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Meeting the Substance Abuse Needs of Status Offenders through Juvenile Drug Court

Arthur Hayden
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Abstract

Despite decreases in most categories of juvenile crimes over the past decade, the number of drug offenses committed by juveniles has continued to rise according to recent national data (Snyder & Sickmund, 2006). The Substance Abuse and Mental Health Services Administration (2008) reported that traditional responses by the juvenile justice system had largely been ineffective with these offenders and, therefore, alternative approaches must be considered. One alternative that has shown promise in reducing recidivism among these offenders was the juvenile drug court. This survey study explored the viability of expanding the Kentucky juvenile drug court program to status offenders who typically did not receive these services. The design consisted of a two-part survey mailed to juvenile drug court administrators. This survey had of 11 Likert-type questions. The internal consistency reliability of the instrument was low ($\alpha = .25$). The respondents, drug court administrators in Kentucky, acknowledged that their programs could be adapted to include this population, and that juvenile drug courts could be used preventatively with substance-abusing status offenders to decrease the risk of offense escalation and to lessen the potential for chemical dependency.

Policymakers and practitioners have largely been ineffective in addressing the juvenile crime problem in the United States. Although delinquency overall has declined over the past decade, offending remains high (Snyder & Sickmund, 2006). The problem has been exacerbated by ever-increasing numbers of juvenile offenders who are also substance abusers. This places tremendous strain on the juvenile justice system, which is already seemingly ill-equipped to adequately respond. Overloaded court dockets, limited resources, and a revolving door of repeat offenders suggest that traditional responses for addressing these issues should be reexamined.

Historically, some disconnect has existed between the various systems involved with juvenile offenders. Although the juvenile justice system was conceived to provide solicitous care for young offenders, corrections and treatment are often competing interests. Fortunately, an assumption that delinquent behavior and substance abuse are independent behaviors that require independent interventions has gradually shifted.

Steiner, Cauffman, and Duxbury (1999) suggest that policymakers and practitioners must consider the more complex assumptions regarding the nature and causes of offending in order to improve the effectiveness of the juvenile justice system. Therefore, traditional single-system responses must be reconsidered and new strategies developed and implemented that target both criminal behavior and associated substance abuse;

otherwise, the interventions used with juvenile offenders will remain largely ineffective (Office of Justice Programs Drug Court Clearinghouse and Technical Assistance Project, 1998).

Juvenile drug courts offer an alternative approach to respond to offending and co-occurring substance abuse. Although drug courts are relatively new and provide limited data (Bryan, Hiller, & Leukefeld, 2006), some studies have reported favorable outcomes (Henggeler, et al., 2006; MacMaster, Ellis, & Holmes, 2005; Rowland, Chapman, & Henggeler, 2008). These studies hold promise for interventions that can effectively control and reduce further illegal behaviors. Thus, policymakers and practitioners have begun to realize that a more effective juvenile justice system is one that responds systemically, and the drug court is an intervention that offers promise for a system often criticized for its failures.

The purpose of this study was to gain insight from Kentucky's juvenile drug court administrators concerning juvenile offending and co-occurring substance abuse, and to assess the viability of expanding drug court services to status offenders. Review of the literature and surveys completed by the administrators suggest that while drug courts have been used effectively to reduce and control delinquent behavior and co-occurring substance abuse, typically services have not been provided to status offenders who also tend to abuse drugs at high rates. By expanding these services to meet the unique needs of status offenders, the drug court may prevent escalation into more serious, delinquent offending and chemical dependency.

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Status Offenders

Status offenders, unlike public offenders or delinquents, have engaged in behavior that if committed as an adult would not be illegal. In Kentucky, these offenses include truancy, running away, and beyond control (incurability) of parents or school officials. In some states liquor law violations and miscellaneous offenses such as tobacco and curfew violations were also considered status offenses.

According to Sickmund (2000), status offenders were often processed informally through diversion or other non-adjudicative alternatives. In some jurisdictions, status offenders were handled entirely by child welfare agencies or in family courts. In others, these behaviors had become criminalized and were handled in juvenile courts.

Juvenile Offending

Arrest rates and cases processed by the juvenile courts are two methods used to understand juvenile offending trends. According to Snyder and Sickmund (2006), national arrest rates for juveniles have declined since the mid-1990s, with the exception of arrests for drug offenses which have steadily increased. These trends represented nearly 200,000 juvenile arrests for drug-related offenses in 2006, which doubled the arrests in 1970 (Bureau of Justice Statistics, 2008).

Despite the general decrease in arrests nationally, juvenile courts continue to process a higher volume of delinquency and status cases than in previous decades. In 2005, nearly 1.7 million delinquency cases were adjudicated (Puzzanchera & Sickmund, 2005), compared to 159,400 status cases in the preceding year (Stahl et al., 2007). Of all cases adjudicated, the largest increase involved drugs, which rose 159 percent between 1985 and 2002 (Snyder & Sickmund, 2006). These statistics are quite significant compared to the 896,000 delinquency cases and 79,000 status cases processed a decade earlier (Office of Juvenile Justice & Delinquency Prevention, 2000).

It is evident that juvenile arrests trends in Kentucky were similar to those reported nationally albeit a small decline in drug offenses. For instance, review of Kentucky crime reports arrest data from 1995-2004 indicated a decline in arrests from 21,895 in 1995 to 15,946 in 2004. Drug-related arrests also declined during this period from 3,582 in 1995 to 2,426 in 2004 (Commonwealth of Kentucky, 2004). Additionally, delinquency cases processed in juvenile courts in Kentucky declined between 2001-2008 from 39,596 in 2001 to 29,375 in 2008 (Kentucky Court of Justice, 2008). The number of status cases processed increased from 12,144 in 2001, to 27,078 in 2008 (Kentucky Court of Justice).

Offending and Substance Abuse

The literature is replete with studies that have examined juvenile delinquency and co-occurring sub-

stance abuse. Factors associated with these behaviors include dynamics of the family, neighborhood, peers, and school (see Dukes & Stein, 2001; Felson, Savolainen, Aaltonen, & Moustgaard, 2008; Johnson et al., 2008; McCrystal, Higgins, & Percy, 2006; McMahon & Luthar, 2006; Partnership for a Drug-Free America, 2008; Wiebush, Freitag, & Baird, 2001).

Fewer studies have examined status offending and co-occurring substance abuse. Among the recent studies, Chen, Tyler, Whitbeck, and Hoyt (2004) found a high prevalence of drug use among female runaways with histories of sexual abuse. Henry (2007) found a significant correlation between truancy and drug use. Kidd (2006) found associations between homeless youth, drug use, and suicide.

Adult Drug Court

Although the drug court movement is relatively new (the first adult drug court was developed in Miami, Dade County, Florida in 1989), the literature contains numerous studies that examined the drug court response to offending and drug abuse (Cresswell & Deschenes, 2001; Goldkamp, 2000; Johnson, Koetzle, & Latessa, 2000; Logan, Williams, Leukefeld, & Minton, 2000; Longshore, 2001; Sechrest, 2001; Sichor & Sechrest, 2001). Overall, reception of drug courts has been favorable with many studies reporting positive outcomes in reducing offending and substance abuse (Brewster, 2001; Goldkamp, White, & Robinson, 2001; Spohn, Piper, Martin, & Frenzel, 2001). Some studies have questioned the effectiveness of drug courts or have recommended further analysis (Longshore, 2001; Miethe, Lu, & Reese, 2000; Saum, 2001).

The literature noted that the adult drug court movement followed a growing number of drug-related offenses that proliferated throughout the justice system beginning in the early 1980s. This proliferation, resulting from a combination of the crack cocaine epidemic and increased enforcement activities due to the 'war on drugs,' led to a significant increase in the number of individuals incarcerated from 1981 to 1996 (Logan et al., 2000). As a result of court processing delays, lack of space to house offenders in jails and prisons, and the revolving door of repeat offenders, the drug court was developed. The National Criminal Justice Reference Service (NCJRS) (2008a) reported that as of 2008 there were 1,957 drug courts in operation in the United States. According to the NCJRS (2008b), these programs were reported to save an estimated \$2,329 in avoided criminal justice system costs and \$1,301 in avoided victimization costs over a 30-month period per participant.

The Department of Justice (DOJ) developed the Drug Courts Program Office (DCPO) in 1995 in response to the Crime Act of 1994 (Violent Crime Control and Law Enforcement Act) to provide technical assistance and funding to states for the development and implementation of drug courts. Funding for drug courts was authorized by the Omnibus Consolidated Rescis-

sions and Appropriations Act (1996). According to DCPO (2001), the drug court was an alternative approach to traditional justice processes that integrated substance abuse treatment with sanctions and incentives to encourage sobriety and lawful behavior.

Goldkamp et al. (2001) described the basic elements of the drug court, which emphasized a therapeutic model aimed at less punishment and more healing and restoration. The basic elements included: (1) integration of alcohol and drug treatment services with justice system case processing; (2) use of a non-adversarial approach in which the prosecution and defense promote public safety while protecting participants' due process rights; (3) identification of eligible participants early for immediate referral; (4) provision for access to a continuum of treatment and rehabilitation services; (5) monitoring of abstinence by frequent drug testing; (6) coordination of court and treatment program responses to participants' compliance or lack of compliance including contingency contracts that involve participants in their own sanction and incentives; (7) requiring ongoing judicial interaction with drug court participants; (8) monitoring and evaluating achievement of program goals and effectiveness; (9) promoting effective programs through interdisciplinary education of planning teams; and (10) forging partnerships among drug courts, public agencies, and community-based organizations (Goldkamp et al.).

Juvenile Drug Court

Juvenile drug courts first appeared in 1993 subsequent to the initial successes of the adult drug courts. Originally, these courts applied the adult model, but have gradually adapted their approaches to consider the more complex, serious delinquent and substance-abusing factors associated with juvenile offending (Office of Justice Programs Drug Court Clearinghouse and Technical Assistance Project (OJP), 1998). According to OJP, juvenile drug courts must differ from the adult model because of the unique challenges presented by these juveniles. The challenges included factors such as the involvement of multiple agencies mandated to provide services such as juvenile justice or child welfare, motivation of offenders, differential development, substance use and offending stages, family issues, counterproductive forces such as peers and gangs, and confidentiality issues.

Based on these challenges, the Drug Courts Program Office (DCPO, 2001) identified several characteristics necessary for these courts compared to traditional juvenile courts. These included: (1) earlier and more comprehensive intake assessments; (2) greater focus on functioning of the juvenile and family throughout the court process; (3) closer integration of the assessment information relating to the juvenile and family; (4) increased coordination between the court, treatment providers, school system, and other community agencies; (5) more active and continuous judicial supervision of

the juvenile case and treatment; and (6) immediate sanctions for non-compliance and incentives for progress for both the juvenile and family (Goldkamp et al., 2001).

Review of the literature on juvenile drug courts suggests that although limited empirical data are available (Bryan et al., 2006), positive outcomes have been found in the reduction of substance abuse and repeat offending among delinquent substance abusers (Belenko, 2001; Hiller, Narevic, Logan, Leukefeld, & Minton, 2002; Krueger, 2000). Among data reviewed by Belenko (2001), retention or completion rates varied between 24 to 42 percent, while recidivism rates varied between 10 to 26 percent. The National Criminal Justice Reference Center (NCJRS, 2008a) identified 474 juvenile drug courts in operation as of 2008, which focused predominantly on delinquent substance abusers.

Kentucky Drug Court

Adult, family and juvenile drug courts are categorized as specialized courts in Kentucky. Adult drug courts operate in 115 of the 120 counties, and juvenile drug courts are located in 19 counties. 84 judges presently conduct drug court programs (Kentucky Court of Justice, 2009).

Much of the research to date on Kentucky's drug court programs has been in the form of process evaluations. Logan, Lewis, Williams, and Leukefeld (2000, p. 78) noted that "process evaluations in contrast to an examination of program outcomes only, can provide a clearer and more comprehensive picture of how drug court impacts those involved in the drug court process." Process evaluations, which provided information about important aspects of drug court programs gathered through use of interviews and surveys, were important in the ongoing assessment and development of these programs (Logan et al.). These evaluations indicated that Kentucky drug courts resembled those throughout the nation.

Despite programmatic difference among the courts in areas such as treatment strategies, sanctions and incentives, the models for a majority of both adult and juvenile drug courts follow the 10 basic elements as set forth by the National Association of Drug Court Professionals. The critical components of the drug courts included accountability, supervision, and therapeutic intervention (Logan et al., 2000) that was aimed at the goal of "stopping illicit drug use, related criminal activity, and promoting recovery" (p. 7). Generally, positive outcomes have been reported for retention, decreasing recidivism and substance use, and in costs savings (Logan, Hoyt, & Leukefeld, 2001).

Theoretical Perspectives

Theories are useful to understand problematic behavior among juveniles. O'Connor (2006) identified several theories that were frequently cited including: learning, control, and psychological theories. These the-

ories have important policy and practice implications for both prevention and treatment.

Social learning theory suggests that problematic behavior is a learned response from the experiences and relationships formed with family members, peers, teachers, and other important individuals. A variety of social learning theories exist including differential association, differential reinforcement, and neutralization. Through social, environmental, and personal experiences, juveniles are afforded opportunities to learn antisocial behaviors. Reinforcement, negative or positive, contributes to these learning experiences. Prevention and rehabilitation occurs through reeducation and re-socialization (O'Connor, 2006).

Control theory suggests that juveniles' ties or bonds give motivation to conform to social expectations. These bonds included attachment, involvement, commitment, and belief. Absence of any of these bonds diminished capacity for control and decreased the desire for conformity. A number of control theories exist including containment, drift, social bond, and low self-control. Prevention and rehabilitation occurs through increased bonding, establishing trust relationships, developing prospects for the future, and believing in the basic institutions of society (O'Connor, 2006).

Psychological theory holds that problematic behavior originates in an individual's personality. Personality is a complex set of emotional and behavioral attributes that remain fairly consistent throughout an individual's life. Prevention and rehabilitation occurs through therapeutic interventions such as individual, family, and drug therapy (O'Connor, 2006).

Studies by Shochet, Smyth, and Homel (2007) have focused on theories to explain juvenile offending and to guide intervention and found that parental attachment was an important indicator of youths' perceptions of school and school success. Hoffman (2003) found that youths residing in areas of high male joblessness experienced stressful life events or little parental supervision were especially likely to be involved in delinquent behavior. Additionally, Haynie (2002) found that the proportion of delinquent friends in a youth's friendship network was strongly associated with subsequent delinquency. Moreover, Cook (2001) found the family system an important determinant of delinquency and addiction.

Method

Sample

The non-probability sample was obtained from records provided by the Kentucky Administrative Office of the Courts (AOC). Only six (6) of the 12 juvenile drug court administrators invited to participate in this study completed and returned the survey. Among the respondents, there were an equal number of males ($n = 3$, 50%) and females ($n = 3$, 50%). The drug court types

consisted of voluntary participation ($n = 4$, 66.7%) and involuntary participation ($n = 2$, 33.3%) programs.

Design and Procedure

The research design used for this study was flexible, consisting of a two-part survey mailed to juvenile drug court administrators following Internal Review Board approval. Part I consisted of 11 Likert-type questions based on a rating scale from 1 to 5 developed by the investigator (see Appendix A). The internal consistency reliability of the instrument was low ($\alpha = .25$). Nevertheless, it was useful as an exploratory tool to gauge respondent's views. Although validity was not assessed, the instrument appeared to have face validity. Part II consisted of nine (9) open-ended questions designed to solicit information about each respondent's particular juvenile drug court and their perspectives (see Appendix B).

Results

Data for Part I of the survey were analyzed using SPSS software, and it consisted of descriptive and non-parametric inferential statistics. These procedures were used based on the small sample size, ordinal level of measurement for the survey items, and non-normal distribution of the variables. Results revealed that respondents viewed both delinquent offending and substance abuse as serious issues, as well as the association between delinquency and substance abuse. Respondents also viewed drug court services to be effective in reducing delinquency and co-occurring substance abuse.

The association between status offending and substance abuse was viewed as slightly less serious. Among status offenses, respondents reported that truancy and running away were most associated with substance use. Respondents also viewed drug court services to be effective in reducing status offending and co-occurring substance abuse. All respondents ($N = 6$, 100.0%) rated substance abuse as a "very serious" issue among juvenile offenders (Q2). This was followed by a majority of respondents ($n = 4$, 66.7%) who rated crime and substance abuse as "very related" (Q3). Fewer respondents ($n = 2$, 33.3%) viewed juvenile crime as a "very serious" issue (Q1). Likewise, few respondents ($n = 2$, 33.3%) believed that drug court was "very effective" in reducing illegal behavior (Q8), or in reducing substance abuse among delinquents (Q9). While one-half of the respondents ($n = 3$, 50.0%) believed that substance abuse counseling alone is "effective" for juveniles, none ($n = 0$, 0.0%) rated it "very effective" (Q7).

A majority of respondents ($n = 5$, 83.3%) "definitely" support the expansion of drug courts to include substance-abusing status offenders (Q11), although few respondents ($n = 1$, 16.7%) rated drug court as "very effective" in reducing substance abuse among juveniles who commit these offenses (Q10). A majority of respondents ($n = 4$, 66.7%) rated substance abuse and truancy "very related" (Q4), but fewer ($n = 2$, 33.3%) rated substance abuse and running away "very related" (Q5). Still, fewer respondents ($n = 1$, 16.7%) rated substance abuse and beyond control "very related" (Q6).

