in the assessment and treatment of offenders on a biannual basis.	Formal instruction occurred for both state and Vanderbilt clinical staff upon orientation to the facility. There was no formal biannual process in place. Additional formal instruction in the assessment and treatment of offenders occurred as part of the ongoing clinical supervision process which was conducted weekly for all Vanderbilt staff. Additionally, state and Vanderbilt clinical staff participated as needed in trainings that impact milieu-based interventions.				
Program Factors					
The need for the program has been empirically documented (e.g., surveys, focus groups).	The need for the program was identified by treatment providers and administrators based on the presenting problems of youth in the facility. DBT skills training was chosen due to the existing empirical evidence of DBT with similar populations and the low demand on agency resources.				
The program is based on credible scientific evidence.	Researchers have modified and implemented DBT skills training group only with similar populations with positive outcomes (Nelson-Gray et al., 2006; Salerno, 2005).				
The program does not overstate the gains to be realized (e.g., recidivism reduction).	DBT skills group aimed to improve incarcerated adolescent females' skills related to emotion regulation, interpersonal relationships, behavioral control, and coping with extensive trauma in a cost-effective way. While a long-term goal is to reduce recidivism, this group was not designed to do so directly.				
Stakeholders (i.e., community sources, management, and staff) agree that the program is timely, addresses an important matter, and is congruent with existing institutional and/or community values and practices.	Not assessed in this study.				
Stakeholders agree the program matches the needs of the clientele to be served.	Not assessed in this study.				
Funding originates from the host agency.	This group did not require any additional funding as it utilized unpaid interns and available site resources (i.e. supplies used in other groups, regular group meeting space/time, etc.). Clinical supervision provided was an existing expectation of staff involved with practicum students.				

Table 1. DBT Skills Group Implementation (continued)

The implementation of this group resulted in no extra costs to the facility or significant demands on resources (i.e. materials, space, time, etc.). Security officers were made aware of each group meeting, with one security officer on stand-by in the event of behavioral disruption, consistent with standard procedure for all clinical groups in this setting.			
The facility was not experiencing any major problems or conflicts at the time of planning or implementation of the DBT skills group.			
DBT skills group did not introduce additional staffing demands. Group leaders were unpaid psychiatric nurse practitioner interns who were trained and supervised by an existing site therapist. Site therapists run groups as part of their standard clinical practice.			
The purpose of this study was to evaluate the DBT skills group in its pilot phase. The group was planned and implemented over an approximate 6-month period.			
The contract agency providing treatment and implementing the DBT skills group has an extensive history of collaboration with the setting.			
The supervising therapist received approval from the setting's superintendent before implementing the DBT skills group. The interns who led the group reported that they were supportive of the group and excited to gain experience in delivering DBT.			
The implementation and delivery of gender-appropriate, evidence-based treatment is part of the treatment agency's contract mandate.			
The supervising therapist was a licensed professional counselor who had received formal training in DBT. Group leaders were psychiatric nurse practitioner students from Vanderbilt University.			
The contract agency providing treatment is involved in program development and implementation across multiple domains within the juvenile justice setting and has served as a consultant to the state around evidence-based practice.			
Not assessed in this study.			
The supervising therapist observed groups and provided weekly supervision to group leaders throughout group leaders' tenure at the agency. Supervision consisted of discussion of the DBT skills group as well as general supervision concerns.			
Group leaders received weekly supervision from the supervising therapist. The supervising therapist was on-site at all times when group leaders were present at the agency.			
Group leaders received academic training on DBT and cognitive behavioral therapy through Vanderbilt University. Group leaders utilized two DBT treatment manuals (Linehan, 1993b; Spradlin, 2003) for the duration of the group. Ongoing clinical supervision was also provided.			

Table 1. DBT Skills Group Implementation (continued)

The staff have the technical/professional skill to implement the program. They have taken applied courses on the assessment and treatment of offenders.

The staff think (i.e., self-efficacy) they can run the program effectively.

To run the program efficiently, the staff are (a) given the necessary time, (b) given adequate resources, and (c) provided with feedback mechanisms (e.g., focus groups and workshops).

The staff participate directly in designing the new program.

Group leaders were nurse practitioner interns who were provided with applied coursework regarding treatment of adolescents. Practical experience with the offender population was gained through the internship experience, exposure to literature specific to this population, and supervision. Ongoing clinical supervision was also provided to help further development of skills.

Group leaders reported feeling confident about teaching DBT skills and managing the group due to the weekly supervision component and the structured nature of the DBT skills group manuals.

Group leaders reported having no difficulty in acquiring resources, space, security, or supervision when implementing the group. Set time during clinical supervision was utilized for planning of weekly group activities.

The group leaders initially proposed the idea to design and lead the DBT skills group in consultation with their clinical supervisor. Both expressed an interest in DBT but had no formal training. They worked closely with the supervising therapist to adapt the DBT skills group as described in the Linehan (1993b) and Spradlin (2003) manuals to a delivery system that was fitting for the correctional setting.

content for each week's group during supervision. The clinical supervisor participated in the group as an observer but did not actively engage in treatment delivery.

The DBT skills-training group received for 12 weeks one 90-minute weekly session led by two psychiatric nursing interns. The sessions were occasionally observed by a DBT-trained licensed professional counselor (LPC) on-site. Referrals were made by facility staff and clinicians based on symptoms related to cutting or other self-harm, affective dysregulation, poor interpersonal skills, and/or internalizing or self-destructive behaviors. The group was conducted in the afternoons to avoid conflict with school hours. Group sessions followed the standardized DBT skills group schedule, which consists of five main subjects: introduction, mindfulness, emotion regulation, interpersonal effectiveness, and distress tolerance (Linehan, 1993b). Group leaders used the Linehan (1993b) skills training manual in conjunction with Don't Let Your Emotions Run Your Life, a self-help manual that consists of additional explanations and activities based on DBT skills designed for non-DBT trained persons (Spradlin, 2003).

Two weeks were allotted for each of the five major content areas of DBT skills group, with the final 2 weeks reserved for review and graduation. Homework was assigned weekly to promote skills

practice. Participants monitored and recorded feelings, behaviors, and skills use with daily diary cards. No other components of the standard DBT protocol were provided as part of this treatment program. Participants received other treatments as usual throughout the duration of the group, which included non-DBT individual and family therapy for all participants and pharmacotherapy for a portion of the participants. Individual therapy included informal check-in regarding the use and perceived effectiveness of DBT skills learned in the group. Some participants received individual and/or family therapy from the DBT skills-training group leaders, while others were assigned to clinicians not involved with the skills training group.

Group leaders ran the group using a highly structured psychoeducational format. The DBT skillstraining group room was set up with tables in a semi-circle, with the group leaders sitting on the open side of the circle in front of a white board and poster pad. Participants were provided with writing and drawing supplies, and candy was provided sporadically for use in group activities.

Measures and Analyses

The primary goal of this pilot study was to determine the effectiveness of using a modified version of a DBT skills-training group to overcome

systemic barriers to DBT, and to implement the DBT skills-training group in a way that adequately met the unique needs of adolescent females in a juvenile correctional facility. Implementation measures assessed organizational factors, program factors, change agent(s), and staff factors (Gendreau et al., 1999). We collected qualitative information on these dimensions from group leaders via face-to-face interviews and e-mail. Treatment providers were asked to describe the following: (a) design of the group; (b) rationale for design of the group; (c) logistical information regarding the group (e.g., time frame, group size, scheduling, supplies, etc.); (d) training and supervision; (e) barriers to implementing the group; and (f) successes of implementing group. In addition, the second author (Tarah Kuhn) served as the clinical lead for the contract agency and was thoroughly familiar with the structural and programmatic components of the agency.

The secondary goal of this pilot study was to use existing, routine clinical assessment tools to measure participant progress. We used the Ohio Youth Scales for Problems, Functioning, and Satisfaction (Turchik, Karpenkov, & Ogles, 2007). The Ohio Youth Scales is a self-report assessment often used in state-funded mental health systems, and was the clinical assessment tool used most commonly by the contracted treatment vendor in the facility. Researchers used this instrument in a similar study of adult women receiving DBT skills training in a community mental health setting (Blackford & Love, 2011).

In an attempt to understand the collected data in a way that reflects target behaviors of DBT, we grouped items on the Ohio Youth Scales Problems Subscale into internalizing and externalizing subscales. We also used the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) to assess depression as an additional measure of internalizing behavior. We selected the BDI-II because of its common use in therapy efficacy studies and its exceptional psychometric properties. Both measurement instruments have demonstrated reliability and validity (Turchik, Karpenkov,

& Ogles, 2007; Beck, Steer, & Carbin, 1988). We used Cronbach's alpha to measure reliability on the internalizing and externalizing scales. Internalizing behavior scale had acceptable to excellent internal reliability at pre- (α = .84) and post-test (α = .94). The externalizing behavior scale had similar alpha scores at pre- (α = .78) and post-test (α = .90).

Of the Ohio Youth Scales, the Problems Subscale measures a variety of problems such as arguing with others, hurting self, and feeling sad on a 0-5 scale, with 0 = none of the time and 5 = all of the time. The Hope Subscale consists of four questions on a 1-6 scale, with higher scores indicating greater hope. The Satisfaction with Treatment Subscale consists of four questions on a 1–6 scale, with higher scores indicating greater satisfaction. The Functioning subscale has 20 items, including "getting along with family," "controlling emotions and staying out of trouble," "attending school and getting passing grades in school," and "feeling good about yourself." Each was rated on a 0-4 scale, with "0 = extreme troubles" and "4 = doing very well."

We selected internalizing and externalizing items from the Problems Subscale and grouped them accordingly with good to excellent internal reliability. We measured internalizing behavior before and after treatment with seven items (α = .84; α = .78), including "hurting yourself (cutting, scratching self, taking pills)," "talking or thinking about death," and "feeling worthless or useless." We measured externalizing behavior before and after treatment with nine items (α = .94; α = .90), including "getting into fights," "causing trouble for no reason," and "yelling, swearing, or screaming at others."

We measured depression with the BDI-II and included scores as another measure of internalizing behavior. Scores higher than 14 on the BDI-II indicated depression. Scores in the 14–19 range were considered mild depression, 20–28 indicated moderate depression, and 29–63 indicated severe depression (Beck et al., 1996). We assessed participant progress by comparing

pre- and post-treatment measures by participant using paired *t*-tests using an alpha of .05 to test for statistical significance. To control for possible Type I error inflation due to multiple comparisons, we also performed multivariate permutation paired *t*-tests (Blackford, Salomon, & Waller, 2009; Blackford, 2007) to obtain a corrected *p*-value. We measured effect size by computing a Cohen's *d* (Cohen, 1992) corrected for dependent groups (Dunlap, Cortina, Vaslow, & Burke, 1996).

Results

A DBT skills-training group was successfully modified and implemented in a correctional facility for female adolescents. Implementation was measured using qualitative data provided by group leaders on organizational factors, program factors, change agent(s), and staff factors (Gendreau et al., 1999). A full description of the DBT skills group implementation process per framework of Gendreau, et al. (1999) is provided in Table 1. Rather than coding data, we used qualitative data gathered from treatment providers to assess components of the Gendreau, et al. (1999) framework (see Table 1).

Treatment providers stated they were able to prepare and establish goals for the group by relying on the high level of structure and guidance in the DBT skills training manuals and supervision from a trained DBT therapist (Linehan, 1993b, Spradlin, 2003). One treatment provider stated, "I had taken a class on cognitive behavior therapy and had read quite a bit, but had never been officially trained in DBT. Having the manuals and supervision from a trained therapist made it much easier to explain and practice DBT skills with the girls. I would practice the skills by myself, too."

The DBT skills-training group was completed in 12 weeks, with no breaks or interruption in treatment. All of the participants completed the group and graduated successfully. Successful graduation was defined as attendance at all group sessions. We did not collect data on the attrition rates in other groups held at this facility. However, based

on the qualitative data collected from clinicians, this group's attrition rate was slightly lower than that of the other groups, possibly because the DBT skills-training group lasted for 12 weeks rather than 16 weeks, which was the timeframe for the other groups. "Having the group after school hours kept the teachers and administrators happy. We had group between the hours of school and dinner; a time when the girls tended to act out," said one of the group leaders.

Participants were removed from the group by group leaders using a "three strikes" system, with a missed group or severe behavioral disruption resulting in one strike. Upon receiving three strikes, participants would be removed from the group. During this study, no participants were removed from the group. One treatment provider recalled participant behavior in the group this way: "Sometimes it took us some time to get the girls settled and ready for group. We practiced mindfulness every group, but would sometimes have to move it to the beginning or the end depending on where the girls were that day. Staying flexible while sticking to the manual was tricky, but [the supervisor] helped us with maintaining structure." Regarding barriers, treatment providers stated that the content might have been too advanced for some of the participants. One group leader stated, "DBT uses some fairly large words and complicated concepts, like dialectics! I think that if other terms could be incorporated to make things like 'emotional dysregulation' and 'interpersonal effectiveness' more accessible to the girls, they might have understood the concepts a bit more easily. For example, they all really took to the concept of 'wise mind.' It is much simpler than some of the other components of DBT."

In addition to investigating DBT skills group implementation, we analyzed clinical assessment data to assess participant progress. The Ohio Youth Scales provided a global assessment of functioning pre- and post-treatment. As predicted, the DBT group reported significant reductions in scores on the Problems Subscale (see

Table 2. Participant Responsiveness to DBT Skills Group

		Pretest	Pretest	Posttest	Posttest			
Subscale	N	X	sd	Х	sd	t	р	d
Problems	9	1.11	0.93	2.70	1.11	-2.91	.02*	66
Норе	9	2.64	0.91	2.27	0.76	0.77	.46	.26
Functioning	9	1.56	0.53	1.22	0.44	2.00	.08	.69
Satisfaction	9	2.90	1.03	1.78	0.44	3.07	.02*	1.09
Depression	9	38.67	12.46	19.11	21.44	4.29	.003*	1.83
Problems Subscales								
Internalizing	9	2.00	1.44	4.25	0.87	-4.29	.003*	-1.49
Externalizing	9	3.61	1.35	3.67	1.31	11	.91	04

Note. * = significant following correction for multiple testing.

Table 2 for this and all Ohio Youth Scales outcomes). Treatment satisfaction scores increased significantly from "moderately satisfied with treatment" at pre-test to "quite a bit satisfied with treatment" at post-test. At pre-test, Functioning scale scores averaged as participants having "some troubles." This improved as participants reported functioning "ok" at post-test, which approached significance (p = .06). On the Hope subscale, initial scores were slightly low and indicated that the "future looks both good and bad." Although there was an increase in the scores at post-test, the increase was modest and did not reach statistical significance (p = .17).

As a post-hoc analysis, the Problems scale was separated into internalizing and externalizing behaviors (see Table 2). When internalizing behaviors were analyzed, initial scores indicated problems several times during the past month. Following treatment, participants reported problems as occurring once or twice per month, which shows a significant decrease (p = .003). The scores of another measure of internalizing behavior, depression, dropped by 50% after treatment. Before treatment, participants rated their depression as severe, on average. After treatment, scores were significantly lower and in the mild depression range (see Table 2). However, when we analyzed externalizing behaviors separately, there were no significant changes (t(9) = .11,p = .91); participants experienced externalizing

behaviors both before and after participation in the DBT skills-training group.

Discussion

While previous literature suggests that DBT can be implemented in a juvenile correctional setting, the costs are high. The only study in which DBT was fully implemented included special state funding and required extensive DBT training for six staff members. The cost of training staff members whose turnover rates are often high, makes the cost of training one of the most challenging barriers to implementing DBT (Trupin et al., 2002). Other studies (Nelson-Gray et al., 2006; Salerno, 2005) have attempted to address this barrier by implementing one component of DBT—group skills training.

One goal of this study was to determine whether the DBT skills-training group could be feasibly implemented in a correctional facility for female adolescents with low demand on systemic resources, including funding, time, staff, and administration. The major finding of this study was that the DBT skills-training group was successfully modified and implemented with preliminarily promising outcomes in this setting, without substantial demand on the facility's resources. This study demonstrated that DBT, a treatment proven effective in reducing the behavioral and emotional problems commonly experienced by incarcerated adolescent females,

can be efficiently modified and executed without imposing significant financial or occupational burdens on a highly structured juvenile correctional system.

We found that after participating in a modified version of DBT skills-training group, participants experienced a decrease in internalizing symptoms commonly associated with depression, anxiety, and PTSD. Feelings of worthlessness, sadness, and parasuicidal behavior are especially high in this population; all significantly decreased in our pilot sample of youth who participated in this modified DBT skills-training group.

Limitations and Directions for Future Research

While this pilot study generated positive preliminary findings, it has several limitations. We observed statistical significance for many of the outcome measures, but the sample size was quite small. Further, this study utilized a withinsubjects pre-test/post-test design with no control group. Future studies should utilize larger samples in a treatment-as-usual group design to determine whether DBT skills training improves symptoms relative to existing treatments. Also, we found that the Functioning scale of the Ohio Youth Scales may not have been best suited for this population because of the lack of participants' access to many of the items ("participating in hobbies/recreational activities," "completing household chores," "earning money"). Another limitation in this study is the lack of formal fidelity monitoring. Group plan and structure were incorporated into supervision, but quality assurance was not directly measured. This could be remedied by including video or audio recording of group sessions and the creation of fidelity checklists to be completed by group leaders. Furthermore, future studies should attempt to identify whether there are specific components of DBT skills training that are more effective for addressing the unique behavioral and emotional problems experienced by this population. This information could be used to design and

evaluate a modified DBT skills-based treatment specifically for adolescent females in correctional facilities. Finally, while we collected data from clinical staff only, future researchers would be wise to collect data from all staff (e.g., front line, administrative, education, etc.) to gain a more thorough understanding of the impact of the implementation and effectiveness of these treatments.

As with most pilot studies, the results of this study raise more questions than they provide answers. While behavioral healthcare in juvenile corrections has improved dramatically over the past 10 years, broad gaps exist in the literature regarding effective and systematic implementation of these treatments. Several studies have identified DBT as an effective treatment approach for the problems of incarcerated youth, but further study of systematic implementation of DBT in its many forms is needed. Given the financial and systemic barriers to providing evidence-based treatment in juvenile correctional settings, simplifying DBT by providing only a modified skills training group was our attempt to deliver this treatment efficiently and effectively in the juvenile corrections environment.

Although we focused heavily on implementation in this study, we did not adequately consider the dimension of sustainability. Since completion of this study, the correctional facility has closed. This prevents the possibility of continuing the followup, full-scale study originally planned. However, the contracted treatment vendor is currently in the process of partnering with the agencies to which participants were sent, with the intention of continuing this study—with the caveat of a change from correctional to other forms of residential setting. Therefore, to avoid similar complications in future studies, researchers and clinicians should complete thorough checks to ensure the stability of their settings. Important aspects to consider include staff turnover, administrative changes, political climate, and funding streams.

Implications and Conclusions

The increasing evidence for the effectiveness of DBT skills-training groups in similar settings and populations makes it an attractive treatment to meet the unique needs of incarcerated adolescent females. Overall, we identified two major themes that may be pertinent for similar settings. These themes relate to the appropriateness of this and other evidence-based treatments for (a) the persons being served, and (b) the setting itself. Bourgon and Armstrong (2005) suggest that the level and type of service that a setting implements should be based on an assessment of the clients' risks and needs. This assessment should include a comprehensive battery of evidence-based measures that assess clients' physical health status, emotional/mental health status, family history, socioeconomic history, educational history, and offending history (Bourgon & Armstrong, 2005). Based on the needs of the population within a particular setting, treatment providers and administrators should collaborate to identify goals and possible evidence-based treatments that could be *effectively* implemented and evaluated in the setting. The framework of Gendreau et al. (1999) could serve as a tool to guide this process.

In the present pilot study, we utilized an emotion-focused cognitive behavioral treatment that was well matched with the symptoms exhibited by girls in the juvenile justice system (i.e., feelings of worthlessness, sadness, emotional reactivity,

and parasuicidal behavior). Furthermore, since previous research suggests that these symptoms may be linked to offending behavior in this population, it is possible that DBT skills training could inhibit recidivism (Wasserman & McReynolds, 2011; McReynolds et al., 2010). A unique finding of this study suggests DBT should be amended to not only address the clinical needs, but also the developmental needs of this population. The modified skills training group met the facility's needs by placing low demands on staff, funding, and resources while fostering a high level of collaboration between treatment providers and administrators. Although we were unable to draw causational conclusions about treatment effectiveness due to the naturalistic design of this study, we urge other researchers to expand on this study by further investigating the generalizability of these preliminary findings in other female juvenile justice correctional facilities.

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The Impact of Child Protective Service History on Reoffending in a New Mexico Juvenile Justice Population

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Abstract

Juvenile offending is a serious public health concern. One of the objectives for Healthy People 2020 (www.healthypeople.gov) is adolescent health; specifically, the need to improve the development, health, safety, and well-being of adolescents. Studies have shown an association between child abuse and later juvenile delinquency. Yet little is known about the continuation of juvenile justice (JJ) involvement beyond a youth's first contact with the JJ system. This study used a Kaplan-Meier survival approach to measure the time between petitioned charges for a New Mexico JJ population between January 2002 and March 2013. At 12 months after the first petitioned charge, 67% of youth with no history of child protective services (PS) involvement did not reoffend compared to 54% of youth with a history of substantiated PS involvement. At 36 months, 59% of youth with no history of PS involvement did not reoffend compared to 39% with substantiated claims. Females were two times more likely to have a history of substantiated PS involvement compared to males (OR = 2.14; 95% CI: 2.00-2.28). African American

youth (*OR* = 1.24; 95% CI: 1.05-1.46) and youth who identified with two or more race/ethnicities (*OR* = 1.85; 95% CI: 1.58-2.17) had higher odds of PS involvement than non-Hispanic White youth. These results indicate that many of the New Mexico youth involved with juvenile justice services also were involved with child protective services.

Introduction

The link between child maltreatment or abuse and juvenile delinquency is well established. Although this link exists, the majority of children who are abused do not offend. Abused children often suffer from developmental deficits, including disruptive behavior, behavioral and academic issues at school, depressive symptoms, and increased aggression in adolescence (Cicchetti & Rogosch, 1997; Dodge, Bates, & Pettit, 1990; Thornberry, Ireland, & Smith, 2001). Researchers have shown that the timing of child abuse is critical, not just the age of onset of abuse, but the occurrence of abuse at certain developmental time points. Multiple studies have shown that maltreatment during adolescence increases the

risk of children being involved with the juvenile justice system (Jonson-Reid & Barth, 2000; Smith, Ireland, & Thornberry, 2005; Thornberry et al., 2001).

Several studies have examined the relationship between types of child abuse and delinquency, but the results have been conflicting. In a study by Zingraff, Leiter, Myers, and Johnsen (1993) comparing maltreated children to comparison groups of random school children and children in poverty (N = 1,091) living in North Carolina, physically or sexually abused children were no more likely to commit violent crimes than children with a history of neglect when controlling for age, gender, race, and family structure. A second study among 159,549 school-age children in California who had a child protective services investigation indicated that neglect, rather than physical or sexual abuse, was a better predictor of juvenile delinquency (Jonson-Reid & Barth, 2000). Results from the Chicago Longitudinal Study, a study of low-income, minority children, indicated that both physical abuse and neglect are associated with violent offending among disadvantaged minority children (Mersky & Reynolds, 2007).

In 2010, an estimated 3.3 million reports of child abuse and/or neglect were reported to U.S., state, and local PS agencies, a rate of 43.8 reports per 1,000 children (U.S. Department of Health and Human Services, 2012). In the state of New Mexico in 2010, there were 23,751 cases of child abuse reported to state PS offices. The total population of children ages 0 to 17 years in 2010 in the state was 518,998 (Puzzanchera, Sladky, & Kang, 2013). The rate of reports of child abuse and/or neglect in New Mexico in 2010 was estimated at 45.7 reports per 1.000 children.

In New Mexico in 2010, there were 23,111 juvenile justice referrals, involving 14,532 juveniles reported to juvenile justice services (JJS-FY10 Annual Report) in an at-risk population of 230,461 children age 10 to 17 living in New Mexico (Puzzanchera et al., 2013). On average,

there were 1.6 referrals per youth, with some youth having only one referral for the year and others having multiple referrals for the year. Although the rate of incarcerated youth in the United States has declined in the last 15 years, there is still more work that can be done to prevent youth from involvement in the juvenile justice system (Annie E. Casey Foundation, 2013).

The cost savings to taxpayers of preventing a lifetime of crime for a high-risk youth—defined as one who habitually commits crimes, is aggressive and violent toward others, engages in substance abuse, and is likely to drop out of high school—has been estimated at \$2.6 to \$5.3 million by age 18 (Greenberg & Lippold, 2013). The cost of just one lifetime police contact prior to the age of 26 is estimated to be \$200,000; costs for youth with two or more police contacts are estimated at \$1.3 million; and the estimates are increasingly higher for habitual offenders (Cohen & Piquero, 2009).

On average, abused and neglected children begin committing crimes at younger ages, committing nearly twice as many offenses as nonabused children, and are arrested more frequently (Widom, 1992). The identification of risk factors influencing the development of behavioral problems in children that lead to juvenile justice involvement will help to identify future children at risk. Once identified, these children can receive the necessary treatment or intervention to aid them in becoming productive members of society. In the current study, we aimed to compare demographic characteristics (potential risk factors) of a petitioned juvenile justice population by PS involvement and to determine whether PS involvement influences the time between a client's first petitioned juvenile justice offense and a second petitioned offense.

