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Juvenile Sex Offenders: A Case Against the Legal and Clinical Status Quo

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The past two decades have seen a movement toward harsher legal sanctions and lengthy, restrictive treatment programs for sex offenders. This has not only been the case for adults, but also for juveniles who commit sex offenses. The increased length and severity of legal and clinical interventions for juvenile sex offenders appear to have resulted from three false assumptions: (1) there is an epidemic of juvenile offending, including juvenile sex offending; (2) juvenile sex offenders have more in common with adult sex offenders than with other juvenile delinquents; and (3) in the absence of sex offender-specific treatment, juvenile sex offenders are at exceptionally high risk of reoffending. The available data do not support any of the above assumptions; however, these assumptions continue to influence the treatment and legal interventions applied to juvenile sex offenders and contributed to the application of adult interventions to juvenile sex offending. In so doing, these legal and clinical interventions fail to consider the unique developmental factors that characterize adolescence, and thus may be ineffective or worse. Fortunately, a paradigm shift that acknowledges these developmental factors appears to be emerging in clinical areas of intervention, although this trend does not appear as prevalent in legal sanctions.

KEY WORDS: juvenile sex offenders; treatment; registration; community notification.

> [T]here is one thing we know to be absolutely true: Sex offenders are a very unique type of criminal. I like to say they have three very unique characteristics: They are the least likely to be cured; they are the most likely to reoffend; and they prey on the most innocent members of our society. (Shapiro, 1998, p. 117)

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The past two decades witnessed a reversal in official responses to adult sex offenders: from denying their existence, to the development of highly specific legal and clinical interventions aimed solely at this population (Finkelhor, 1995). Early and largely unsupported optimism about the "treatability" of sex offenders has been replaced by equally unsupported pessimism that sex offenders are incurable, as is eloquently stated by the Texas State senator quoted above. Consequently, legal sanctions have become harsher (e.g., longer sentences, enactment of civil commitment laws) and treatment has increased in length, intensity, and invasiveness.

This reversal in responding to sex offenders is also evident in the legal and clinical treatment of juvenile sex offenders. Society appears to have moved from a shared belief that "boys will be boys" and no special interventions for juvenile sex offenders are necessary, to a shared belief that sex offenders are "compulsive, progressive, and incurable," regardless of age, and require specialized legal and clinical interventions (Chaffin, Letourneau, & Silovsky, 2002, p. 205). Three widespread beliefs, or assumptions, appear to underlie current legal and clinical interventions with juvenile sex offenders:

1. There is an epidemic of juvenile offending that includes juvenile sexual offending;
2. Juvenile sex offenders have more in common with adult sex offenders than with other juvenile delinquents; and
3. In the absence of intensive interventions, juvenile sex offenders are at exceptionally high risk of reoffending.

This paper examines the genesis of these three beliefs; the interventions (both legal and clinical) that developed in response to these beliefs; and evidence (or lack thereof) for the effectiveness of these interventions. At the outset it should be noted that we believe researchers and practitioners to be among those who apparently hold (or held at one time) these three beliefs. Indirect indicators that researchers believed in an "epidemic" stems from the use of that term in the titles or abstracts of publications (e.g., Thomas, Holzer, & Wald, 2002; Sousa, 1999). That practitioners also believed in an epidemic of offending is suggested by the exponential increase in juvenile sex offender treatment facilities that occurred over the 1980's and through the early 1990's (National Adolescent Perpetrator Network, 1993). The belief that juvenile sex offenders have more in common with adult offenders than with other delinquent youth appears supported by the approach taken in many juvenile sex offender treatment programs. Specifically, treatment programs for adult and juvenile sex offenders are typically open only to sex offenders (and are closed to nonsex offenders), and often use similar treatment approaches such as relapse prevention and cognitive restructuring and similar treatment techniques, such as an assault cycle intervention and victim clarification (Burton & Smith-Darden, 2001, tables 20 and 21A). Treatment programs for juvenile sex offenders

also tend to run much longer (i.e., 12–36 months—see Burton & Smith-Darden, 2001, table 10) than is the case for other juvenile delinquents (e.g., see Aos, Phipps, Barnoski, & Lieb 2001 and Elliot 1998 for comparisons of juvenile delinquency treatment programs). Lastly, evidence that practitioners believe (or once believed) in the high rate of recidivism of juvenile offenders is found in media statements and treatment propaganda developed by treatment sites. Thus, there is the example of a facility director explaining that "80%" of juvenile sex offenders reoffend in the absence of treatment (Davis, 2002) and the numerous and easy to locate examples of treatment center web sites and brochures that emphasize the need for sex offending treatment due to "its persistence into adulthood" (New Hope Treatment Centers, n.d.).