Nonparametric inferential statistics including Mann-Whitney U and the Spearman's rank correlation were used. The Mann-Whitney U statistic was used to examine whether significant differences existed in the mean survey ratings based on gender of the respondents, and the type of drug court program (voluntary/involuntary). No significant differences were found.

The Spearman's rank correlation was used to examine whether significant relationships existed among the survey items. As seen in Table 1, a significant relationship was found ($\rho(4) = .833, p = .039$) between the effectiveness of substance abuse counseling (Q7) and the effectiveness of drug court in reducing illegal behavior (Q8). A significant relationship was found ($\rho(4) = .894, p = .016$) between the effectiveness of drug court in reducing illegal behavior (Q8) and the effectiveness of drug court in reducing substance abuse among delinquents (Q9). A significant relationship was also found ($\rho(4) = .822, p = .045$) between the effectiveness of drug court in reducing illegal behavior (Q8) and the effectiveness of drug court in reducing substance abuse among status offenders (Q10). No other significant relationships were found.

Substance abuse counseling is a significant component of the drug court program. This counseling, coupled with other interventions, is intended to reduce illegal behavior whether it is delinquent, status, or substance use. Therefore, not only should one expect that the program administrators would support substance abuse counseling, but that the administrators would also rate highly the effectiveness of their programs in accomplishing these objectives.

Table 1.
Mean Ratings for Respondents' Survey Responses (N = 6)

Survey Question	M	SD
Q1	4.33	.52
Q2	5.00	.00
Q3	4.67	.52
Q4	3.50	1.03
Q5	3.67	.89
Q6	3.50	1.03
Q7	3.33	.82
Q8	4.50	.75
Q9	4.33	.52
Q10	3.50	.63
Q11	4.67	.41

The analysis used for Part II of this study involved examination of qualitative data. While there are multiple ways to analyze qualitative data such as content analysis and computer-assisted models, identifying themes and presenting verbatim responses are widely-accepted

(Ryan & Bernard, 2000). Indeed, Silverman (2000) notes that more "ambitious analytic positions may actually cloud the issue" if the aim is simply to present descriptive findings (p. 825).

A number of important themes emerged from the data. Primarily, the drug courts were intensive, voluntary programs that differed from traditional juvenile and family court models; they have evolved to tackle a growing problem of substance abuse among juvenile offenders. The programs are reportedly successful because they have incorporated many of the DCPO basic elements such as increased coordination between the court, treatment providers, school system, and other community agencies, more active and continuous judicial supervision of the juvenile case and treatment, and immediate sanctions for non-compliance with incentives for progress for both the juvenile and family. However, while respondents reported favorably on juvenile drug courts in these areas, the services generally have not been extended to status offenders; it is unclear whether drug court programs will do so in the future.

Discussion

The purpose of this study was to explore the opinions of juvenile drug court administrators concerning juvenile offending and co-occurring substance abuse, and to determine if these services could be expanded to meet the needs of status offenders. Although the design was not rigorous and the findings were limited due largely to the small number of respondents, the data may be useful for policymakers and practitioners concerned with these issues.

The study revealed that both criminal and status offenders often presented with co-occurring substance abuse issues, and that offending and substance abuse were intrinsically related. While the respondents have documented the success of drug court services, the programs in Kentucky have tended to provide services primarily to delinquent offenders while neglecting status offenders who were an equally important at-risk population.

Although there may be some skepticism among policymakers and practitioners whether to integrate status offenders with delinquents in treatment, further research is necessary to determine what effects, if any, this integration would present given the lack of research on juvenile drug courts. However, as many juvenile offenders commit both types of offenses, denying services is difficult to justify. Drug court has been minimally expanded in some jurisdictions to include status offenders, according to the drug court administrators.

The juvenile drug court is a viable alternative to traditional juvenile or family court for status offenders. Status offenders could benefit from closer supervision and intensive services afforded by the drug court. As noted by the Bureau of Justice Assistance (2003), juvenile drug courts were a logical step given the success of

adult drug courts in reducing recidivism. Specifically, Bureau of Justice Assistance noted: "juvenile court judges experienced many of the same frustrations the adult courts had faced. They found that dealing with substance-abusing juveniles within the traditional juvenile court often meant long treatment waiting lists, disjointed service delivery, lack of family engagement, and no input into the nature or extent of treatment" (Bureau of Justice Assistance, p. 6).

Indeed, the juvenile drug court has shown remarkable outcomes in lowering recidivism by providing a broader array of services not typically afforded by traditional juvenile or family court. Assessment of existing programs has "demonstrate[d] remarkable rehabilitation of youth who were assessed to be at high risk of continued, escalating delinquent involvement and illicit substance use. Measured by indicators such as recidivism, drug use, and educational achievement, juvenile drug courts appear[ed] to hold significant promise" (Cooper, 2001, p. 13).

The juvenile drug court administrators in Kentucky supported the expansion to include status offenders. There was some evidence that some of these courts had already identified this need and, therefore, had provided these services to a limited number of status offenders. However, most of the courts do not mandate services. This appeared to be due, in part, to concerns about the sanction of secure detention used by the judge for non-compliance, as well as costs to expand these services.

While delinquent offenders could be detained for noncompliance with drug court, secure detention of status offenders would be controversial (Kelly, 2008). In Kentucky, judges currently exercise their contempt powers via the Valid Court Order (VCO) exception to detain status offenders if necessary due to noncompliance with judicial orders. A valid court order permits detention of status offenders through a finding of contempt. Therefore, it is within their judicial discretion whether or not to detain status offenders for noncompliance with drug court. Likewise, not expanding these services to status offenders due to concerns about costs seems counter-intuitive. Drug courts are more cost effective compared to traditional approaches and have demonstrated better success in reducing recidivism among offenders with co-occurring substance abuse issues.

In conclusion, as this study was only exploratory, further assessment of juvenile drug courts and status offenders is necessary. Future studies should include analysis of offender perceptions of success, as well as longitudinal assessment of drug court participants to determine long-term effects of these services in both the reduction of crime and co-occurring substance abuse. Comparative research involving the juvenile drug court programs and alternative programs is recommended. Finally, as the juvenile drug court approach focuses not only on the juvenile offender but also family, school and other social systems, future research should assess the impact of these systems on success outcomes.

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Appendix A

Scaled Survey Questions

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| <ol style="list-style-type: none"> 1. How serious do you perceive juvenile crime? 2. How serious do you perceive substance abuse among juveniles? 3. How related is crime and substance abuse among juveniles? 4. How related is substance abuse and poor school attendance among juveniles? 5. How related is substance abuse and running away from home among juveniles? 6. How related is substance abuse and incorrigibility/beyond control among juveniles? | <ol style="list-style-type: none"> 7. How effective is substance abuse counseling for juveniles? 8. How effective is drug court in reducing illegal behavior among juveniles? 9. How effective is drug court in reducing substance abuse among juveniles who commit delinquent offenses? 10. How effective is drug court in reducing substance abuse among juveniles who commit status offenses? 11. Should juvenile drug courts be expanded to include substance-abusing status offenders? |
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Appendix B

Open-Ended Survey Questions

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| <ol style="list-style-type: none"> 1. Please describe the juvenile drug court model presently used in your county. 2. What factors contributed to the decision to develop a juvenile drug court in your county? 3. How does juvenile drug court differ from traditional juvenile or family court intervention in your county? 4. What evidence can you identify to support the continued use of juvenile drug courts? 5. What roles do you see juvenile drug courts having in the future of juvenile justice? | <ol style="list-style-type: none"> 6. What are the barriers to continued growth and sustainability of juvenile drug courts in your county? 7. Describe any support or efforts underway to include status offenders in your juvenile drug court program. 8. What barriers exist in expanding juvenile drug courts to include status offenders in your county if not currently included? 9. What additional information would you like to report concerning your juvenile drug court or juvenile drug courts in general? |
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The Effects of a Re-integration Program on Employment and Recidivism among Juvenile Offenders

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Abstract

This study measured the effectiveness of the Texas Youth Commission's (TYC) RIO-Y (Re-Integration of Offender-Youth) program for youthful offenders with respect to the likelihood of program participants and non participants gaining employment and the probability of recidivism for each cohort. Two logistic regression analyses determined the probability of TYC youth being employed and their odds of recidivism at six months and one year after release to parole status. Seventeen demographic factors such as age at release, gang membership, and previous felony adjudications, which are used by the Texas Youth Commission to predict recidivism, were introduced into the analyses as control variables. The sample consisted of all Project RIO-Y participants and non-participants assigned to 3 Texas Youth Commission facilities and one residential contract care program between 2002 and 2004 (N = 1,502).

Offenders

Youth adjudicated as delinquents face uncertain futures on release from residential juvenile programs (Modrcin & Rutland, 1989). They frequently return to environments characterized by family dysfunction, poverty, and peer pressure to continue a delinquent lifestyle (Dembo, Williams, & Schmeidler, 1994). Adding to these circumstances is the fact that many of these juveniles have psychological/emotional problems (Sikorski, 1991). The extent to which they can achieve the socially desired goals of community assimilation, educational development, and successful employment depend on the availability of effective, integrated treatment services.

Many juveniles who enter the criminal justice system may be characterized in two ways; inadequate educational attainment and less than satisfactory preparation to enter the workforce (Clark & Davis, 2000). To ensure that youthful offenders receive the necessary skills to enter the workforce, it is important that they are exposed to a broad range of services. These include employability skills training, occupational skills training and for many with learning and emotional disabilities, specialized training opportunities that prepare them to successfully enter the workforce.

This article examines the effects of the Texas Youth Commission's (TYC) Project RIO-Y (Re-Integration of Offenders-Youth) program and explores the likelihood of gaining employment and its effects on recidivism for this population based on participation or non participation in this program. Coffey and Gemignani (1994) maintained that in addition to vocational and academic

programs, juvenile justice practitioners must provide youth with awareness, knowledge, skills and attitudes required to obtain and succeed in entry-level jobs. Therefore, the development of mature attitudes and competencies is critical to realistic career decision-making and the likelihood of gaining employment.

Career Development

Super (1957) is one of the most prominent theories of career development. This theory of career stages uses a life-span approach to describe how individuals evidence their self-concept through vocational choices. Super suggests that the process of choosing an occupation that permits maximum self-expression occurred over time and in four stages: (a) exploration, a period of engaging in self-examination, schooling, and the study of different career options; (b) establishment, a period of becoming employed and finding a niche; (c) maintenance, a period of holding on to one's position and updating skills; and (d) disengagement, a period of phasing into retirement. In addition, he introduced the concept of career maturity to denote "the place reached on the continuum of vocational development from exploration to decline" (p. 153). The model has expanded over the years and has come to encompass the reality that adults today have multiple roles and do not follow the linear pattern of organizational advancement that was predominant when the initial framework was formulated in the 1950s. The present investigation sought to incorporate the theory of career maturity as a conceptual framework for improving the employment chances of incarcerated youth. The focus of this research was on Super's stage of exploration and his concept of career maturation that begins with the dimension of orientation to vocational choice.

A major failure of juvenile justice authorities is the failure to provide youth with career preparation pro-

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grams. Many youth paroled back to the community without an employable skill and many will never return to school and receive a high school diploma (Cahill & Pitts, 1997).

A study of formerly incarcerated youth by Bullis and Yovanoff (2002) indicated that services focusing on educational placement and securing appropriate competitive work should be provided to incarcerated youth immediately after their return to the community. The authors suggested that these services should include the following components: (a) allow staff the flexibility necessary to serve youth outside of the school setting and in the community; (b) place emphasis on service coordination with other agencies, job and alternative educational placements; (c) utilize functional skill assessments (i.e., assessments of work, living, and social skills); (d) involve each youth in a meaningful way to plan and develop his or her own transition services and placement options; and (e) provide social skill instruction addressing specific work and living skills and setting requirements. The Texas Youth Commission (TYC) provides many of these components.

Project RIO-Y

The Texas Youth Commission (TYC) is the state agency charged with the incarceration and rehabilitation of the state's most serious juvenile offenders. Its mission is to "protect the public, habilitate youth to become productive citizens, rehabilitate delinquent youth and help prevent delinquency" (Texas Youth Commission (TYC), 2002, p. 1). Among the many rehabilitative programs within TYC, are the Workforce Development Programs are those that provide youth with the employability and occupational skills that enable them to locate gainful employment when they return to the community (Texas Youth Commission (TYC) - Archive, n.d.).

In 1985, the Texas legislature created Project RIO (Reintegration of Offenders) in order to assist adult offenders assigned to the Texas Department of Criminal Justice (TDCJ) and locate employment upon their return to the community. While incarcerated in a TDCJ facility, adult offenders were provided employability skills training along with instruction in occupational skills. Upon release, these offenders were referred to the Texas Workforce Commission (TWC), the state employment service, for assistance in locating employment opportunities. The adult program demonstrated a high degree of success with respect to reduction of recidivism and an increase in employment among adult offenders.

During the 74th legislative session in 1995, the state legislature mandated that the TYC implement the Project RIO-Y (Re-Integration of Offenders - Youth) program for juveniles assigned to it, and who were 16-years-old and older. While assigned to a TYC facility, volunteer RIO-Y participants received an assortment of program services. These included aptitude and interest assessment to determine career fields in which the student could conduct career exploration activities and

intensive training on the formation of mature attitudes and competencies for employment; such as job readiness skills training that prepare the youth to search for employment, apply for and interview for a job, and the skills necessary to maintain employment. When a Project RIO-Y graduate returned to the community they would be referred to TWC for employment assistance and/or other workforce development services provided through the statewide network of workforce centers. The other workforce development services included: referral to apprentice programs; additional occupational skills training opportunities funded by the Workforce Investment Act (WIA) and provided by local workforce development boards; referral to Job Corps programs; and the military and other employment and training opportunities (TYC, 2002). The purpose of this study is to determine the likelihood of gaining employment and the probability of recidivism for this population from participation in Project RIO-Y.

Method

Sample

The researchers used the records of all Project RIO-Y participants and non participants, 18-21 years of age, from 2002 through 2004, and examined employment and recidivism rates at 180 and 365 days on parole for each youth. Approximately 1,500 youths fulfilled these criteria. Seventeen demographic factors were used to characterize the sample on the following variables: age at release; age of first delinquent referral; assessment center behavior score; classifying offense; country of citizenship; county of commitment; escape history prior to TYC; ethnicity; known gang membership; placements prior to TYC; previous felony adjudications; previous felony referrals; previous referrals for violent offenses; probation prior to TYC; specialized treatment need; participation in specialized treatment programs; and documented incidents in the first 30 days at TYC.

Results

The logistic regression analysis for employment data at 180 days resulted in a significant equation, with the likelihood ratio = 123.42 ($df = 31$), $p < .0001$. As expected, the -2Log L statistic for the constant (2059.06) was larger than the -2Log L for the entire model (1935.64). The Wald statistic confirmed this result (Wald = 110.08, $p < .0001$). The equation was able to correctly classify 66.1% of participants as either employed or not employed.

Table 1 gives the coefficient estimates for the individual independent variables, their Wald statistics and significance levels, and the odds ratio for each variable. An examination of the table reveals that the only individual variables contributing significantly to the equation were living in Travis County (Wald = 4.82, $p = .03$), of African American ethnicity (Wald = 35.75, p

<.0001), and had a chemical dependency need (Wald = 4.25, $p = .04$). A trend was noted for age at first referral (Wald = 2.82, $p = .09$), specifically, the variables African American (as compared to the Anglo group), living in Travis County, and having a chemical dependency

need. It must be noted, however, that most of the variables approached 1.00 and all were associated with lowered log-odds of employment at 180 days. The age trend indicated that younger ages at referral were also associated with lower odds of employment at 180 days.

Table 1

Maximum Likelihood Estimates & Odds Ratio Estimates - Independent Variables for Employment Data at 180 Days (N = 1486)

Variable	Coefficient	SE	Wald	p	Odds Ratio
RIO/non-RIO	.13	.12	1.23	.27	1.14
Age at release	-.04	.10	.16	.69	.96
Age 1st referral	.06	.04	2.82	.09	1.06
Escape history	-.19	.14	1.88	.17	.82
Bexar	.15	.16	.88	.35	.81
Dallas	.23	.15	2.27	.13	.87
Harris	.08	.15	.30	.58	.76
Tarrant	-.16	.20	.66	.42	.59
Travis	-.67	.30	4.82	.03	.36
Assault	.08	.12	.42	.51	.91
Burglary	-.34	.12	7.69	.00**	.60
Drug	-.00	.15	.001	.97	.84
Robbery	.14	.18	.63	.42	.97
Theft	-.04	.14	.09	.77	.81
African American	-.50	.08	35.75	.00**	.39
Hispanic	.07	.08	.75	.39	.70
U.S. citizen	.01	.03	.28	.59	1.01
ACBS	-.15	.11	2.01	.16	.86
EDN	-.19	.13	2.27	.13	.83
CDN	-.26	.13	4.25	.04*	.77
SON	.12	.21	.31	.58	1.12
Gang member	.02	.12	.04	.85	1.02
Previous placements	-.06	.08	.65	.42	.94
Felony adjudications	.09	.09	.98	.32	1.10
On probation	-.11	.13	.72	.40	.90
Felony referrals	-.07	.05	2.21	.14	.93
RVO	.02	.11	.42	.84	1.02
CDT	.14	.14	.92	.34	1.15
EDT	-.14	.19	.58	.45	.87
SOT	-.13	.25	.25	.62	.88
Incidents 1st 30 days	-.03	.08	.15	.70	.97

* $p < .05$. ** $p < .01$.