Hypotheses

Given the current knowledge regarding the association of childhood abuse and neglect with the increased risk of involvement in the juvenile justice system, this study seeks to determine

the demographic differences between children with a history of substantiated PS involvement as opposed to no PS involvement in a large population of New Mexico juvenile justice clients petitioned from January 2002 through March 31, 2013. First, drawing on previous research, we believe that a large percentage of clients in the juvenile justice system will have had previous substantiated involvement with PS. Second, we anticipate that children who have a history of substantiated abuse or neglect are likely to be delinquent adolescents and, therefore, more likely to become involved with the juvenile justice system at an earlier age than children without a history of substantiated abuse or neglect. Third, we expect that children with substantiated involvement with PS will reoffend in a shorter time period due to a disruptive home life and their inability to properly orient themselves to social settings.

Methods

Children, Youth, and Families Department of New Mexico (CYFD)

The Children, Youth, and Families Department of New Mexico comprises three service divisions: Early Childhood Services (ECS), Protective Services (PS), and Juvenile Justice Services (JJS). The department was created in 1992 under Governor Bruce King. The purpose of the department was to integrate and place appropriate emphasis on services provided by multiple state agencies, ranging from early childhood development to institutional care. The CYFD's goal is to support the strengthening of families and communities through services directed at increasing positive outcomes. By combining the three service divisions under one umbrella department, a single case management and tracking system captures data on individuals. This system keeps the same unique identifier for each youth, regardless of the program with which the youth comes into contact. Therefore, a youth who is involved in more than one program has all of his or her data contained in a single electronic

file. New Mexico is unique in this regard, as most states choose to have separate divisions, each with its own specific client tracking system; thus, the merging of data between divisions could be problematic. New Mexico CYFD has emphasized collaboration between service areas, addressed confidentiality concerns, and implemented initiatives that have resulted in unprecedented data sharing.

Child Protective Services Department (PSD) in New Mexico

The New Mexico Child Protective Service division is responsible for all child welfare services for children and families living in New Mexico. In accordance with the New Mexico Children's Code (Section 32A-4, NMSA 1997), the PSD is mandated to receive and investigate reports of children in need of protection from abuse and/ or neglect by their parent, quardian, or custodian, and to take action to protect those children whose safety cannot be assured in the home. PSD staff is available to receive reports of child abuse 24 hours a day, seven days a week, including reports of child abuse and/or neglect of children in placement. It is the duty of intake workers to receive these calls and determine the level of priority given the circumstances of the report. The level of priority determines the timeframe of response; this can range from immediate response to 5 days. Services range from in-home care to foster care to termination of parental rights.

Juvenile Justice Services (JJS) in New Mexico

New Mexico consists of 33 counties with 27 juvenile probation offices statewide, which receive citations and/or police reports and truancy reports from schools. Each case is assigned to a juvenile probation officer (JPO) within 5 days of receipt of the charge report. The JPO assigned to the charge conducts a preliminary inquiry (interview) within 2 days (for youth in detention) or 30 days of being assigned the case. JPOs are responsible for entering case data into the case management system. After the completion of the

preliminary inquiry, the JPO decides whether to handle the case informally or formally. For cases handled informally, the JPO decides which youth services to require the client to complete within a predetermined time period. If the decision is made to handle the case formally, then the JPO submits case information to a Children's Court Attorney (CCA) of the district attorney's office with a recommendation for an appropriate disposition. Cases that go to the CCA are referred to as petitioned charges; in New Mexico, a petition is a legal document in which the state formally alleges the client to be a delinquent or youthful offender due to the commission of a delinquent act(s). Once the case goes to court, the children's court judge makes a final decision on the disposition of the client.

Study Design

The present study capitalizes on an existing data system, the Family Automated Client Tracking System (FACTS), used by the juvenile justice system of New Mexico. Detailed information regarding demographics and case information are collected by juvenile probation officers during interviews with the youth and their guardian and entered into the electronic FACTS system. FACTS has been in existence since 1996. Originally, the case management system was developed for child welfare using federal Statewide/Tribal **Automated Child Welfare Information System** (SACWIS) funds, and only protective services used the case management system. However, in 1999, juvenile justice services functionality was added, and probation/parole and juvenile corrections began using the same system. For this study, all data were extracted from this centralized case management system.

Sample Population

Child PS data were captured from the National Child Abuse and Neglect Data System (NCANDS) report for Federal Fiscal Years 1998 through 2011 and produced by the New Mexico Child Protective Services Unit containing extracted data from the case management system (FACTS), which underwent extensive data cleaning. NCANDS is a voluntary data collection and analysis system that was created in response to the Child Abuse Prevention and Treatment Act (PL 111-320). All states provide data on protective service reports, investigations, victims, and perpetrators. Information on case-level information is also provided by the states. The NCANDS records include all investigations or assessments of alleged child maltreatment that received a disposition (finding) for the reporting time period.

Youth with at least one juvenile justice charge leading to petition between January 2002 and March 2013 were included in this study. The juvenile justice data set of all formal charges leading to petitions were merged with child protective service data collected from 1998 through 2011 by use of a unique client identifier.

The primary variables of interest for analysis from the combined data set were sex, race/ethnicity, prior PS history, PS case disposition, the average number of juvenile justice formal charges leading to petitions, and the following information at first juvenile justice petitioned charge: age, county of residence, crime type, and severity/degree of crime. Clients were split into two groups: those with prior substantiated PS involvement and those with no PS involvement (dependent variable). For the survival analysis, a third group, those with unsubstantiated PS involvement, was included to further clarify the PS population.

According to the New Mexico Children's Code: Substantiated PS involvement is defined as an allegation of child abuse or neglect in which a parent, guardian, foster parent, pre-adoptive parent, or treatment foster care parent has been identified as the perpetrator or as failing to protect the child, and credible evidence exists to support the investigation worker's conclusion that the child has been abused or neglected.

Unsubstantiated PS involvement is defined as an allegation of child abuse or neglect in which the information collected during the investigation

does not support a finding that the child was abused or neglected as defined in the New Mexico Children's Code by a parent, guardian, foster parent, pre-adoptive parent or treatment foster parent, or that such a person failed to protect the child from abuse or neglect.

Measures

Demographics

Demographics on clients, specifically their sex, race/ethnicity, and county of residence were collected by Juvenile Probation Officers (JPOs) during the time of the preliminary inquiry. Client files were then created in FACTS, capturing all data on demographics, as well as incident details. Age at first incident was calculated using the date of the incident and the youth's date of birth. Race and ethnicity were combined for this analysis. Race was categorized as one of the following: White, Black or African American, Asian, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, or any combination of the aforementioned categories (regarded as two or more race/ethnicities). Under ethnicity the possible categories were Hispanic, White, Black or African American, Asian, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, Missing, or two or more. For this analysis, under the combined race/ethnicity variable, a youth could be one of the following: Non-Hispanic White, Hispanic White, Non-Hispanic Black or African American, Hispanic Black or African American, Non-Hispanic Asian, Hispanic Asian, Non-Hispanic American Indian or Alaska Native, Hispanic American Indian or Alaska Native, Non-Hispanic Native Hawaiian or other Pacific Islander, Hispanic Native Hawaiian or other Pacific Islander, or two or more race/ethnicities (a combination of any of the aforementioned categories).

Case Details

Details of a client's case were verified in FACTS from the preliminary inquiry (interview). For this

analysis, details regarding the type and severity of crime committed by the youth during their first petitioned offense were gathered. Other data captured and used for this analysis included whether the crime was an assault (yes/no), related to drug use (yes/no), a weapon-related crime (yes/no), or a property crime (yes/no).

Recidivism

A recidivism event was marked when a client returned to the juvenile justice system due to a second petitioned charge. For this analysis, we were interested in the number of months between a client's first and second petitioned charges. All dates of initial charges and future charges were captured in FACTS. Clients were determined to have an event (variable event = 1) if they had a second petitioned charge during the time period between January 2002 and March 2013. For clients who did not have a second petitioned charge (event = 0), the time between their first petitioned charge and March 31, 2013 (the last date for which data were captured prior to being pulled from FACTS) was calculated. For all time calculations, incident dates were used for measuring time instead of charge date, as the incident date is a more accurate measure of when the alleged behavior occurred. Charge dates depend on when juvenile probation offices receive citations and/or police reports.

Statistical Procedures

All analyses were completed using STATA v.12 (College Station, TX). All variable comparisons were analyzed with either a chi-square or *t*-test analysis for categorical and continuous variables, respectively. Recidivism was measured by using a Kaplan-Meier survival estimate. A Cox Proportional Hazard Model was used to evaluate the effects of variables on recidivism. Recidivism was captured as having more than one juvenile justice petitioned charge from January 2002 through March 2013 (event = 1 for youth with two or more juvenile justice charges, and event = 0 for youth with only one juvenile justice charge).

Table 1. *Population Demographics (N* = 27,983 *clients)*

Parameter	Substantiated PS Involvement N (%)	No PS Involvement N (%)	<i>P</i> -Value
N	5,277	22,834	
Sex*			< 0.001
Males	3,344 (63.5)	17,919 (78.5)	
Females	1,926 (36.5)	4,806 (21.5)	
Race/Ethnicity ^β			< 0.001
Non-Hispanic White	1,252 (23.7)	5,375 (23.5)	
Hispanic	3,202 (60.7)	14,354 (62.9)	
African American	205 (3.9)	704 (3.1)	
Asian	7 (0.1)	54 (0.2)	
American Indian	338 (6.4)	1,706 (7.5)	
Pacific Islander or Native Hawaiian	0 (0.0)	12 (0.1)	
2+ Race/Ethnicities	271 (5.1)	613 (2.7)	
Age at First Petitioned Charge (Years)			
Mean (SD)	15.0 (1.7)	15.9 (1.5)	< 0.001
Range	10.0-17.9	10.0-17.9	
First Crime Type			< 0.001
Misdemeanor	3,248 (61.5)	13,198 (57.8)	
Felony	1,839 (34.9)	9,054 (39.6)	
City Ordinance	38 (0.7)	139 (0.6)	
Status Offense	2 (0.1)	6 (0.1)	
Not Applicable for Probation Violation	150 (2.8)	437 (1.9)	
First Crime Degree/Severity			< 0.001
Class A: 1st Degree Felony	64 (1.2)	189 (0.8)	
Class B: 2nd Degree Felony	63 (1.2)	373 (1.6)	
Class C: 3rd Degree Felony	385 (7.3)	1,823 (8.0)	
Class D: 4th Degree Felony	1,327 (25.1)	6,669 (29.2)	
Class E: High Misdemeanor	1,415 (26.8)	5,448 (23.9)	
Class F: Petty Misdemeanor	2,021 (38.3)	8,321 (36.4)	
None or Missing Information	2 (0.1)	11 (0.1)	
First Crime-Assault			< 0.001
Yes	1,723 (32.7)	5,249 (23.0)	
No	3,554 (67.4)	17,585 (77.0)	
First Crime-Property Crime			0.784
Yes	1,689 (32.0)	7,353 (32.2)	
No	3,588 (68.0)	15,481 (67.8)	
First Crime-Weapon Related Crime			0.020
Yes	586 (11.1)	2,800 (12.3)	
No	4,691 (88.9)	20,034 (87.7)	
First Crime-Drugs/Alcohol			< 0.001
Yes	834 (15.8)	5,439 (23.8)	
No	4,443 (84.2)	17,395 (76.2)	
Number of Petitioned Charges			
Mean (SD)	5.4 (5.8)	3.7 (4.2)	< 0.001
Range	1–76	1–68	
Number of Clients with > 5 incidents	1,694 (32.1)	4,129 (18.1)	< 0.001
Number of Clients with > 10 incidents	760 (14.4)	1,455 (6.4)	< 0.001
Number of Clients Under 13 years During First Crime (Child Delinquent Status)	554 (10.5)	822 (3.6)	0.019

^{*116} clients were missing Sex information.

Only cases leading to a petitioned charge were used for this analysis because these represent the more serious offenses, as well as the habitual clients. Limitations of using either incident date or charge date have been noted previously (Harris, Lockwood, & Mengers, 2009; Ryan, Williams, & Courtney 2013).

Results

In the New Mexico NCANDS report (1998–2011) there were 340,730 reports to statewide central intake for 191,046 New Mexico residents. The NCANDS data set was then merged with juvenile justice records from January 2002 through March 2013. A unique identifier (person ID number) was captured in both data sets, made possible by the unique case management system in New Mexico that provides data collection for both JJS and PS.

The juvenile justice file contained 148,552 charges for juveniles between the ages of 10 and 17 vears old. There were 34,790 unique clients. When these two data sets were merged, 11,956 (34.4%) of JJS clients had a history of PS involvement as defined by the presence of an NCANDS record and a juvenile justice petitioned charge record. Of the juveniles with a history of PS, 5,277 clients had substantiated PS involvement, with the remainder of the reports being either unsubstantiated claims (N = 6,595) or the investigations were closed due to the absence of findings (N = 84).

A comparison of demographics between youth with prior substantiated PS involvement and youth with

^β18 Clients were missing Race/Ethnicity information.

T-test completed for continuous variables and chi-square test for categorical variables.

no prior PS involvement indicated that these two groups differed significantly by sex, race/ethnicity, age at first petitioned referral, first crime type, first crime severity, crimes of assault, weaponrelated crimes, crimes involving drugs/alcohol, and mean number of petitioned charges during the 2002-2013 time period (Table 1). In the logistic regression analysis of sex and race/ ethnicity (independent variables) by PS status in our juvenile justice population, we observed that females were twice as likely to have a history of substantiated PS involvement as males (OR = 2.14; 95% CI: 2.00-2.28; see Table 2). Compared to Non-Hispanic White juvenile justice youth, African American youth and youth who identified with two or more races/ethnicities had higher odds of PS involvement. Juvenile justiceinvolved youth who identified as Native American had decreased odds of PS involvement (OR = 0.83; p-value = 0.007). Both Hispanic and Asian juvenile justice clients had decreased odds of PS involvement compared to Non-Hispanic White clients, but these were not significant at an alpha 0.05 level.

A Kaplan-Meier survival analysis using the logrank test indicated a significant difference in recidivism rates by PS involvement (χ^2 (2) =

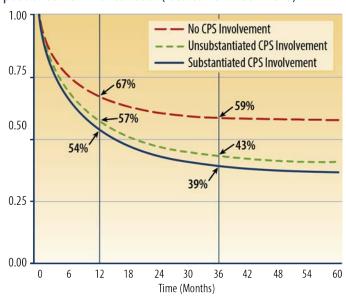
Table 2. Logistic Regression of Substantiated PS Involvement by Demographics (N = 27,983)

Parameter	Odds Ratio <i>P</i> -Valu		95% Confidence Interval
Sex			
Males	Ref		
Females	2.14	< 0.001	2.00-2.28
Race/Ethnicity			
Non-Hispanic White	Ref		
Hispanic	0.95	0.215	0.88-1.03
African American	1.24	0.014	1.05-1.46
Asian	0.58	0.176	0.26-1.28
American Indian	0.83	0.007	0.73-0.95
Pacific Islander or Native Hawaiian*	NA	NA	NA
2+ Race/Ethnicities	1.85	< 0.001	1.58-2.17

^{*} Due to small numbers (N = 12), the Race/Ethnicity category of Pacific Islander or Native Hawaiian dropped out of the model.

953.67; p < 0.001; see Figure 1). The lines on the graph represent the percentage of youth who "survived" to that time point without a second incident leading to a petition charge. At 12 months after the first petition charge, 67% of youth with no history of PS involvement did not reoffend compared to 54% of youth with a history of substantiated PS involvement. At 36 months, 59% of youth with no history of PS involvement did not reoffend compared to 39% of those with substantiated claims. In 2 years (12 to 36 months), reoffense rates among youth with no PS involvement dropped by 8% compared to a 15% drop among those with substantiated PS involvement.

Figure 1. Kaplan-Meier Survival Curve for Recidivism among petitioned New Mexico Youth (records from 2002-2013).



Using a Cox Proportional Hazard Model to evaluate the effects of certain demographic characteristics on the time to recidivate in this population, we found PS involvement (unsubstantiated or substantiated), being Hispanic, African American, or identifying as having two or more races/ethnicities (compared to identifying as being Non-Hispanic White) significantly increased the hazard of recidivating. For those identifying as female, Pacific Islander, and for each yearly increase in age at first petitioned charge, the hazard of recidivating decreased (Table 3).

Table 3. Cox Proportional Hazard Model for Time to Recidivate in a Juvenile Justice Population (N = 34,644)

Parameter	Odds Ratio	<i>P</i> -Value	95% Confidence Interval
PS Involvement			
No PS Involvement	Ref		
PS Involvement	1.52	< 0.001	1.48-1.57
Race/Ethnicity			
Non-Hispanic White	Ref		
Hispanic	1.17	< 0.001	1.13-1.22
African American	1.34	< 0.001	1.24-1.46
Asian	1.05	0.766	0.73-1.46
American Indian	1.05	0.138	0.98-1.13
Pacific Islander or Native Hawaiian*	0.20	0.025	0.05-0.82
2+ Race/Ethnicities	1.27	< 0.001	1.16-1.38
Sex			
Male	Ref		
Female	0.75	< 0.001	0.72-0.78
Age at First Petitioned Charge	0.91	< 0.001	0.90-0.92

^{*} Only 18 clients identified as Pacific Islander Race/Ethnicity.

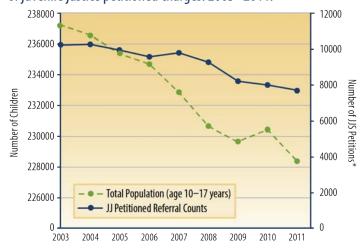
Discussion

Much of the research on the effects of child abuse has focused on the behavioral and mental development of the children as adults. Current juvenile justice research has focused on behavioral interventions and treatments for both the youth and the youth's family members. Our study is a blend of youth involved in juvenile justice and a retrospective analysis of the contributions of child abuse and neglect on youth and adolescent outcomes. We have shown that in the New Mexico population of juvenile justice offenders, youth with a history of substantiated PS involvement are more likely to become habitual offenders and are more likely to reoffend in a shorter period of time than youth without a history of PS involvement. Further comparative analysis has shown that female juvenile justice-involved youth and African American youth are more likely to have PS involvement.

In the state of New Mexico, the youth population (10 to 17 years) has been on the decline for the past 8 years, declining, on average, at a rate of

1,103 youths per year (Figure 2). During the same time period, the rate of juvenile justice charges leading to petitions has also declined by, on average, 317 petitioned referrals per year. Crime among youth in New Mexico continues to be a problem, and research regarding interventions that target specific groups before they become habitual offenders may be warranted based on the findings reported here.

Figure 2. Total population of children age 10–17 years by number of juvenile justice petitioned charges: 2003–2011.



* JJS Charges that led to petitions (did not include informally handled incidents). Multiple charges for one incident were grouped as one incident.

A report by the California Youth Authority is consistent with our results, showing that youth with a history of child welfare records were significantly younger at first admission, were somewhat less likely to be incarcerated for a violent crime, and were more frequently female compared to youth entering the California Youth Authority without a history of child welfare records (Jonson-Reid & Barth, 1998). On average in New Mexico, youth with a substantiated PS background were 15.0 years old at the time of their first serious petitioned crime (charge leading to petition) compared to youth without a PS history, who were 15.9 years old.

In the 2010 census, 2.9 million Americans identified as American Indian and Alaska Native, roughly 0.9% of the total U.S. population (Norris, Vines, & Hoeffel, 2012). New Mexico was ranked

as having the fourth largest American Indian and Alaska Native population among all 50 states. The results of our analysis indicate that Native American children involved in the juvenile justice system are less likely to be involved with protective services than Non-Hispanic White juvenile justice-involved youth. These results could be misleading due to the small number of Native American youth observed in this study. Previous research has shown underreporting of child abuse/neglect in Native American populations to state child protection agencies (Cross & Simmons, 2008). The NCANDS report does not include reports of abuse/neglect made to tribal child welfare systems. For this analysis, all of the child protective service data were extracted from the state of New Mexico NCANDS reports.

In a recidivism study of 580 juvenile offenders released from out-of-home placement, 52.2% of the offenders reoffended within 18 months of release (Minor, Wells, & Angel, 2008). Males were more likely to recidivate than females, but youth with a sexual abuse history were less likely to reoffend than youth without a sexual abuse history (Minor et al., 2008). Our results were similar in the overall recidivism rate when offenders were followed for 18 months. Our results indicate that recidivism risk is significantly higher among youth with a PS history, but for this analysis we did not separate youth by specific types of abuse. Future analysis separating youth by abuse type is recommended. A second study of recidivism among 173 males showed that prior involvement with child welfare was not significantly related to recidivism risk (Calley, 2012). Our study included females, whom studies have shown have a higher risk of child welfare involvement than males (Cauffman, 2008). However, in another study, it is unclear whether child welfare involvement was collected via guardian self-report, or whether the researchers were able to gather this information from state documents and databases (Minor et al., 2008). Compared to these studies, our study included more than 25,000 clients followed for an extended period of time in an ethnically and

racially diverse population that included both males and females.

Children involved in PS are affected not only in adolescence but much later, into adulthood. Children who experience child abuse are more likely to experience lower levels of education, lower earnings from employment, and accrue fewer assets as adults, compared to children who did not experience child abuse (Currie & Widom, 2010). Our study showed that females in the juvenile justice population were more likely to be involved with PS than males. The study by Currie and Widom (2010) showed that females involved with PS will have fewer years of school and lower IQ scores during young adulthood (approximate age 29 years) and will be less likely to be employed, have a bank account, own a vehicle, and own a home than women with no history of PS involvement (Currie & Widom, 2010). Not only are these females (and males) robbed of a safe and happy childhood, but the lingering effects of abuse leading to PS involvement will follow them into their adulthood. From a public health standpoint, there are many opportunities for interventions to occur once this target population of children has been identified. These interventions would save taxpayers from the cost of juvenile and adult incarceration, and provide these youth with the skills and motivation needed to become well-adjusted adults.

In a study supported by the National Institute of Justice, a group of children (N = 1,575) were followed from childhood through adulthood to measure the percentage of children who would be involved with the justice system both as children and adults (Widom, 1992). One of the hypotheses that researchers were testing was the "cycle of violence," which suggests that children with a history of physical abuse are predisposed to violence in later years. The study showed that being abused or neglected as a child increases the likelihood of arrest as a juvenile by 59%, as an adult by 28%, and for a violent crime by 30% (Widom & Maxfield, 2001). The results of this study support the results of our study, indicating

that youth with a history of PS involvement are more likely to be involved with the juvenile justice system than youth who have no such involvement. The study by Widom & Maxfield (2001) goes one step further, however, by following the youth through adulthood, showing that these same youth have a higher likelihood of committing crimes as adults.

This study is not without limitations. The first limitation is that the capture dates for both data sets (NCANDS and FACTS) do not completely overlap. The JJ population in New Mexico comprises clients between the ages of 10 and 18 years. There are a few exceptions in which committed youth could stay in a facility up to the age of 21 years, depending on their offense and commitment obligation. Children who had PS involvement in 2011 would likely be too young to be in the juvenile justice system at the time this study was conducted. Likewise, children who were 10 years old or older in 2002, or who were born in 1992 or earlier, would have been too young to be captured in the 1998 NCANDS data. Therefore, there was a small window for client overlap between PS and juvenile justice involvement in this study. Most likely, the percentage of clients with both PS involvement and juvenile justice involvement is a conservative estimate. A second limitation of this study concerned clients whose first petitioned charge occurred at an older age (16+), and who therefore had less time overall for repeat offenses. After age 18, clients would be referred to the adult system and no longer followed in the juvenile justice system. Future research might include a survival analysis of juvenile clients, including data on their involvement in the adult system. A third limitation is that only the history

of juvenile justice petitions and PS allegations that occurred in New Mexico were included in this study. Due to the proximity of New Mexico to bordering states and Mexico, interstate and international client history, which may have yielded salient information, was not available.

Conclusion

Youth with a history of PS involvement have a greater risk of earlier delinquency and recidivism compared to youth without a history of PS involvement. In addition, compared to those with no PS involvement, adolescents with a PS history are at increased risk for multiple referrals/arrests and at increased risk for an assaultrelated crime charge, indicating that youth with prior PS involvement appear to be more violent at a younger age. This study extends the current literature by investigating the relationship between youth involved in both PS and juvenile justice. The results from this study suggest that collaboration between PS and juvenile justice agencies is critical and that youth with a prior history of PS involvement should be targeted for early intervention.

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Social Distance Between Minority Youth and the Police: An Exploratory Analysis of the TAPS Academy

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Abstract

Research has consistently shown that minority youth harbor more negative feelings toward the criminal justice system and are more likely to express negative perceptions of the police than non-minority youth. These negative perceptions are often the result of weak social bonds that reflect great social distance between minority youth and the police. In order to reduce social distance between minority youth and the police, the Teen and Police Service (TAPS) Academy was established in 2011. This study explores the effectiveness of the TAPS Academy. Pre-test and post-test data measuring social distance were collected from a group of Hispanic/Latino and African American youth engaged in the TAPS Academy. Results from the study provide support for the effectiveness of the TAPS Academy in reducing social distance between minority youth

and the police. Important implications and directions for future research are also discussed.