Table 1 illustrates that the two largest odds ratios were participation in the RIO-Y program and a chemical dependency need. Thus the chance of being employed after 180 days was 1.14 greater for RIO versus non-RIO participants and 1.15 less for those with chemical dependency needs. Nevertheless, it must be noted that most of the odds of employment changed as the levels or values of the variables changed.

The second equation generated a logistic regression analysis for employment data at 365 days. Similar to the

employment data for 180 days, the equation was significant with the likelihood ratio = 116.42 ($df = 31$), $p < .0001$. The -2Log L statistic for the constant (2044.05) was again larger than the -2Log L for the entire model (1927.63). A significant Wald statistic was also evident (104.65, $p < .0001$). The rate of correct classification of participants as employed or not employed after 365 days was 65.8%. The coefficient estimates for the individual independent variables, the Wald statistics, significance levels, and odds ratios are found in Table 2.

Table 2

Maximum Likelihood Estimates & Odds Ratio Estimates - Independent Variables for Employment Data at 365 Days (N = 1486)

Variable	Coefficient	SE	Wald	p	Odds Ratio
RIO/non-RIO	.32	.12	7.85	.00**	1.39
Age at release	-.04	.10	.13	.72	.96
Age 1st referral	.04	.04	1.20	.27	1.04
Escape history	-.26	.14	3.16	.08	.77
Bexar	-.03	.16	.04	.85	.65
Dallas	.04	.15	.07	.78	.70
Harris	.17	.15	1.25	.26	.79
Tarrant	-.22	.20	1.19	.28	.54
Travis	-.36	.30	1.49	.22	.46
Assault	.08	.12	.42	.52	1.05
Burglary	-.09	.12	.55	.46	.87
Drug	-.16	.16	.99	.32	.83
Robbery	-.07	.18	.15	.70	.91
Theft	.21	.14	2.35	.12	1.20
African American	-.49	.08	33.62	.00*	.45
Hispanic	.17	.08	4.28	.04*	.86
U.S. citizen	.02	.03	.72	.39	1.02
ACBS	-.07	.11	.40	.53	.93
EDN	.04	.13	.09	.76	1.04
CDN	-.27	.13	4.36	.04*	.77
SON	.14	.21	.42	.52	1.15
Gang member	.01	.12	.01	.93	1.01
Previous placements	-.14	.08	3.11	.08	.87
Felony adjudications	.01	.09	.01	.93	1.01
On probation	.03	.13	.04	.84	1.03
Felony referrals	-.05	.05	1.18	.28	.95
RVO	.09	.12	.61	.44	1.10
CDT	.08	.15	.27	.60	1.08
EDT	.05	.19	.08	.78	1.05
SOT	.001	.25	.00	1.00	1.00
Incidents 1st 30 days	-.08	.08	1.08	.30	.92

* $p < .05$. ** $p < .01$.

Table 2 shows that the following individual variables contributed significantly to the equation: Project RIO (Wald = 7.85, $p < .01$); African American (Wald = 33.62, $p < .0001$) and Hispanic ethnicities (Wald = 4.28, $p = .04$) (as compared to Anglos); and a chemical dependency need (Wald = 4.36, $p = .04$). Trends were noted for escape history (Wald = 3.16, $p = .08$) and number of past placements (Wald = 3.11, $p = .08$).

The two variables that were associated with a raise in the log-odds of being employed after one year were participation in Project RIO and Hispanic ethnicity, as compared to Anglos. Conversely, African American ethnicity (compared to Anglos), and a chemical dependency need were associated with lowered log-odds of employment at 365 days. The number of escape

attempts and previous placements indicated a trend toward lower log-odds of employment.

The logistic regression analysis conducted for recidivism data at 180 days was significant with the likelihood ratio = 67.97 ($df = 31$), $p = .0001$. Consistent with this statistic, the -2Log L statistic for the constant (1883.66) was greater than the -2Log L for the constant plus the independent variables (1815.69). This equation also resulted in a significant Wald statistic (63.11, $p < .01$). The model was able to correctly classify 62.2% of participants as having been or not been re-arrested within 180 days.

Table 3 shows the coefficient estimates for the independent variables, the Wald statistics and significance levels, and the odds ratios for recidivism at 180 days. It

is evident from the table that four independent variables had significant coefficients. Living in Tarrant County (Wald = 6.19, $p = .01$), as compared to all other counties), having a greater number of felony referrals (Wald = 4.84, $p = .03$), and having no previous mental health treatment (Wald = 9.22, $p < .01$) were associated with greater log-odds of re-arrest at 180 days. Conversely, coming from Travis County was associated with lower log-odds of recidivism (Wald = 3.86, $p < .05$). Interestingly, a greater number of adjudications showed a trend toward lower odds of re-arrest (Wald = 2.82, $p = .09$).

The four largest odds ratios in Table 3 are worth noting. Participants whose classifying offense was drugs, assault, or burglary had a 1.36, 1.33, and 1.23 greater chance respectively of being re-arrested within 180 days than their counterparts whose offense was reported as robbery, burglary, or other crimes. In addition, those who were described as having chemical dependency treatment were 1.28 times more likely to be re-arrested. However, the caveat given above for the first three logistic regressions, regarding the small values of most of the odds ratios, must be repeated with reference to this analysis.

Table 3

Maximum Likelihood Estimates & Odds Ratio Estimates for Independent Variables for Recidivism Data at 180 Days (N = 1502)

Variable	Coefficient	SE	Wald	p	Odds Ratio
RIO/non-RIO	-.07	.12	.30	.58	.93
Age at release	.46	.10	.19	.66	1.05
Age 1st referral	-.02	.04	.24	.63	.98
Escape history	.12	.14	.69	.40	1.13
Bexar	.19	.17	1.31	.25	1.19
Dallas	-.08	.16	.24	.62	.98
Harris	-.11	.16	.46	.50	.88
Tarrant	-.54	.22	6.19	.01**	.57
Travis	.52	.26	3.87	.04*	1.66
Assault	.17	.13	1.76	.18	1.33
Burglary	.09	.13	.48	.49	1.23
Drug	.19	.16	1.47	.22	1.36
Robbery	-.21	.19	1.23	.27	.91
Theft	-.11	.14	.62	.43	1.01
African American	.09	.09	1.13	.29	1.09
Hispanic	-.09	.09	1.18	.28	.91
U.S. citizen	-.03	.03	.98	.32	.97
ACBS	.15	.11	1.86	.17	1.16
EDN	-.11	.13	.70	.40	.89
CDN	-.10	.13	.59	.44	.90
SON	-.23	.23	.97	.32	.80
Gang member	.06	.12	.28	.60	1.07
Previous placements	.03	.08	.18	.67	1.03
Felony adjudications	-.16	.10	2.82	.09	.85
On probation	.14	.14	.97	.32	1.15
Felony referrals	.11	.05	4.84	.03*	1.12
RVO	-.15	.12	1.51	.22	.86
CDT	.25	.15	2.73	.10	1.28
EDT	-.64	.21	9.22	.00*	.53
SOT	-.38	.29	1.71	.19	.68
Incidents 1st 30 days	.12	.08	2.09	.15	1.13

* $p < .05$. ** $p < .01$.

The final logistic regression analysis pertained to the data collected for recidivism at 365 days. This equa-

tion was also significant (Likelihood ratio = 120.54, $df = 31$, $p < .001$), with a larger -2Log L value for the inter-

cept (2072.62) than the full model (-2Log L = 1952.08). The Wald statistic was also significant (Wald = 107.15, $df = 31$, $p < .0001$). The model successfully classified just under two-thirds of participants (65.8%) as re-arrested or not within 365 days.

The coefficient estimates for the independent variables, the Wald statistics and significance levels, as well as the odds ratios for recidivism at 365 days are summarized in Table 4. In this table it is evident that seven of the independent variables were significant. All of the following factors increased the log-odds of re-arrest within 365 days: African American ethnicity, as compared to Anglo or Hispanic ethnicity (Wald = 8.35, $p = < .01$), having a chemical dependency treatment (Wald = 4.31, $p = .04$), and a greater number of felony referrals

(Wald = 12.18, $p < .01$). On the contrary, the following factors decreased the odds of recidivism within 365 days: older age at first referral (Wald = 4.63, $p = .03$), having previous mental health or sexual offender treatment (Wald = 4.49, $p = .03$), and unexpectedly, a greater number of violent referrals (Wald = 5.60, $p = .02$). It is important to note that while several variables did not have significant coefficients, several trends were detected; in that, living in Bexar County as compared to the other counties (Wald = 3.67, $p = .06$) and having a greater number of incident reports in the first 30 days (Wald = 3.30, $p = .07$) increased the log-odds, while Hispanic ethnicity as compared to African American or Anglo ethnicity (Wald = 2.82, $p = .09$) decreased the log-odds of recidivism within 365 days.

Table 4

Maximum Likelihood and Odds Ratio Estimates for Independent Variables for Recidivism Data at 365 Days ($N = 1502$)

Variable	Coefficient	SE	Wald	p	Odds Ratio
RIO/non-RIO	-.03	.12	.59	.81	.97
Age at release	.05	.10	.24	.62	1.05
Age 1st referral	-.08	.04	4.63	.03**	.92
Escape history	.17	.14	1.36	.24	.18
Bexar	.31	.16	3.67	.06	1.43
Dallas	-.007	.15	.002	.96	1.05
Harris	.07	.15	.21	.65	1.13
Tarrant	-.29	.20	2.25	.13	.79
Travis	-.02	.27	.01	.93	1.03
Assault	.14	.12	1.41	.23	1.23
Burglary	.07	.12	.30	.59	1.13
Drug	.16	.16	1.06	.30	1.25
Robbery	-.27	.18	2.45	.12	.80
Theft	-.04	.14	.09	.76	1.02
African American	.24	.08	8.35	.00**	1.41
Hispanic	-.14	.08	2.82	.09	.97
U.S. citizen	-.04	.03	1.90	.17	.96
ACBS	.16	.11	2.19	.14	1.17
EDN	-.21	.13	2.76	.10	.81
CDN	.09	.13	.47	.49	1.09
SON	-.09	.21	.18	.67	.91
Gang member	.12	.12	1.03	.31	1.13
Previous placements	.09	.08	1.21	.27	1.09
Felony adjudications	-.02	.09	.05	.82	.98
On probation	.15	.13	1.36	.24	1.16
Felony referrals	.18	.05	12.18	.00**	1.20
RVO	-.27	.11	5.60	.02*	.76
CDT	.30	.05	4.31	.04*	1.35
EDT	-.39	.18	4.49	.03*	.68
SOT	-.54	.25	4.49	.03*	.58
Incidents 1st 30 days	.15	.08	3.30	.07	1.16

* $p < .05$. ** $p < .01$.

Additionally, Table 4 shows that five variables achieved odds ratios of 1.20 or greater and all were associated with higher risk of re-arrest within 365 days. Living in Bexar County as compared to the other counties, African American ethnicity as compared to Hispanic or Anglo ethnicity, having drugs and assault as the classifying offense compared to all other offenses, and having a greater number of felony referrals increased the risk by factors of 1.43, 1.41, 1.25, 1.23, and 1.20 respectively.

Discussion

The difference in the employment rates for RIO participants at 180 days and 365 days could be due to several parole requirements. One factor could be that at 180 days on parole status, a youth may be required to engage in an activity other than employment. Often, youths returning to the community must complete other parole requirements, such as finishing a GED, specialized treatment for sex offending or chemical dependency, or meet the requirement of performing community service before they could go to work. Additionally, being of Hispanic ancestry increased the likelihood of employment at 365 days on parole status. With respect to Hispanic socio-cultural values, work is viewed as an essential part of their make-up and status within the community. This may account for their higher employment rate.

Two predictor variables were significantly related to the likelihood of not being employed at 180 days and 365 days; African American ethnicity and having a chemical dependency need. These results are consistent with research that shows that unemployment among African American teens is higher than among white, including Hispanic youth. According to the U.S. Department of Labor, Bureau of Labor Statistics Report (2005), 32.6% of African American youth between the ages of 16-19 years were unemployed as compared to 13.3% of White youth (including Hispanics) of the same age group. This is evidence of the high rate of unemployment among African American youth and the difficulty that these youths face in gaining employment.

With respect to having a chemical dependency need and the likelihood of not being employed at 180 days and 365 days, Vander Waal, McBride, Terry and Van Buren (2001) in a report for the National Institute of Justice stated, "In many communities, the majority of juveniles currently entering the justice system are serious drug users" (p. 32). Other research indicates that juvenile drug use is related to recurring, chronic, and violent delinquency that continues well into adulthood. Juvenile drug use is also strongly related to poor health, deteriorating family relationships, worsening school performance, and other social and psychological problems. Chemically dependent youth who receive poor

treatment or no treatment at all could be more likely to continue offending and thereby decrease the likelihood of entering the workforce.

A trend was also noted for lowered odds of employment at 180 days for those who were younger at first referral and for youth who lived in Travis County (Austin). Youth that were referred at a lower age could return to school rather than enter employment because of their age at release. The Texas Compulsory School Law mandates that school age children must attend school until their 18th birthday unless they have achieved a high school diploma or a GED. With respect to the lower odds of employment for youth living in Travis County, it could be that more youth are returning to school to complete high school or to enroll in some type of post secondary educational opportunity. Travis County, traditionally, has had a relatively well educated workforce. It is a center for technology and research, particularly in microchip manufacturing and software development. Seven universities and colleges are located in the area and feed these industries as well as state, county and local government. Furthermore, there are a number of community based youth serving organizations, all of which place youth in high school diploma programs, GED programs, and occupational skills training programs.

With regard to the predictive model for recidivism at 180 days, living in Tarrant County, having a greater number of felony referrals, and having no previous mental health treatment significantly increased the likelihood of re-arrest. Travis County residents were significantly less likely to be re-arrested at 180 days. Surprisingly, a greater number of adjudications also evidenced a trend toward less re-arrest incidence. Odds ratios indicated that youth with a chemical dependency treatment and those whose classifying offense was drugs, assault, or burglary had between 1.23 and 1.36 greater chance of re-arrest within 180 days, although these factors were not individually statistically significant.

The final regression for recidivism at 365 days indicated that African American ethnicity, having a chemical dependency need, younger age at first referral, and a greater number of felony referrals all significantly raised the probability of re-arrest. However, the indicators that significantly decreased the probability were having had previous sexual offender or mental health treatment, and unexpectedly, a greater number of violent referrals. Trends were also noted that increased the likelihood of re-arrest, specifically, living in Bexar County and having a greater number of incident reports, while Hispanic ethnicity decreased the odds. Odds ratios indicated that the risk of re-arrest at 365 days increased by factors of 1.43, 1.41, 1.25, 1.23, and 1.20 respectively for Bexar County residents, African American youth, those with a classifying offense of drugs and assault, and youth with a greater number of felony referrals.

Recommendations

While it is important for juvenile justice practitioners or all youth serving professionals to develop strategies that prevent juvenile offending, equal attention must be paid to the development of rehabilitative programs that prepare youthful offenders to enter adulthood with the skills necessary for them to be happy, well adjusted, and pro-social members of society. This research points out the relatively recent emergence of career development strategies for juvenile offenders as well as the promising results of these programs. Unfortunately, it also clearly demonstrates that career development programming is still not a priority in many juvenile agencies. Hopefully, this research will generate new knowledge with respect to the rehabilitative qualities of career development as well as cause policymakers to advocate for more occupational skills programs and legislators to fund more of these programs.

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Male and Female Juvenile Sex Offenders: Examining Recidivism Rates as Adults

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Abstract

Previous research has examined that for some youth who offend, it may predicate a lifetime of continued and escalating deviance; yet few researchers have specifically focused on youth who commit sexual offenses in regard to desistance or continuance into their adulthood. This study relied on 122 juvenile male and 61 juvenile female sex offenders who appeared on the Texas sex offender registry in April of 2001. The cohort was followed for an average of 4.25 years after they became an adult. Results showed that although 61% of the male and 46% of the female offenders were arrested during adulthood, less than 20% of male or female offenders were arrested for either an assaultive or sexual offense. The results of a Cox Regression analysis also showed that the younger someone commits their first sex offense the more likely they would be arrested as an adult for *some* type of offense. Due to the small number of offenders who were re-arrested for sex offenses, critical variables that distinguished those who continued such offending could not be examined. For juveniles who committed sex offenses, the stakes were high as it could have resulted in a decade of public registration. The implications of the results are discussed in light of recent sweeping legislation.

Several recent studies have focused on recidivism rates of juvenile sex offenders (see Hagan, King, & Patros, 1994; Kahn & Chambers, 1991; Miner, Siekert, & Ackland, 1997; Rasmussen, 1999; Schram, Milloy, & Rowe, 1991; Smith & Monastersky, 1986). However, only a few have specifically focused on continuance or desistance of sexual offending during adulthood (Sipe, Jensen, & Everett, 1998). In regard to continuance or desistance of sexual offending, prior research has found that many adult sex offenders began in their adolescence (Abel, Mittelman, & Becker, 1985; Groth, Longo, & McFadin, 1982); thus indicating that early intervention is essential to prevent juveniles from continuing offending into their adulthood. Prior research has also shown a potential for young sex offenders to respond well to treatment (see Becker & Hunter, 1997).

Delinquent Juveniles and Recidivism

Although few studies have been conducted on reoffending among juvenile sex offenders, the issue of recidivism among juvenile offenders has been generally addressed. Wolfgang, Figlio, and Selling (1972) first assessed the link between juvenile and adult offending. Developmental theory soon emerged in studying the course of offenders. The *pathways* that offenders took

became of interest to criminologists (Kempf-Leonard, Tracy, & Howell, 2001). Developmental theory focused not only on the causes and correlates of offending, but also on the persistence and/or desistance of such offending (LeBlanc & Loeber, 1998). As noted by LeBlanc and Loeber, offending across two or more developmental stages (childhood, adolescence, and adulthood) is referred to as meta-trajectories.

Moffitt (1993) made a distinction between two groups of offenders; life-course persistent offenders and adolescence-limited offenders. Those who exhibited aggression during their childhood, escalated into delinquency and violence during their adolescence and adulthood were considered to fall into the life-course persistent offender category. Thus Moffitt (p. 679) noted "across the life course, these individuals exhibit[ed] changing manifestations of antisocial behavior: biting and hitting at the age of four, shoplifting and truancy at the age of ten, selling drugs and stealing cars at age sixteen, robbery and rape at age twenty-two, and fraud and child abuse at age thirty."

However, those who engaged in violent acts only during their adolescence were known as adolescence-limited offenders. This group of offenders customarily did not demonstrate early onset criminal behavior as the life-course persistent offenders, but rather began in early adolescent years and ceased after early adulthood. Subsequent research has indicated the existence of such a group of offenders (Kempf, 1988; Nagin, Farrington, & Moffitt, 1995). Moreover, it has been noted that those who began offending early (early-starters) were more likely to have had serious and persistent offending (Krohn, Thornberry, Rivera, & LeBlanc, 2001).

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Developmental theory sought to understand the origins of offending, which differed from traditional theories of criminality. Traditional theories typically compared groups of criminals to non-criminals whereas developmental theory followed the life course of offenders (Tracy & Kempf-Leonard, 1996). While offense specialization has been found among offenders who committed serious crimes involving weapons, status offenses, and those who had co-offenders, offense specialization has not been assessed specifically for sex offenders (Tracy & Kempf-Leonard); hence, this area of research merits attention.

Adult rapists and child molesters usually began acting out sexually at an early age. Additionally, for some, there was a progression of non-contact sexual crimes during adolescence, such as voyeurism, exhibitionism, and compulsive masturbation, manifested into a more serious mental illness. At least one out of every three violent adult sexual offenders displayed some evidence of progression from *nuisance* crimes to more serious sexual crimes as adults. It becomes imperative, therefore, to identify those at risk when they are young (Longo & Groth, 1983).

Therefore, we know that many adult sex offenders began offending early (Longo & Groth, 1983). Yet we also know many juvenile sex offenders desist such offenses after they reach adulthood (Becker, Cunningham-Rathner, & Kaplan, 1987).

Juvenile Sex Offenders and General Recidivism

Several studies have assessed juvenile sex offenders in regard to re-arrests for any type of subsequent crime. Many have shown moderate rates of re-arrests (i.e., approximately 35%). For example, in Waite et al.'s (2005) study of 256 juvenile sex offenders, 39% were re-arrested over a ten-year period. Similarly, in a study of 139 offenders, 35% were charged with another offense during a two to 10 year follow-up while they were still adolescents and into their adulthood (Worling & Curwen, 2000). In Smith and Monastersky's (1986) study of 112 offenders followed for approximately two years, it was found that 35% were charged with another non-sexual offense. In Miner's (2002) study of 86 juvenile sex offenders, re-arrest rates were assessed from a few months to 6.5 years (average 4.3 years). The results showed that 47% were arrested for a non-sexual offense. Nonetheless, many of these studies were limited in that they did not distinguish between re-arrests during adolescence or adulthood and typically included arrests during both developmental periods.

Juvenile Sex Offenders and Sexual Recidivism

While moderate degrees of non-sexual arrests were reported, the rate of sexual recidivism was substantially lower—typically less than 20%. In Worling and Curwen's (2000) study, 13% were charged with another sex

offense; the subjects were followed on average for six years (2 to 10-year range). In Waite et al.'s (2005) study, only 5% were re-arrested for a sexual offense during a 10-year follow-up period. In addition, Smith and Monastersky's (1986) reported a sexual recidivism rate of 14%.

While there are studies reporting higher rates of recidivism, it has been noted that such studies included high risk or samples outside the United States (e.g., Långström, 2004; Långström & Grann, 2000; Parks & Bard, 2006). Another study, for example, reported a sexual reoffending rate of 37% (Rubinstein, Yeager, Yeager, Goodstein, & Lewis, 1993).

A relatively low rate of sexual recidivism has been reported among studies following juveniles only during their adolescence. For instance, in one study only juvenile convictions were measured and it was found that of the 170 juvenile sex offenders in the sample, 14% were convicted for another sexual offense (Rasmussen, 1999). Another study reported 4% of 75 juvenile sex offenders were charged with a subsequent sex offense as a juvenile (Prentky, Harris, & Righthand, 2000).

Recidivism across Trajectories

Central to the identification of characteristics of this population of sex offenders is their likelihood of continued offending during their adulthood. Many juveniles who sexually offend are merely *experimenters* and will not continue the behavior into their adulthood. It has also been suggested that juveniles usually took one of three possible patterns: 1) commits no further crimes, including sex offenses; 2) commits both sexual offenses and other offenses; and 3) commits sexual offenses only and develops a paraphilic arousal pattern (Becker et al., 1987). Research conducted by Parks and Bard (2006, p. 319) also contributed to the conclusion that "most adolescents who sexually offend do not continue offending into adulthood."

Sipe et al. (1998) focused on juvenile sex offenders after they became adults; and found 9.7% of 164 juvenile sex offenders were re-arrested for a sexual offense. In comparison to juvenile offenders who were nonsexual, having an arrest for a sexual offense (lewd conduct) was significantly related to an arrest for a sexual offense as an adult.

Vandiver (2006) also focused on a group of juvenile sex offenders after they reached adulthood. In her study of 300 juvenile male sex offenders, only 13 were re-arrested for another sex offense during a three to six year follow-up period. The number of those re-arrested was so low that an analysis could not have been performed to identify factors to predict sexual recidivism.

Another study also measuring adult arrests, yet relying on convictions, reported 18% of 100 juvenile sex offenders being convicted of another sexual offense (Hagan, Gust-Brey, Cho, & Dow, 2001). When relying on less sensitive measures (i.e., incarceration rates), the

numbers decreased; 3% of 36 juvenile sex offenders were subsequently incarcerated for sex offenses committed as adults (Brannon & Troyer, 1995).

Nisbet, Wilson, and Smallbone's (2004) study of 303 adolescent sex offenders revealed that approximately 25% received further convictions prior to reaching age of adulthood (18 in Australia), while nine percent came to the attention of criminal justice authorities for a sexual offense after reaching adulthood. Rubinstein et al. (1993), assessed recidivism for an eight-year period of their adulthood. They reported that among the 19 subjects only 37% recidivated. It has been suggested, though, that this sample was extremely assaultive and that the results most likely could not be generalized to all juvenile sex offenders (Sipe et al., 1998).

Juvenile Sex Offenders Compared to Juvenile Offenders

Several studies have compared recidivism rates of juvenile sex offenders to juveniles (who were not arrested for a sex offense). For instance, studies have reported juvenile delinquents committing non-sexual offenses were significantly less likely than juvenile delinquents committing sexual offenses to be later arrested for a sexual offense (see Hagan et al., 2001; Rubinstein et al., 1993). In fact, in Rubinstein et al.'s study, of the 19 of the sexually abusive youths, seven (37%) were arrested as an adult for sexual assault compared to only six of the 58 (10%) of the youths who committed violent non-sexual offenses. Also notable, was the fact that only those who committed sexual offenses as a youth later committed *multiple* sexual offenses as an adult.

Factors Critical to Sexual Recidivism

Prior research has focused on many different factors as potential predictors of future sexual recidivism. However, for juvenile sex offenders the results, at best, were not sufficient. Many studies have produced inconsistent findings for various factors. Some of the factors explored as potential predictors have included age of victim, sex of victim, offender-victim relationship, and prior sexual victimization (Richardson, Kelly, Bhate, & Graham, 1997).

The age of the victim is a critical factor. For example, in one study, juvenile sex offenders with child victims recidivated at twice the rate of those with peer/adult victims (Boyd as cited in Parks & Bard, 2006). Furthermore, those with peer/adult victims had a higher rate of general recidivism. Similar results were not found with other studies (e.g., Hagan et al., 2001; Nisbet et al., 2004). In an effort to fill the gap in knowledge regarding this key variable, Parks and Bard found among a group of 156 juvenile male sex offenders, that those who had both child victims and peer/adult victims (mixed group) were more likely than the child only vic-

tim group and the peer/adult only victim group to have higher risk scores, yet they did not exhibit higher rates of recidivism.

In regard to victim sex, it has been found that those with a male victim are 3.5 times more likely to recidivate sexually than those offenders without a male victim (Långström & Grann, 2000). Similarly, Smith and Monastersky (1986) also reported that having a male victim was associated with sexual recidivism. Conversely, Rasmussen (1999) found that the number of female victims correlated with sexual recidivism.

The offender-victim relationship has also been examined as a possible critical variable to predict future sexual recidivism. For example, Långström (2002) found that having a stranger victim positively correlated with committing additional sexual offenses. Nonetheless, in a previous study-albeit a smaller sample-having a stranger victim was not significantly related to sexual recidivism.

Richardson et al. (1997) made an important distinction between child molesters who had been and not been abused as children. The researchers concluded that child molesters and rapists who experienced early onset abuse within or outside the family were more likely to begin offending at an early age, as well as having a greater risk of re-offending in adulthood. Prior abuse, although not included in the present study, appears to be a critical variable.

Females and Recidivism

The literature addressing juvenile sexual offending and recidivism trajectories has focused almost solely on male samples (see Miner, 2002; Waite et al., 2005; Worling, 2001) with minimal attention afforded to female cohorts. As such, the data on adolescent sexual offense recidivism has been generalized almost exclusively to male offenders. For example, sexual recidivism research by Långström and Grann (2000) included 44 males and only two females. Similarly, Kahn's and Chamber's (1991) two-year follow-up of adolescent sex offenders utilized a 20:1 ratio of males to females. Although it has been established that juvenile female offenders comprised a very small portion of sexual abusers (see Johnson, 1989), it is crucial to note that offenses committed by females, particularly adolescents, were often not reported to the police and were difficult to prosecute (Hetherington, 1999). The Federal Bureau of Investigation (FBI) estimated that juvenile girls accounted for only 60 of the 14,924 (less than 1%) rape perpetrators reported to the police in 2005. Additionally, girls only accounted for 1,000 of the 48,112 (2%) other sexual offenses committed by juveniles (U.S. Department of Justice, 2005). These numbers, while piling in comparison to their male counterparts, are still substantial enough to warrant further inquiry.

This study focuses on males and females who were arrested for a sex offense when they were juveniles and

assesses their arrest patterns after they became adults for: 1) sexual; 2) assaultive; and 3) all offenses. Male and female differences in offending patterns could provide much needed information to practitioners who work with such offenders. Differences in offending patterns would suggest different causes for engaging in such behavior. This would lead to the most appropriate formal response and/or sanction, which could lead to better treatment and fewer victims.

Method

Participants

All of the registered female sex offenders were included in this analysis ($N = 61$). For each female, two males were individually matched to her year of birth and race ($n = 122$). Her matched male, also born in 1980, may have been arrested for a sex offense in 1998, making him an adult (18 years of age) at the time of his sex arrest. Thus, some of the matched males in the juvenile sample were adults at the time of arrest. This occurred in 10 cases; eight males were 18 years of age and two were 19 years of age at the time of arrest. Ten of the juveniles, therefore, were processed as adults.

Given that the male offenders outnumbered female offenders, a matched sample of juvenile male sex offenders were included. A list was generated of all of the males that had the same year of birth and race and from that list, two subjects were randomly chosen.

The male offenders ranged in age from 11 to 19 years of age, with an average age of 14.82 ($SD = 1.9$), while the female offenders had an age range at the time of arrest from 11 to 17 years, with an average age of 14.16. Additionally, a larger percentage of the female offenders compared to the male offenders were in the youngest category, 11- to 13-years-old (49% compared to 32%). 49.2% of the male and female offenders ($n=62$; $n=31$, respectively) were Caucasian and 50.8% of the male and female offenders ($n=60$; $n=30$, respectively) were African American. Records from the sex offender registry did not indicate offender ethnicity. For example,

if an offender was Latino/a, depending on which jurisdiction he or she was arrested, they would have been recorded as a Caucasian or African American offender.

Procedure

The data were collected over an extended period of time, retrieved in April of 2001 and included all registered sex offenders in Texas. Female sex offenders who were juveniles at the time of the arrest were included ($N=61$) along with a matched sample, two male sex offenders for each female ($n=122$). The 2:1 ratio was chosen due to the large number of juvenile males available.

Data were collected from the sex offender registry and the cohort's criminal history reports. The second part of data collection was collected approximately seven years later in August 2008. This included accessing the cohort's criminal history reports again. The length of time they were followed ranged from less than one month to 11.4 years with an average time of 4.25 years. For those who were re-arrested, the time followed was calculated from each person's 17th birthday to the time of their first arrest. For those who were not re-arrested, the time followed was calculated from each person's 17th birthday until August 25, 2008, the date the histories were retrieved.

Results

Offense of Arrest

The 61 females had 66 sexual offenses recorded in the sex offender registry data; five of the females had two offenses (see Table 1). The sample of 122 juvenile males had 144 sex offenses. Slightly more than 100 ($n = 102$; 84%) of these juveniles were arrested for only one offense, while 20 (16%) were arrested for more than one offense. The number of arrests for sex offenses ranged from one to four. For the analysis, only the primary offense was included.

Table 1.
Offense of Arrest for Juvenile Male and Female Sex Offenders

Primary Offense	Male ($n = 122$)		Female ($N = 61$)	
	Number	Percent	Number	Percent
Aggravated Sexual Assault	31	51.0	60	49.0
Indecency with Child	26	43.0	43	35.0
Sexual Assault	4	7.0	17	14.0
Court Board Ordered & Burglary	0	0.0	2	2.0
<i>Total</i>	61	101	122	100

Sex offenders were defined in accordance with federal and state definitions of who is required to register. Within these guidelines (see Texas Code of Criminal Procedure, 2007), the definitions of what is considered a sexual offense were outlined. Anyone (adult or juvenile) convicted of the following crimes are required to register as a sex offender: indecency with a child; sexual assault; aggravated sexual assault; prohibited sexual conduct; compelling prostitution; sexual performance by a child; possessions or promotion of child pornography; aggravated kidnapping if the defendant committed the offense with intent to violate or abuse the victim sexually; burglary with intent to commit indecency with a child, sexual assault, aggravated sexual assault, prohibited sexual conduct, or aggravated kidnapping; second conviction of indecent exposure; a conviction for an attempt; conspiracy or solicitation of any of the above listed crimes; a deferred adjudication for any of the above listed crimes (as of 1992); conviction under the laws of another state or Uniform Code of Military Justice (2008) for any of the above crimes; and second conviction under the law of another state or Uniform Code of Military Justice for an offense containing elements similar to the elements of indecent exposure.

Sex offenders are required to register for 10 years; however, violent sex offenders are required to register until their death. Violent sex offenders may petition to have their registration obligations dismissed if a licensed psychiatrist stated that the person was not likely to commit another sexual offense and there was reason to believe he/she would no longer be a threat to the community.

Victim Characteristics

The victims ranged in age from infancy to 17 years of age for males, with an average victim age of 8.53 years ($SD = 3.779$), while female victims' ages ranged from 2-73 years. The victim who was 73 years old was considered an outlier in the analysis and, when included, the average victim age for females was 8.8 years ($SD = 9.101$). When the outlier was excluded from analysis, this reduced the average victim age to 7.73 ($SD = 3.635$). The difference in victim age between female and male offenders was not significant ($t(179) = 1.35, p = .179$). Although this comparison of the average victim age did not show significance, a chi-square analysis did show a marginal significance after victim age was collapsed categorically ($\chi^2 = 6.1, df = 1, p = .078$). This indicated that female offenders were *slightly more* likely than male offender to have victims who were in the infancy category (0 - 5) and *slightly less* likely to have victims in the adolescent category (12 - 17 years). However, provided that the significance level was marginal at best, we could not be certain that these characteristics yield a high degree of external validity of juvenile sex offenders in general.