Introduction

There is an extensive literature on public attitudes toward the criminal justice system, perceptions of the police, and police legitimacy (Cochran & Warren, 2012; Reitzel & Piquero, 2006; Leiber, Nalla, & Farnworth, 1998; Roberts & Stalans, 1997; Frank, Brandl, Cullen, and Stichman, 1996; Worrall, 1999). Much of the research has focused on adults and non-minority populations (Weitzer & Brunson, 2009). The research that has focused on youth and minority populations reveal that youth are more likely than adults to have confrontational encounters with police, and that minority youth are more likely than non-minority youth to have negative experiences with the police (Cochran & Warren, 2012; Hurst & Frank, 2000;

Weitzer & Brunson, 2009). These experiences often stem from minority populations experiencing differential treatment (i.e., increased racial profiling, disparate treatment, and institutionalized racism) as a result of racial discrimination. Unfortunately, the cumulative effects of these negative experiences lead youth, particularly minority youth, to have more negative opinions of the police, question police legitimacy, and have a more critical view of the fairness of police organizations (Leiber et. al, 1998; Smith & Holmes, 2003; Taylor, Turner, Esbensen, & Winfree, 2001; Engel, 2005).

In order to address negative opinions, issues of police legitimacy, and questions of fairness, community policing has been adopted by many law enforcement agencies to proactively improve police/citizen relations and address issues of community crime (Bureau of Justice Assistance [BJA], 1994; Black & Kari, 2010). Through strategic planning, community policing fosters systematic partnerships with community organizations and individuals to increase trust and respect for the police (BJA, 1994). These partnerships are often facilitated through mentoring programs that address strained relationships between minority youth and the police. Although there is a need for more research on the effects of police as mentors, the existing research has found using police as mentors has proven effective at improving minority youths' respect and trust for police officers (Arter, 2006; Lumpkin & Penn, 2013). Such research has set the framework for the current study, which is an evaluation of the TAPS Academy's effectiveness on reducing social distance between police and minority youth. In an attempt to improve the relationship between at-risk minority youth and the police, the TAPS Academy was created. The purpose of the Academy serves to reduce social distance between police and at-risk youth.

Social distance between minority youth and the police has been explored in the literature (Braithwaite, 2003; Braithwaite, 2010; Murphy & Cherney, 2012). Murphy & Cherney (2012) referred to social distance as "the degree to which individuals or groups have positive feelings for other individuals, institutions, or their legal systems" (p. 184). Social distance is used to examine the social bonds between individuals in positions of authority and those they govern. Research has indicated there are several ways individuals tend to position themselves around those in authority, and this strategic arranging is known as motivational posturing (Murphy & Cherney, 2012). Motivational posturing includes commitment, resistance, and disengagement. Committed individuals place the least social distance between themselves and authority figures. Resistant individuals place a moderate amount of social distance between themselves and authority figures. Disengaged individuals completely refrain from interacting with authority figures (Murphy & Cherney, 2012).

Murphy & Cherney (2012) adopted the concept of social distance and used it within a policing context to examine police/adult relationships. Expanding on Murphy & Cherney's (2012) use of social distance, our study focuses on social distance within a policing context to examine relationships between police and minority youth. We measure social distance by examining the extent to which minority youth like, feel connected to, trust, and respect the police. The goal of this study is to (a) examine the degree to which minority youth have positive feelings for the police and (b) determine whether the TAPS Academy is an effective program for reducing social distance between police and minority youth.

TAPS Academy Implementation

While funded through the Community Oriented Policing Services (COPS) office, the 11-week TAPS Academy program was implemented through the Houston Police Department (HPD) in Houston, Texas. The TAPS Academy paired police mentors with at-risk youth placed in juvenile detention, alternative schools, and or other restrictive settings.

Through classes convening once a week, officeryouth groups with a ratio of 1 officer to 5 youth discussed topics ranging from drug prevention to bullying and gang violence. The TAPS Academy day was divided into the following three sessions: (a) subject presentation session, (b) small group session, and (c) reflection session. During the subject presentation session, subject matter experts facilitated an interactive dialogue with youth on the topic of the day using videos, group activities, and discussions. After the subject was presented, youth moved to small groups where they engaged in intimate mentor/mentee dialogues with police officer mentors about the topic of the day. In these small group sessions, mentors and mentees engaged in more intimate conversations about the day's presentation. They developed lasting bonds by establishing rapport, learning from each other, communicating to dismantle negative beliefs, and bridging the gap between them. Officer mentors employed active learning techniques to teach youth appropriate responses and effective skills for avoiding criminal activity. The reflective session ended the TAPS Academy day. During the session, small groups reported to the larger group the results of their discussion. In many instances the small group reports revealed how bonds and rapport were established, the learning that took place, and how effective communication was used to dismantle negative beliefs in order to bridge the gap between youth and officers. Upon completion of the 11-week program, youth participated in a graduation ceremony where they were provided with a certificate of completion for participating in the program.

Unlike other police/youth programs, preliminary evaluations revealed the TAPS Academy to be effective at reducing social distance between police and minority youth at risk. Previous programs, such as Drug Abuse Resistance Education (D.A.R.E.) and Gang Resistance Education and Training (G.R.E.A.T.), were also designed to confront issues between the police and youth. However, research has shown those programs to be ineffective in reducing at-risk behaviors among

youth (Anderson, Sabatelli, & Trachtenberg, 2007; West & O'Neal, 2004; and Lynam et al., 1999). Furthermore, there is a gap in the research on the effects of these programs on different racial youth groups. With that in mind, the current study seeks to explore the effects of the TAPS Academy on Hispanic/Latino and African American youth.

Theoretical Framework

This research is grounded in Hirschi's (1969) social control/social bond theory. The development of social bonds (through mechanisms such as mentoring) can be used to decrease social distance. The purpose of the theory is to explain why individuals conform to moral and socially acceptable behavior rather than deviate. Hirschi (1969) posits that conformity results from integration into prosocial groups and a personal internalization of social norms and values. In other words, bonds form between individuals and their societies that prevent them from engaging in deviant activities. These bonds include attachment, commitment, involvement, and belief. Attachment involves positive connections between individuals and significant others (family, friends, mentors) and purports that deviant behavior would damage these relationships. Commitment involves engaging in conventional activities and establishing positive goals that will constrain deviant behavior. Involvement includes the time and energy invested in conventional activities, which then limits opportunities for engaging in deviant behavior. Finally, belief involves the personal internalization of social norms and values.

Social control/social bond theory suggests that the stronger an individual's social bonds, the lower the likelihood of deviant behavior. The weaker an individual's social bonds, the greater the likelihood of deviant behavior. Research has provided support for social control theory by finding a negative relationship between social bonds and delinquency (Li, 2004; Longshore, Chang, Hsieh, & Messina, 2005). The current study explores mentoring as a mechanism for reducing social distance through the development of social

bonds between at-risk youth and the police. Although several studies have explored the effectiveness of mentoring programs with at-risk youth (Keating, Tomishima, Foster, & Allesandri, 2002; Ford, 2012; Li, 2004; Longshore, et al. 2005), few studies have explored the benefits of mentoring, or using police as mentors, for improving negative perceptions of the police among minority youth. Furthermore, this study bridges this gap in the research by bringing at-risk youth and police together through the TAPS Academy, Officers serve as mentors to strengthen the social bonds between them and the youth engaged in the program. We hypothesized that through this collective relationship, youth perceptions of the police would improve, thus reducing social distance between youth and the police.

Literature Review

Public perceptions of the police have historically served as a source of scholarly inquiry for criminal justice researchers (Weitzer & Tuch, 1999; Brunson, 2007; Cochran & Warren, 2012). The existing literature has consistently shown differing views of the police by different racial and ethnic populations (Cochran & Warren, 2012). Traditionally, minority groups have held more negative views and perceptions of the police than non-minority groups (Smith & Holmes, 2003; Taylor et. al, 2001; Engel 2005). Moreover, minority youth tend to express more negative feelings toward the police than non-minority youth (Leiber et al., 1998). Consistently, young minorities report the least "trust" of the police (Barlow & Barlow, 2002). Brunson (2007) states "one of the most reliable findings in research on attitudes toward the police is that citizen distrust is more widespread among African-Americans than whites" (p. 73). These feelings developed out of negative (involuntary and voluntary) police contacts (Huebner, Shaefer, & Bynum, 2004). In addition, when such contact occurs it is shared with family and friends in order to lighten the burden, because regular channels for safe disclosure are thought to be blocked or not an option

(Huebner, Schafer, & Bynum, 2004). These shared experiences contribute to feelings of anguish and anger toward the police in the extended group (Brunson, 2007). Thus, others who may not have had any personal contact with the police within the group vicariously experience negative treatment through relatives and friends. These vicarious experiences have the potential to contribute to increased levels of hostility and distrust of the police (Brunson, 2007; Feagin & Sikes, 1994).

Although several explanations have been offered to account for differing perceptions of the police, many scholars argue that negative perceptions of the police among minority groups stem from adverse police encounters and cumulative disadvantages experienced by minority populations throughout the many phases of the criminal and/ or juvenile justice system (Cochran & Warren, 2012). Some argue that the distrust of law enforcement by minorities in general and minority youth in particular may have its origins in slave patrols—that is, organized groups that policed slaves during the antebellum period (Gabbidon & Greene, 2009)—or in the enforcement of unjust laws, such as monitoring and restricting black citizens' movements (Bass, 2001). Throughout history, the distance between minority communities and the police continued via practices such as being watched and detained (Browning, Cullin, Cao, Kopache, & Stevenson, 1994); irrelevant stops (Mastrofski, Reisig, & McCluskey, 2002); unlawful arrests (Smith & Visher, 1981); use of unwarranted physical and deadly force (Jacobs & O'Brien, 1998); officer misconduct (Kane, 2002); and slower response times as well as fewer police services in minority communities (Anderson, 1990).

In addition, scholars have begun to further explore issues of racial profiling to understand its relationship with public perceptions of the police (Reitzel & Piquero, 2006; Weitzer & Tuch, 2002; Cochran & Warren, 2012). According to Weitzer & Tuch (2002), racial profiling refers to a police officer's decision to stop and interrogate a citizen based primarily on the citizen's race.

However, African American and Hispanic/Latino populations have become the prime targets of racial profiling (Weitzer & Tuch, 2002). Khoury (2009) suggests that racial profiling increases the visibility of African Americans and serves as an attempt to remind them of their "place." As such, negative perceptions of the police and issues concerning police legitimacy have emerged across African American and Hispanic/Latino communities (Engel, 2005; Cochran & Warren, 2012). Specifically, greater expression of negative perceptions and questions of police legitimacy have arisen among African American and Hispanic/Latino youth (Leiber et al., 1998). These documented shortcomings by law enforcement to this group create dissatisfaction, social distance, distrust, and apathy.

Policing methodologies such as community policing have been found to improve police/community relations within predominately African American and Hispanic/Latino communities. Some researchers contend that in order to improve these strained relationships, police should engage in a dialogue with youth and acknowledge their ideas (Solis, Portillos & Brunson, 2009). Others researchers have focused on the importance of procedural justice (Mazerolle, Antrobus, Bennett, & Tyler, 2013). They have found that when people understand the actions of police officers and believe police are operating in a procedurally just way, which would include the fair and respectful treatment of citizens, people are more likely to think favorably of the police (Mazerolle, et al., 2013; Tyler & Fagan, 2008; Reisig & Lloyd, 2009). This research has laid the foundation for programs that seek to improve police legitimacy.

Several programs (e.g., D.A.R.E. and G.R.E.A.T) have been implemented to improve police/community relations and perceptions of the police among youth. However, research on these programs has garnered inconsistent results concerning their effectiveness because they primarily address drug abuse and gang prevention rather than police/youth relations (Anderson et al., 2007; West & O'Neal, 2004).

The TAPS Academy takes a slightly different approach by targeting a specific segment of the youth population—at-risk youth—via effective interactions, mentoring, and communication. The TAPS Academy builds on the strengths of programs such as D.A.R.E. and G.R.E.A.T. and addresses important topics such as violence, drug use, and proper ways to interact with the police. The primary focus however, is to reduce the social distance between at-risk youth and police officers.

There is a need for more programs to address the strained relationship between police and youth. Moreover, there is a greater need for research on these programs to determine their effectiveness at improving perceptions of the police among minority youth and reducing social distance. Therefore, the purpose of this research is to investigate the effectiveness of the TAPS Academy on African American and Hispanic/Latino (minority) at-risk youth. Specifically, this research examines the extent to which minority youth have positive feelings for the police and determines whether the TAPS Academy is an effective program for reducing social distance between minority youth and the police. Using a pre-test/post-test model, paired samples t-tests examined social distance between at-risk youth engaged in the TAPS Academy and the police. Independent samples t-test examined differences in social distance of pre-test and post-test among subgroups of the samples by race and gender.

Method

Study Participants

The initial sample consisted of 75 youth; however, only 50 youth completed the post-test. Therefore, the resulting sample for this study consisted of 50 youth from whom there were pre-test and post-test measures to compare. Youth comprising the sample were engaged in the TAPS Academy from September 2013 through December 2013. The sample is considered a purposive sample because youth engaged in the TAPS Academy

were chosen by alternative schools and juvenile justice administrators based on criteria such as duration in facility (youth had to be committed to the facility for 11 or more weeks), behavior, attendance, academic performance, and potential for success. Due to the duration of commitment to the facility, TAPS Academy tends to include the most at-risk youth. Parental consent forms were distributed and completed by all parents/guardians of students who participated in this study. All study activities were approved by the University of Houston-Clear Lake Institutional Review Board (IRB). The final youth sample ranged in age from 13-17 (M = 15.73, SD = .97), with 42% identifying as African American and 58% identifying as Hispanic/Latino. The majority of the youth were males (82%) compared to females (18%). In addition, 8% of youth participants reported enrollment in middle school (7th or 8th grades); 46% reported enrollment as high school freshmen; 21% reported enrollment as high school sophomores; 12% reported enrollment as high school juniors; 1% reported enrollment as high school seniors; and 12% reported earning a GED.

There were 11 officers involved in the program. The officers' ages ranged from 30 to 54, with 73% male and 27% female. Fifty-four percent of the officers were African American, 18% were White, 18% were Hispanic/Latino, and 9% were Asian/ Pacific Islander. The officers' years of service on the department ranged from 5 to 32 years, with 32% ranking as sergeants, 27% as senior officers, 18% as officers, and 18% as lieutenants. Forty-five percent of the officers involved in the program received a Master's degree, 9% completed some graduate work, 27% completed an undergraduate degree, 9% completed an associate's degree, and 9% completed some undergraduate coursework. Most of the officers (82%) reported having children.

Evaluation Design/Data Collection

In order to assess the extent of social distance between minority youth and the police, preand post-test surveys were completed by youth engaged in the TAPS Academy. The pre-test (TI) was completed by participants during week 1 of the TAPS Academy and the post-test (T2) was completed during week 11 of the TAPS Academy. Prior to administering the survey, the purpose of the study was explained to participants. It was also explained to youth that their participation was completely voluntary, their responses were anonymous, and they could stop completing the survey at any time. The surveys were then distributed to the youth and, upon completion, were collected by the researchers.

Measurement

Youth completed a social distance scale that consisted of 12 items adapted from the Bogardus (1933) Social Distance Scale. Although Bogardus' Social Distance scale was originally created to measure social distance between different racial and ethnic groups (Bogardus, 1933), it was modified for the present study to measure social distance between police officers and youth. Youth were asked to indicate the extent to which they either agreed or disagreed with a series of statements on a 4-point continuum (See Table 1 for complete scale). The responses were pre-coded as 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). Internal reliability of the social distance scale was .916 for the pre-test and .899 for the post-test.

Results

Participants completed a social distance scale, with higher scores indicating less social distance between youth and the police and lower scores indicating more social distance between youth and the police. Pre-test scores ranged from 12 to 42 out of a possible range of 12 to 48, with a sample mean of 21.94 (SD = 7.32). Post-test scores ranged from 12 to 48 out of a possible range of 12 to 48, with a sample mean of 30.04 (SD = 6.62). During the pre-test, an independent samples t-test found no significant differences between African American and Hispanic/Latino youth on the social distance scale t(48) = .437, p = .664. The

Cohen's effect size value (d = .12) suggests a small effect. Similarly, there were also no significant differences between African American and Hispanic/Latino youth on the social distance scale during the post-test t(48) = -.638, p = .527). Cohen's effect size value (d = .18) suggests a relatively small effect.

From pre-test to post-test, however, results from a paired samples *t*-test indicated that youth showed significant improvement in social distance. As seen in Table 1, there was a statistically significant difference in the pre-test and post-test scores on 11 out of the 12 items of the social distance scale. These findings suggest the TAPS Academy may be an effective intervention for improving social distance among minority youth.

After participating in the TAPS Academy, African American youth were more likely to respond affirmatively to feeling close to the police, caring what officers thought, getting along with police officers, and believing that officers respect and treat people fairly. These findings are consistent with research suggesting that the development of social

bonds will improve perceptions of the police. Despite these findings, however, African American youth showed no statistically significant improvement from pre-test to post-test on several items, including perceptions that the police will help and listen during times of trouble, respecting the police, not wanting to disappoint officers, and feeling connected to the police. These findings suggest that the TAPS Academy is a potentially effective program for improving social distance

Table 1. African American & Hispanic/Latino Paired Samples Results (n = 50)

	1				1
	Test Pre-test=1 Post-test=2	Mean	Std. Deviation	<i>t</i> -value	Cohen's d
I respect the police	1	2.2600	1.00631	-4.198**	.81
	2	2.9800	.74203		
I feel close to police	1	1.6400	.77618	-5.200**	.92
officers	2	2.3800	.83029		
Police officers will treat me	1	1.7000	.78895	-5.267**	1.0
fairly when I get into trouble	2	2.5200	.70682		
Police officers will help me	1	2.0000	.90351	-3.746**	.75
when I am in trouble	2	2.6400	.77618		
Police officers will listen to	1	1.8200	.87342	-3.500**	.71
me when I get into trouble	2	2.4200	.81039		
I care what police officers	1	1.4000	.67006	-5.002**	.84
think of me	2	2.1400	1.04998		
I want to get along well	1	2.1000	.93131	-3.525**	.72
with police officers	2	2.7200	.78350		
I don't want to disappoint police officers by getting	1	2.1600	.95533	-1.804+	.39
into trouble	2	2.5200	.86284		
I feel connected to the	1	1.5800	.78480	-3.293**	.65
police in my community	2	2.0800	.75160		
I believe the police respect	1	1.6600	.74533	-5.824**	1.1
me	2	2.5600	.76024		
I believe the police do their job of fighting crime well	1	2.0200	.89191	-3.625**	.80
	2	2.6800	.74066		
The police treat all people	1	1.6000	.78246	-5.112**	1.0
fairly	2	2.4000	.75593		

^{*} $p \le .05$ (two-tailed). ** $p \le .01$ (two-tailed). + $p \le .10$ (two-tailed).

among African American youth and the police but fails to completely eliminate social distance (see Table 2.)

The finding that participation in the TAPS
Academy does not completely eliminate but
potentially improves social distance between
African American youth and the police represents
a stark contrast with previous research findings of social distance between Hispanic/Latino
youth and the police. From pre-test to post-test,

Hispanic/Latino youth who participated in the TAPS Academy showed statistically significant improvement in social distance on every item of the scale, ranging from respecting the police to believing the police treat people fairly (see Table 3).

In addition to exploring the effects of the TAPS Academy on African American and Hispanic/ Latino youth, we examined the effects of the TAPS Academy on gender. During the pre-test, an independent samples t-test revealed a significant difference in social distance between males (M = 20.85, SD = 7.27) and females (M = 26.88, SD = 5.48); t(48) = -2.338, p = .024. The Cohen's effect size value (d = .93) suggests a large effect. There were no significant differences between male (M =29.97, SD = 6.47) and female (M = 30.33, SD = 7.69) youth on the social distance scale during the post-test t(48) = -.145, p = .885). Cohen's effect size value (d = .0) suggests a small effect. Using a paired samples *t*-test to examine social distance among males from pre-test to post-test, results found that males showed improvement from pre-test to post-test on all measures of social distance (see Table 4).

Unlike males, females showed only marginally significant improvement on two measures. Females were more likely to agree with the statement that the police fight crime well. They were also more likely to agree with the statement that the police will treat them fairly (see Table 5).

Although males and females scored differently on the pre-test, they scored similarly during the

Table 2. African American Paired Samples Results (n = 21)

	Test Pre-test=1 Post-test=2	Mean	Std. Deviation	<i>t</i> -value	Cohen's d
I respect the police	1	2.4762	1.16701	-1.191	.35
	2	2.8571	.96362		
I feel close to police	1	1.6667	.91287	-3.200**	.80
officers	2	2.4286	.97834		
Police officers will treat me	1	1.7143	.84515	-2.500*	.86
fairly when I get into trouble	2	2.4286	.81064		
Police officers will help me	1	2.0476	.97346	-1.404	.46
when I am in trouble	2	2.4762	.87287		
Police officers will listen to	1	1.8571	.96362	-1.633	.55
me when I get into trouble	2	2.3810	.92066		
I care what police officers	1	1.2857	.56061	-3.068**	.85
think of me	2	2.0952	1.22085		
I want to get along well	1	2.1429	.91026	-1.985+	.91
with police officers	2	2.6667	.79582		
I don't want to disappoint police officers by getting	1	2.4286	1.02817	.000	0
into trouble	2	2.4286	1.07571		
I feel connected to the	1	1.6190	.92066	-1.482	.49
police in my community	2	2.0476	.80475		
I believe the police respect	1	1.5714	.74642	-3.508**	1.1
me	2	2.5238	.92839		
I believe the police do their job of fighting crime	1	2.0476	1.02353	-1.743+	.65
well	2	2.6667	.85635		
The police treat all people	1	1.6190	.80475	-2.500*	.83
fairly	2	2.3333	.91287		

^{*} $p \le .05$ (two-tailed). ** $p \le .01$ (two-tailed). + $p \le .10$ (two-tailed).

post-test. Males and females reported fairly similar levels of social distance between themselves and the police after participating in the TAPS Academy.

Findings from the analyses mentioned above indicate (a) the TAPS Academy is potentially an effective approach for reducing social distance between minority youth and the police, (b) the TAPS Academy may be more effective at reducing social distance between Hispanic/Latino youth and the police than it is in reducing

social distance between African American youth and the police, and (c) the TAPS Academy may be more effective in reducing social distance among male youth than females. However, these results should be interpreted with caution, as the analyses included a very small sample of female participants, which may have confounded the results. Also, gender and race effects were not tested directly.

In addition to the social distance scale, qualitative questions assessed the types of people TAPS participants viewed favorably and their perceptions of police. Participants were provided the opportunity to indicate their heroes. They were also provided the opportunity to finish the sentence, "If I were the person in charge of the police, I would..." Although many participants responded to both qualitative queries, they were not required to respond; therefore, the number of reported qualitative responses during the pre-test differs from the number of quantitative responses during the pre-test.

During the pre-test, 50 youth *p ≤ .05 (two-tailed). **p identified their heroes. Most youth responded positively by listing a family member (e.g., father, mother, aunt, or uncle). Two youth responded negatively by stating, "not the f**king police." Six youth indicated that a rapper (e.g., Sean Carter Jay Z, Lil Boosie, and/or Chief Keef) were their heroes. Three youth said they did not have a hero (see Table 6).

Fifty youth completed the statement, "If I were the person in charge of the police, I would..." The majority of youth responded negatively by

Table 3. Hispanic/Latino Paired Samples Results (n = 29)

	Test				
	Pre-test=1 Post-test=2	Mean	Std. Deviation	<i>t</i> -value	Cohen's d
I recreat the notice	1	2.1034	.85960	-5.506**	1.3
I respect the police	2	3.0690	.52989		
I feel close to police	1	1.6207	.67685	-4.063**	1.0
officers	2	2.3448	.72091		
Police officers will treat me	1	1.6897	.76080	-5.142**	1.2
fairly when I get into trouble	2	2.5862	.62776		
Police officers will help me	1	1.9655	.86531	-4.075**	1.0
when I am in trouble	2	2.7586	.68947		
Police officers will listen to	1	1.7931	.81851	-3.494**	.84
me when I get into trouble	2	2.4483	.73612		
I care what police officers	1	1.4828	.73779	-3.994**	.82
think of me	2	2.1724	.92848		
I want to get along well	1	2.0690	.96106	-2.891**	.78
with police officers	2	2.7586	.78627		
I don't want to disappoint	1	1.9655	.86531	-3.087**	.79
police officers by getting into trouble	2	2.5862	.68229		
I feel connected to the	1	1.5517	.68589	-3.417**	.78
police in my community	2	2.1034	.72431		
I believe the police respect	1	1.7241	.75103	-4.689**	1.2
me	2	2.5862	.62776		
I believe the police do their job of fighting crime	1	2.0000	.80178	-3.700**	.93
well	2	2.6897	.66027		
The police treat all people	1	1.5862	.77998	-4.870**	1.2
fairly	2	2.4483	.63168		

* $p \le .05$ (two-tailed). ** $p \le .01$ (two-tailed). + $p \le .10$ (two-tailed).

saying, "I wouldn't have anything to do with the police," "f**k the police," or "not beat up on people for no reason." Seven youth responded by stating, "I would legalize marijuana," "change the laws," or "treat them the way they treat people." Two youth responded by saying, "I would continue protecting the people in the community" (see Table 7).