To avoid violating the assumptions of chi-square analysis, victim's age was collapsed into four categories: 0-5, 6-11, 12-17, and those older than 17 years of age. Similar age categories have been previously utilized (Saunders & Awad, 1991; Vandiver & Kercher, 2004; Worling, 1995). For the survival analysis, the collapsed categories were not used.

While most of the variables had no missing data, the relationship between the offender and victim was missing for 67 cases. This was determined through missing value analysis; the number of cases was significant, meaning the type of randomness was missing *not* at random and, therefore, making imputation methods a nonviable option. This variable, therefore, was not included in the bivariate and Cox regression.

Re-arrests for Sexual, Assaultive, and General Offenses

The follow-up period revealed several notable recidivism patterns for both male and female offenders for any, assaultive, and sexual arrests during adulthood (see Table 2). Male offenders were significantly more likely than female offenders to be arrested for any type of offense during adulthood ($\chi^2 = 3.6, df = 1, p < .05$). Additionally, a t-test revealed the number of arrests significantly differed for male and female offenders ($t(158) = 2.116, p < .05$). On average, male offenders had 1.9 re-arrests compared to 1.2 re-arrests for female offenders. 60% of the male offenders compared to only 46% of the females were arrested for some type of offense during adulthood. Of those who were re-arrested during adulthood, the arrest occurred as quickly as three weeks after their 17th birthday to as long as 17.8 years later. The average time to arrest occurred two years, four months and three weeks after their 17th birthday.

Although few of the offenders were arrested for assaultive offenses during adulthood, male offenders were significantly more likely than female offenders to be re-arrested for assaultive offenses (16% compared to 5%; $\chi^2 = 4.4, df = 1, p < .05$). Most of the offenses included either assault or aggravated assault (see Table 3). In addition, a t-test of the number of assaultive crimes was significant between sexes ($t(158) = 2.741, p < .05$). Although the average number of assaultive offenses for male and female offenders was less than one, females on average had closer to no assaultive arrests (.2 compared to .04 assaultive arrests on average). Only three female offenders compared to 18 male offenders were arrested for an assaultive offense during the follow-up time.

Moreover, only thirteen male and three female offenders were re-arrested for another sexual offense; no significant differences, therefore, were found ($\chi^2 = 1.678, df = 1, p > .05$). The number of offenders who were re-arrested for another sexual offense is relatively low - perhaps if the sample/population were larger, the difference may be significant.

Table 2.
Rearrests for Male and Female Juvenile Sex Offenders as Adults

Type of Re-arrest	Male (n = 122)		Female (N = 61)	
	Frequency	Percent	Frequency	Percent
Any Re-arrest*	74	60.7	28	45.9
Assaultive Re-arrest*	19	15.6	3	4.9
Sexual Re-arrest	13	10.7	3	4.9

*p<.05

Table 3.
Assaultive Re-arrest Offenses

Offense	Male (n = 122)		Female (N = 61)	
	Number	Percent	Number	Percent
No Assaultive Offense	103	84.4	58	95.1
Assault	8	6.4	0	0.0
Aggravated Assault	4	3.2	1	1.6
Deadly Conduct	2	1.6		
Abandon or Endanger	0	0	1	1.6
Child - Imminent Danger				
Terroristic Threat	3	2.5	0	0.0
Robbery	1	.8	1	1.6
Injury to Child	1	.8		0.0
Elderly-Disabled				
<i>Total</i>	122	100	61	100

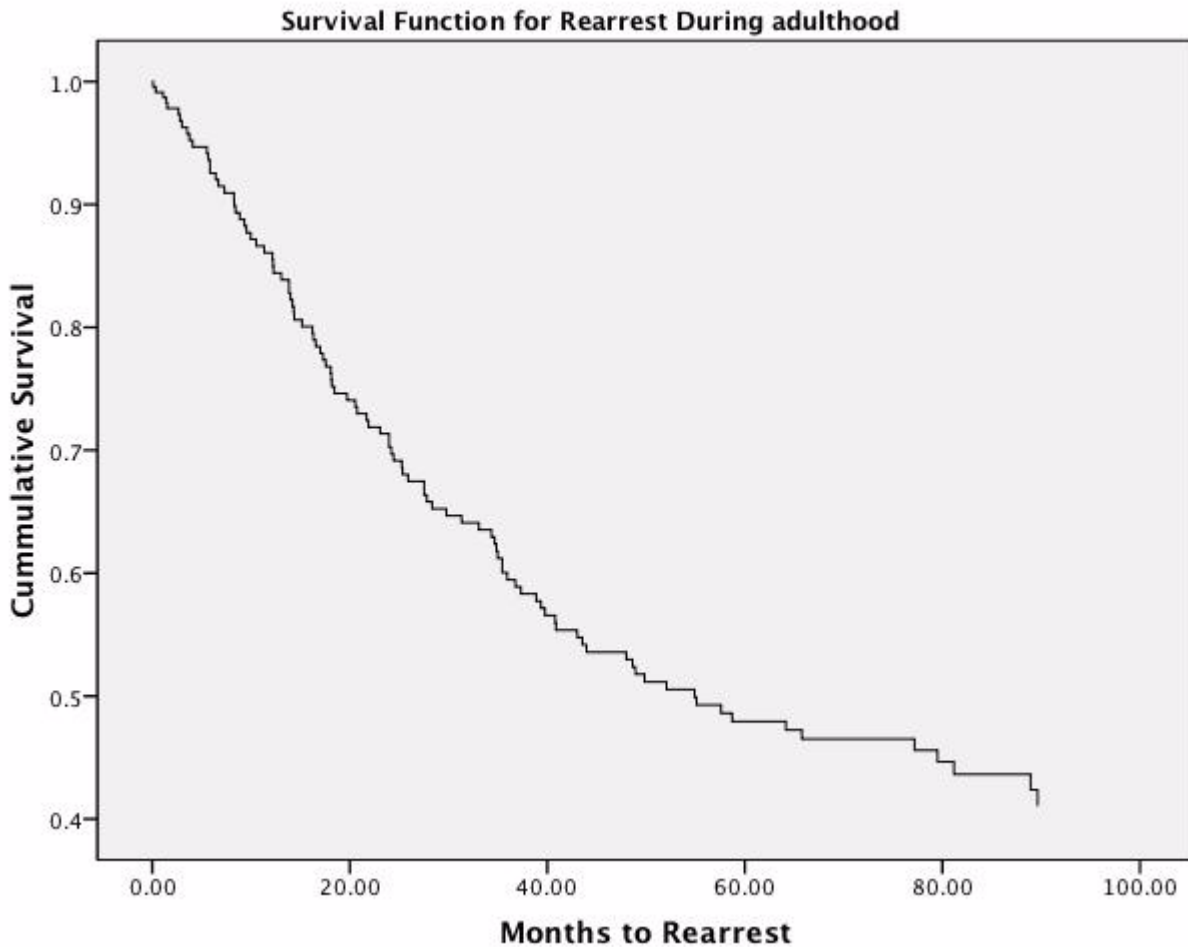
*Due to rounding, totals may not equal 100%

Factors Related to Adult Recidivism

For the purpose of estimating factors that relate to adult recidivism for any offense, Cox Regression was employed with the dependent variable set to arrest for any offense (yes/no). The time variable was identified as the number of months from the person's 17th birthday to the date of first arrest, if they were arrested. For those not arrested, the time included the number of months from the person's 17th birthday to the date the criminal histories were retrieved (August 25, 2008). The independent variables included sex of the offender, age of arrest for sexual offense (that led to registering as a sex offender), victim age, victim sex, and the type of sex offense the person was arrested for initially. Unfortunately, due to a large amount of missing data, the rela-

tionship between the sex offender and his/her victim could not be included.

The variables in the model were entered using backward Wald, which began with all of the variables in the model and deleted the least significant variable. The process was repeated as many times as necessary. For this model, the -2 Log Likelihood yielded a value of 955.432, which indicated an adequate fit of the data to the model. The chi-square value for the last iteration yielded 13.3 ($p < .01$). Only one variable, however, was significantly related to adult arrest-age at arrest for the initial sexual offense that led to the sex offender registry requirement. Thus, when all of the variables were in the models neither the victim's sex, victim's age, nor the sex of the offender significantly correlated with general recidivism during adulthood.



Also notable was the survival function generated (see Figure 1). The curve estimate revealed that risk for general re-arrests was relatively equal, despite the length of time it had been since they turned 17 years old. Hence, the risk was not necessarily greater when they were 17 compared to 18, 19, et cetera. There did appear to be some plateau effect around month 70 (around age 23) and 80, yet the effect was relatively slight; perhaps additional follow-up on this cohort and comparisons to other samples could show some aging out occurring around the age of 23.

Discussion

The present study reveals that although sexual recidivism is low, general recidivism was relatively high. 60% of male and 46% of female offenders were arrested for at least one offense during the follow-up period. The number of arrests for assaultive and sexual offenses for male and female offenders, however, was relatively low. Only 16% of male and 5% of female offenders were arrested for an assaultive offense and

only 11% of male and 5% of female offenders were arrested for a sexual offense during adulthood. Thus, while close to half of the male and females were arrested for another offense, few of those were for assaultive or sexual offenses. This corroborates previous findings (e.g., Nisbet et al., 2004; Vandiver, 2006). Therefore, it is evident critical intervention needs to occur. Hence, it is known that when a juvenile commits a sex offense, the chances are high they will be arrested as an adult. Yet, the type of intervention needed would require a closer examination at this population and a comparison of interventions and identification of critical factors that would lead to success. A specific sex offense treatment based program may not be viable for all juveniles who commit sex offenses, given that their likely progression will include general offenses and not sex offender specific offenses.

In regard to policy implications, results from this study and previous findings cast doubt on whether juveniles should be required to register as sex offenders. It has been reported that at least 38 states include juveniles under their sex offender registration laws (Caldwell, 2002). Sex offender laws, in general, are the result of a

public demand (Walker, 2007), rather than empirical-based evidence. These laws view juvenile sex offenders as a population that presents a sustained risk for continued sexual offending. As some states consider drastic measures such as lifetime registration for juveniles, the predicated belief that once a sex offender, always a sex offender must be closely examined. The results from this research, corroborating with prior literature, indicated that a substantial portion of juvenile sex offenders would continue delinquent behavior, yet few would continue *sexual* offending. In terms of policy development, such findings support policies of excluding rather than including juvenile sex offenders on public registries or at least determining registration on a case-by-case decision.

With regards to distinguishing between juvenile sex offenders who continue sexually offending and those who do not, the results from this study along with previous research (Caldwell, 2002), has cast doubt on achieving this goal. Although many well-developed tools exist that effectively predict risk scores for adult sex offenders, such tools for juveniles have not received the same level of empirical validation. The results of this research show that juveniles who offend for any type of offense during their adulthood do not differ from those who do not offend on several key characteristics: victim age; sex of the offender; and relationship of victim to offender. All of these variables have been key variables used in adult sex offender risk assessment, yet this research, with the exception of age of arrest, did not distinguish re-offenders from non re-offenders. It should be noted that other researchers have developed risk assessment tools, such as the J-SOAP and ERASOR. For J-SOAP, however, the resulting score does not link to reoffending estimate (Worling, 2004). ERASOR, also, was not developed to predict long term recidivism risks (Worling).

In regard to the practical application of this finding, it suggests a need to rely more heavily on the treating therapists rather than formal measurement tools, which are often relied upon as treatment tools for adult sex offenders. This means that the judgment and experience of those who treat juvenile sex offenders are critical. Perhaps providing more open forums for those who treat juvenile sex offenders to be able to share cases may benefit the treatment providers, and therefore, the offender.

Despite the low numbers of girls and women who commit sexual offenses, some attention has been drawn to this rather rare group of offenders and integrated in this study was their re-arrest patterns in comparison to boys/men. This research showed that the re-arrest rates for girls/women were substantially lower in comparison to their boy/men counterparts. Despite a statistically significant difference between boys and girls with respect

to sexual recidivism, the percentage of the girls (5%) was approximately half of the boys (11%) in this sample. Again, the purpose of the sex offender registries were to forewarn families of potential predators in their neighborhoods, including those with a relatively low rate of recidivism may cast the net too wide.

One of the focuses of this study was to examine a group of juvenile sex offenders from a developmental perspective; critical to this integrated theory is the concept of pathways. More specifically, those who began committing crimes early (early-starters) were more likely to persist across trajectories (i.e., into their adulthood). Whether this is true specifically for sex offenders had not been previously tested. Female offenders were significantly more likely to be arrested at a younger age than male offenders. Previous research, for example, has found prior abuse to be a critical variable-especially for girls. Girls who sexually offend are more likely to have experienced abuse and more behavioral outbursts than male offenders (Mathews, Hunter, & Vuz, 1997). Perhaps the pathway for girls to sexually offend is different for boys. Further research is needed to focus specifically on how abuse affects boys and girls.

For those who are treating juvenile female sex offenders, it is critical to assess factors that led to and/or correlated with sexual offending. For example, if females who sexually offend are more likely than their male counterparts to have experienced sexual victimization (as the literature suggest), then this issue needs to be addressed during treatment, as it is likely this will cause some level of emotional distress.

This study was limited in that it relied only on one geographical area (Texas) and its records. It is possible, for example, that some of the subjects committed crimes in other states and therefore, were not included. It was also limited in the sample/population size. Furthermore, utilizing re-arrest as a criterion for recidivism is not without criticism. For instance, one researcher noted re-arrests and reconviction were considered "fairly insensitive" criteria because many offenders may be able to avoid detection (Caldwell, 2002, p. 294). Longo and Groth (1983) add that the low rate of sexual recidivism customarily found in juvenile offender groups may be due to the low visibility of juveniles involved in sexual crimes as compared to adults. The results, nonetheless, will provide information about a known sample of juvenile sex offenders who are re-arrested; it will provide a baseline of knowledge from which to build upon for future efforts utilizing more sensitive measures. Many of the findings in this study will need to be validated in subsequent studies relying on a different sample, especially given that the policy implications would yield a substantial change in the direction of current policy towards this group of offenders.

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An Examination of Delinquency and Victimization Using Social Bonding and Routine Activities

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Abstract

The study examined the relationship between juvenile delinquency and juvenile victimization using an integration of social bond theory and routine activities perspectives. Data were obtained from the Monitoring the Future (MTF) series of surveys given annually to a nationally representative sample of students. The MTF survey is from the 2005 group of surveys given to tenth grade students. The version of the survey was administered to 5,577 tenth grade students. This research examined the link between a student's commitment to school and guardianship. Specifically, it determined the amount of delinquency to which a student is involved and the extent of victimization experienced. Results showed that students who had stronger bonds to school were less likely to be involved in delinquency and were less likely to experience victimization than students who had weaker bonds to school. Current research supported an integration of social bond and routine activities/lifestyle theories and also provided more empirical evidence to support the anecdotal beliefs concerning the relationship between delinquency and victimization.

According to the Uniform Crime Report (UCR), youth under the age of 18 made up 15.3% arrests in 2005; this report was compiled annually by the Federal Bureau of Investigation (FBI) (2005) using aggregated data from local police departments. Youth under 18 years were most likely to be arrested for larceny-theft, for which they made up 25.7% arrests in 2005. According to the 2005 UCR, youth under 18 accounted for almost 16% (15.8%) arrests for violent crime and 26% of property crime arrests in the United States (FBI).

If a few more years are added to the age range, to encompass more of the crime prone years, the percentages of arrests would be even more astounding. Moreover, should the age group be expanded to those persons under the age of 25, the percent of arrests would more than double (from 15.3% to 44.3%) (FBI, 2005). People under the age of 25 accounted for nearly 44.5% arrests for violent crime and 53.9% for property crime (FBI).

Turning attention to victimization data for 2005, it was quite clear that the victimization rate for persons under 25 was much higher than the rate for persons over 25. The victimization rate increases as does the age range. The rate of victimization for youth 12 to 15 years of age was 44.0 per 1,000. For adolescents 16 to 19 years of age the victimization rate increased slightly to 44.2 per 1,000. The victimization rate increased again for individuals between 20 and 24 years of age (46.9 per 1,000). After this age group, the victimization rate decreased drastically to 23.6 per 1,000 for persons aged 25 to 34 years (Sourcebook of Criminal Justice Statistics, 2005).

One of the main theories that will be used to examine offending behavior is the social bond theory. Hirs-

chi's (1969) theory is different from previous theories, because he examined the reasons for people to refrain from committing a crime. According to Hirschi, there are four major aspects to the social bond; attachment, commitment, involvement, and belief. The element of attachment referred to ties that individuals formed with other people.

Commitment referred to how invested a person was in conventional society. Involvement meant how much a person participated in conventional activities. While the last element of the social bond, belief, referred to the acceptance of conventional values and norms of society. According to the theory, when these elements of the social bond do not exist or are weakened individuals are free to commit deviant acts (Hirschi).

Several studies have found support for social bond theory. For example, an examination of the relationship between the elements of attachment and commitment and delinquency has shown the strongest support (see Costello & Vowell, 1999; Huebner & Betts, 2002; Junger & Marshall, 1997; Krohn & Massey, 1980; Rankin & Kern, 1994; Wiatrowski, Griswold, & Roberts, 1981). Results of studies that have examined the elements of involvement and belief have been less supportive (Agnew, 1993; Huebner & Betts; Jenkins, 1997).

Social bond theory has more explicative power when it comes to less serious forms of delinquency (Agnew, 1985; Friedman & Rosenbaum, 1988; Krohn & Massey, 1980). Krohn and Massey noted that it would be expected that social bond theory would be better at explaining minor forms of delinquency. The assumption that social bond is more explicative of less serious crime, also reinforces why it should be used to explain

youth crimes, as youth are most often arrested for non-violent crime (FBI, 2005).

The data used in this study included many questions regarding school, thus it is important to review previous research that had examined the elements of the social bond in regards to school. In her article, Jenkins (1997) used social bond theory to examine crime and misconduct in school, as well as school non-attendance. Results from a self report survey administered to 754 seventh and eighth grade students showed that the effect of each component of the social bond (i.e., attachment to school, commitment to school, involvement in school, and belief in school) varied by type of delinquency. She reported that of the four elements of the social bond the commitment element explained the most variance for all three types of delinquency measured. For school crime (i.e., drug and alcohol use, stealing from students or teachers, and damaging school property), both commitment and belief had strong inverse effects, while attachment and involvement had no significant effect (Jenkins).

For school non-attendance (i.e., cutting classes or school, being late for classes or school), Jenkins (1997) found that all of the social bond elements, except involvement, had inverse effects, but that commitment and attachment had the strongest effects. All of the elements, except involvement, are inversely related to school misconduct (i.e., frequently talking in class, using inappropriate language, cheating), but again the strongest relationship was with commitment. Jenkins found that the involvement element of the social bond had no significant effect on any of the three forms of delinquency; hence she agreed with Krohn and Massey (1980) that involvement should be part of the commitment element.

There has been a wide variety of studies which examined routine activities. Studies have looked at victimization on college campuses (Tewksbury & Mustaine, 2003), victimization in rural areas (Spano & Nagy, 2005), and victimization in different countries (Bennett, 1991; Bjarnason, Sigurdardottier, & Thorlindsson, 1999; Messner, Lu, Zhang, & Liu, 2007). All have found support for the routine activities approach to explaining victimization risks. Support has been found for the routine activities theory for both property crime (Bennett; Cohen & Felson, 1979; Messner et al.) and violent crime (Schreck & Fisher, 2004; Schreck, Wright, & Miller, 2002).

Age, gender, and race have been identified as predictors that have a powerful effect on victimization rates (Hindelang, Gottfredson, Garofalo, 1978). Males more so than females, had a greater chance of being victimized and juveniles had a greater chance of being victimized than adults (Lauritsen, Sampson, & Laub, 1991; Esbensen & Huizinga, 1991; Sampson & Lauritsen, 1990). These same demographic characteristics have also been found to predict delinquency (Hindelang et al., 1978). There is a co-accordance to juvenile delinquency and victimization (Esbensen & Huizinga; Lauritsen et al.; Peterson, Taylor, & Esbensen, 2004). Based

on these findings it is evident that the more we learn about delinquency, the more we know about victimization and vice versa.

Lauritsen et al. (1991) examined the effect of delinquency on criminal victimization among teenagers. They "consider[ed] three areas in examining the risk factors for victimization among juveniles and young adults: (1) demographic factors; (2) involvement in delinquent lifestyles; [and] (3) physical proximity to crime and social disorder" (p. 267). Therefore, Lauritsen et al. found that involvement in delinquent lifestyles increased a youth's risk of victimization.

Esbensen and Huizinga (1991) also examined how an adolescent's involvement in delinquent activities affected his/her risk of victimization. In their study of youth aged 11 to 15 years, who were living in high-risk neighborhoods, it was found that gender, age, family living arrangement, and type of neighborhood disorganization had a significant effect on the risk of victimization. They also reported that males were more likely to report being victimized than females. The youngest members of the study, those who were 11 years of age, reported less victimization than older members of the sample. Adolescents living with a single parent reported the highest levels of victimization. Those adolescents living in Black neighborhoods, which were "characterized by a high proportion of Blacks, high concentration of single-parent families, and high density per household" reported the highest level of personal victimization (Esbensen and Huizinga, p. 209). Adolescents living in dense neighborhoods, characterized by "high density, high rates of mobility, and a high concentration of single people," reported the highest levels of property victimization (p. 209). Esbensen and Huizinga found slight differences in reported rates of victimization by race, but these differences did not reach the level of statistical significance.

Based on the similarities that were found between offending and victimization, Schreck and Fisher (2004, p. 1023) used the routine activities/lifestyle theories as a framework to examine the roles that family and peers played in the violent victimization of adolescents. The routine activities/lifestyle theory suggests that, "the convergence in time and space of motivated offenders, attractive targets, and ineffective guardianship determines the risk of victimization." Schreck and Fisher hypothesized that a strong attachment to one's family made adolescents less likely to be victimized as the guardianship was more effective. It was also hypothesized that relationships with delinquent peers would increase an adolescent's risk of victimization. Using data from the National Longitudinal Study of Adolescent Health, Schreck and Fisher found that family climate and a parent's feelings toward his/her child were the strongest factors associated with victimization. Additionally, adolescents living in homes that had a warm climate and positive parental feelings were least likely to be victimized. They also found that relating with delinquent peers increased an adolescent's risk of being

victimization. Thus, due to the association that had been found between offending and victimization, it has been suggested that theories of crime and theories of victimization should be integrated to provide a better understanding of both crime and victimization (Miethe & Meier, 1990).

Integrated theories usually attempt to explain crime by combining assumptions or variables from two or more existing theories. The reasoning behind integrating theories was that each theory only explained a small part of the causes of crime and that if these theories were combined then it was possible to get a more complete picture of the causes (Lilly, Cullen, and Ball, 2002). According to Lilly et al., there were two main problems with integrating theories. The first was that the use of integrating theories assumed that integrating elements of existing theories was a faster way of advancing criminological knowledge than having competing perspectives. The second major problem was that this would have led to "sloppy theorizing," (p. 243), where theorists would simply choose elements of theories that they liked, but which did not necessarily combine well.

Based on the assumptions of the theories used in this paper there were three hypotheses made. The first, based on the social bond theory, was that students with higher scores on the commitment index would be less involved in delinquency. The second hypothesis, based on routine activities theory, was that students who have a low score on the routine activities index would have a lower score on the victimization index. The third hypothesis involves the integration of the theories being used. It was hypothesized that students with higher scores on the commitment index would have lower scores on the victimization index.

This research examined the link between delinquency and victimization by attempting to use an integration of social bond theory and routine activities theory. The focus was on the effect of guardianship on both victimization and delinquency. Guardianship was measured by how much time students spent away from their parents. This was a fairly narrow definition of the aspect of guardianship, however, as the research used secondary data it was constrained by the questions asked in the Monitoring the Future (MTF) survey. Prior research has shown that teenagers who spent more time participating in leisure activities outside of their homes reported higher levels of violent victimization (Schreck & Fisher, 2004; Schreck et al., 2002).

Method

Participants

Teachers and students from participating schools were visited by a local representative from the Survey Research Center two weeks prior to the administration date. At this first meeting potential participants were given a flyer which would tell them and their parents

about the study. Either active or passive parental consent was used depending on the policies of the school district. The actual administration of the survey was carried out by the local representative along with assistants. Questionnaires were usually administered during a regular class period in the classrooms that had been chosen to participate. For a more detailed explanation of the sampling procedures used in the MTF series see Johnston, Bachman, O'Malley, and Schulenberg (2005).

Instrument

The questions on the MTF survey were combined into four different indices, commitment, delinquency, guardianship, and victimization. Since this study used a secondary data set the indices must be made from questions that were included in the MTF survey.

The commitment to school index was a five item index consisting of the following questions: 1) in the last year how often did you enjoy being in school; 2) in the last year how often did you try your best in school; 3) in the last year how often did you find your school work interesting; 4) how likely is it that you will graduate from high school; and 5) how likely is it that you will go to college. The scores on the commitment index ranged from 5 to 23. A score of 5 on the index corresponded with students who had the least amount of commitment to school. For instance, students who scored a 5 reported that they never enjoyed being in school, they never tried their best, they never found school work interesting, and that they definitely would not graduate from high school or go to college. The opposite was reported for those students that had a score of 23 on the index; thus these students had a high commitment to school.

The delinquency index included ten questions about students' drug use in the twelve months prior to the survey. Drugs included in the index were alcohol, marijuana, LSD, crack, cocaine, amphetamines, heroin, methamphetamines, and inhalants. The scores on the delinquency scale ranged from 10 to 55. A score of 10 on the index indicated that the students reported that they had not used any of the drugs in the previous twelve months. The highest score possible for the delinquency index was a 70 which would have meant that a student would have reported using every type of drug in the index forty or more times in the previous twelve months.

The guardianship index for the current research contained five items that pertained to the amount of time students spent away from their parents. This was not the most comprehensive measure of the guardianship aspect of the routine activities/lifestyle theory, but given the questions asked on the MTF survey it was the most comprehensive index that could be created from the data. Questions included in the index were: 1) how often do your parents allow you to go out with friends on school nights; 2) how often do you go to parties; 3) how

often do you go to the mall; 4) how often do you get together with friends informally in your free time; and 5) how often do you go to the movies. Scores on this index ranged from 5 to 24. A score of 5 on this index indicated that students reported that their parents never let them go out on school nights, they never went to parties, the mall, or the movies, and that they never got together with their friends informally in their free time. A score of 24 on this index meant that students reported that their parents allowed them to go out on school nights often, they got to go to parties, the mall, and movies almost daily, and that they got together with their friends informally in their free time almost daily.

The victimization index consisted of seven items regarding victimization experiences at school during the twelve months prior to taking the survey. The experiences that were asked included: having something worth less than \$50.00 stolen; having something worth more than \$50.00 stolen; having property deliberately damaged; being injured with a weapon; being injured without a weapon; being threatened with a weapon; and being threatened without a weapon. The scores ranged from 7 to 35. A score of 5 indicated that a student reported that they had not experienced any victimization at school during the previous twelve months. A score of 35 indicated that a student reported that they had experienced all the types of victimization five or more times in the previous twelve months.

Design and Procedure

Data from the MTF series (2005) were used in this study. The MTF study is a series of annual surveys that are administered by the University of Michigan's Institute for Social Research to a nationally representative sample of eighth, tenth, and twelfth grade students in both public and private schools. While there are many different versions of the MTF survey administered each year, this study used one version of the survey given to 5,577 tenth grade students in 2005.

The MTF series used a multistage sampling design to obtain the nationally representative sample. The first stage on the sampling design was the selection of geographic areas. In the second stage, schools within the chosen geographic areas were selected. The last stage was the selection of students from participating schools to respond to the survey. In large schools, a random sample of about 350 students were selected to participate in the study, while in smaller schools with less than 350 students all students were asked to participate.

Results

The majority of the students who responded to this survey were White females over the age of 16 years that lived in a town or city. The demographic characteristics reported for the students in this sample were consistent with the demographic characteristics presented in the

2000 US Census. For example, females accounted for 50.8% of the students surveyed, while males accounted for 49.2%, which was consistent with the US population in 2000 (50.9% females and 49.1% males) (United States Census Bureau, 2000). The racial composition of this sample was also fairly consistent with the racial composition of the United States in 2000. The racial composition of the students in this sample was 16.6% Black, 69.3% White, and 14.1% Hispanic, while the racial composition of the United States in 2000 was 12.3% Black, 75.1% White, and 12.5% Hispanic (United States Census Bureau).

A series of One-Way ANOVA were conducted to determine whether there was a significant effect between any of the indices used (commitment, delinquency, guardianship, and victimization) and the demographic characteristics of the respondents. The results of the One-Way ANOVAs are presented in Table 1.

Table 1.
Results of One-Way ANOVA's

Variables Compared	df	F	Sig.
Commitment/Age	1	8.130	.004
Delinquency/Age	1	7.263	.007
Guardianship/Age	1	2.683	.102
Victimization/Age	1	.006	.938
Commitment/Gender	1	143.254	.000
Delinquency/Gender	1	2.682	.102
Guardianship/Gender	1	9.556	.002
Victimization/Gender	1	72.166	.000
Commitment/Race	2	9.000	.000
Delinquency/Race	2	24.387	.000
Guardianship/Race	2	.708	.907
Victimization/Race	2	1.693	.184
Commitment/Live	2	13.357	.000
Delinquency/Live	2	1.571	.208
Guardianship/Live	2	15.805	.000
Victimization/Live	2	4.978	.007

Students who responded to the survey were 16 years or older and slightly more likely to have had a higher score on the delinquency index while those students under 16 years were more committed to attending school. Guardianship and victimization did not have a significant relationship with age. This finding may be explained by the fact that all of the student's in the sample were fairly close in age and that age was dichotomized into under and over 16 years.

There was a significant relationship found between gender and all of the variables, except delinquency, for

this sample of students. Females tended to be more committed to school, with a mean score on the commitment index of 17.84 as compared at the mean score for males of 16.97. Females also tended to experience less victimization, with a mean score of 9.03 on the victimization index as compared to the mean score of 9.93 for males.

Johnston et al. (2005) recommended interpreting racial differences in the MTF surveys with caution. The combination of a stratified clustered sample and the fact that on any given survey Blacks and Hispanics were only represented by about 700 respondents led to a greater margin of sampling error for Blacks and Hispanics than for Whites. The findings presented were based on the race variable because the racial composition of the students sampled closely mirrored that of the general population. The two indices used to measure social bond theory (commitment and delinquency) were found to be significantly related to race, while the two indices that were used to measure the routine activities/lifestyle theory (guardianship and victimization) were not found to be significantly related to race. In this sample, Black students were most committed to school, with a mean score of 17.76 on the commitment index, followed by Hispanic and White students with mean scores of 17.39 and 17.31, respectively. The results from the analysis of delinquency and race were to be expected given the results of the relationship between race and commitment to school. Black students reported the least amount of delinquency (mean score of 11.76), followed by Hispanic and White students (with mean scores of 12.66 and 12.95, respectively).

The Pearson Correlation Coefficient (r) was calculated for each of the relationships that were being examined. The results of the analysis are shown in Table 2. These results were all in the directions that were expected, but were not as strong as expected. There was an inverse correlation between commitment to school and self-reported delinquency ($-.295$), which supported the assumption of social bond theory. The correlation between guardianship and victimization ($.033$) supported the routine activities/lifestyle theory; in that, as the amount of time spent away from parents increased so would the amount of victimization reported. There was also an inverse correlation between commitment to school and victimization ($-.188$) and a positive correlation between guardianship and self-reported delinquency ($.234$).

Table 2.
Pearson Correlation Coefficient Results for Variables

	f	%	f	%
Commitment		$-.295^*$		$-.188$
Delinquency	$-.295^*$		$.234^*$	
Guardianship		$.234^*$		$.033^{**}$
Victimization	$-.188$		$.033^{**}$	

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

Almost 40% (39.8%) of the students who responded to the MTF survey used in this research scored a 10 on the delinquency index; in that, they had not used any of the drugs in the index in the previous twelve months. Slightly more than 40% (41.6%) of students scored a 7 on the victimization index; thus in the previous twelve months they had not experienced any of the victimization experiences that were included in the index.

The commitment index was found to have a significant relationship with all four of the demographic variables used (age, gender, race, and where live). The other three indices were each only significantly related to two of the demographic variables. There was an inverse correlation between commitment and delinquency; in that, that as students became more committed to school, they became less likely to be involved in delinquency. There was a positive correlation between guardianship and victimization; that is, students who spent more time away from their parents reported more victimization. There was also an inverse correlation between commitment and victimization; therefore, the more committed a student was to school the less likely they were to be victimized. The correlation between guardianship and delinquency was positive, meaning that as students spent more time away from their parents they also reported more delinquency.

Discussion

The current research examined the effects that commitment to school and guardianship may have had on delinquency and victimization for tenth grade students in a nationally representative survey. Parental involvement, specifically in a child's education, cannot be overlooked as an important protective factor. An education consultant, Kunjufu (1995) noted that as the age of the child increased the involvement of parent(s) decreased. Thus, the very ages when more risk factors converge are the time when parental involvement in school activities reduces (Greene and Penn, 2006). The results of this study were generally consistent with previous literature. Although the relationships were not as strong as some previous literature indicated, they do provide support for both theories used and for the integration of the theories.

As the commitment to school increases delinquency decreases, as well as the likelihood of crime victimization. Contrary to traditional findings about race, commitment to school, and delinquency, Blacks showed the highest commitment to school as well as the least amount of delinquency. This supports a belief that commitment to school can overcome social ills, risk-factors and participation in delinquency activities. Thus the key to reduce delinquency as well as victimization is an increased affiliation, association, and bonding to school.

Logically, the commitment to school becomes such an important protective factor because of the volume of time and influence that peers, teachers, and school have

on the youth. Further research on the prevention of juvenile delinquency should also incorporate victimization research. Prevention strategies such as restorative justice provide promising tools because they infuse the victim, community and the offender into the process. In the current adversarial justice system, little is done to restore to a condition before the offense took place, which provides support that demographically speaking offenders are often victims. By reducing one, a profound reduction can be made on the other. The results are significant for the at-risk youth practitioner because now he/she is in the business of delinquency prevention as well as victim services.

This study examined one aspect of each theory (commitment for social bond theory and guardianship for routine activities/lifestyle theory). In order to fully test the integration theory to better understand juvenile offending and victimization, there is a need for a more comprehensive study in the future that can look at the other variables of each theory.