Using a different approach during the posttest, TAPS Academy participants were provided the opportunity to share their thoughts on the

Table 4. *Paired Samples—Male* (n = 41)

	Test Pre-test=1 Post-test=2	Mean	Std. Deviation	<i>t</i> -value	Cohen's d
I respect the police	2.1951	1.00547	-3.958**	.38	1.3
	2.9268	.75466			
I feel close to police	1.5366	.74490	-5.595**	1.1	1.0
officers	2.4146	.80547			
Police officers will treat me	1.6829	.81973	-4.759**	1.0	1.2
fairly when I get into trouble	2.5122	.71141			
Police officers will help me	1.9512	.92063	-3.733**	.80	1.0
when I am in trouble	2.6341	.76668			
Police officers will listen to	1.7032	.81375	-4.039**	.85	.84
me when I get into trouble	2.3902	.80244			
I care what police officers	1.3171	.60988	-4.996**	.95	.82
think of me	2.0732	.93248			
I want to get along well	1.9756	.93509	-3.920**	.89	.78
with police officers	2.7561	.79939			
I don't want to disappoint	1.9756	.90796	-3.222**	.74	.79
police officers by getting into trouble	2.6098	.80244			
I feel connected to the	1.4390	.70883	-4.309**	.88	.78
police in my community	2.0732	.72077			
I believe the police respect	1.5854	.70624	-6.645**	1.4	1.2
me	2.6098	.70278			
I believe the police do their job of fighting crime	1.9268	.87722	-3.434**	.84	.93
well	2.6098	.73750			
The police treat all people	1.5610	.77617	-4.683**	1.0	1.2
fairly	2.3659	.69843			

^{*} $p \le .05$ (two-tailed). ** $p \le .01$ (two-tailed). + $p \le .10$ (two-tailed).

program by answering the questions, "What do you like about the TAPS program?" and "What would you change about the TAPS program?" Although youth were not required to respond, the majority of youth responded positively to both questions. Forty-four youth responded to the first question by stating, they "liked how down to earth the police were," "the classes were interesting," and "the police gave good advice." None of the youth had negative comments about the program. Six youth even noted their appreciation

for the snacks provided to them by the officers during the program (see Table 8). Forty-two youth responded positively to the second question by saying they would not change anything about the program. One youth responded negatively by stating, "get rid of the mean officers." Seven youth responded by saying they should "have better snacks," "shorten the program time," and "have more female police officers" (see Table 9).

Discussion

Research has frequently identified race as a salient factor in determining perceptions of the police among various groups. Perceptions of the police often reflect the amount of social distance between those groups and the police. Existing research has consistently found that African American and Hispanic/Latino youth have held more unfavorable views of the police than non-minority youth. These negative perceptions often indicate weak social bonds. Reduction of negative perceptions could be facilitated by strengthening social bonds, which would then reduce social distance. The TAPS

Academy attempts to improve social distance between at-risk youth and the police by strengthening social bonds through mentorship.

Findings from this study provide support for social bond theory and the effectiveness of the TAPS Academy in reducing social distance between minority youth and police officers. Although minority youth initially expressed negative attitudes toward the police, they reported more positive attitudes after participating in the

Table 5. *Paired Samples*—*Female* (n = 9)

	Test Pre-test=1 Post-test=2	Mean	Std. Deviation	<i>t</i> -value	Cohen's d
I respect the police	2.5556	1.01379	-1.414	.77	1.3
	3.2222	.66667			
I feel close to police	2.1111	.78174	426	.12	1.0
officers	2.2222	.97183			
Police officers will treat me	1.7778	.66667	-2.135+	1.1	1.2
fairly when I get into trouble	2.5556	.72648			
Police officers will help me	2.2222	.83333	936	.52	1.0
when I am in trouble	2.6667	.86603			
Police officers will listen to	2.3333	1.00000	389	.23	.84
me when I get into trouble	2.5556	.88192			
I care what police officers	1.7778	.83333	-1.414	.54	.82
think of me	2.4444	1.50923			
I want to get along well	2.6667	.70711	426	.15	.78
with police officers	2.5556	.72648			
I don't want to disappoint	3.0000	.70711	-1.835	.99	.79
police officers by getting into trouble	2.1111	1.05409			
I feel connected to the	2.2222	.83333	229	.12	.78
police in my community	2.1111	.92796			
I believe the police respect	2.0000	.86603	707	.35	1.2
me	2.3333	1.00000			
I believe the police do their job of fighting crime	2.4444	.88192	-1.170+	.69	.93
well	3.0000	70711			
The police treat all people	1.7778	.83333	-1.941	.83	1.2
fairly	2.5556	1.01379			

^{*} $p \le .05$ (two-tailed). ** $p \le .01$ (two-tailed). + $p \le .10$ (two-tailed).

Table 6. Who Is Your Hero?

Positive Response	Negative Response	Other
39	2	9

Table 7. If I Were In Charge of the Police, I Would...

Positive Response	Negative Response	Other
2	41	7

TAPS Academy. These findings parallel existing research that suggest positive dialogues and interactions can lead to more positive perceptions of the police (Solis et al., 2009; Mazerolle et al., 2013; Tyler & Fagan, 2008; Reisig & Lloyd, 2009).

Although we identified an overall change in social distance between minority youth and the police, we found that Hispanic/ Latino youth reported more favorable perceptions of the police and reduced social distance at the conclusion of the program than African American youth. Results from the study also found the TAPS Academy to potentially be more effective at improving perceptions of the police among males compared to females; however, these results were based on a limited female sample, which could have confounded the results. Possible explanations for these differing levels of effectiveness between African American and Hispanic/Latino youth, as well as males and females, center on various micro-level factors that include cross-racial mentorships, differing vicarious experiences, and familial influence.

Table 8. What Do You Like About the TAPS Program?

Positive Response	Negative Response	Other
44	0	6

Table 9. What Would You Change About the TAPS Program?

Positive Response	Negative Response	Other
42	1	7

African American youth tend to fall below both Hispanic/Latino and White youth on measures of perceptions of the police. However, when asked about fear of the police and issues regarding neighborhood policing, Hispanic/Latino perceptions tend to align with those of African Americans (Shuck, Rosenbaum, & Hawkins, 2008). These negative perceptions indicate weak social bonds; in order to improve these negative perceptions, the social bonds need to be strengthened.

Mentorship has proven effective in strengthening social bonds. Several studies have noted the importance of same-race mentoring (Ensher & Murphy, 1997; Cohen, Steele, & Ross, 1999; Yancey, Siegel, & McDaniel, 2002; Ward, 2000). Findings from these studies suggest youth prefer and benefit from mentors who share cultural and ethnic similarities with them. When assessing minority youth, these studies suggest African American youth benefit from African American mentors because they better understand the social and psychological struggles that they often face (Rhodes, 2002). These conclusions are important to the findings of the current study because youth engaged in the TAPS Academy were matched with police mentors of different racial groups. This could have contributed to the disparate outcomes in program effectiveness between African American and Hispanic/Latino youth.

In addition, African American youth are more likely than Hispanic/Latino youth to experience negative police contacts (Crutchfield, Skinner, Haggerty, McGlynn, & Catalano, 2012). They are also more likely to have family, friends, and neighbors who experience negative police contacts (Rosenbaum, Shuck, Costello, Hawkins, & Ring, 2005). When these negative contacts are shared they create vicarious experiences that influence attitudes and perceptions about the police (Rosenbaum et al., 2005). Since African American youth showed less improvement on five social distance variables (respect, help, listen, disappoint, and connect) than Hispanic/Latino

youth, it is possible this outcome resulted from greater personal and/or vicarious experiences (especially those shared by family, friends, and neighbors) encountered by African American youth which, in turn, influenced the police/youth mentor relationship.

When exploring gender differences, males made greater strides in reducing social distance from pre-test to post-test than females. However, the significant difference may be due to gender differences during the pre-test. Females initially reported more favorable perceptions of the police than males. It is possible that these gender differences in reducing social distance are due to the fact that males had a longer way to go to improve their perceptions of the police than females. There is extensive research indicating that girls allow interpersonal relationships such as mentoring to take a greater role in their lives than boys; therefore, girls often benefit from those relationships more (Jack, 1991; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991). Bogat and Liang (2005) argue that boys and girls have differing mentoring needs and benefit from different types of mentoring relationships. Girls tend to be more verbal and emotionally driven while boys are less likely to express their emotions. Rhodes (2002) stresses the importance of "meaningful conversations" in facilitating successful outcomes from mentoring programs. Rickwood and Braithwaite (1994) posit that boys may not benefit from mentoring programs that are primarily verbally based. However, our study found that males benefitted from the TAPS Academy more than females. Unfortunately, females represented a small (18%) portion of the study sample, which is important to note when interpreting the results. It is possible that although African American females developed stronger social bonds with their police mentors by making a greater personal investment and effectively communicating in their mentoring relationships, the effect was less pronounced than it might have been because females represented a much smaller portion of the sample.

Although the findings of our study yield promising results for reducing social distance between minority youth and the police, a significant limitation of this study lies with the research sample. The sample is relatively small and consists solely of at-risk youth in Houston, Texas. Use of this sample places limitations on the generalizability of the research results. The goal of the TAPS Academy is to serve as a model program for reducing social distance among at-risk youth across various geographic areas. Future research should explore the effectiveness of the TAPS Academy on at-risk populations in areas (international, state, and local) other than Houston, Texas and among groups other than youth involved in alternative schools and juvenile facilities (e.g., juvenile justice populations, non-juvenile justice-involved youth, etc.).

Conclusion

The findings from this study may inform several areas of future research. First, future research should explore a larger population sample with a sufficient number of youth from several minority groups to provide a better test of the program's effects among treatment and control groups. It is important to note that some of the results of this study could be due to confounding factors resulting from the sample. Therefore, a larger population sample would provide more information about the extent of social distance between youth and the police, as well as provide greater insight into the effectiveness of the TAPS Academy. Second, research should examine the demographics (e.g., age, race, gender, years of service, etc.) of police mentors and how these may influence the police/youth relationship. Research exploring the demographics of police mentors can inform future police/youth programs, since such research could yield information on the characteristics of police officers who work best with minority youth at risk. Third, research should explore the effectiveness of police mentors on youth populations other

than those at risk. Research exploring juvenile justice populations as well as non-juvenile justice-involved youth may provide support for the adaptability of the TAPS Academy to meet the needs of multiple youth populations. Fourth, future research should assess the relationship between African American youth and police mentors. Since findings from the current study provide varying degrees of support for the effectiveness of the TAPS Academy on African American youth, research is needed to help us understand why. Finally, future studies should explore the effect of matching same-race police mentors with youth. There is a considerable amount of research emphasizing the benefits of same race mentor/mentee relationships—an examination into the effects of these relationship pairs may shed light on ways to enhance social bonds, reduce social distance, and improve the effectiveness of the TAPS Academy youth.

With these recommendations for future research in mind, the TAPS Academy provides a start for community policing practices that affect the most disadvantaged populations. As the TAPS Academy continues to grow, additional research will provide more answers to questions concerning the best approaches to reducing social distance between minority youth and the police.

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Rural Youth Crime: A Reexamination of Social Disorganization Theory's Applicability to Rural Areas

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Abstract

Criminological theories are often developed based on studies of urban areas. The current analysis examines the applicability of social disorganization theory to youth crime in rural areas using Osgood and Chambers' (2000) analysis. The current analysis used negative binomial regression models to test social disorganization theory based on juvenile arrest rates in 2,011 nonmetropolitan counties within 48 states in the United States. The findings indicate that social disorganization theory can be applied to understand youth crime in rural areas: residential mobility, ethnic heterogeneity, family disruption, poverty, and population density predicted higher levels of crime. Although the population at risk—those between the ages of 15 and 24—was significant, we found age was not associated with crime in rural areas, which is the opposite finding of other social disorganization theorists. The unemployment rate of the counties had no effect on crime in our study. The findings of the current study match many of the findings of Osgood and Chambers' (2000) original analysis on social

disorganization theory and rural crime, indicating that many of the components of social disorganization theory can be applied to understanding youth crime in rural areas.

Introduction

The vast majority of criminological research has been done in urban areas. Since little attention has been paid to delinquency in rural areas (Kaylen & Pridemore, 2013; Wells & Weisheit, 2004), our portrait of delinquent behavior is incomplete. This neglect of rural areas produces confusion in criminology. Kaylen and Pridemore (2013) explain that many studies treat rural areas as "miniature versions of urban areas, with similar social processes occurring on a smaller scale" (p. 170). As such, criminologists tend to falsely accept that theories and causes of crime are the same for rural and urban areas.

Although social disorganization theory—defined as the decline in the influence of existing social rules on the behavior of individuals—has been applied to rural areas in a small number of studies (Jobes, Barclay, Weinand, & Donnermeyer,

2004; Kaylen & Pridemore, 2011; Osgood & Chambers, 2000), the results of the studies examining the relation between social disorganization theory and rural crime have produced mixed results. Despite the equivocal results, the researchers who tested this relationship have argued that social disorganization theory can be applied to rural areas (Osgood & Chambers, 2000). However, Kaylen and Pridemore (2013) point out studies on rural crime have suffered from problems with data measurement and collection, making any studies of rural crime difficult to compare with those focusing on urban crime. To aid in moving research on rural crime forward, the current analysis builds on Shaw and McKay's (1942) conclusion that rural areas experiencing a high rate of crime are socially disorganized.

Scholars have begun to acknowledge that individuals' motivations for and environmental contributors to crime may be different in urban and rural areas (Deller & Deller, 2010). For example, Wells and Weisheit (2004) examined urban and rural areas across the United States and found that some of the predictors of crime in urban areas were not associated with crime in rural areas.

Kaylen and Pridemore (2013) pointed out that new research is emerging which is studying rural crime, but that rural crime is still an understudied area of criminology. Moreover, Kaylen and Pridemore (2013) explained that many studies treat rural areas as "miniature versions of urban areas, with similar social processes occurring at a smaller scale" (p. 170). As such, criminologists tend to falsely accept that theories and causes of crime are the same for rural and urban areas based on their view that rural areas are just miniature versions of urban centers.

The current study examines the generalizability of social disorganization theory to rural areas by building on Osgood and Chambers' (2000) analysis. We studied 2,011 rural counties across the United States to test the theory's applicability to crime in rural areas. Using a larger sample size than Osgood and Chambers (2000) and following

the same methodological approach, the results of the current analysis attempt to provide more generalizability than previous studies using similar dependent variables (Kaylen & Pridemore, 2011; Osgood & Chambers, 2000).

Literature Review

Social Disorganization Theory

Recognizing that the city of Chicago was undergoing drastic structural changes in the 1920s and 1930s, Shaw and McKay (1942) set out to understand the relationship between place and juvenile delinquency rates. Shaw and McKay (1942) demonstrated to criminologists that social ecological factors could impact criminal patterns. After gaining access to juvenile court records, they mapped out where each youth lived within the city of Chicago. They found juvenile crime rates were drastically different from one place to the next. More specifically, they saw that the highest rates of juvenile delinquency were concentrated near the center of Chicago, and the lowest rates of juvenile delinquency were found on the outskirts of the city.

In trying to explain this phenomenon, Shaw and McKay (1942) claimed that areas with high rates of juvenile delinquency were structurally different than areas with lower rates of juvenile delinquency. Shaw and McKay (1942) illustrated that as the city center transitioned from being residential to primarily commercial in nature, the effects on the residents living there were negative. For example, during the transition, residents were either forced to find housing elsewhere or submit to living in substandard conditions. This led to residential turnover, an increased number of broken families, and an overall increase in concentrated poverty and decay (Akers & Sellers, 2009).

While the physical and structural changes that Shaw and McKay (1942) discovered were alarming, they were more concerned with what impact these changes had on the relationships among

people living within these communities. These areas of transition were described as "socially disorganized" in that the residents living there experienced high rates of population turnover, were described as ethnically heterogeneous (due to an influx of immigrants), and the community suffered from many of its citizens living either in poverty or in a lowered socioeconomic status. Because of these rapid changes and the resulting stressors these changes placed upon people, social disorganization has been credited with hampering the overall levels of informal social control that people are willing to exert over one another (Bursik & Grasmick, 1993). Shaw and McKay (1942) argued that the crime-ridden areas were socially disorganized, and that this social disorganization negatively influenced community members' willingness to intervene and prevent juvenile delinquency from occurring.

Social disorganization theory initially gained much interest from the criminological community due to its unique place-based perspective. However, social disorganization theory fell out of favor, and the theory remained relatively dormant until the late 1980s and early 1990s. Around this time, scholars began empirically testing social disorganization theory as a theoretical framework and explored the theory's validity in a variety of different neighborhood contexts (Sampson & Groves, 1989; Bursik & Grasmick, 1993; Sampson, Raudenbush, & Earls, 1997). This growing body of research has led to a renewed interest in social disorganization theory among criminologists.

More recent studies examining social disorganization theory have found that additional features of a neighborhood, such as high population density, poverty, unemployment, and a large percentage of female-headed households, are associated with crime and delinquency (Markowitz, Bellair, Liska, & Liu, 2001; Li, 2011; Kaylen & Pridemore, 2011). Other research has demonstrated that perceptions of neighborhood disorder can be explained by social disorganization theory (Witherspoon & Ennett, 2011). Sampson

(2012) illustrated that lower levels of crime in a community may be due to residents being able to effectively communicate with social control agencies. Allen and Cancino (2012) applied social disorganization theory to the Texas-Mexico border region and found many of the variables associated with social disorganization are related to crime on the Texas-Mexico border. Furthermore, Mustaine, Tewksbury, Huff-Corzine, Corzine, and Marshall (2014) demonstrated that social disorganization theory can be applied to child sexual assault. Therefore, based on the studies just mentioned, Shaw and McKay's (1942) initial conceptualization of social disorganization theory has been expanded to explain many different areas of crime.

Social Disorganization Theory and Rural Crime

Social disorganization theory was initially developed to explain crime in urban areas. However, more recently scholars have expanded social disorganization theory to examine crime and delinquency in rural areas. Studies have been conducted using social disorganization theory not only in rural areas of the United States (Osgood & Chambers, 2000; Osgood & Chambers, 2003; Bouffard & Muftić, 2006; Li, 2011) but in rural areas in other countries (Jobes et al., 2004). Unfortunately, the number of studies that have explicitly tested social disorganization theory in the rural context is limited and their findings are mixed (Kaylen & Pridemore, 2012).

Osgood and Chambers (2000) examined social disorganization theory in rural counties across four states in the United States. In their research, they tested many of the key variables associated with social disorganization (i.e., residential instability, ethnic diversity, family disruption, low economic status, high population density, and proximity to urban areas) using arrest rates for juveniles in 264 nonmetropolitan counties in Florida, Georgia, Nebraska, and South Carolina. The authors hypothesized that rates of juvenile violence would be positively related to all of their social disorganization theory variables. They

found that many of the key variables of social disorganization theory associated with crime and delinquency in urban areas were also associated with crime and delinquency in rural areas. Osgood and Chambers (2000) demonstrated that residential instability, ethnic diversity, and family disruption were significant predictors of juvenile arrest rates in rural counties in the four states they analyzed. Osgood and Chambers argued, based on the findings of their study, that the basic components of social disorganization theory could be used to explain crime in both urban and rural areas.

Kaylen and Pridemore (2011) examined social disorganization theory in rural areas of Missouri. Using hospital records from 106 rural counties in Missouri, the scholars found that only family disruption was a significant predictor of crime in rural areas. Kaylen and Pridemore (2011) concluded that "the association between traditional social disorganization variables and youth violence may not be generalizable to rural areas" (p. 987).

In other research studying the connection between social disorganization theory and rural crime, Jobes et al. (2004) examined social disorganization and crime in rural Australia. Using a cluster analysis, Jobes et al. found that communities had lower crime rates when they had more cohesive and integrated community structures. Therefore, the authors concluded that social disorganization theory is applicable to both urban and rural areas. The different conclusions drawn by Osgood and Chambers (2000), Kaylen and Pridemore (2011, 2013), and Jobes et al. (2004) have called into question our understanding of the applicability of social disorganization theory to crime in rural areas.

More recently, scholars have called into question the ability of social disorganization theory to explain crime in contexts other than cities in the United States. Examining the applicability of social disorganization to a Western European city, Bruinsma, Pauwels, Weerman, and Bernasco

(2013) surveyed 3,575 residents in 86 neighborhoods of The Hague. They collected information on six different models of social disorganization, such as the classic model and collective efficacy. Bruinsma et al. (2013) concluded that social disorganization does not explain crime in The Hague. Instead, social disorganization may be better suited to explaining distinct urban processes. This has led to doubt as to whether social disorganization theory can be applied to areas other than cities in the United States.

The Current Study

The goal of the current study is twofold. First, given the limited research that has directly tested social disorganization theory in the rural context, it is our hope that this study will add to that growing body of literature. A second goal of this study is to provide more explanatory power than previous studies have been able to do. In an effort to do this, we are using Osgood and Chambers' (2000) study as a framework for our analysis. As such, we used the same social disorganization theory variables and juvenile crimes derived from the Uniform Crime Report as Osgood and Chambers. Our study differs from that of Osgood and Chambers, however, in that we are conducting our analysis on all nonmetropolitan counties in 48 (Hawaii and Alaska not included)¹ as opposed to only four states. Our goal in conducting this larger analysis is to provide a greater degree of generalizability than past studies, using smaller sample sizes, were able to (Bouffard and Muftić, 2006, N = 221; Jobes et al., 2004, N = 123; Kaylen and Pridemore, 2011, N = 106; and Osgood and Chambers, 2000, N =264).

Drawing on the findings from previous rural crime studies, we hypothesize there will be a relationship between juvenile delinquency and social disorganization variables in rural communities. More specifically, we hypothesize that

¹ Alaska and Hawaii were not included because of missing and incomplete data from the U.S. Census Bureau and the Uniform Crime Report.

juvenile delinquency rates will be positively associated with all of our social disorganization variables (i.e., residential instability, ethnic heterogeneity, family disruption, a high poverty rate, population at risk, unemployment, and population density). In addition, we hypothesize that our findings, like those of Osgood and Chambers (2000), will lend the most support to the variables of residential instability, ethnic heterogeneity, and family disruption.

Methods

Data

As Osgood and Chambers (2000) pointed out in their analysis, most studies at that time focused on variation in crime rates in neighborhoods in the same metropolitan area. This type of analysis does not allow for generalization to other areas of the country. To correct for this type of operationalization, Osgood and Chambers (2000) used county-level data from four different states: Florida, Georgia, South Carolina, and Nebraska. While their county-level analysis and use of different states was an improvement over many past analyses, the generalizability of Osgood and Chambers' (2000) findings does have limits. Therefore, the current analysis included more rural counties in the United States (N = 2,011) and a larger sample of states (N = 48).

More recently, questions about the validity of county-level data have been brought to light, especially in rural counties and in counties with small populations (Kaylen & Pridemore, 2011; Lott & Whitley, 2003; Maltz & Targonski, 2002; Wiersema, Loftin, & McDowall, 2000). As mentioned above, county-level Uniform Crime Report data do have limitations. Moreover, Maltz and Targonski (2002) have explained that missing data and imputed data at the county level make using the data problematic. Even with these limitations, we believe we are justified in using county-level data for the current analysis. We acknowledge the limitations of the Uniform Crime Report data and believe the findings of

this study will not be the sole source of information on crime in rural areas, but will be used as one of many studies examining this issue (see *Limitations* section).

The current study includes all counties that were not considered part of a metropolitan statistical area (MSA) by the Census Bureau. The Census Bureau classifies counties as not being a part of an MSA when it does not have a city of 50,000 or more, as well as when less than 50% of the county population resides in a metropolitan area of 100,000 or more. The current analysis included 2,011 counties with an average population of 24,580. The counties range in population from 41 to 190,846.

The Dependent Variables

The dependent variables for the analysis were collected from the Uniform Crime Report. In total, seven dependent variables were included in the current analysis: murder, rape, robbery, aggravated assault, weapons, and simple assault. The Violent Crime Index for 2010, which is the sum of murder, rape, robbery, and aggravated assault, was also included in the analysis, as was the total number of juvenile arrests for each crime. Negative binomial regression was used to control for any spikes in crime rates that can occur due to a small increase in the number of events occurring in an area with a small population (the Analytic Strategy section describes negative binomial regression). Social disorganization theory focuses on how the environment affects juvenile delinquency rates. Therefore, Uniform Crime Report data on juvenile arrests were used in the current analysis. The Uniform Crime Report classifies juveniles as individuals aged 11 through 17. Table 1 illustrates the descriptive statistics for the variables in the analysis.