One of the limitations to social bond theory is that it does not examine the order between delinquency and weak bonds. In other words, Hirschi's (1969) study did not look at whether the boys committed delinquent acts because they had weak social bonds, or if their social bonds were weakened because they committed delinquent acts. This study has a similar limitation, in that, based on the questions in the MTF survey, it could not be determined if delinquency occurred before or after victimization. The MTF survey that was used was a cross-sectional study. Future research should use longitudinal data in an attempt to examine the temporal process of the variables. A further limitation is that the MTF surveys were administered to students during the school day. Students who had dropped out of school or who were absent on the day the survey was administered were not included. Nevertheless, Johnston et al. (2005) noted that the drop out rate among tenth grade students was less than 5% and absent students comprised 12% of the tenth graders in 2005. Hence, the number of students not participating in the survey did not have had a significant effect on the results.

Conclusion

It was found that as a student's commitment to school increased, his/her likelihood of being involved in delinquent acts decreased as does his/her chances of being victimized. The amount of time students spend away from his/her parents increased so did his/her likelihood of being victimized and involved in delinquent acts. The correlations between victimization and commitment to school and guardianship and self-reported delinquency supported the idea that the routine activities and social bond theories could be used together to better understand crime and victimization among adolescents. This is a fruitful area of research for future studies.

The correlations between delinquency and victimization that are supported by this research have impor-

tant implications for prevention policies. Prevention programs should be viewed as ways to prevent both delinquency and victimization. Social bond theory would seem to support programs that attempt to improve an individual's bonds, especially attachment to family and school and commitment to school. Social bond theory also emphasizes the importance of early intervention programs to help strengthen family bonds.

Routine activity theory proposes that delinquency could be prevented by reducing the opportunity to commit delinquent acts. The routine activity theory has posited that in order for delinquency to occur, motivated offenders must come in contact with attractive targets that lacked guardianship. This argument was supported by the current research, because juveniles who spent more time away from their parents were more likely to report being victimized. Therefore, it would seem that programs that could increase the ties of a juvenile to their family or some other entity that could act as a guardian would be supported by the routine activity theory.

The types of programs that would be supported by the two theories used in this research are similar. Hence evidence that the integration of these two theories would prove useful in preventing or reducing both delinquency and victimization. It is important that youth practitioners understand that they play a dual role. Not only could their programs help prevent or reduce delinquency, but they could also help prevent or reduce victimization.

For the juvenile justice practitioner as well as anyone who works with children and youth, this study is important because they reinforce the need for mentorship, after school, and summer programs. These initiatives by themselves are important, but when reinforced with strong parental participation the protective factors against juvenile delinquency as well as victimization could be maximized. Policy at the local and national level should not only focus on juvenile delinquency prevention but also victimization. With the combination of these two elements the stakeholder net is widened in order to make juvenile delinquency prevention, a public safety and public health issue that requires national attention.

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A Proposed Program to Reduce Risk of Recidivism for First Time Juvenile Sex Offenders

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Abstract

This proposed pilot project is intended for juvenile sex offenders and their parents. The program aims to guide juvenile sex offenders into successful reintegration into their communities, and prevent re-incarceration/relapse of juveniles released from juvenile correctional facilities and the family court using a multi-systemic approach. A developmental evaluation is proposed to be conducted from the behavioral objectives approach to measure the effectiveness of a 12-months pilot program.

Sex offenses committed by juveniles are now being taken more seriously, despite evident professional denial in some quarters. The notion that juveniles are merely curious or experimenting when engaged in deviant sexual activities has been dispelled (Becker, Cunningham-Rathner, & Kaplan, 1986). Juvenile's perpetrated sexual aggression has been a problem of growing concern in Jamaica over the last decade. Between 1999 and 2005, two hundred and ten of the 765 criminal acts reported to the police were rape and carnal abuse that were committed by juveniles aged 12-15 years. All these cases involved adolescent male perpetrators. Moreover, according to these reports, the majority of these perpetrators were from the inner city areas where gang rape was very popular (Jamaica Police Statistics Department, 2006).

By legal definitions, sexually abusive behavior, whether juvenile or adults, is contact that is sexual in nature and that occurs without consent, without equality, and is a result of coercion, manipulation, game-playing, or deception (Shaw, 1999; Longo, 2002). Sexual abuse is widely recognized as a significant problem, and the scope may be underestimated considering that not all offenses are reported, due to cultural practices and acceptable social behavior. A significant amount of research has been conducted on juvenile sex offenders, which have revealed that these individuals are unique individuals. Perhaps the only statement that is reliably true for all juvenile sex offenders is that the traits and progression of behavior may vary tremendously from one individual to another (Fehrenbach, Smith, Monastersky, & Deisher, 1986; Johnson, 1988; Berliner, 1995). According to Fehrenbach et al., Johnson, and Berliner, nine of ten juvenile sex offenders were male. They also noted that juvenile sex offenders often committed their

first sexual offense before age 15 and at times even before the age of 12 years. They further posited that juvenile sex offenders were found in every socioeconomic class and every racial, ethnic, religious, and cultural group.

The Center for Sex Offender Management (CSOM) (1999) reported that children who sexually abused were far more likely than the general population to have been physically, sexually, or otherwise abused. The Center further indicated that the minority of sexually abusive youths also had deviant sexual arousal and interest patterns. These arousal and interest patterns were recurrent and intense, and related directly to the nature of the sexual behavior problem (e.g., sexual arousal to young children). The research indicated that between 40% and 80% of sexually abusive youths have themselves been sexually abused. Additionally, it was reported that the following were other common traits found among juvenile sex offenders: a) difficulties with impulse control and judgment; b) high rates of learning disabilities and academic dysfunction (30-60%); and c) mental illness (up to 80% have a diagnosable psychiatric disorder).

According to the professionals within the field of psychology, a history of victimization is virtually universal among juvenile sex offenders. For instance, experienced therapist, Robert Longo (2001) noted that as he thought back to the thousands of sex offenders he had interviewed and the hundreds he had treated, he could not think of many cases in which a patient did not have some history of abuse, neglect, family dysfunction, or some form of maltreatment within his or her history.

Research on adult sex offenders has shown that many, perhaps the majority, began committing sex crime in their teenage years or earlier (e.g., Groth, Longo, & McFadin, 1982; Longo & McFadin, 1981). More specifically, Ryan and Lane (1997) suggested that many child molestations may be committed by those under the age of 18 years. They believed that although this was evident, some juveniles were often prevented or assisted in

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avoiding responsibility for sexually offensive/abusive behavior through definitions of their behavior as exploratory in nature; hence it was believed that such behavior would pass with age. However, more recent research on sexual offending and etiology has highlighted the danger in making such an assumption (e.g., Aljazireh, 1993). Aljazireh highlighted that research has demonstrated that patterns of sexual offending often began in early adolescence and that many offenders showed a progression to more serious sexual assaults as adults.

Researchers have indicated that juveniles who had committed sex offenses were a heterogeneous mix. In that, they differed according to victim and offense characteristics and a wide range of variables, which included types of offending behaviors, histories of child maltreatment, sexual knowledge and experiences, academic and cognitive functioning, and mental health issues (Knight & Prentky, 1993; Weinrott, 1996). Redding (2002) indicated that a number of clinical studies have pointed to the presence of males and prepubescent youths who had engaged in sexual abusive behavior.

Fehrenbach et al. (1986) and Allard-Dansereau, Haley, Hamane, and Bernard-Bonnin (1997) postulated that sex offenses vary and may include behaviors sometimes treated lightly, such as repeated obscene phone calls, exposure, frotteurism (rubbing against another against his or her will), and other forms of harassment. Nevertheless, they suggested that most adolescent offenses appeared to be more serious, and adolescents were actually more likely to attempt intercourse and other forms of genital-genital or genital-anal contact than adult offenders. They further noted that the age of a perpetrator should not be ignored, and neither should less severe behaviors be dismissed. For example, exposure (flashing), touching over the clothes, obscene, pseudo-mature language, possession of pornography, and boys-will-be-boys type coercion (Fehrenbach et al.; Allard-Dansereau et al.). To some researchers, all these signs may be signs of an abuser or potential abuser (e.g., Johnson, 1988; Allard-Dansereau et al.). According to Knight and Prentky (1993), juveniles with sexual behavioral problem have significant deficit in social competence. Furthermore, Katz (1990) and Miner and Cimmins (1995) have argued that inadequate social skills, poor peer relationships, and social isolations were among the difficulties identified in these juveniles.

Ryan (2000) noted that there were two types of offenders. Referring to clinical observation and empirical research, he indicated that, as is the case for adult sexual offenders, juvenile sexual offenders would fall into two categories; those who sexually abused children and those who victimized peers and adults. From the time juvenile sex offending was first identified as a serious problem, there have been tremendous advances in the treatments available to juveniles who sexually offend. In 1983, there were only 20 programs in North America for juvenile sex offenders, while today there are well over 1,000 worldwide (Ryan). The majority of these juvenile sexual offender treatment programs have

generally adhered to a traditional adult sex offender model. These standard interventions would include the teaching of relapse prevention and the sexual abuse cycle, empathy training, anger management, social and interpersonal skills training, cognitive restructuring, assertiveness training, journaling, and sex education (Hunter & Longo, 2004).

Nonetheless, despite the recognition given to intervention as being helpful to juvenile sex offenders and as an important component in the prevention of future sexual offenses, additional research on the effectiveness of different methods are required (Hunter & Longo, 2004). According to Hunter (2000), treatment could be a difficult hurdle for juvenile sex offenders. In one study, he noted that as many as 50% of youths entering a community-based treatment program were expelled during the first year of participation; most often for failure to comply with attendance requirements or therapeutic directives. He further argued that the failure to complete treatment may increase a youth's chances of re-offending.

A common belief about juvenile sexual offenders is that even after treatment most will offend again. However, Hunter & Longo (2004), citing the research literature, found no compelling evidence to suggest that the majority of juvenile sex offenders was likely to become adult sex offenders. They maintained that juveniles who engaged in sexual aggression frequently ceased such behavior by the time they reached adulthood. They further argued that juveniles who participated in treatment programs had sexual recidivism rates that range between 7% and 13% over follow-up periods of two to five years (Hunter & Longo). Accordingly, Alexander (1999) noted that youth participating in treatment had lower recidivism rates than either adult sex offenders or untreated juvenile sex offenders. In an analysis of eight separate studies, Alexander found that while adults had re-offend rates that averaged 13%, juveniles who participated in offense-specific treatment had a recidivism rate that averaged 7.1% in a 3-5 year follow-up. Worling (2001), in a large-scale study that examined data from across Canada, found that only 5% of youths who underwent treatment were charged with another sexual offense within six years, compared to 18% of the youths who did not participate in treatment (Ryan, 2000).

Although intervention has been credited as successfully working with juvenile sex offenders, Ryan and Lane (1997) posited that the history of treatment approaches used to help individuals troubled by deviant sexual deviation have had varying effects. They implied that these treatment approaches, which were underpinned by theories, have received substantial attention in the last century. Moreover, this served as a basis for understanding both the history of the ways in which people thought about sexual offending, as well as the history of current approaches to treatment (Ryan & Lane). Conversely, Holin & Howells (1991) maintained that theoretical approaches to sexual offending behavior have progressed from ideas based entirely upon theoret-

ical assumptions to theories founded on the findings of research that was data driven.

Intervention should be underpinned by theories. There are a number of theories that have been proposed to explain why some juveniles sexually abuse others. Although there is no clear and simple formula for how this happens, as sexual offending behaviors are extremely complex. For this intervention program several theories are applicable. These include social learning, social process, social bond, and the system theory.

Social Learning Theory

Social learning theory postulated that sexually abusive behavior in children was linked to many factors, including exposure to sexuality and/or violence, early childhood experiences (sexual victimization), exposure to child pornography and advertising, substance abuse, heightened arousal to children, and exposure to aggressive role models/family violence (Ryan & Lane, 1997). According to Ryan and Lane (1991), in terms of juveniles sexual offending, a child's early experience of sexual arousal may have occurred in the context of an explorative relationship, including victimization. Additionally, Ryan & Lane (1991) suggested that a child having experienced those early encounters would most likely continue that behavior unless otherwise directed.

The social bond theory, as posited by Travis Hirschi (1969), linked the onset of delinquency to the weakening of the ties that attached individuals to society. Hirschi maintained that the stronger the bond to others and society, the less likely one would commit a crime. On the other hand, the weaker the bond the more likely an individual would commit a crime. This social bond is developed early in one's life and plays a significant role in later life, which is well supported by a number of empirically validated and reliable studies (e.g., Van Voorhis, Cullen, Mathers, Garner, 1998; Wiatrowski, Griswold, and Roberts, 1981). Hirschi identified four elements of this bond: attachment; commitment; involvement; and belief. These are acquired through the socialization process throughout one's life. Thus he believed that juveniles, who have experienced strong bonding and attachment with their parents, as well as positive peer relationships, were less likely to display delinquent behavior.

Developmental theories in explaining sexual offending, in terms of early childhood experience, family and the environment, focused on factors such as family trauma, physical and sexual abuse, neglect, undefined family roles and boundaries, and exposure to sexually traumatic experiences or explicit materials that were believed to contribute to the development of sexual offending behavior (Ryan & Lane 1991). However, from the systems theory perspective the juvenile who had committed sexual offenses was not seen in a compartmentalized way, but as a whole package. Therefore, in trying to address the problems of juvenile sex offend-

ers, a holistic/multi-systemic approach is quite appropriate, in which all the systems that are impacting their behavior must be considered, while at the same time networking with the social agencies that could create positive change.

This has become a growing concern for Human Rights groups and the society as a whole. One example of gang rape that was committed in an urban inner city area in 2003 was highlighted by the Guardian newspaper which reported on events that took place on International Women's Day. As reported by the newspaper, Kelly (name was changed,) who was participating in a forum held on International Women's Day in Jamaica 2004, disclosed that she was gang raped when she was 13-years-old. As she recalled the incident she spoke inaudibly and ripped a bus ticket into pieces. Kelly stated, "It was lunchtime. I was with three of my girlfriends; we'd gone home to change clothes" (George, 2004, p. 12). It was reported that five boys about the age of 15- 16 years went to her door and said they wanted to "battery" - have sex with - one of Kelly's friends (p. 12). Kelly continued with her story, "I couldn't allow that, so I slammed the door. They kicked it in and beat me unconscious. My friends ran away" (p. 12). George reported that when Kelly woke up, it was obvious she had been raped. Kelly further stated, "I went to the hospital and got a report of my injuries and told the police. But I don't know what they did about it" (p. 12).

Having read Kelly's unfortunate incident, along with the reports coming out of the family court and the Police Rape Unit, and being a social worker and teacher it was evident that juvenile sex offenders needed to be educated regarding the legal, moral and health issues when they became involved in illegal sexual activities. With this conviction, it is being proposed that a pilot project be developed that would address juvenile sex offenders. This program would be called the *Second Chance for Children*. It would be designed specifically to address male juveniles who had committed sexual acts and would also include their parents. It would utilize the Multi-systemic Treatment (MST) technique which is an intensive family and community-based treatment that addresses the multiple determinants of serious antisocial behavior in juvenile offenders. The strategies for this program would include educational and treatment strategies. The proposed project would be conducted over a three year period with the focus mainly on training and service learning.

Program Phases

The *Second Chance for Children* is designed to specifically address male juveniles who have committed sexual acts, and their parents, utilizing the MST technique. This technique is an intensive family-and community-based treatment that addresses the multiple determinants of serious antisocial behavior in juvenile offenders. MST views individuals as being ingrained

within a complex network of interconnected systems that encompass individuals, family, and extra familial (peers, school, community) factors. The strategies would

Program Philosophy

Second Chance for Children intervention philosophy is founded in clearly defined common concepts. Therefore, this intervention program believes that: a) intervention using the MST technique is a dynamic process which would assist the individual, family and community in reducing deviant juvenile behavior; and b) education is an organized effort that facilitates changes in the individual's knowledge, understanding, skills attitudes and beliefs.

Program Goals and Objectives

The program's goals would be unique to each group of individuals. These goals are to help juveniles (boys) who have committed sexual acts to: reduce their risk of re-offending through acceptance of responsibility for their behavior; and acquirement of new information, and cognitive and behavior change through intervention. The goals for parents would include helping them to improve their parenting skills and to develop better interaction with their children through education and training.

There are ten clearly defined objectives proposed for this program. These are: to use an integrated approach in treating juvenile offenders; to get juveniles who have committed sexual offenses to understand how their behavior impacts other persons; to get participants to learn and understand that they cannot impose their behaviors on others; to learn appropriate skills regarding sexual contact; to improve pro-social skills in juveniles; to provide an opportunity for juveniles to express their emotional needs; to improve coping strategies and strengthen social bonds; to work with juvenile sex offenders in their local setting; to improve decision making skills; to educate juveniles on health issues resulting from promiscuity; to inform juveniles of the legal implication of illegal sexual acts; to bridge relationships; and to improve parenting skills.

Program Specifics

The program would target the following groups of individuals: juvenile who had been referred by the juvenile justice and family court systems, the schools, child care and protection service, and/or parents; and parents of juveniles who had been referred. Also, it would be community based and would begin as a pilot with the intention to expand, based on the evaluations that would be conducted on an ongoing basis during and after the pilot phase. Along with juveniles and their parents, teachers (school), probation officers, motivational

speakers, counselors, and human service practitioners would also be involved in the training sessions.