The Independent Variables

All of the independent variables were collected from the United States Census Bureau. The 5-year estimates from the American Community Survey were used for the years 2006-2010. The 5-year

Table 1. Descriptive Statistics for Variables Used in the Analysis

	Mean	Standard Deviation
Residential Instability	.28	.06
Ethnic Heterogeneity	.17	.15
Family Disruption	.06	.03
Poverty Rate	.12	.06
Population at Risk	.15	.26
Unemployment	.04	.02
Population Density	45.73	110.36
Violent Crime	3.05	6.64
Murder	.06	.61
Rape	.23	.81
Robbery	.47	1.61
Assault	2.27	5.08
Weapons	1.14	3.53
Simple Assault	13.27	25.66

estimates were used because the Census Bureau does not collect information every year for all counties with small populations (see Table 1).

The variables used in the current analysis were selected based on the traditional social disorganization theory model of urban areas and on the variables that Osgood and Chambers (2000) selected for their original analysis. Residential instability was measured as the proportion of the population that had moved since 2005. Ethnic heterogeneity refers to the proportion of households occupied by white versus nonwhite persons. The ethnic heterogeneity measure calculates the likelihood of two randomly selected individuals from the county having different ethnicities. Following Osgood and Chambers (2000), we calculated the ethnic heterogeneity measure as $1-(\sum p_i)^2$, whereby p_i is the proportion of households within a given ethnic group (i.e.,

Table 2. Negative Binomial Regression Analysis and Type of Crime

	Violent Crime	Murder	Rape	Robbery	Assault	Weapons	Simple Assault
	B	B	B	B	B	B	B
	(S.E.)	(S.E.)	(S.E.)	(S.E.)	(S.E.)	(S.E.)	(S.E.)
Residential Instability	3.755***	-1.269)	3.061**	5.914***	3.771***	3.917***	4.957***
	(.590)	(2.375)	(1.152)	(1.060)	(.615)	(.768)	(.505)
Ethnic Heterogeneity	2.831***	5.826***	1.769**	4.682***	2.519***	2.896***	1.916***
	(.298)	(1.172)	(.609)	(.549)	(.312)	(.378)	(.245)
Family Disruption	7.011**	-3.487	1.888	12.865**	6.877**	7.563**	6.750***
	(2.085)	(7.997)	(4.448)	(3.907)	(2.175)	(2.711)	(1.674)
Poverty Rate	306	12.575***	-1.593	.902	584	.175	690
	(.859)	(3.184)	(1.979)	(1.689)	(.909)	(1.171)	(.712)
Population at Risk	-2.670***	-2.674***	-2.700***	-3.449***	-2.633***	-3.151***	-2.721***
	(.140)	(.485)	(.277)	(.258)	(.146)	(.182)	(.115)
Unemployment	-2.312	-12.581	-2.623	-2.717	-2.527	148	.885
	(2.102)	(7.943)	(4.433)	(3.918)	(2.218)	(2.725)	(1.755)
Population Density	.100	1.331**	324	.540*	.072	.128	.104
	(.114)	(.419)	(.230)	(.210)	(.120)	(.150)	(.093)
Adjacent to Metro Area	139*	362	126	081	129	149	057
	(.066)	(.289)	(.130)	(.123)	(.069)	(.085)	(.056)
Northeast	.788***	335	1.148***	.716**	.703***	.327	.940***
	(.146)	(.824)	(.241)	(.239)	(.150)	(.178)	(.129)
Midwest	.539***	.961*	.795***	.155	.534***	.389**	.494***
	(.093)	(.442)	(.185)	(.182)	(.097)	(.121)	(.074)
West	.599*** (.128)	2.097***	.199 (.257)	.217 (.233)	.650*** (.134)	.641*** (.165)	.620*** (.109)

p < .05; p < .01; p < .01; p < .001; (Standard Error)

white or nonwhite). The proportion of the households within a given ethnic group is then squared and summed across the two groups. The ethnic heterogeneity measure ranges from 0 to 0.5. A score of 0 indicates the county has only white or nonwhite residents; a score of 0.5 indicates the county has an equal number of white and non-white residents (see Table 2).

Previous studies of social disorganization have used ethnic heterogeneity in their analyses. Kornhauser (1978) found support for increased ethnic heterogeneity and increased crime in urban areas. Bursik and Webb (1982) argued that increased ethnic heterogeneity may lead to groups leaving the neighborhood due to the new groups moving in. Thus, increasing residential instability has been demonstrated to increase crime. Examining both urban and rural areas, Wells and Weisheit (2004) found ethnic heterogeneity to be a consistent predictor of violent crime in rural and urban settings. When examining the research on rural crime, ethnic heterogeneity has been shown to be predictive of crime (Bouffard & Muftić, 2006; Osgood & Chambers, 2000; Wells & Weisheit, 2004). Again, an increased level of ethnic heterogeneity may indicate the inability of the neighborhood to increase informal social control.

We measured family disruption by the proportion of female-headed households in the county and the poverty rate by the proportion of families living below the poverty level. In line with the work of Osgood and Chambers (2000), we also included the unemployment rate as a second economic measure. We measured population at risk in the same way as Wells and Weischeit (2004) in their analysis of urban and rural crime: the proportion of the population between the ages of 15 and 24. This is a deviation from the work of Osgood and Chambers (2000), who focused on the proportion of the population between the ages of 10 and 17. We used the ages of 15 to 24 for two reasons. First, the ages of 15 to 24 more closely follow the age-crime curve. In this way, the age groups most likely to commit a crime

could have a large influence on crime levels in a county. Second, because the U.S. Census Bureau changed the age range category in 2000, focusing on the 10- to 17-year-old age group was no longer an option. The distribution of the population between the ages of 15 and 24 was skewed; to correct for this, we used the natural logarithmic transformation in the current analysis. The natural logarithmic transformation did correct the skewed distribution of the population at risk.

We also included the *population density* in the model. Population density is calculated as the population of the county divided by the land area, in square miles, of the county. The distribution of the population density was skewed, and the natural logarithmic transformation was used to correct for this skewed distribution. The natural logarithmic transformation did correct the skewed distribution of population density. We created the category adjacent to the metro using Beale codes (U.S. Department of Agriculture, 2013). Beale codes categorize counties as being either adjacent to metropolitan areas or nonadjacent, with 1 being adjacent to metropolitan areas and 0 being nonadjacent. Finally, the current analysis used region codes to control for the region of the country in which the county was located. The South has higher rates of crime than other regions of the country and has been controlled for in previous studies (Blau & Blau, 1982; Gastil, 1971; Nisbett & Cohen, 1996). Taking this into account, dummy variables for the Northeast (N = 95), Midwest (N = 761), and West (N = 285)were used. The South was the reference category

Table 3. Number of Counties That Are Adjacent to Metro, Non-Adjacent to Metro, and Region

	N	Percent
Adjacent to Metro	1053	52.36
Non-Adjacent to Metro	958	47.64
Northeast	95	4.72
South	870	43.26
Midwest	761	37.84
West	285	14.17

for the current analysis. The current study tested for multicollinearity and we did not experience any issues related to this assumption. Appendix A provides the correlations for the variables used in the analysis.

Analytic Strategy

We used negative binomial regression to understand the effect of social disorganization theory on juvenile delinquency. Osgood (2000) demonstrated that negative binomial regression is the proper statistical method to use when examining crime in rural areas. Osgood (2000) explained that counties with small populations could have a large rise in crime rates with the occurrence of just one crime. At the same time, a more populated area would see only a small increase in its crime rate with one additional crime. Thus, areas with small populations could have significantly higher crime rates than more heavily populated areas even though more crimes had occurred in the more heavily populated area. For example, if an area had 10,000 residents and had one homicide the rate would be 10. If that same area had two homicides the next year the rate would jump to 20. An area with 500,000 residents would have 50 homicides to have a rate of 10 and would have to experience 50 more homicides to have a rate of 20. Negative binomial regression uses counts as the dependent variable to take away the large rate increases that small areas would experience due to a small increase in crime.

Findings

Results shown in Table 2 indicate that residential instability was a significant predictor of crime for the violent crime index and the crimes of rape, robbery, assault, weapons, and simple assault. Only murder was not significant in our analysis. The coefficient for residential instability and the violent crime index was 3.755. This coefficient indicates that with each unit increase of residential instability, the expected count of violent crime increases by 3.755. The coefficients for rape, robbery, assault, weapons, and simple

assault were all positive and large, suggesting that residential instability is a key variable in explaining youth crime in our sample of rural counties.

When examining ethnic heterogeneity, we found this variable was significant for all crimes in our analysis. All of the coefficients were positive, indicating that an increase in ethnic heterogeneity increased the occurrence of the crimes we analyzed. For example, with each unit increase of ethnic heterogeneity, the expected count of rape increased by 1.769. Like residential instability, ethnic heterogeneity was a significant predictor of youth crime for the rural counties in our analysis.

Family disruption was positive and significant for violent crime, robbery, assault, weapons, and simple assault among youth in rural areas. Family disruption was not significant for murder or rape. The positive coefficients demonstrated that family disruption increases violent crime, robbery, assault, weapons, and simple assault among youth in rural areas. For example, with each unit increase on the scale of family disruption, the expected count of simple assault increased by 1.916.

Poverty was significant only for murder in our analysis. With each unit increase on the poverty scale, the expected count of murder among juveniles in rural areas increased by 12.575. The unemployment rate was not significant for any of the crimes in the analysis. Population density was significant and positively related to murder and robbery. For each unit increase on the scale of population density, the expected count of robbery increased by 0.540.

The variable population at risk was significant for all of the crimes in the current analysis. However, the coefficients were negative, which was not in the direction we theorized. For example, with each unit increase on the scale of population at risk, the expected count of assault decreased by 2.633. This finding indicates the population at risk may have a different effect on crime in rural than in urban areas.

The dummy variable, being adjacent to the metro, was significant for the violent crime index. However, the coefficient was negative (-.139). Being adjacent to the metro was not significant for any of the other crimes in the analysis. Violent crime was significant at the p < .05 level; the non-significant findings for the other crime variables suggest that a county adjacent to a metropolitan area is not at increased risk for crime.

We included the regional variables in the analysis to control for variation in juvenile crime rates across the United States. The Northeast was significant and positive for violent crime, rape, robbery, assault, and simple assault. The Midwest was significant and positive for violent crime, murder, rape, assault, weapons, and simple assault. The West was significant and positive for violent crime, murder, assault, weapons, and simple assault. These findings do not align with previous studies that found the South has higher levels of crime than other regions of the country. However, past analyses examining rural crime rates did not control for region (Barnett & Mencken, 2002; Deller & Deller, 2010; Kaylen & Pridemore, 2011; Osgood & Chambers, 2000; Wells & Weisheit, 2004). Therefore, the findings could be due to actual differences in criminal activity in the different regions, or may be evidence that the problems with Uniform Crime Report data (see the *Limitations* section) are more problematic in a particular region, such as the South.

Discussion

Past research on the relation between social disorganization theory and crime has produced mixed results. Some researchers have found that social disorganization theory does predict crime in rural areas (Jobes, et al. 2004; Osgood & Chambers, 2000) and others have found that social disorganization theory does not explain rural crime (Kaylen & Pridemore, 2013; Wells & Weisheit, 2004). Still other research on social disorganization theory and crime has found that certain factors of the theory are related to rural

crime, whereas other variables are not (Barnett & Mencken, 2002; Kaylen & Pridemore, 2011; Li, 2011). In the current study, we found that certain factors of social disorganization theory can explain juvenile crime in rural areas (i.e., residential instability, ethnic heterogeneity, and femaleheaded households), whereas other factors have little to no relationship with rural juvenile crime (i.e., poverty rate, population density, and unemployment). We found that other variables influenced youth crime in rural areas, but in the opposite direction than theorized (i.e., population at risk).

Residential instability has been demonstrated to be a key factor in increasing crime rates in both urban (Kapsis, 1978; Kornhauser, 1978; Sampson, 1995; Xie & McDowall, 2008) and rural areas (Petee & Kowalski, 1993; Osgood & Chambers, 2000). The current analysis provides evidence that residential instability is a key factor predicting juvenile crime in rural counties in the United States. As social disorganization theory would predict, increased residential instability would reduce the level of informal social control within the neighborhood. As a result, residents may be less likely to watch out for and react to improper behavior in a neighborhood because of the anonymity of the residents in that neighborhood.

Ethnic heterogeneity was also a significant predictor of rural crime in our analysis. In Shaw and McKay's original 1942 conceptualization of social disorganization theory, ethnic heterogeneity was theorized to break down social ties within the neighborhood, thus reducing the likelihood of informal social control. As different racial and ethnic groups moved into an area, the social solidarity needed to create organizations and social ties would not develop. Thus, crime would increase in areas that have a high level of ethnic heterogeneity. Shaw and McKay did not argue that race itself was the cause of crime. Instead, they contended that when new groups move into the socially disorganized neighborhood, they take on the problems of that neighborhood. The neighborhood is the cause of crime because of

its disorganized structure, not the racial or ethnic composition of its community members.

Sampson and Groves (1989) argued that family disruption (e.g., female-headed households) would increase social disorganization within a neighborhood. Single parents would have less resources and time to control the behavior of their children. Studies on social disorganization and crime in urban areas have found that family disruption does increase crime (Rocque, Posick, Barkan, & Paternoster, 2014; Sampson & Groves, 1989). Our analysis found that family disruption was significant for all crime committed by juveniles with the exception of murder and rape. Other studies on rural crime have also found that family disruption increased crime levels (Bouffard & Muftić, 2006; Osgood & Chambers, 2000). Moreover, Kaylen and Pridemore (2011) found family disruption to be the strongest predictor of crime when using hospital records from rural areas in Missouri.

The population at risk was significant in our model, but in the opposite direction than theorized. That is, we found the population at risk the proportion of the population ranging in age from 15 to 24—to be negatively associated with crime in rural areas. Wells and Weisheit (2004), who also used this measure in their analysis of social disorganization theory, similarly found the population at risk to be negatively associated with crime in both urban and rural settings. On the other hand, Osgood and Chambers (2000) found the population at risk in their study—that is, the proportion of the population ranging in age from 10 to 17—to increase crime. Since the U.S. Census Bureau changed their groupings of age ranges in 2000, the age range 10 to 17 was not available for the current analysis. The negative association we found between age and crime could be due to the current age range category capturing the beginning of the desistence process of the age-crime curve. However, the negative association may also indicate that the age of the population at risk plays little or no role in crime in either urban or rural areas.

Like Osgood and Chambers (2000), we did not find unemployment or the poverty rate to be significant predictors of juvenile crime in rural areas. Many authors have noted that these two variables may operate differently in urban and rural areas (Weisheit, Falcone, & Wells, 1994). In the current analysis the poverty rate was significant for murder, but for all other crimes both the poverty rate and unemployment were not significant. Wells and Weisheit (2004) pointed out a similar pattern in their analysis of rural and urban areas. They found that the poverty rate was a significant predictor of crime in urban areas, but not a significant predictor in rural areas. While it is hard to fully explain our findings, some have argued that social factors better predict crime in rural communities than do economic factors (Weisheit et al., 1994). According to Osgood and Chambers (2003), "it appears that—unlike in most urban areas—poverty does not disrupt the social fabric of small towns and rural communities" (p. 6). From our analysis and the previous analysis, it seems that poverty and unemployment may be more predictive of crime in urban areas than rural areas.

Population density was significantly associated with increased levels of murder and robbery in the current analysis. However, the conclusion that population density is a significant predictor of crime in rural areas is unclear. Wells and Weisheit (2004) and Osgood and Chambers (2000) found mixed results for population density. Li's (2011) study found that population density was not related to property crime but was negatively related to violent crime. Therefore, the role of population density and social disorganization theory in rural crime is unclear. We can only speculate that perhaps people living in less densely populated areas form stronger social networks (which increases informal social control and minimizes crime), as has been posited by Wilkinson (1984a & 1984b).

Finally, being adjacent to a metropolitan area was not significant for any juvenile crime in the study, except violent crime, which was significant

in the opposite-than-theorized direction. This was in line with the findings of Osgood and Chambers (2000). A rural county that is adjacent to a metropolitan area does not have a spillover of crime, but rather seems to have no bearing on crime in the county. This finding is also consistent with studies demonstrating that crime displacement does not occur (Guerette & Bowers, 2009; Weisburd et al., 2006). In the context of this study, it appears that juvenile crime does not move to other locations adjacent to crime-prone areas.

Limitations

One potential reason our findings are inconsistent with those of other studies testing social disorganization theory in rural communities is that we are using different data. After the Osgood and Chambers 2000 study was published, researchers began questioning the reliability of data from the Uniform Crime Report for small counties in the United States (Lott & Whitley, 2003; Maltz & Targonski, 2002; Wiersema et al., 2000). It is possible that residents of rural counties may be less likely to report a nonviolent crime to the police because such crimes may be handled in an informal manner. Urban areas, on the other hand, do not have as many tightly knit groups that would enable them to handle nonviolent crimes informally. However, violent crimes would be as difficult to handle informally in rural as in urban areas because of the nature of a violent act (i.e., it is difficult to hide a body).

Another potential problem with Uniform Crime Report data is the potential to underestimate the incidence and prevalence of various crimes. Because the Uniform Crime Report contains information only on crimes known to the police, there may be a large number of crimes that are not reported and, therefore, not known to the police. Klaus (2004) pointed out that there could be a number of reasons individuals may not report a crime to the police, such as fear of reprisal and the belief that the crime was not important enough to contact the police. Klaus (2004)

went on to estimate that approximately 42% of crime is reported to the police. This would lead to a large gap between actual crime and crime that is reported.

To address the problems found in the Uniform Crime Report county-level data, researchers have explored using other data sets. Kaylen and Pridemore (2013) used hospital records from Missouri to examine rural crime. The scholars argued that hospital records would provide a better data set than Uniform Crime Report county-level data because hospital codes are standardized by the World Health Organization (WHO), and the codes used have been shown to be reliable (Kaylen & Pridemore, 2013). Moreover, Kaylen and Pridemore (2013) pointed out that many past studies exploring violence have used hospital records. However, it is still unclear why researchers should assume that hospital records would not suffer from some of the same problems as Uniform Crime Report data: that is, using hospital records supposes that an individual who is assaulted would go to the hospital instead of contacting the police. Kaylen and Pridemore (2013) did explain that individuals do go to the hospital when they are seriously injured; however, we cannot be sure how much crime hospital data will capture.

Other scholars have suggested using victimization surveys such as the National Crime Victimization Survey, to collect data on crime. The use of crime victimization surveys may begin to capture the unreported crime. However, victimization surveys also have a number of potential problems. Some individuals may lie about an incident because of embarrassment. Others may make up crimes that had not occurred with the belief they are helping the researcher. Respondents to a victimization survey may have problems remembering when an event took place or how many times. Victimization surveys may also have sampling errors. Thus, the use of surveys may lead to problems similar to those found when using Uniform Crime Report data.

We do acknowledge the potential problems with Uniform Crime Report data, and it is our goal to recognize these issues and not claim that our analysis is the only study that should be used to gauge social disorganization theory's applicability to youth crime in rural areas. However, we feel justified in using the data and then comparing our findings to those of studies that use the same data, as well as data from different sources. By comparing our findings to those of others we might begin to see a pattern emerge and find new ways to measure crime in rural areas.

Conclusion

Our analysis demonstrates that certain factors of social disorganization theory do apply to rural areas. Residential instability, ethnic heterogeneity, and family disruption were all significantly associated with increased levels of crime. The poverty rate, unemployment, and population density were either nonsignificant or yielded inconsistent findings. The population at risk was associated with crime but in the opposite direction theorized. The current analysis demonstrates that social disorganization theory cannot be applied fully to youth crime in rural areas, but that parts of the theory can be applied while other parts have no association. However, given that our findings are so similar in scope to those of Osgood and Chambers (2000), we believe we can draw similar conclusions; while not directly transferable from the urban to rural context, social disorganization theory can be useful to help us start to make sense of the phenomenon of juvenile rural crime.

Rural crime does provide us with a unique opportunity to examine criminological theories. Often, theories of crime ignore rural communities. Wells and Weisheit (2004) pointed out that theories often assume rural areas are just small urban areas. The disregard for rural areas leaves criminologists in an awkward position when examining crime in rural areas. New measures may need to be developed to fully tap into the potential

of using social disorganization as a theoretical framework for explaining rural crime.

In addition, our findings can help shed light on possible policy implications derived from social disorganization theory. If one were to adhere to the ideas positioned by Warner, Beck, and Ohmer (2010), then informal social control should be conceptualized as a mechanism that increases direct intervention within a community. In an effort to reach these goals, Shaw and McKay implemented Community Action Programs designed to encourage "the community to develop their own solutions to problems and were based primarily on providing social support" within the community (Warner et al., 2010, p. 355). Examples of policies they implemented include recreation and mediation outlets for delinquent youth, as well as community organized committees overseeing change from the ground up. While these efforts proved successful in various pockets of Chicago, one could guestion whether similar policies would be successful if replicated in rural settings.

As things stand now, little is known about what policy implications specifically focused on juvenile rural crime would look like, due mainly to the limited research on the topic. Some have suggested a grassroots approach, while others argue for more systematic responses in the way of Federal assistance to rural social service agencies (Weisheit et al. 1994; Cancino, 2005). In staying true to some of the tenets of social disorganization theory, Cancino suggests that rural communities need to work on strengthening the levels of social cohesion among its citizens (2005). In order to do so, Cancino suggests more frequent contact between law enforcement, local politicians, and citizens in the community to collaborate in crime fighting efforts (2005). Similar to the above suggestions, Wilkinson (1984a and 1984b) argues that rural communities need to focus on strengthening social ties among its citizens because this "makes these places less likely to see an increase in crime even if they exhibit

high rates of family disruption, poverty and other forces" (referenced in Li, 2011, p. 67).

Perhaps, as Warner et al. (2010) claim, we should begin thinking "outside the box" about ways to increase social control. This may be an even more challenging task when trying to address juvenile crime. Rural crime poses a unique challenge from a policy perspective. With many individuals in rural America living in lower socioeconomic circumstances and potentially isolated from their neighbors, how best to tackle rural crime remains an open question. Rather than assume that criminological theories, like social disorganization, explain crime in both urban and rural areas, criminologists should continue to explore what informal social control looks like in the rural context and find the most effective ways to increase it.

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Appendix

Correlation Tables for Variables Used in the Model

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Violent Crime	1.00													
2. Murder	.340	1.00												
3. Rape	.486	.040	1.00											
4. Robbery	.692	.150	.270	1.00										
5. Assault	.966	.286	.385	.525	1.00									
6. Weapons	.567	.132	.259	.554	.506	1.00								
7. Simple Assault	.690	.175	.356	.607	.630	.695	1.00							
8. Residential Instability	.198	.021	.082	.161	.194	.155	.233	1.00						
9. Ethnic Heterogeneity	.280	.106	.018	.257	.171	.181	.146	.077	1.00					
10. Family Disruption	.212	.096	.042	.234	.180	.191	.217	.122	.622	1.00				
11. Poverty Rate	.050	.084	058	.100	.029	.068	.025	065	.509	.676	1.00			
12. Population At Risk	188	039	113	128	181	137	213	150	108	233	078	1.00		
13. Unemployment Rate	.153	.051	.051	.138	.138	.159	.166	.037	.345	.532	.517	247	1.00	
14. Population Density	.158	.022	.087	.160	.139	.121	.169	.165	.074	.106	.045	095	.085	1.00

How to Help Me Get Out of a Gang: Youth Recommendations to Family, School, Community, and Law Enforcement Systems

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Abstract

Research on juvenile gangs has focused predominantly on why adolescents are members of gangs rather than on how youths desist from gang involvement. Participants were recruited from a camp facility in central California. Using the Consensual Qualitative Research approach, four researchers reviewed 58 adolescent males' responses to six open-ended questions regarding how to help youths get out of gangs. These youths made six overarching recommendations: overall recommendations and those relating to school, family, community, law enforcement, and gang interventions. This article concludes with practical implications and future directions based on the integration of study results with the research literature.

Introduction

Many communities face the harsh realities of gangs and the subsequent societal difficulties they bring (Gilbertson, 2009). In 2010 there were an estimated 756,000 members of 29,400 gangs across 3,500 jurisdictions in the United States (Egley & Howell, 2012). Although previously assumed to be only an urban challenge, research has shown a shift in gang territory into suburban communities. Despite a decrease in youth crime rates over the past decade, gang activity continues to cause violent and serious crime at high levels; the 2010 National Youth Gang Study found that rates of gang activity reported by agencies nationwide remained stable over the previous 5 years (Egley & Howell, 2012). All social institutions must examine their role in this negative developmental trajectory and determine how they can help youths re-engage in healthy systems, such as schools, to get out of the gang life

(Sharkey, Shekhtmester, Chavez-Lopez, Norris, & Sass, 2011).

Unfortunately, research investigating the effectiveness of interventions to reduce violence and increase healthy life outcomes for youths in gangs is limited. There are many reasons for this dearth of scholarship. First, identifying exactly who is in a gang is a challenge. The label of being a gang member carries serious consequences, including being targeted by law enforcement for noncriminal offenses, being treated with less respect by school and community members, and being targeted by gang members for recruitment or retaliation. Thus, valid methods for identifying gang membership are limited to self-identification (Esbensen, Winfree, He, & Taylor, 2001). Second, given the complexity of gang members' involvement in risk behaviors, interventions tend to be multidimensional and poorly tracked; it is difficult to isolate which interventions have helped the youths and in what way, as compared to what has not helped or even done harm (Klein, 2011). Third, rigorous methodology is challenged by the ethical mandate to intervene with all youths, making random assignment to treatment infeasible. Fourth, agencies are not able to share sensitive and protected data without overcoming collaboration and permission challenges. Moreover, once sensitive data are shared they may be used against participants who are brought to trial. Youths who are involved in gangs may hesitate to allow sharing of their personal information for fear of how it might be used against them by institutions they already distrust. Fifth, gang risks and behavioral patterns may differ: what works in a large urban environment may not be the best fit for a smaller suburban community (Klein, 2011). All of these factors affect the course of gang research that has, for the most part, focused on risk factors and negative outcomes rather than resilience (Sharkey et al., 2011).

It is important to examine gang desistance as distinct from joining, as reasons for leaving a gang are not simply the opposite of those for joining (Pyrooz & Decker, 2011). For example, if lacking prosocial activities during free time is a motivation to join a gang, providing members with prosocial activities may not motivate them to leave the gang. Scholars have recognized that desistance from gangs can take one of two pathways: either an immediate departure that involves eliminating gang activity or a gradual disengagement from the gang (Pyrooz, Decker, & Webb, 2010). However, a deeper understanding of how these pathways are initiated and which ones lead to greater success is not yet available (Pyrooz, Sweeten, & Piquero, 2013). Literature on desistance from various organized groups, including racist, terrorist, and criminal groups, has identified leaving as motivated by "push" and "pull" factors (Bjorgo, 2009; Petersilia, 2003). Factors that push individuals out of such groups include disillusionment with the group ideology or functioning, whereas factors that pull individuals away include family responsibilities, maturation, or a desire for a mainstream life. In the adult criminal justice literature, romantic relationships and employment have been found to be key motivations for people who have transitioned from crime to conformity (Petersilia, 2003). Although research with adults may provide some insight into desistance patterns, juveniles involved in gangs are in a different developmental stage and may have specific motivations for desistance from gang involvement that need to be studied (Pyrooz & Decker, 2011).

Studies of youth gang persistence and desistance have only recently emerged, but share some consistent findings. For example, Melde and Esbensen (2011) examined correlates of gang involvement and desistance with 1,686 youths originally recruited for the evaluation of a school-based program. Of these, 181 (11%) reported involvement with a youth gang at some point in the first two waves of data collection. Desisters had less frequent delinquency, more prosocial peers, less negative peer commitment, less unstructured socializing, and less anger identity than youths who persisted in a gang. Similarly,

Pyrooz et al. (2013) examined longitudinal data from the Pathways to Desistance study of 1,354 youths ages 14 to 17 years who had been adjudicated in Philadelphia or Phoenix. They found that youths deeply embedded in gangs, with more antisocial ties (e.g., their peers had been arrested and incarcerated) and fewer prosocial opportunities (e.g., youths who come from low-income backgrounds) desisted from gangs at a slower rate than those who did not belong to gangs. They also found that lower levels of self-control were related to persisting in gangs for longer periods, indicating that perhaps those youths lacked the skills to transition into alternative opportunities. Results of both studies suggest that engagement with prosocial peers, school engagement, anger management, and structured activities are potential interventions for youth gang members. However, it is unclear whether these factors caused, or were merely associated with, desistance from gangs.

The reasons, methods, and perceived and real consequences of leaving a youth gang have also been examined in several studies. O'Neal, Decker, Moule, and Pyrooz (2014) examined the actual process of desistance from gangs, with a specific focus on gender differences. Former gang members, both adolescents and adults (N = 143) from Los Angeles and Phoenix, were interviewed about their gang involvement. The most common reasons cited for leaving a gang for males and females, were becoming tired of the gang lifestyle/deciding to grow up and beginning a family. Carson, Peterson, and Esbensen (2013) conducted secondary data analysis with data drawn from the national evaluation of the Gang Resistance Education and Training (G.R.E.A.T.) program. Their final pooled sample size across several cohorts and waves of participants was 15,298; among gang desisters (n = 1,185) the most common reason for leaving a gang was disillusionment (e.g., "It wasn't what I thought it would be"). Findings suggest that leaving a gang typically occurs because of natural transitions or other nonspecific reasons.

One potential consequence of leaving a gang that may discourage desistance is the fear of retaliation or violence. However, in several studies the actual experience of violence is typically low. For example, Pyrooz and Decker (2011) conducted a cross-sectional study that included 84 youths in juvenile facilities in Arizona who were recently detained in the Arrestee Drug Abuse Monitoring program. They found that gang members who had external motivations to leave the gang, such as family or work obligations, did not experience resistance to desistance from fellow gang members. Conversely, almost onethird of members who left because of reasons internal to the gang, such as to avoid violence or crime, experienced some violence when leaving. Overall, only 20% of participants experienced any kind of violence when leaving the gang. Pyrooz et al. (2013) also found that for both males and females, being attacked by one's own gang was uncommon (14% to 17%), but being attacked by a rival gang was somewhat more common (35% to 40%). Taken together, findings imply that helping youths leave gangs may be both acceptable and successful.

The question remains how various social institutions can engage youths who are embedded in gangs. Recent studies have done important work in examining, retrospectively, how former gang members experienced the process of desistance. However, studies exploring and considering what might work, proactively, to help youths get out of a gang, are needed. In a study by O'Neal et al. (2014), both males and females cited family members as the most important source of social support in leaving a gang; formal institutions such as workplaces and social service agencies have not been noted as particularly important in the desistance process. This lack of credit to formal institutions or programs for helping youths desist from gangs is consistent with the findings of the study by Carson et al. (2013), in which the most common method of gang desistance was passive ("simply asked to leave or just left the gang"). Since youths rarely credit formal

institutions with helping them to leave a gang, more information is likely to be gained by asking youths what such institutions could or should do to help them leave a gang.

The current study was an exploratory analysis of youths' perspectives on how various social institutions (e.g., law enforcement, schools) can help youths get out of gang life. The methods rely on a convenience sample recruited by an external agency and given to researchers after data collection was completed. Although there were methodological limitations, these were balanced by the value of these youths' perspectives in an area of inquiry that has yet to be extensively examined; tapping youth perspectives may yield more innovative and practical solutions than those borne of developmental theory. The aim of the open-ended questions, outlined below, was to aid in understanding how various community members can help a youngster get out of a gang.

Methods

Participants

On a single day of data collection in December 2011, the Coordinator of a local task force on youth gangs administered surveys anonymously, without any demographic information, to all 58 boys housed in a 24-hour minimum-security camp for males on probation who were between the ages of 13 and 18 years. The Coordinator prefaced the survey with an introduction detailing the importance of the boys' input to help the community; no other incentive was provided and all youths complied, providing responses ranging from a few words to multiple paragraphs of written feedback. These boys were recruited for participation because of their knowledge of and involvement with gangs; youths in the facility were in or associated with gangs. The goal of the program, which was assigned for 120 or 180 days, was to help youths on probation gain the skills to become successful members of society upon release. Programs included counseling, education, vocational training, drug and alcohol

intervention, religious and spiritual expression, and community service.

Measure

The survey was a compilation of shortanswer, open-ended questions crafted by the Coordinator of the community's Task Force on Youth Gangs solely for the purpose of this study. The instructions asked the participants to answer questions to help community members develop better approaches to assisting youths who were committed to getting out of gangs. The answers to the following questions analyzed for this study were:

- (a) As community leaders, what can we do to motivate a youngster to make the commitment to get out of his street gang?
- (b) As community leaders, what can we do to help a youngster secure the help of his family members to get out of a gang?
- (c) As community leaders, what can we do to secure the support of the youngster's homeboys to get out of a gang?
- (d) As community leaders, what can we do to ensure the support of the youngster's enemies to get out of a gang?
- (e) As community leaders, what can we do to secure the support of law enforcement officers to help the youngster get out of his gang?
- (f) What can teachers do to support a student who has made the commitment to get out of his gang?

Procedures

The coordinator gave the completed surveys to the researchers, who used Consensual Qualitative Research (CQR; Hill, 2012) to analyze the responses. CQR is a structured format for examining responses to open-ended questions, requiring multiple judges to come to consensus on the meaning of content. These procedures assure reliability through consensus coding, and validity

through auditing, of the method. Reviewing 10 surveys at a time, content codes were independently developed for all responses by three team members and confirmed through consensus procedures in weekly meetings. With subsequent sets of 10 surveys, codes were added independently by each of the three coders as needed and the list was finalized by consensus. Once all 58 surveys were reviewed to generate the complete list of codes, all were coded a second time to ensure that the entire code list was applied to all surveys. Finally, responses were grouped by code, the code name was removed, and the auditor assigned a new code name to each group of responses. The auditor also noted any responses that seemed to not fit the group. The first author implemented changes based on results of the audit.

Four research members affiliated with the university participated in the CQR process. CQR requires that researchers disclose personal perspectives and influences that may impact the data analysis. All team members were female, three members were White and one was Mexican American. Ages of team members ranged from 24 to 37 years. One team member had a Ph.D. and the other three had master's degrees in education; all team members were trained as school psychologists. Broadly, team members were influenced by their shared perspective that schools and other institutions should engage all youths in positive ways to help them achieve prosocial goals regardless of cultural diversity, emotional concerns, learning difficulties, or other environmental constraints. Team members also believed that schools and communities have a responsibility to promote social justice, which ideally is promoted through comprehensive services that address the needs of youths in family, school, community, and socio-political contexts. These perspectives may have influenced the findings; the CQR process is designed to maximize objectivity and decrease biases or compromises that may have emerged as a result of group dynamics.

Results and Discussion

Overall, 27 content codes (recommendations) within six themes were generated by the research team based on youths' responses (see Table 1). We analyzed each of their recommendations in the context of existing research on how to get youths out of gangs. Herein we describe each recommendation with examples of quotes, transcribed verbatim to exemplify the researchers' rationale for each theme and category (if fewer than 5% of participants recommended a theme it is included in the Table but not the text). A full list of quotes is available from the technical report (Sharkey et al., 2012) by contacting this paper's first author. The percentage of the total participants who provided each recommendation is included in parentheses next to each recommendation.

Overall Youth Recommendations

Four recommendations fell within an overarching theme of overall youth recommendations and can be supported by any organization interacting with the youths.

Promote future aspirations for life, school/college (50%). One of the most common responses was that adults should promote positive future aspirations, including attending college, for youths in gangs. Examples of quotes include, "Motivate the kid to go to college and learn new things," "Make the kid see how good life is with an education," "Show him that if he change his life is going to be something better for him and his family," and "Tell them that school is more important. That education takes them farther in life than gangs do."

Future research may benefit from including the aspirations of gang-involved youths to understand the way in which the promotion of future goals impacts youth gang desistance. Research provides evidence that hope (i.e., confidence in one's ability to overcome challenges and a positive outlook) is protective against the development of both internalizing and

Table 1. Summary of Youth Recommendations

	- %
Recommendation	Endorsed
Overall Youth Recommendations	
Promote future aspirations for life, school/college	50
Discuss negative impact of gangs	43
Move to a different town, witness protection, change name	22
Ensure kids are safe/have a safe place to hang out	17
Family Recommendations	
Family classes, counseling, communication	46
Impact on your family/family is more valuable	29
Family unconditional love, support child in getting out	25
Family keep track of youths, take them to work, spend time with them	21
Family members need to get out of the gang themselves	9
Community Recommendations	
Keep youths busy/positive outlet for emotional release: sports or other activities	47
Community support: youth counseling, support, drug programs	47
Help youths get a job	28
Give youths money, food, toys, material goods	10
School Recommendations	
Teachers can provide emotional/relational support	41
Teachers should provide extra school help/assistance	24
Teachers can help youths stay in school, graduate	22
Teachers can make school more fun and relevant	12
Change teacher's attitudes toward gang members, show respect, treat same as others	10
Law Enforcement Recommendations	
Stop harassing youths	10
Improve relationships between law enforcement and youths	34
Law enforcement should stay on top of what kids do	14
Gang Interventions	
Work with the whole gang together	40
There's nothing you can do	38
Call for peace between rivals	33
Develop friendships outside of gangs	22
You can't change enemies—they don't care about each other	14
Beat them up	6

externalizing problems in children (Hagen, Myers, & Mackintosh, 2005), providing support for the possibility that a positive future orientation can help with gang desistance.

Discuss negative impact of gangs (43%). Fortythree percent of the respondents recommended that individuals and groups, including community members, law enforcement, families, peers, and teachers, should tell youths about the negative consequences that can result from gang involvement in an effort to help youths leave gangs. These recommendations included telling and showing youths where they may end up (e.g., jail) and/or trying to "scare" them out of gang life. Youths wrote, "Tell them what waits them if they keep banging [participating in gang activity] which is die or in prison," "Take them to a tour on jail and show them what kind of lifes they will have if they continue to bang," "Teach him or her it makes your life more complicated," and "Tell him that you could end up dead or life in prison."

Research suggests that programs attempting to scare youths out of crime through visits to prisons and with inmates are not effective. Petrosino, Turpin-Petrosino, and Buehler (2005) conducted a meta-analysis of nine experimental studies that evaluated programs like Scared Straight, which take youths who are at-risk or delinquent to prisons and jails in an attempt to deter them from criminal behavior. Results of the meta-analysis showed that youths who participated in these programs were either more or equally likely to criminally offend in the future than no-treatment control groups, suggesting iatrogenic effects. On the other hand, Gang Resistance Education and Training (G.R.E.A.T.), an evidence-based gang prevention program shown to be effective in reducing gang membership (Esbensen, Peterson, Taylor, & Osgood, 2012), includes a lesson on harmful consequences of gangs on the individual and community. However, without a components analysis, it is unclear whether this was one of the components responsible for the program's positive effects.

Move to a different town, witness protection, change name (22%). Participants recommended moving youths to different schools or communities to help them leave gang life. One boy stated, "The best way to secure a youngster's family is taking them to different city or placed so they could stay there and don't worry about whats is going to happen." Another wrote, "...give them new identities when they get moved out of town or even out of state so that the other gang members who don't want help don't track them down." Other quotes include, "To get out of a gang you would have to go to a different town or state" and "Move out of town, go somewhere far so they can leave their gang." Police involvement and support in the form of protective custody was mentioned as well: "Tell the police to be put in protective custody to protect your family."

To date, research examining the impact of moving youths to get them out of gangs is limited and primarily relies on reports from law enforcement agencies. Additional study of this strategy would help to determine whether youth migration could be a positive intervention for youths who want to leave gangs.

Ensure youths are safe and have a safe place to hang out (17%). Several participants noted the importance of having safe spaces for youths to hang out in their neighborhoods, suggesting that a sense of safety would increase youth gang desistance. Respondents shared, "Teachers should watch out for a student. It's mostly a problem to a student who gets out of a gang because they got no one to count on and are always afraid of getting rushed [attacked]," "Try to keep safe from the gang he got out of," "Get the youngster and his homeboys protection and make sure their safe when they get out," and "I myself would move to a safe environment were you and your family could be safe." Virtually no research has examined the process of youths leaving a gang and the real and/or perceived threat to safety involved in this process.

Of the few studies that have been conducted, it is unclear whether leaving a gang results in victimization. Pyrooz and Decker (2011) found that violence was uncommon when members left the gang, particularly when they left because of external reasons, such as a job or family commitment. Few interventions directly address the fear of violent retaliation associated with leaving a gang. A comprehensive school safety plan may be helpful in protecting youths who decide to leave their gang while they are in school (Sharkey, et al., 2011).

Family Recommendations

Another overarching theme among the participants' responses was recommendations pertaining to the family of gang members.

Family classes, counseling, communication (46%). Family counseling and classes were repeatedly recommended as ways to facilitate youths getting out of gangs. The youths' recommendations suggested that by getting the family together and/or providing the families with the tools to help the youths, the youths would be more likely to successfully leave the gang. For example, boys wrote, "To secure the help of his family members you can counsel them and keep them together," "I think they should have classes with the kids and there family and see why they do what they do," "The family needs to take a class about gang stuff so they can learn about street stuff," and "Family counceling."

Several family-based therapies are empirically supported as treatments for adolescents with conduct disorder and delinquency: multi-systemic therapy, functional family therapy, multidimensional treatment foster care, and brief strategic family therapy (Henggeler & Sheidow, 2012). These therapies focus on bringing families together to better understand patterns of behavior, increase communication between family members, and solve problems relating to specific issues. A meta-analysis of the efficacy of family therapy treatments for adolescent delinquency and substance abuse found that family therapies

are more effective in treating adolescents with delinquency issues than individual adolescent treatments without a family component (Baldwin, Christian, Berkeljon, Shadish, & Bean, 2012).

Impact on your family/family is more valuable (29%). Almost one-third of the youths responded that youths need to make a commitment to get out of a gang because of the importance of family. One participant stated, "By helping them to realize the pain their causing to there family." Both direct (e.g., "Make them see that...the family are also going to pay the consequences," "Is it worth it to put your family in danger by putting yourself out there in a gang?") and indirect (e.g., "They will see the pain that the family has when they get in trouble," "You can try to make them think about their family and what they go threw because of them") influences on the family were reported. Some participants included recommendations about the importance of youths seeing their families as being more valuable than gang life (e.g., "Make them realize how much they can lose of family if they keep taking the same route," and "Tell them that family is more important because they are the only ones who will be there, not their homeboy, because they come and go").

This advice is empirically supported. A year-long qualitative study of Latino, low-income youths involved in gangs found that participants who left their gangs reported doing so because they realized the negative effect their gang involvement had on their families (Halpern, Barker, & Mollard, 2000). Moreover, the youths cited not wanting to continue to put their family through the pain and challenges as a motivation to stay out of gang life.

Family keep track of youths, take them to work, spend time with them (21%). Several participants recommended that family members keep track of and spend time with youths in order to help them get out of the gang: "You can also have family activities to help them stay busy," "They should spend more time with his family

than him being in the streets of his hood," "To spend more time with his family," and "Mom and dad should take them with them to work."

Kerr, Beck, Shattuck, Kattar, and Uriburu (2003) examined the association between family factors and behavioral outcomes for Latino youths. Their research found that parental monitoring and family connectedness were strongly associated with less problem behavior among the youths and family; cultural support was associated with prosocial behavior.

Family unconditional love, support child in getting out (25%). One-quarter of the youths recommended that families should provide their children with unconditional love and support as a means of helping them get out of gangs. Similar to the previous category in this theme, these quotes reflected the need for youths to know that their families care about them and want them to get out of the gangs. For example, participants stated that the family can support the child in leaving a gang "By helping the kid in any way," "By simply having the family know that no matter the situation you need to help out the daugter or son by any meens necessary," "Be helpful by telling the family to incourage the kid too. And by helping him in a good way," and "Tell our family members that there is a better way for us and all we need is there support. Give us opportunities to show our family members that we could change with there help."

In the year-long qualitative study of Latino low-income youths by Halpern et al. (2000), the youths also reported that not having enough guidance, support, and attention from their families was a major factor in their decision to join gangs.

Family members need to get out of the gang themselves (9%). Five youths included family gang affiliation and involvement as a factor influencing youth involvement in gangs and subsequent difficulty in getting out of the gangs. For example, youths stated, "The family members need to be already committed to get out of the

gang then let them talk," and "Well most of the gang members I know there familys are gang members also so that's all they know." One teen expanded this theme to other family issues, such as parental drug and alcohol problems, which may be affecting youths' ability to make positive changes in their lives.

As it is common for more than one family member to be in a gang, future research should focus on the effect of family gang members' desistance on youth gang desistance.

Community Recommendations

The importance of the community in helping youths get out of gangs was a recurring theme in the youths' responses.

Keep youths busy/positive outlet for emotional release: sports or other activities (47%). Nearly one-half of the participants reported the need for youths to stay busy in positive, non-gang related activities. Sports were commonly discussed as having multiple positive influences on youths trying to leave gangs (e.g., outlet for aggression, social activity, school-based activity). One youth wrote, "Sports like boxing to get all there anger out on one another." Other school and community activities were also noted as ways to occupy youths' time, especially after school. For example, one youth wrote, "Provide him with things that will keep them busy also make sure he likes it." Among all the responses, the need for these activities to be fun, positive, and appropriate outlets for youths was repeated (e.g., "Bring us more fun things in the community," "Get them involved in other productive activities.") that are not cost prohibitive (e.g., "All we need is thengs that we like to do for fun that our parents can't privide for us because of financial situation").

Keeping youths busy through extracurricular activities (e.g., sports teams, clubs, organizations) is commonly viewed as a community-based protective factor for youths (Bynner, 2002). A wide range of activity involvement, rather than the level of intensity of participation, has been

shown to be positively associated with fewer delinquent behaviors (through the process of more community adult support leading to improved decision-making skills; Crean, 2012).

Community support: youth counseling, support, drug programs (28%). Many participants stated that community-based programs, such as drug treatment groups and mentorship opportunities, are potential ways to assist youths in choosing to leave gang life: "Help them get into a program and help them stay away from drugs if it's possible," "Incouraging the youngster and the homeboys by making like places where teens can hang out and get help with school and family problems and how to live a better life," "Put them in programs and get people to talk to them so they can realize the benefits of not gang banging, maybe it will help," and "I think the community leaders can motivate a youngster to make the commitment to get out of his street gang by having afternoon job programs."

Several community programs that target youth violence prevention and intervention have been researched and developed into evidence-based models (Edberg et al., 2010). Community programs provide youths with things to do and places to be other than being on the streets and/or with potential street gangs (Halpern et al., 2000). Although concerns exist about the potentially negative effects of grouping together youths at risk for delinquent behavior (Cecile & Born, 2009), community-based programs have demonstrated success in helping these youths. One example of such a community program is the Juvenile Intervention and Prevention Program (JIPP) in the Los Angeles Unified School District. JIPP takes a whole-child approach to school-based gang intervention and prevention for children identified as being at risk; students involved in JIPP were more involved in their communities and had better attitudes about themselves, their parents, and law enforcement after receiving and participating in the program (Koffman et al., 2009). Other community efforts, such as the National Youth Gang Suppression and Intervention Program (Decker & Curry, 2000) have also shown promise for helping youths desist from gangs.

Help youths get a job (47%). Many participants shared the idea that getting jobs was a good way for youths to stay out of gangs. For example, youths wrote, "Maybe work on getting more jobs for younger kids so they won't have to stay on the streets," "I think community leaders can motivate a youngster by having something to do with a job," and "Well I think a good way to help out someone get out of a gang is by helping them get a job." The financial benefit of employment was also noted within these responses, such as "Offer us jobs because then we don't have to sell drugs to get money and if we get drugs we fight."

Studies have demonstrated that employment is related to reductions in general offending. For example, in one study, even just temporary employment was related to a reduction in offending for high-frequency chronic offenders (van der Geest, Bijleveld, & Blokland, 2011).

Give youths money, food, material goods (10%). A few recommendations provided by youths suggested that material assistance would motivate youths to get out of gangs: "maybe give them money" or "give them food, money." More than half of these responses referred to the money being used for college scholarships for youths, e.g., "They [law enforcement] should advice the youngster to do well by paying for college if they are willing to get out" and "They [teachers] can offer them opportunties like scholarships for colleges..."

Although providing youths with scholarships to college is a common practice, direct effects of this practice on gang desistance is unknown.

School Recommendations

Five categories were derived from the responses that focused on school recommendations. The responses reflect a general sense that teachers have an important and powerful role to play in youth development and future opportunities for success.

Teachers can provide emotional/relational **support (41%).** Many respondents wrote that teachers should provide emotional and/or relational support in the form of advice, such as "give advice," support youths' choice to get out of the gang, such as "...do something big for a kid cause it's hard to get out a gang"; encourage youths' efforts, such as "Teachers could only help us by being faithful and encouraging to leave the gang life," "Teachers can keep supporting him," "Talk to them and see they are successful in life also motivated the kid," and "I think the only thing [teachers] can do is keep supporting them and keep having them to not going back to the gang and start doing the wrong thing." The importance of trust in helping relationships seemed to underscore many of the recommendations the youths made.

The research literature has not directly addressed the association between trust in relationships and youths leaving gangs, but there is evidence that trustworthiness in student-teacher relationships is important to adolescents, particularly adolescents from minority groups. For example, Gregory and Ripski (2008) examined the relation between adolescent student discipline, students' defiant behavior, and students' perceptions of their teachers as trustworthy through interviews and surveys. They found that having a relational approach to discipline decreased student defiance, but that this association was explained by student perceptions of teacher trustworthiness. Relationship building and trustworthiness are thus important in deterring behavior problems in school.

Change teacher's attitude toward gang members, show respect, treat same as others (10%). There was a general sense that youths perceive teachers as treating gang-involved youths differently from non-gang involved youths, which was not perceived as helpful for youths trying to get out of a gang. For example, youths wrote,

"[Teacher] to not give up on the kid just cause he was into gangs don't matter nothing," "[Teacher] don't put the kid down," "[Teachers can] show more respect," and "Gang banger students and non-gangbanger students should be treated the same."