Eligibility and Staff

The participants eligible for the program would include male juvenile sex offenders between the ages of 12-18. These juvenile sex offenders would be first time offenders. The parents would be those of the juvenile sex offenders who were participating in the program. The staff would include a program director, a program coordinator, two trained counselors, a community social worker, and resource persons (special motivational speakers).

Location and Community Profile

The project would be located in the Rema Community Center, which is in close proximity to three high schools, two junior high schools and three primary schools. This location is selected based on statistical reports from the Kingston & St. Andrew juvenile and family court for the years 2000-2003, which indicated that this region of Kingston and St. Andrew had the highest incidents of sex offenses committed by juveniles (Social and Economic Survey of Jamaica, 2003).

The community of Rema and its environs are classified as a low socio-economic community, with a population of approximately 15,000 residents, with age group ranging from 0-90 years of age. The community is characterized by inadequate public facilities, substandard quality housing stock, high percentage of unemployment, and no entertainment facilities. These and other factors have contributed to the increase in the adolescent criminal population, particularly sexual offenders.

Intervention Program and Procedure

Sex offenders upon entering the program would be assessed to determine programming needs and treatment style (e.g., group counseling, individual counseling, and seminars) suitable for them. The Child and Adolescent Functional Assessment Scale (CAFAS) test would be administered as a group pre-test for the juveniles. CAFAS is a testing instrument that is most reliable in predicting recidivism with juvenile offenders (Quist & Matshazi, 2002). For the parents, a one group pre-test would also be administered.

Training Session for Juveniles. The training program would include: sex education; anger management; problem solving; conflict management; human sexuality; legal issues regarding sex offenses; and acceptance of responsibility for one's behavior, and empathy for victims. Activities to accommodate the training would be: role play; open discussions; individual and group counseling; special presentations (guest speakers); community service; and field trips (e.g., to juvenile correctional facilities) (see Appendix A). The content and

skills the juvenile would be able to attain as a result of participating in the training sessions include: building self-esteem (juveniles would learn to love and accept themselves); communication/social skills (how to interact with their peers and adults); problem solving (how to solve problems); responsibility (how to accept responsibilities); anger management (how to control their anger); human sexuality (the acceptance of one's sexuality); health issues (the consequences of having unprotected sex such as sexual transmitted diseases); and legal issues (the legal consequences of committing illegal sex acts).

Training Sessions for Parents. Two hours training sessions would be held by- weekly. Topics would focus on family life education, parenting skills, communication skills, decision making skills, time management, and building positive relationships. In addition, the program would include structured family therapy. Sessions would be conducted by trained therapists, counselors and specialists in family therapy and parenting skills. Training techniques would involve group therapy, discussion and presentations by resource persons (see Appendix B). To ensure regular attendance, parents would be given personal diaries to log all information pertaining to the training sessions. Juvenile participants would be given letters as reminders for their parents.

End of Program. In the final month of the parent's training program, there would be two combined sessions involving juveniles and their parents. The aims of these sessions would be to: observe interaction and communication patterns between and within the groups (parents and children); get a verbal feedback from both groups, regarding what they had learnt; and get parents to express openly their feelings towards their children, as well as affording the juveniles an opportunity to hear how their parents felt about them. During the final week of training for the parents, a formal evaluation would be conducted by external evaluators. In the final months of the program, the CAFAS test and an evaluation would be administered to the juveniles. This would be done as one of the means of evaluating the program. A graduating exercise would be held at the end of the program, and certificates would be awarded to students and parents who had successfully completed the training program.

Follow up Activities (Phase 2). Juvenile participants would do their two months voluntary service. The aim of this would be to have them gainfully occupied, lowering the risk of them becoming involved in deviant activities as well as providing them with the opportunity to practice some of the pro-social skills they were taught during the program. During the following months, the intervention team (counselors, social workers, probation officers) would visit with juveniles at their homes and place of voluntary service. This would help in determining how well they had adjusted, and if the intervention was meaningful. The team would meet monthly to discuss the progress of each participant, towards attaining the intervention goals. Obstacles and/or barriers would

be identified and discussed as these could affect the goal attainment of the program, as well as participants from attaining their goals. A logical model would be used to outline the steps and track the program progress at each step towards its goal.

Assessment and Evaluation

Assessment would include a clinical review, review of court documents, probation reports, family interview, and review of school records. Furthermore, paper/pen test specific to the training would be administered. A number of evaluation techniques would be used throughout the duration of the program. This would include developmental evaluation, monitoring and auditing, outcome evaluation, and summative evaluation (see Appendix C).

Developmental Evaluation. The program would be evaluated throughout the program cycle. This would be done to assess the effectiveness of the steps taken to achieve desired program outcome. It would involve the participation of the program director, the program coordinator, primary stakeholders and evaluators. Emphasis would be placed on output measures so as to allow the program director and coordinator to plan appropriately for the participants.

Monitoring and Auditing. These evaluations would be done to improve the effectiveness of the program implementation and service delivery and to guarantee that all the resources were spent in the most effective, efficient and productive way. In addition, it would help in tracking participant's involvement in the program. The decision to conduct a monitoring evaluation would allow the program director and coordinator to make appropriate decisions on a daily or weekly basis so that the program is being administered as designed and altered as necessary.

Outcome Evaluation. An outcome evaluation would also be conducted to determine if the desired changes in attitude, behavior and knowledge had been attained as a result of the intervention. Participants would be tested at the beginning and the end of the program cycle.

Summative Evaluation. This would help to determine the merit and worth of the program. The program for the juveniles would be evaluated at the end of the pilot, but the evaluation for the parents program would be conducted at the end of their program, which would be scheduled for six months. Due to the level of external funds that would be received for the project, an external evaluator would be contracted to give objectivity to the process. Using an internal evaluator could bias the process, considering that an internal person would be integrally involved in the program. The findings and recommendations would help in determining the effectiveness, continuation, expansion, and or replications at other sites. A full report presenting data, interpretation and recommendations would be presented. Moreover, the evaluation procedures would utilize particular tech-

niques, such as: focus group meetings with participants (juveniles); interviews with parents, staff members, and observers (non-participants); interview with program directors, coordinators and resource persons; and participants' surveys.

Evaluation Design

The evaluation design would be behavioral and consist of four levels. The behavioral design would be used because the focus would be on the degree to which juveniles were able to change their anti-social behavior as a result of the training received. Likewise, it would be used to determine how well parents had changed their attitude towards parenting or adjusted their parenting styles. Some of the questions that would be guiding this evaluation include whether the program was achieving its objectives and whether it was making a positive impact on the lives of participants. A behavioral performance achievement test would be conducted quarterly. Results would be compared with the behavioral objectives stated to determine if they were being achieved. The behavioral objective design would assist the director and staff in the summative decision making.

A four-level evaluation would be used as the intervention program would focus on several educational trainings that would look specifically at four levels of training outcomes; learning, recreation, behavior change, and results. The director would be interested in knowing the impact the training components had on the juveniles and their parents, in terms of the training outcomes. The evaluator would conduct a time series evaluation for the juveniles and one group pre-test and post-test evaluations for the parents.

These evaluation techniques would assist the researcher in knowing how effective the intervention program was in changing attitudes and increasing the knowledge of the juveniles and their parents. The time series design was selected particularly for the juveniles, because having the data collected before the intervention program commenced would provide baseline data for comparison with the data collected during and after the intervention. Employing this technique would provide the program director with a comprehensive knowledge of the program's effectiveness. If some goals and objectives of the program were not being met, there would be time to redefine them before the end of the program. These data would be compared during the analysis process.

Data Collection

To guarantee the validity and reliability of the evaluation findings, several collection methods would be employed (triangulation). Triangulation would be used in determining the strength of evidence in support of findings. Examples of methods to be employed would include: questionnaires; interviews; focus groups; and

observation. Two groups of ten participants and ten parents would be asked to fill out questionnaires. These participants would be selected using the simple random sampling technique. Nevertheless, for the focus group discussions, all juvenile participants would be involved, considering the small number of juveniles participating in the program. Observation would take place periodically during the life cycle of the program, and interviews would be conducted by director, staff and resource persons.

Evaluation Report

Communicating and reporting evaluation activities and findings may be considered as one of the most critical aspects of an evaluation. The format for evaluation and reporting would include: working sessions; a comprehensive written report; accompanied with an executive report that would focus primarily on the evaluation findings; and personal discussions, memos, and e-mails.

Conclusion

Working with juveniles who have committed sexual offenses may be a challenge, particularly with juveniles living in the inner cities. However, there are strategies that may help in designing effective program for the successful transition of juvenile sex offenders. These strategies include educational strategies (training sessions, seminars, and workshops), treatment strategies (cognitive therapy, family counseling, and behavior modification), intensive supervision, and risk assessment.

The Second Chance for Children intervention program would focus on juveniles ranging from 12-16 years of age and explore the treatment for male juvenile sex offenders. The dialectic psycho-educational approach that is being proposed is within the multi-systemic treatment style, which involves parents, school officials, judicial officials (probation officers), and community leaders. The program's focus on first time juvenile sex offenders would employ educational strategies, treatment strategies, intensive supervision and risk assessment in the intervention process with juveniles and their parents. Program evaluation would be conducted during and at the end of the program to determine the effectiveness of the program, with a view of it being replicated in other locations even if it has to be customized to fit that particular location.

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Appendix A

Table 1.

Training Program for Juveniles

Time	Topics	Objectives	Activities	Resource Person/s
September Week 1 Monday Refreshment will be served at the end of the orientation	Orientation	<ol style="list-style-type: none"> 1. Introduction of juveniles and their parents to the program and explain the expectation of the program. 2. Introduce juveniles and their parents to staff, and get them acquainted with each other. 	<ol style="list-style-type: none"> 1. Ice breaker sessions. 2. Introduction of staff, parents, juveniles. 3. Introduction to facilities 4. Motivational talk by a special invited guest. 	<ul style="list-style-type: none"> ♦ Program Director ♦ Program Coordinator ♦ Administrative staff ♦ Counselor ♦ Community social worker ♦ Probation officer ♦ Ministry of health representatives.
Wednesday	Orientation Cont. - Juvenile only	<ol style="list-style-type: none"> 1. Outlining of rules and regs 2. Conducting pretest 	<ul style="list-style-type: none"> ♦ Registration, presentation by program Director, and Coordinator ♦ Question and answer session. 	Program Director, and Coordinator
Thursday	Orientation Cont. - Juvenile only	Administering of pretest		Program Director, Coordinator and Administrative assistant.
September-cont. Week 2,3,4	<ol style="list-style-type: none"> 1. Relationship building. 2. Building of self-esteem. 3. Achievement test 	<ol style="list-style-type: none"> 1. .To help juvenile develop positive and trusting relationships 2. To help juveniles build high self- esteem - help them to love and accept themselves. 3. . To determine how effective the content of the lessons impact on participants behavior. 	<ul style="list-style-type: none"> ♦ Video presentation on relationship building ♦ Discussion ♦ Role play ♦ Written, short questions 	<ul style="list-style-type: none"> ♦ Program Coordinators ♦ Community social worker ♦ Participants and teachers
October	<ul style="list-style-type: none"> ♦ Developing positive attitudes. ♦ Achievement test 	<ol style="list-style-type: none"> 1. Helping juveniles to develop positive attitude 	Presentation Discussion	Motivational speakers
November	Communication/social skills	<ol style="list-style-type: none"> 1. Help juveniles to better communication skills with peers and adults. 	<ul style="list-style-type: none"> ♦ Presentation ♦ Group activities. ♦ Recreational activities. 	Teacher from community schools.
December Christmas Party	Responsibility and accountability	<ol style="list-style-type: none"> 1. To help juvenile develop a sense of responsibility. 2. To get juveniles to understand that responsibility goes along with accountability. 3. To help juvenile develop affection for others. <ul style="list-style-type: none"> ♦ To encourage socialization. ♦ To enjoy the festive season. 	<ul style="list-style-type: none"> ♦ Exchange of Christmas gifts between juvenile participants. ♦ Exchange of Pleasantries. ♦ Dining 	Resource persons-police personnel. All staff, juveniles and their families, recourse personals and specially invited guest.
January	<ol style="list-style-type: none"> 1. Dealing with fear and anxieties. 2. Achievement test. 	<ol style="list-style-type: none"> 1. Help juveniles deal help juveniles deal with their anxieties in a meaningful way 	<ul style="list-style-type: none"> ♦ Presentation ♦ Discussion 	Staff and resource person
February	<ol style="list-style-type: none"> 1. Problem solving 2. Conflict management 3. Decision making 	<ol style="list-style-type: none"> 1. Help juveniles to resolve problems without being abusive. 2. To promote the juvenile's ability to learn and make better choices. 	<ul style="list-style-type: none"> ♦ Presentation ♦ Discussion 	Personnel from the Dispute Resolution Foundation.

Table 1.
Training Program for Juveniles

Time	Topics	Objectives	Activities	Resource Person/s
March	1. Anger management. 2. Field trip 3. Achievement test	1. Help juveniles to use coping strategies when in conflict. 2. Help juveniles to understand the consequences if they continue their delinquent behavior-(incarceration)	Visit to a juvenile correction facility.	<ul style="list-style-type: none"> ♦ Program coordinator ♦ Parents ♦ Correctional staff
April	1. Human sexuality 2. Intimacy 3. Responsible sexual behavior.	1. Help juveniles to better understand about human sexuality.	Discussion	Ministry of Healthy Personals
May	1. Health issues relating to irresponsible sexual behavior 2. Achievement test	1. Help juveniles to understand the health issues associated with irresponsible sexual behavior (e.g., contracting of sexual transmitted diseases).	<ul style="list-style-type: none"> ♦ Video presentation. ♦ Discussion 	Personals from the National Family Planning Agencies.
June	1. Evaluation 2. Closing exercise	1. .To evaluate the effectiveness of the intervention 2. Closing exercise.	Verbal feedback on the program.	Staff and participants.
July-August	1. Community service	1. To keep participants meaningfully occupied, and to have them practice some of the pro-social skills they were taught.	Volunteering in government agencies.	<ul style="list-style-type: none"> ♦ Social worker ♦ Probation officers ♦ Program coordinator
September-August	1. Follow up 2. Certification for Participants who have successfully completed the two years program.	1. To determine the effect the intervention program had on participants. 2. To provide evidence that they have complied with directives from the juvenile/family court and successfully completed the program.	1. School and home visits by counselors probation officers 2. Certification exercise	<ul style="list-style-type: none"> ♦ Participants ♦ Counselor ♦ Social workers ♦ Probation officers ♦ All staff members ♦ Juveniles ♦ Parents ♦ Guest speakers and specially invited guest.

Appendix B

Table 2.

Training Program for Parents

Time	Topics	Objectives	Activities	Resource Persons
September	<ol style="list-style-type: none"> 1. Developmental stages and normal expectations (Erickson's Psychological Stages of Development) 2. Basic needs of children 3. Maslow's Hierarchy of needs 	<ol style="list-style-type: none"> 1. To help parents to understand the different stages of development their children have to go through, and the different crisis accompanying each stage 	Discussion	Psychologist and specialist in these areas
October	<ol style="list-style-type: none"> 1. Parenting skills 2. Unhealthy interpersonal relationships 3. Quality vs. Quantity time spent with children 4. Characteristics associated with positive parenting. 	<ol style="list-style-type: none"> 1. Help parents to understand the responsibility that accompanies parenting 	Discussion Verbal and video presentation	Resource persons from the parenting center
November	<ol style="list-style-type: none"> 1. Building/rebuilding relationships 	<ol style="list-style-type: none"> 1. To get parents to build positive relationships with their children 	Discussion	Resource persons from the parenting center
December	<ol style="list-style-type: none"> 1. Communication skills. 	<ol style="list-style-type: none"> 1. Help parents to develop good communication skills 	Discussion	Language and communication specialist
January	<ol style="list-style-type: none"> 1. Decision making 2. Effective/appropriate discipline 	<ol style="list-style-type: none"> 1. To help parents make the best decision for themselves and their children 2. Help parents recognize the importance of discipline vs. punishment 		Specialist in the area
February	<ol style="list-style-type: none"> 1. Social networking 2. Combine classes for juvenline and their parents <ol style="list-style-type: none"> a. Evaluation b. Post test c. Closing exercise 	<ol style="list-style-type: none"> 1. Help parents to understand the importance of social networking (agencies from which they can get help) 2. To observe interaction between parents and juveniles and parents 3. To determine how effective the training was 4. To allow participants to fell a sense of accomplishment 	Human Service Agencies will be invited to mount display and speak about their agencies- services offered will be highlighted. - Group work and open discussion	<ul style="list-style-type: none"> ♦ Personals from various Human Service Agencies. ♦ Program director and coordinator. ♦ Counselors ♦ External evaluators ♦ Parents and their families ♦ Special invited guest ♦ Representative for funding agencies, human service agencies and community members

Appendix C

Table 3.
Evaluation Types

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
C	D	A & C		C	A & D	C		C	B

KEY:

A = Developmental

B = Summative

C = Monitoring and Auditing

D = Outcome