Research literature has supported the importance of positive teacher-student relationships in preventing and/or decreasing youth delinquency. Rudasill, Reio, Stipanovic, and Taylor (2010) found poor student-teacher relationships predict students' risky behavior. Similarly, bonding with teachers has been found to act as a buffer against the negative influences of associating with deviant peers (Crosnoe, Erickson, & Dornbusch, 2002). Positive student-teacher relationships can significantly impact adolescent students' behavioral and emotional trajectories over time. In a longitudinal study of student depression and misconduct from ages 13 to 18 years, Wang, Brinkworth, and Eccles (2012) found that positive teacher-student relationships at age 13 protected students against depression and misconduct from ages 13 to 18. In addition, these researchers found that positive teacher-student relationships moderated the effect of poor early parental control and negative parent-child relationships on misconduct throughout adolescence. However, other studies have found that school personnel supportiveness is not related to gang involvement (Ryan, Miller-Loessi, & Nieri, 2007). The influence of teacherstudent relationships on gang desistance is a promising area that needs further research.

Teachers should provide extra school help/assistance (24%). Several youths wrote that teachers should provide extra help and assistance in school to youths who are trying to get out of a gang. Responses coded in this category ranged from specifically assisting youths with their schoolwork: for example, "[Teachers] could help them with their school work," "extra help," and "try to help them out in school" to "don't overwhelm them with work," and "Get them and there homies together in school find out whose smartest and let him tutor the group."

Crosnoe et al. (2002) found that youths were less likely to join a gang if they had good feelings about their academic skills, believed education leads to future career success, were bonded to school, and had positive relationships with peers and mentors. Dishion, Nelson, and Yasui (2005) were able to explore the relation between various risk factors in 6th grade and their impact on gang affiliation in 8th grade. Results of the study indicated that peer rejection, academic failure, and antisocial behavior in 6th grade predicted gang involvement in 8th grade. The authors suggested that school failure should be addressed in interventions aimed at reducing gang involvement for at-risk middle school students.

Teachers can help youths stay in school, graduate (22%). Youths' recommendations also encouraged teachers to help students stay in school, get good grades, and graduate in an effort to help youths leave gangs. One youth wrote that teachers can "help the kids with all the necessities to graduate from high school." Others wrote, "Teach the youngster the importance of learning and how difficult life will be without a diploma," "Help him stay in school and get his education," and "help him graduate high school."

Findings regarding the relation between academic achievement and gang affiliation have been mixed. For example, Tapia, Kinnier & MacKinnon (2009) compared grade point average, attitudes toward teachers, and attitudes toward school between Mexican American youths in gangs and those not in gangs and found no significant differences in these variables for the two groups. However, Choi (2007) found poor academic performance to significantly predict delinquency and gang initiation for Asian and Vietnamese American youths. Additional research should examine the effect of teachers helping youths to graduate and youths' desistance from gangs.

Teachers can make school more fun and relevant (12%). Some participants noted that teachers should make school more meaningful,

engaging, and fun. This included tailoring activities to the interests of the youths. For example, one youth wrote that teachers can "give him something that he likes to do that would encourage him to keep doing good and not get back into his normal ways." Other youths wrote, "Do fun things in class to get the youngsters' attention to the lesson," "Teach in school what you can do in life," and "That teacher should get the student more fun stuff that you could have fun."

Although few studies have directly measured the impact of making school more meaningful for at-risk youth to encourage gang desistance, one study presents a theoretical discussion of the role schools can play in preventing youth gang involvement. Sharkey et al. (2011) suggest that although gangs may meet youths' needs for improved self-esteem, schools may be able to meet this need by making school material more relevant to youths and by designing curricula to play to the strengths of each student.

Law Enforcement Recommendations

When providing recommendations regarding what law enforcement can do to help youths get out of gangs, three themes emerged from participants' responses. Two of these—stop harassing youth and improve relationships between law enforcement and youth—indicated a negative relationship between youth and law enforcement. In contrast, the third category of law enforcement recommendations, "staying on top of what kids do," called for greater law enforcement management of youths' daily lives. Overall, this theme highlights a perceived need to improve the way in which law enforcement interacts with and manages youths involved in gangs as a means of supporting their transition out of gangs.

Stop harassing youths (40%). The largest theme regarding law enforcement was the need for law enforcement to stop harassing youths and leave them alone. Comments included stopping restrictions, gang lists, and arrests of youths affiliated or thought to be affiliated with gangs. One

participant wrote, "Law enforcement officers need to stop harassing the gang bangers and make peace." Others shared, "Law enforcement needs to be willing to actually help before helping, not just out trying to arrest a gang member," "Stop harassing us like everytime they see me they stop me and ask me stupid questions," and "Stop harassing people who look like gang members and stop stereotyping."

In response to gang and youth violence, police have reacted with tactics based on zero tolerance policies designed to punish youths. Some surveillance strategies involve profiling, which can result in disproportionate minority contact (Borrero, 2001). Repeated harassment or stops by police of youths who fit a gang member profile may serve to push otherwise innocent youths into gangs due to resentment from repeated stops and searches based on appearances (Densley, 2011). Borrero (2001) recommends facilitating a safe forum for sharing issues, a youth-police relations committee, and intervention with and advocacy for youths by other providers and community members.

Improve relationships between law enforcement and youths (34%). Within the category of improving relationships between law enforcement and youths, many participants reported that law enforcement officers should talk to them as a means for law enforcement to get to know their struggles. These responses reflected the importance of working on the relationship between youths and law enforcement by changing both sides' perceptions of each other; that is, having law enforcement better understand the youths, as well as having the youths better understand that law enforcement is there to help. For example, youths stated, "Have them talk to each other and the officers don't even know what the people go thru," "To secure the support of law enforcement officers to help the youngsters get out his gang... they could also interact with them and get to know the kids," "[Law enforcement] should have classes with the kids and there family and see why they do what they do," and "Not give up on him and help him get out the gang."

The Effective Police Interactions with Youth curriculum (LaMotte et al., 2010) was developed to train police in effective methods of reducing disproportionate minority contact. A study of patrol officers who participated in this training found that the training enhanced patrol officers' knowledge of youth behavior, reduced disproportionate minority contact, and increased the use of strategies to work with youths effectively (LaMotte et al., 2010). Such training may help law enforcement officers respond more effectively to youths in gangs, but more rigorous research is needed to determine its effects on officer behavior and youth outcomes.

Law enforcement should stay on top of what kids do (14%). This theme indicated that law enforcement officers should monitor youths. Most of these responses suggested that law enforcement use arrest and/or other legal action to show youths what happens when they are involved in gang life. Two responses in this section had specific suggestions for ways in which law enforcement can better monitor the youths: "What police enforcement should consider doing is to get a gang injunction because that will really help the community and it's gang problems. They should support the youngster by watching out for him if he/she ever tries to get out," "Well when I get out I have to register as a gang-member. I feel like they are doing a good job on breaking down on that. Because I know now that I'm not even going to walk down the street with a homie because I would get locked up for a while," and "What law enforcement officers can do to help youngsters get out of gangs is they can increase the no gang tolerance and encourage youngsters that gang are good for nothing and cause them to arrest youngsters at young ages."

Generally, studies have shown that legal sanctions do little to deter crime, and gang members may be less susceptible to threats of punishment than non-gang member criminals (Maxson, Matsuda, & Hennigan, 2011). In a cross-sectional study involving interviews with 744 gang and non-gang youths with criminal histories, Maxson

et al. (2011) found that morality (reported by youths on a Likert scale of how "right or wrong" it was to commit three types of crime) was the strongest predictor of intention to commit future crimes, whereas severity of the consequences had a weak effect on the prediction of crime for nongang members.

Gang Interventions

Six categories were derived from the youths' responses, yielding a gang intervention theme.

Work with the whole gang together (40%). Youths recommended that gang members or exgang members talk to and support each other to get out of the gang as reflected in the responses, "Get [the homeboys] together and talk about stuff like reality and how to move on," "[the homeboys] should talk to one another and give each other advice so that they want to stop being from the neighborhood," and "Get [the homeboys] together and talk about stuff like reality and how to move on." Some also suggested that community leaders "Find a way to eliminate the whole gang."

Some research has focused on working with gangs to reduce violent and criminal behavior but, in general, research suggests it is more important to focus on deterring crime than it is to target gangs or gang membership alone (Bullock & Tilley, 2008). The Boston Gun Project, for example, focused on deterrence as a response to gangrelated violence (Braga & Kennedy, 2002). Police threatened intensive and sweeping enforcement when specific, predetermined crimes were committed. Such communication with gang members allowed gangs to acknowledge their role in gaining the attention of law enforcement. At the same time, service providers offered programs to help gang members engage positively in the community. When this project was replicated in Manchester, England, the purpose drifted to a focus on getting individuals out of gangs and cooperating with service providers. This caused many unintended negative consequences, including a focus on labeling youths as gang members,

disagreement among providers on criteria for the gang label and subsequent intervention eligibility, and too large a target population (Bullock & Tilley, 2008). Thus, evaluators concluded that effective deterrence should focus on criminal behavior, not gang membership status.

Call for peace between rivals (33%). Other responses discussed bringing the rival gangs together to help youths get out of gangs. Some responses discussed having a peace or truce made between gangs such as, "Tell them that we call peace between them and that we don't want no trouble." Other responses further reflected the need to connect enemies with the aim of showing both sides they are no different from one another, for example: "By showing them [rivals] that were pretty much the same. And also by helping them to start knowing there enemies," "Make rivals try to connect to each other then make them realize that now since they don't have rivals theres no need to gang bang," and "Tell [the enemies] that if there wasn't sides and you guys knew each other you would probably be best friends. You are all alike." Some responses specifically noted that the call for peace would need to be between the individuals who want to get out of their gangs. One participant shared, "You can show and or tell them it is not worth losing your life in a gang fight or shoot other gang members just because their in another gang or they live on the wrong side of the street."

Research on peace treaties is limited; in 1992 rival gang members in Los Angeles signed a peace treaty that promised a cease-fire against enemies and focused on addressing social problems in the community (Streetgangs.com Staff, 2012). The *Street Gangs* website attributed a 40-year low rate of gang-related violence to this peace treaty. Additional media support this conclusion: *The Final Call*, the original newspaper of the Nation of Islam, reported a 44% drop in gang homicides in the first 2 years after the gang truce (Muhammad & Muhammad, 2012). It is difficult to isolate the direct impact of peace treaties. Although consensus indicates they are

an effective tool to stop gang violence, more rigorous research is needed.

Develop friendships outside of gangs (22%). Several participants suggested that youths develop friendships with individuals not in their gangs. A few responses within this theme included the idea of getting new friends and realizing that gang members are not real friends. One participant wrote, "You have to make them convince themselves that gangs is not the only sign of friendship because they cant see that on their own." Others wrote, "Ask them if they are willing to get out and start hanging with the right crowd," and "By helping him get new friend."

Recent studies of youth gang desistance have found that family obligations and prosocial opportunities were related to youth desistance from gangs (Pyrooz & Decker, 2011; Pyrooz et al., 2013), which suggests that helping youths form healthy friendships outside of gangs could help support their abilities to leave a gang.

There's nothing you can do (38%). Unfortunately, many youths suggested that there was nothing to be done to help "homeboys" help each other get out of gang life. Some of the responses indicated there was nothing community leaders could do because the youths themselves may not want to get out of the gang or their "homeboys" do not want them to leave the gang. For example, "There is not much you could do because it's their choices and there is nothing anyone can do to change the choices they make" and "I don't think there's anything you can do to make him change his ways because he is gonna be into his gang so much that he won't listen to anybody but his gang." Another common sentiment of the youths was that "The youngster might not want to get out of his gang" and "We can't do anything unless they are willing to. We can't force them."

Fortunately, there is enough evidence to suggest that family, school, community, and law enforcement interventions can be successful in disengaging youths from gangs (Pyrooz & Decker, 2011; Pyrooz et al., 2013).

You can't change enemies, they don't care about each other (14%). There was a similarly hopeless sentiment in answer to the question about helping a youngster's enemies get out of gangs, with youths reporting that there is nothing that can be done. All of these responses noted that enemies neither like nor care about each other and thus enemies will not help each other. Responses included, "Enemies are enemies if you don't like somebody that's called a enemie. You just don't like them for a reason. So I don't think anything can change that," "I think that there is no way that the youngster can give his enemies advice to get out of a gang because they are rivals and rival gangs don't give advice to each other," and "You can't because they chose the route they wanted and their enemy already has built hatred toward him."

Strengths and Limitations

There are several limitations to this study that warrant discussion. First, we obtained this sample after responses had been collected anonymously; thus, important demographic and gang participation data were unavailable. Although all youths referred to the facility have significant juvenile delinquency histories and most are gang members, it is possible that some participants were not gang members. It would have been ideal to survey youths who were gang members and had been successful in leaving the gang lifestyle. Moreover, youths were required to complete the survey; thus, it is possible that not all youths responded honestly. However, it was clear from reading youth responses that most youths took the questions seriously enough to write lengthy answers. Despite these shortcomings, the findings are comprehensive and provide meaningful inspiration for more rigorous future empirical research regarding specific ways families, schools, communities, and law enforcement can help youths get out of gangs.

Implications for Interventions

The recommendations made by youths highlighted in this article underscore the responsibility

of everyone in the community to intervene with youths who are in gangs or may be at risk for joining gangs. Families, teachers, service providers, law enforcement, and other community stakeholders can all contribute. Although individual efforts to enhance youth success are important, research has identified comprehensive and coordinated gang interventions to be the most effective. Most importantly, these youth reports reflect that participants would like to be treated with respect by the authorities with whom they interact. These results indicate that youth prevention and intervention efforts do not necessarily need to be specifically designed for members of gangs but, rather, that interventions addressing the basic needs of youths, such as security, belonging, and means to success, may be the most powerful ways to engage youths in prosocial rather than antisocial groups (Sharkey et al., 2011). This is an important point, as gang membership is a concept that is elusive and difficult to measure (Densley, 2011), and gang members enter and desist from gang activity within short periods of time (Carson et al., 2013). Thus, the main point for interventions is that youths who appear to be associating with gangs should not be excluded from services and supports available for all youths. On the contrary, such youths need to be engaged in structured activities in school and community settings by adults who will take the time to understand their needs, risks, and strengths, and intervene accordingly.

Conclusion

The recommendations made by youths and identified in this study should be taken into consideration when planning a continuum of services to address youth gang involvement. Directions for future research could include systematically mapping a continuum of services to match established gang intervention models, identifying where gaps exist, and filling those gaps with evidence-based interventions—particularly those identified by participating youths as to what might be helpful to them. Professionals who work

with youth gang members need to get to know the unique risks and strengths of each adolescent in order to understand why they joined a gang and why they want to get out; a single approach is unlikely to solve such a serious and complex problem. Continuing to enhance coordination between agencies is critical so youth referrals can be tracked to ensure timely intervention, and so youth services can be evaluated to ensure they are as efficient and effective as possible to avoid redundancy and address youths' needs. Data need to be collected to investigate the effect of individual services, as well as the collective effort. Over time, research can examine which of these recommended and sometimes popular interventions, such as extracurricular activities, job training, and educational interventions, are most effective in helping youths to get out of gangs.

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EXPLORATORY RESEARCH COMMENTARY:

How Do Parents and Guardians of Adolescents in the Juvenile Justice System Handle Adolescent Sexual Health?

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Abstract

This study explores the perceptions of guardians of youth involved in the juvenile justice system regarding sex education content and implementation, challenges, clinic access, and contraceptive use. Nine guardians participated in a focus group at the Bexar County Juvenile Probation Department (BCJPD), San Antonio, Texas. Data were analyzed using an inductive approach. The guardians strongly endorsed sex education for youth. They believed that, ideally, sex education should be communicated from parent to child but that in reality this tends not to occur. Even guardians who communicate with their teens said they feel unequipped to do so because they lack accurate information. They said they support sex education implementation in schools as well as under the terms of juvenile probation. Guardians proposed that bolstering life skills was a worthwhile measure to reduce risky behavior and said that peer pressure, social media, and gang activity influence risky teen behavior. Guardians identified religious beliefs and a reticence to accept sexual activity as issues

for the juvenile justice system to consider when providing access to contraceptives. Research documents that guardian involvement during youths' experiences with the juvenile justice system is crucial. Results of this study point to guardians' need for further resources and expansion of sex education programs among BCJPD services.

Introduction

Minorities in the Juvenile Correctional System

In the United States, millions of adolescents enter the juvenile justice system each year. The juvenile offenders comprise a special group of the nation's youth who have their own unique challenges. Juvenile offenders are a high-risk population with special needs and they experience health problems at a higher rate than the general population (Committee on Adolescents, 2011; Golzari, Hunt, & Anoshiravani, 2006). Adolescents in the Texas juvenile justice system range in age from 10 to 17 years and represent all races, ethnicities, and socioeconomic backgrounds.

Despite the representation of various races and ethnicities, researchers have found that Hispanic and African American populations are disproportionately represented in the Texas juvenile justice system (Carmichael, Whitten, Voloudakis, 2005). In Texas, all minorities comprise 55% of the general adolescent population: 13% identify themselves as African American and 40% identify themselves as Hispanic. However, of the detained juvenile population in Texas, approximately 32% identify as African American and 39% identify as Hispanic (Carmichael et al., 2005). In the United States, whereas all minorities combined contribute to 37% of the adolescent population (Carmichael et al., 2005), minorities constitute 60% of the detained juvenile population, according to data collected in 2001 (Carmichael et al., 2005).

The population of adolescents entering the juvenile justice system, who generally comprise high-risk minority populations (Armour & Hammond, 2009; Lauritsen, 2005; The Sentencing Project, 2014), have special health needs (Committee on Adolescents, 2011; Golzari et al., 2006). Specific strategies call for a variety of studies to understand best practices in order to address the special needs of these high-risk youth (Chassin, 2008; Greenwood, 2008; Kelly, Owen, Peralez-Dieckmann, & Martinez, 2007; Lauritsen, 2005; Liddle, 2014; Marvel, Rowe, Colon-Perez, Diclemente, & Liddle, 2009).

The purpose of this paper is to explore how parents and guardians of children involved in the juvenile justice system handle the children's health needs, including sex education. Better understanding of the needs of juvenile offenders and their parents' beliefs may pave the way for determining best practices and more effective strategies for reducing high-risk behavior, such as sexual activity. The demographics of the individuals who participated in the focus group described in this article reflect the minority populations that make up the juvenile justice populations of Texas (where the focus group took place).

Risk Indicators

Adolescents in the juvenile justice system report a higher rate of engagement in high-risk behaviors than adolescents in the general population (Committee on Adolescents, 2011; Golzari et al., 2006). This led the American Academy of Pediatrics and the National Commission on Correctional Health Care to declare a policy on the health care of adolescent populations in correctional facilities (Committee on Adolescents, 2011; Rizk & Alderman, 2012). The policy recommends a complete medical history and physical, including a gynecological assessment as indicated by gender, age, and risk factors (Committee on Adolescents, 2011; Rizk & Alderman, 2012), as well as sexually transmitted disease (STD) and pregnancy testing for youths entering a detention center (Committee on Adolescents, 2011; Rizk & Alderman, 2012; Spaulding et al., 2013). The high-risk behaviors of this population include sexual debut at a younger age, having multiple sexual partners, and drug/alcohol use (Chassin, 2008; Rizk & Alderman, 2012). Of the adolescents involved in the United States juvenile justice system in the year 2000, 56% of boys and 40% of girls tested positive for substance use (Chassin, 2008).

Substance use substantially increases the likelihood of engaging in other risky behaviors, especially using substances during sex, engaging in unprotected sex, and having multiple sexual partners, which puts youth at higher risk for acquiring an STD, including human immunodeficiency virus (HIV) (Chassin, 2008; Teplin et al., 2005; Tolou-Shams, Hadley, Conrad, & Brown, 2012). According to a mini review conducted in the United States in 2012, chlamydia infection rates among detained adolescent females ranged from 14% to 22%, and for gonorrhea, from 5% to 6% (Rizk & Alderman, 2012; Spaulding et al., 2013). Other studies have found that in addition to being twice as likely to contract an STD as their nonincarcerated peers, incarcerated female adolescents are also more likely to become pregnant and to endure high-risk pregnancies (Gallagher, Dobrin, & Douds, 2007).

Unplanned pregnancy has been a widespread consequence of the risky sexual behaviors of this population, leading some to recommend that teens be screened for pregnancy on admission to detention centers (Committee on Adolescents, 2011; Rizk & Alderman, 2012). Although birth rates among adolescents in the United States have continued to decline since the peak in 1991 (61.8) births per 1,000) to a record low in 2012 (29.4) births per 1,000) (Finer & Zolna, 2011; National Center for Health Statistics [NCHS], 2013), adolescents with a history of entering into correctional facilities are more likely to become pregnant or already be parents than their peers in the general population. For example, 15% of incarcerated teen males are likely to be fathers compared to 2% of nonincarcerated teen males, and 9% of incarcerated teen females are likely to have had children compared to 6% of nonincarcerated teen females. (Committee on Adolescents, 2011).

Cultural Influence

Studies suggest that cultural values may explain why Hispanic women desire marriage and children at a younger age than do African Americans, Southeast Asians, and Whites (Caal, Guzman, Berger, Ramos, & Golub, 2013; Romo, Berenson, & Segars, 2004; Russell & Lee, 2004). Cultural values may influence behaviors such as educational attainment and contraceptive use, which in turn affects pregnancy outcomes (Caal et al., 2013; Romo et al., 2004; Russell & Lee, 2004). Studies have found that attitudes toward contraceptives are not the only issue as parent-child discussions about sexuality are also taboo in this culture (Russell & Lee, 2004). The Hispanic culture values family and a traditional family model beginning at a young age, resulting in Latinos being more likely to experience their sexual debut at a younger age (Romo et al., 2004; Russell & Lee, 2004). One qualitative study explored the role of young women's perceptions of their parents' opinions about reproductive health services. The study found that parents played a significant role in the reproductive health-seeking behavior of their teens, often times preventing the women

from seeking reproductive health services such as STD screening/treatment, as well as contraceptive counseling. The majority of the women reported that their parents did not support having access to reproductive health services and even reported hiding contraceptive use from their parents (Caal et al., 2013). The fear of parental criticism could pose an obstacle to adolescents seeking reproductive health services. Despite the challenge of gaining the support of families, professionals working to prevent teen pregnancy (e.g., school staff, health or social services agencies, and nonprofit organizations) believe that the involvement of the family is critical in Hispanic teen pregnancy prevention among Hispanic youth (Burke, Mulvey, Schubert, & Garbin, 2014; Russell & Lee, 2004).

Parent Involvement

Parental/quardian attitudes toward their adolescent's health care, including pregnancy prevention and STD screening, is important because studies have shown that parental/quardian involvement in an adolescent's development can have a crucial impact in the success or failure of that individual (Burke et al., 2014; Jerman & Constantine, 2010; Kim, Gebremariam, Iwashyna, Dalton, & Lee, 2011). The literature on the power of parental influence and connectedness to youth is extensive and points to communication between parents and their children as a fundamental process through which youth's ideas, values, beliefs and expectations around sexual health are established (Burke et al., 2014; Caal et al., 2013; Huebner & Howell, 2003; Jerman & Constantine, 2010; Kim et al., 2011; Markham et al., 2010). Douglas Kirby and colleagues have found that parental connectedness proves to be a protective factor that promotes healthy decision making, which reduces risky behaviors (such as sex without contraception and sex with multiple partners) and therefore increases the likelihood of avoiding negative outcomes, such as pregnancy or contracting an STD (Kirby & Lepore, 2007). Other studies highlight the notion that parental monitoring, parent-adolescent communication, and parenting style are all important variables to

consider when understanding sexual risk taking among adolescents (Huebner & Howell, 2003). A national survey was conducted in the general population in order to assess attitudes and opinions of parents regarding sexual behaviors among adolescents (Abt Associates Inc., 2009). The survey results indicated that the majority of parents surveyed were opposed to premarital sex both in general and for their own adolescents (Abt Associates Inc., 2009). It also found that there were differences in opinion among minority parents compared to non-minority parents in that patterns of permissiveness among minority parents varied by specific context (Abt Associates Inc., 2009). Parents were more in favor of sexual activity among adolescents when contraception was used, and if their adolescent was likely to marry their sexual partner (Abt Associates Inc., 2009). Abt Associates Inc. (2009) found that parents/guardians were more opposed to sexual activity "if the adolescent and his or her partner think that it is okay" (p. 9). The survey revealed that general parent/guardian views about sex and abstinence were more conservative among non-Hispanic blacks, Hispanics, parents from lower-income households, and parents attending religious services more frequently (Abt Associates Inc., 2009). The majority of parents surveyed were in favor of their adolescent receiving sex education messaging and had preferences about where the message came from (Abt Associates Inc., 2009). Abt. Associates Inc. (2009) found that survey responses indicated that parents preferred sex education information come from (in order of preference): "a place of worship (85%), a doctor's office or health center (85%), school (83%), a community organization (71%), and the Internet (55%)" (p. 9). While these results shed light on the attitudes of parents from the general population, attitudes of parents among special populations, such as juvenile offenders, are unknown due to a lack of research on the topic.

Lack of family involvement is identified as one of the most important issues faced in the juvenile justice system. There is also a lack of validated

tools to measure the family involvement construct (Burke et al., 2014). Despite the widespread research of increased risky behaviors and outcomes associated with juveniles involved in the juvenile justice system, as well as the proven importance of parental opinion and involvement, little research has been conducted to explore the opinions and attitudes of parents and guardians of adolescents involved in the juvenile justice system. While studies have been conducted on access to sexual health services in the juvenile justice system, as well as the high-risk behaviors that necessitate these services, literature reviews point to the fact that there is a dearth of research regarding parent/guardian attitudes toward access to sexual health services for adolescents in the juvenile justice system. This paper describes a qualitative study that assessed the attitudes and opinions of parents whose teens are involved in the juvenile justice system. Its results highlight parents' attitudes on youths' information-seeking behavior, sexual activity, pregnancy risks, contraceptive use, clinical visits, challenges, and other specifics regarding sex education programs. The focus group results described in this paper aim to explore how the culture and religion of parents residing in a largely Hispanic community influences juvenile justice-involved youths' access to contraceptives in clinics and sex education programs.

Positive Youth Development Programs

Evidence-based programs (EBPs) have been shown to change behaviors in youth after educating them about risky sexual behaviors (Bryan, Schmiege, & Broaddus, 2009; Cronin, Heflin, & Price, 2014; Inman, Van Bakergem, La Rosa, & Garr, 2011; Thomas, 2000). Further, some programs have been specifically tested and proven effective in youth involved in the juvenile justice system (Bryan et al., 2009). These sex education programs offer a range of approaches—from not discussing condoms and contraception to educating on condoms and contraception use (Thomas, 2000). Implementing programs that offer the appropriate approach and are shown to be effective in

promoting healthy sexual behaviors in special populations (such as minority youth in the juvenile justice system) is crucial to successful outcomes (Inman et al., 2011; Thomas, 2000). The focus group conducted for the UT Teen Health initiative was part of a community needs assessment in order to identify an EBP that fit the needs of the population.

Methodology

Data Collection

The study described in this paper was conducted as part of a community needs assessment by the University of Texas Health Science Center at San Antonio-UT Teen Health (UTTH). The objective of the focus group was to better understand the perspectives of parents/guardians of youth who have been referred to the Bexar County Juvenile Probation Department (BCJPD) in order to select the best EBP for the department's goals and objectives regarding teen pregnancy prevention. Parents/quardians were defined as the person responsible for a child's care, custody, or welfare (Bolen, Lamb, & Gradante, 2002). The focus group session was held on April 10, 2012 using procedures approved by the University of Texas Health Science Center at San Antonio Institutional Review Board and the Centers for Disease Control and Prevention. The stakeholders (parents/quardians) who participated in the focus group were recruited using convenience sampling methods: The BCJPD staff in charge of running mandated parenting groups for parents of youth in the juvenile justice system advertised the opportunity to participate in the focus group to approximately 20 parents/guardians who were participating in the parenting classes at that time. Parents/guardians who participated in the focus group were compensated with a \$20 gift card to a local grocery store chain. Participation was voluntary and did not affect parents'/guardians' standing in the parenting classes. The focus group was limited to the first 9 parents/guardians in order to promote strong participation among individuals.

Focus group participants (both male and female) were representative of the target population: parents/guardians of youth who had been referred to the BCJPD. The focus group was held on-site at the administrative offices of the BCJPD where the parenting classes were facilitated. To promote candid responses from the participants, the focus group was conducted in a private room without Bexar County staff present. The focus group discussion explored important aspects of sex education curricula, as well as attitudes and beliefs toward contraceptives and condom use.

The UTTH evaluator who conducted the focus group was trained on focus group facilitation and analysis during one-on-one sessions. Training included relevant literature and background information on the scope and purpose of the focus group—based research, and a review and discussion of the moderator's guide.

An original moderator guide, consisting of 8 questions and 13 sub-questions (see Appendix), was developed by the evaluator of UTTH with the counsel of Jeff Tanner and Associates, the Centers for Disease Control and Prevention, and Edward Saunders, associate professor and director of social work at the University of Iowa College of Liberal Arts & Sciences. The semi-structured design guide was developed to identify social norms of the following topics: (a) Challenges facing teens; (b) Information-sharing behavior; (c) Sexual activity; (d) Programming; (e) Clinics; (f) Birth control; and (g) Curriculum.

At the beginning of the session, the participants were asked to complete a demographic form and sign a research study consent form. To promote confidentiality, participants were asked to use only their first names. Questions were posed in an open-ended manner followed by more specific prompts to generate further discussion. The discussion lasted 40 minutes. The discussion was recorded using a hand-held audio-recording device.

Analysis

After the focus group, discussion recorded on the audiotape was transcribed verbatim by the UTTH evaluator. Transcripts were analyzed using a quasi-inductive approach (Thomas, 2006). The evaluator created preliminary codes based on the moderator's guide. Additional topic domains and subcategories were created inductively during the analysis process. The following codes were used based on the focus group discussion: (a) Challenges for parents of high-risk teens; (b) Consequences of teen sex; (c) Prevention; (d) Contraceptive use; (e) Parent-teen communication; (f) Emergency contraceptives; (g) Clinics; and (h) Sex education. The evaluator coded the raw data (the scripts) using Word documents to organize the data into levels of codes (Thomas, 2006): themes, categories, and subcategories. Each level of code was collapsed to identify broader themes during the analysis process. In a separate document, the quotes were summarized to generate concepts, key themes, and patterns. To ensure validity and strengthen credibility of the results, an investigator triangulation method (Guion, Diehl, McDonald, 2011) was utilized whereby the evaluator and an additional researcher coded the transcript from the focus group discussion independently (using the same cut and paste procedure). The evaluator and the researcher met to discuss the coding process, coding decisions, and the subsequent data organization. Comparison of the analysis summaries reached by the evaluator and the researcher revealed that the findings from the evaluator and

Sample description

There were 9 parents/guardians (6 mothers, 1 grandmother, and 2 fathers) who participated. There were parents/guardians of teens ranging in age from 13 to 16 years old. Two of the parents had teens who were parenting. The group of parents (56% Latino, 22% African American, 22% other) had teens who had been involved in the juvenile justice system at durations from 1 month to more than 1 year.

the researcher were comparable and thus heightened the validity of the findings.

Results

Challenges for Parents of High-Risk Teens

The parents/guardians in the focus group agreed that peer pressure was the most challenging factor in raising teens. Focus group results indicated that teens experienced peer pressure on a daily basis that led to high-risk behaviors because adolescents desired popularity. The desire for acceptance from their peers caused some teens to ignore the boundaries set by their parents. The parents agreed they had trouble enforcing boundaries on their teens because the teens felt they could do whatever they wanted and they did not have to answer to parents. Parents felt that access to technology had increased peer influence. The accessibility of social media has increased the gap between younger generations who are technologically savvy versus older generations who are unfamiliar with technology. One grandmother of a teen on probation commented, "Peer influence, definitely: my granddaughter wanted to be popular and have tons of friends. Technology allows them to have their network of friends, their database of friends. It's hard because I did not grow up in that generation. I am raising my granddaughter so it's harder even than raising my own daughters." Parents/ guardians felt that peer pressure rendered teens susceptible to engaging in risk-taking behaviors such as drug and alcohol abuse, gang activity, and sexual activity.

Parents/guardians of teens on probation felt that risky behaviors were very likely to lead to detrimental effects on teen health and the family unit. They pointed to the trouble their kids had already experienced as evidence of this. The participants in the group recognized that even though they came from a variety of backgrounds, their shared commonality was facing challenges when raising a teen in today's society.

Consequences of Teen Sex

The parents/guardians in the focus group unanimously agreed that an incurable disease (such as HIV/AIDS) was the worst thing that could happen to teens as a result of sexual activity. The parents also agreed that teen pregnancy was a grave consequence, but an incurable disease was still worse.

The parents/guardians perceived that teens involved in the juvenile justice system had a greater likelihood of both contracting HIV/AIDS, due to intravenous drug use, and becoming a teen parent by engaging in sex while under the influence. They perceived that the risk to their teen of suffering the consequences was great, "Especially because the drug of choice is heroin. And the best high they can get off of it is shooting it up," one dad stated.

Prevention

Parents/guardians suggested that education was the best preventive factor for avoiding high-risk behaviors. The parents/quardians thought that sex education should be taught to the teens before issues arose. Some of the parents did not think their teens were getting the life skills they needed while in the juvenile justice system. One mother commented, "I think that a lot of times, the detention doesn't help them at all. It just sends them to another place." Where implementation of sex education classes should take place was debatable among the parents: some felt sex education should come from the schools, while others felt it should come from the parents. One mother remarked, "The thing is, it is not the schools' responsibility to educate them [sex education]... It's the parents' responsibility." Some felt that the schools should integrate sex education into the curriculum and all felt it should be offered as part of the BCJPD services. The parents also suggested that sex education information be promoted using social media such as YouTube.

Contraceptive Use

The parents/quardians of youth on probation expressed that the hardest thing for most parents to accept was the concept of their teen having sex, especially in a Catholic community. Despite religious ties and willingness to accept teen sexual activity, parents/guardians were in favor of teens using contraceptives to avoid unplanned pregnancy. One mother said, "A lot of parents don't want to think that ... I didn't want to think that my daughter was having sex, but it was like a reality check. I had to snap out of it ... I didn't want her getting pregnant and I didn't want her to get a sexually transmitted disease. I had to snap out of it and I finally did put her on birth control." Another mother concurred as she grappled with her religious views, "Because I know myself, I had reservations about birth control. I wondered if I should keep pushing abstinence because we were a devout Catholic family. So, I spoke with a friend who is also Catholic and she told me, 'I put my daughter on birth control because you don't want to face with that [sic].' I have regrets about not having put her on birth control."

Some parents said that other parents may even be open to the idea of a teen seeking access to contraceptives without parental consent, but they agreed that this viewpoint may vary among individual parents. One mother commented, "That is iffy. I would be glad because she is making the step to protect herself. But every parent is different. They would have to accept that their kid is having sex."

Parents were also open to the idea of teens using long-acting reversible contraceptives, such as an IUD or an implant; however, they wanted more information about long-acting methods. They suggested parenting classes on this topic. They wanted teens to understand that even though they were decreasing their risk of pregnancy by using contraceptives, they must use a condom in order to reduce the risk of contracting an STD. They stressed the importance of conveying

condom use as a necessary part of messaging to teens.

Parent-Teen Communication

The parents/guardians felt that in general, there was a lack of communication between teens and parents about sex. They observed that there were some exceptions to this generalization, but for the most part, teens went to their friends and to media to learn about sex and relationships. The parents/guardians said that when they were raised, kids of their generation had more respect for parents/quardians, but this did not mean that there was more communication between parents and teens about topics such as sex and relationships. Therefore, the parents lacked role models and other resources for guidance on good parentteen communication about sexual health topics. Another concern was that parents felt they did not always have accurate information about STDs and birth control to impart to their adolescents. They voiced a desire for more parent education programs in order to equip themselves with knowledge and prepare for conversations with their teens.

Emergency Contraceptives

Parents said they would only be comfortable with a teen obtaining access to emergency contraceptives without parental consent in the cases of rape or incest. But, for reasons other than rape or incest, they would want more information about emergency contraceptives before they could make statements about parental consent and emergency contraceptive (EC) access. One mother said, "I don't think it [giving parental consent for a teen to access EC] would go over very well. That is controversial." And another mother concurred, "We would need more information about it. The parents should be educated about it."

Clinics

When parents were asked how they felt about requiring a clinical well-child visit as part of a court-ordered mandate (conditions associated with probation), the parents were open to this

idea. One mother said, "I think having an individual check-up with somebody [a doctor] that is open to them [teens] if they cannot be open to the parent [is a good idea]." All of the other parents agreed. They said that many of their teens were embarrassed to go to the clinic with parents. Other parents said they did not think teens would seek clinical services without the parents escorting them to and from an appointment. Few felt parents should be responsible for taking their teen to the clinic. Parents indicated that perceived barriers about teens accessing clinical services were, in general, that teens were defiant against anything the parents asked of them, and that teens were embarrassed to go to the clinic.

Sex Education

The parents/guardians agreed that messaging about sex education and life skills in general should come from the parents or the schools. However, they felt that with influences from peers and media, it was hard to establish boundaries and broach conversations. They felt that if messaging was not coming from parents or schools, probation/detention was a good place to address topics such as STDs, healthy decision making, and self-esteem. They felt that society today did not encourage parental support and influence; even when parents attempted to influence their teens, the teens did not abide. Additionally, they felt that schools should offer sex education as part of the curriculum beginning in middle school or elementary school. All of the study participants agreed that sex education should be mandated and consistent in detention/probation programs, rather than mandating it case by case.

Parents felt it was necessary to teach teens to use a condom correctly and unanimously agreed that teens would learn best if they saw a condom demonstration led in person by a facilitator. They unanimously agreed that written instructions would not suffice stating that, "They [teens] are visual and auditory in this generation." They felt that lessons should also include messaging about the consequences of improper condom use.

Gangs

In addition to topics such as goal setting, pregnancy prevention, STDs, healthy decision making and refusal skills, the parents/guardians felt that sex education curricula should also include information on gangs and sex trafficking. The parents/guardians perceived that much of the teens' behavior could be attributed to gang involvement. The parents felt their teens were drawn to gangs out of curiosity and because they idealized the lifestyle of a gang member. One mother said that she knew that her teen was curious about gangs because her teen had watched movies on Netflix to learn more about gangs.

Discussion

Few, if any, studies have looked at the perspectives of the parents or guardians of adolescents in the juvenile justice system. This study investigates the opinions and attitudes of the parents/guardians regarding reproductive health education of teens on probation. The parents/guardians, overall, agreed that outside influences from peers, social media, and technology were the biggest hurdles to overcome when raising teens.

Parents believed that many of the teens' external influences, such as friends and social media, led to involvement in drug use and gang activity. Moreover, since gang activity and substance abuse have been demonstrated to increase the likelihood of high-risk sexual behaviors, the beliefs of parents/quardians that much of their teens' behaviors stemmed from involvement in or fascination with gangs are validated by research (Chassin, 2008; Minnis et al., 2008). While social media allows teens to influence one another, other media outlets can also have an influence on the actions of adolescents. Even something as seemingly benign as a Netflix documentary about gangs can start a teen down a path to poor decision making, according to some of the study participants. Ultimately, the concerns expressed by the parents in these focus groups—that the influence of gangs, with their typically high-risk

behaviors—increased teen-pregnancy rates, increased STD rates, and lowered goal planning, has been confirmed (Chassin, 2008; Minnis et al., 2008).

While parents in the general population, as well as parents of juvenile justice–involved youth, shared favorable attitudes and opinions on the importance of providing sex education (Abt Associates Inc., 2009), opinions about where the education should be delivered differed slightly by venue and preference between the two groups. Parents in the general population preferred (in order of preference) that sex education messaging come from: places of worship, health care provider, school, community based organization, and the Internet (Abt Associates Inc., 2009). Parents of adolescents on probation preferred it come from: parents, the probation department, schools, and the Internet.

Parents/guardians of teens on probation perceived that their teens were at increased risk of STDs, unplanned pregnancies, and drug use as compared with the general adolescent population, which previous research in this at-risk population proves true (Chassin, 2008; Committee on Adolescents, 2011; Golzari et al., 2006; Greenwood, 2008; Teplin et al., 2005). Strategic, multi-pronged approaches that include a variety of educational venues should be considered in order to change teen behavior and outcomes regarding high-risk teens involved in the juvenile justice system. Comprehensive approaches should be expanded in the community to include EBPs implemented with BCJPD in addition to school and community-based programs. All parents/guardians agreed that encouraging sex education as a preventive measure before teens are exposed to risky situations was a solution to mitigating negative outcomes. In addition, parents recognized the importance of parent-child communication as an avenue for sex education, but felt limited in their knowledge of the topic and the challenge of competing with outside sources such as peer and media influence. Parents/guardians desired education classes for themselves so

they would be prepared to communicate with their teen and be able to impart medically accurate information. It is likely the parents and teens alike would benefit from an education program designed to provide guidance to parents who want to discuss reproductive health issues with their teens.

A variety of sex education programs exist that have been proven to be effective in specific populations. Some programs include condom demonstrations, while others do not. The parents interviewed unanimously agreed it was necessary to teach teens correct condom application with an in-person facilitator conducting a demonstration. There are many EBPs endorsed by Office of Adolescent Health, Health and Human Services. Few have been studied in the juvenile justice population except for Sexual Health and Adolescent Risk Prevention (SHARP) and Rikers Health Advocacy Program (RHAP) curricula (MacDonald, 2013; Magura, Kang, & Shapiro, 1994). Both have been shown in randomized control trials to improve condom use and reduce sexual risks. Including acceptable programs that are evidence-based could serve to reduce unintended pregnancy and reduce STDs in this vulnerable population.

Studies support the notion of parents/guardians that adolescents' feelings of embarrassment are a barrier to accessing clinical services (Garcia, Ptak, Stelzer, Harwood, & Brady, 2014). The focus group participants also felt that the reasons teens would not go to the clinic were because they wouldn't follow through with an appointment or would have feelings of embarrassment. Some of the parents had reservations about how distribution of birth control/condoms by clinics would be received in the community because of the strong religious ties to the Catholic Church. Parents drew from personal experience when conveying reluctance to encourage birth control due to religious beliefs, as well as a lack of acceptance that their teen was sexually active. However, most of the study participants felt they would be able to reconcile their religious and personal beliefs with

the knowledge that their teens were seeking and receiving the necessary care they need to prevent any unplanned pregnancies and STDs. These views coincided with those of the parents of the general population who were less likely to disapprove of sexual activity among adolescents if contraception was used (Abt Associates Inc., 2009). There was no consensus on whether access to birth control should be allowed without parental consent because they felt this perspective could vary among individuals. This is consistent with previous findings that patterns of permissiveness for minority parents vary by specific context (Abt Associates Inc., 2009). The only exception was that in the case of emergency contraceptives, parents felt parental approval should not be required in cases of rape or incest because the teen should not be held responsible for the possibility of pregnancy in this case. Parents/guardians were in favor of teens receiving more information about reproductive health care services as long as the parents were also provided with the same information.

Conclusion

The results of this study confirm the acceptance of sex education within the juvenile justice system by parents and the need for a linkage to clinical services for extremely high-risk youth. It also confirms that parents are supportive of longacting reversible contraceptive methods and the importance of educating about these methods and condom use. Evidence-based interventions and increased clinical access can be effective approaches to changing behavior and decreasing unplanned pregnancy (Bryan et al., 2009; Eisenberg, Bernat, Bearinger, & Resnick, 2008; Thomas, 2000). This study involved participants that were reflective of a minority community (72% identified as Hispanic or African American) and minorities make up a disproportionately high number of youth in the juvenile justice system. This study truly reflects opinions of parents who are affected by their teens engaging in high-risk behaviors. This study also implies the need for

further research to confirm findings in order to generalize concepts to include all parents/guardians of youth on probation regardless of ethnicity. An increased understanding of parental perceptions and increased programming to include parents and youth within the juvenile justice system could lead to a greater impact in ameliorating the deleterious outcomes associated with high-risk behaviors.

Recommendations

Based on the feedback from parents/guardians in the study, it was clear they favored offering sex education that included information about contraceptives and condom use. UTTH provided recommendations to the juvenile probation department after sharing the focus group data. First, a strategic teen pregnancy prevention plan was developed to include a basic foundation for sexuality education known as Sex Ed. 101. The Sex Ed. 101 training was attended by over 360 probation officers to reiterate basic anatomy and puberty, and to increase understanding of STDs and contraceptives. Additionally, 55 probation officers interested in teaching the EBP, Reducing the Risk, attended a 2-day training of facilitators and began implementation in 2013.

To date there have been 361 youth ages 12 to 17 years old that have been reached with the EBP, Reducing the Risk. Additional recommendations include identifying probation officers that have implemented Reducing the Risk to become trainers of the curriculum to sustain the program. Further recommendations include providing additional training to all probation officers on answering sensitive questions, engaging parents and students in the topic of sexuality education, and identifying resources in the community for parents and teens. The content in this study explains the parental perspective and contributes to the body of knowledge about this less than visible population. The focus on parents and the importance of factors that influence risk-taking behavior makes this study and subsequent recommendations an important contribution, as

parents are critical stakeholders in health education that affects their children. Until now, their views were rarely studied explicitly. This study reveals how parents of juveniles on probation concur and differ from the parents of the general population.

Limitations

Several limitations exist: The study was conducted as part of a community needs assessment in Step 1 of the Getting to Outcomes framework. The purpose of the needs assessment was to guide program planning in selecting an evidence-based sex education program that would best fit the BCJPD. It aimed to garner understanding of cultural norms and attitudes of parents whose teens have been referred to the BCJPD. The sample size of the focus group was small (N = 9), therefore it is possible that the views of the parents who participated may not be the views of all parents whose teens have been referred to the BCJPD, or in other parts of Texas and the United States. Due to the small sample size, analysis of participant perspectives based on gender, age, and race were not conducted. The preliminary results of this study are compelling; however the matter of parental/quardian perspectives on adolescent sexual health in the juvenile justice system deserves further investigation.

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Appendix

Moderator's Guide—Parents (of high-risk teen) Focus Group

- Welcome—the group will be welcomed and reminded that they each represent a portion of the parents in the area. Not all represent the same portion—thus, they should speak their mind as they would if all like them were given a voice.
- There are no right or wrong answers in terms of what we're looking for.
- Tonight we're going to talk about teenagers and the challenges of helping them make healthy decisions. We could cover a lot on the topic of parenting, but in order to keep this meeting to the time limit I promised you, we need to lay a few ground rules. This conversation will be audio-recorded. First, feel free to share specifics as to any experiences you've had, but just keep the stories short. If you are uncomfortable sharing specifics, general points are fine too. Second, if someone is talking, please let them finish. Third, no side conversations, please. Finally, do speak up and speak clearly. If you shake or nod your head, the tape recorder doesn't pick that up, so from time to time I will repeat what you said or say things just to clarify for the audiotape. We will ask you to fill out an information sheet, but when this meeting is finished, we will transcribe these tapes and then erase them. Please only use your first name for confidentiality purposes. Anything you say will be held in the strictest confidence. Finally, if there are any questions you do not feel comfortable answering, you don't have to.
- Please state your name and the ages and genders of your teen(s).
- 1. CHALLENGES FACING TEENS: What are the biggest challenges when raising healthy teens today? (Explore the degree of connection between risks.)
 - 1a. Move from actual risks to parental actions to prevent.
 - 1b. Probe to determine feelings of shortcoming or needs.
 - 1c. If necessary: "Research shows that parental closeness is an important protective factor—not necessarily being their friend, rather, staying a parent but staying close. What are the challenges to that? How is that accomplished?"
- **2. INFORMATION-SHARING BEHAVIOR:** How often do you talk to your teen about sex? Where do you think kids should go for information about sex and relationships?
- **3. SEXUAL ACTIVITY:** What is your impression of your teen's peers? Are most of them sexually active or not?
 - 3a. In general, what do you think are the possible consequences of teen sex?
 - 3b. What do you feel is the worst thing that could happen to a child as a consequence of teen sex? (Follow-up questions for each person: "How likely is that to occur?" Probe for percentages—are half of those who have sex likely to have this happen?) What is the most likely consequence? What is the best prevention?
- **4. PROGRAMMING:** Do you think sex education would be helpful for your child?
 - 4a. How would you feel if making a sex education curriculum became one of the conditions of your child's probation?

- **5. CLINICS:** How would you feel if making a clinic visit for a well-child exam became one of the conditions of probation?
 - 5a. Do you know of any clinics in the community that provide family planning services to teens?
 - 5b. Have you visited any of the clinics with your teen?
- **6. BIRTH CONTROL:** What do parents think about birth control? How comfortable would you be assisting your child with gaining access to birth control? How comfortable would parents be if their children gained access to birth control while on probation or in detention?
 - 6a. Are you familiar with long-acting reversible birth control methods such as an implant or an IUD?
 - 6b. How do you feel about your teen or your teen's partner being on a long-acting reversible contraceptive like an implant or an IUD? Would you feel comfortable giving consent for your teen to have access to this at a clinic?
 - 6c. What are your thoughts about emergency contraception (aka "the morning after pill")? Would you feel comfortable giving your child consent to access this kind of birth control?
- 7. CURRICULUM: There are many parts to a sex education curriculum. One part is teaching teens how to use condoms. We want to know from you what would be the best way to help teens learn this skill and what method parents would find most acceptable. There are three options. I am going to describe the options and I want you to tell me which option you think would be the most useful and the most acceptable to parents:
 - Watching the teacher in person apply the condom to a model of a penis while describing the steps.
 - Watching a video of a teacher apply a condom to a model of a penis while describing the steps.
 - Receiving handouts with written instructions (no diagrams or pictures or drawings) describing the steps of how to apply a condom.
 - 7a. Do you think it would be useful and appropriate for teens to have a condom demonstration lesson at all?
 - 7b. What sorts of things do parents feel teens should learn about? If needed, probe:
 - Pregnancy prevention?
 - STDs?
 - How to make better decisions?
 - Goal setting?
 - · Refusal skills?
- 8. Is there anything else you would like to add?

Thanks very much for attending, and don't forget that you need to fill out the data sheet before you go. If there is any question on the sheet that you would prefer not to answer, that is ok. Thanks again!

Journal Manuscript Submission

The *Journal of Juvenile Justice* is a semiannual, peer-reviewed journal sponsored by the Office of Juvenile Justice and Delinquency Prevention (OJJDP). Articles address the full range of issues in juvenile justice, such as juvenile victimization, delinquency prevention, intervention, and treatment.

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