As easy as it is to find "evidence" that specially trained practitioners and researchers hold (or held) these beliefs, it is just as easy to find evidence that many practitioners and researchers either never held the three beliefs reviewed in this paper or have changed their beliefs in the face of evidence to the contrary. For example, a recent posting to the Association for the Treatment of Sexual Abusers (ATSA) list serve reviewed a study suggesting "90%" recidivism rates. This post was immediately met with numerous doubtful responses. However, our purpose with the present paper is to try and understand how the United States ended up with a legal system for juvenile sex offenders that has recently been described as a "tragedy" (Zimring, 2004) and a treatment system that requires years to address problem sexual behaviors. It is our hypothesis that the three beliefs examined in this paper played major roles in determining the current legal and treatment interventions commonly employed with juvenile sex offenders. The next section of this paper examines the evidence regarding the three assumptions.

EVIDENCE REGARDING GENERALLY ACCEPTED ASSUMPTIONS ABOUT JUVENILE SEX OFFENDERS

Assumption 1: There is an Epidemic of Juvenile Sexual Offending

The first assumption, that juvenile sexual offending has attained "epidemic" levels, stems from a more general and widespread concern that juvenile criminal offending is out of control. This concern about an epidemic of juvenile violence arose towards the end of the 1980s and gained momentum throughout the 1990s (Howell, 2003). Three sources of data, arrest records, victim reports, and self-reports, provide somewhat different pictures of juvenile delinquency over the past two decades. Arrest data, which have been widely reported in the media and are largely responsible for public conceptualizations about crime rates, suggest a sharp increase in violent offending among juveniles, including violent sexual offending, from the late 1980s through 1994, and then an equally sharp decrease from 1994 to 2000 (Finkelhor, 2002, 2003; Howell, 2003). Data from national

crime victim surveys indicate a much smaller increase in violent offending between the late 1980s and mid-90s and then a gradual decline through the end of the '90s (Finkelhor, 2002, 2003; Finklehor & Jones, 2004; Zimring, 2004). Data from national juvenile self-reports suggest that offending patterns remained relatively stable, with a small increase of 8–10% in the proportion (but not the rate) of adolescents committing serious violent offenses in the late 1980's and early 1990's (Howell, 2003). In his recent review of the data, Zimring (2004) argued that, between 1974-2000, rates of juvenile sexual offending were characterized more by stability than by change.

Although evidence of a decline in juvenile violent offending should be cause for celebration, this reduction has gone largely unnoticed until quite recently (Finkelhor, 2002, 2003). Indeed, juvenile justice sanctions developed in the late 1980's and throughout the 1990's remain in place and have, in many cases, intensified during the period of time that juvenile sex offending was declining. These sanctions include longer sentences, extension of sex offender registries and community notification practices to juvenile offenders, and extension of civil commitment procedures to include juveniles. As is discussed subsequently, the potential for harm against youthful offenders from these practices seems evident, while the potential for improved community safety or reduced sexual recidivism seems remote (Caldwell, 2002; Trivits & Reppucci, 2002; Zimring, 2004).

Assumption 2: Juvenile Sex Offenders are Different From Other Juvenile Offenders

In any given specialty area, research on juveniles often occurs only after years, or even decades, of research on adults. It is therefore not surprising that, in North America, recognition of the problem of juvenile sexual offending followed the long overdue public recognition of the prevalence of adult sex offending. Perhaps as a consequence of having better established research on the characteristics and treatment of adult offenders, descriptions of juvenile sex offenders and their motives often parallel those of adults. Evidence suggests, however, that juvenile sex offenders are similar to other juvenile delinquents and are quite distinct from adult sex offenders. For example, the bimodal age distribution of sex offenders (peaking at 13 and in the mid-30's) has been interpreted as indicating qualitative differences between juvenile and adult sex offenders (Hanson, 2002).

To the extent that juvenile sex offenders are unique from other juvenile delinquents and require separate legal or clinical interventions, sex offenders would be expected to have different characteristics than nonsexually delinquent youth. Certainly there is wide heterogeneity within each group and not all youth will be characterized by the same factors (Chaffin et al., 2002; Knight & Prentky, 1993). There are also subgroups within each group (e.g., Butler & Seto, 2002; Seto, Lalumeire, & Blanchard, 2000). However, if there are two distinct groups

(i.e., sexually and nonsexually delinquent youth), the characteristics that are most common for one group should also distinguish that group from the other (e.g., see Knight & Prentky, 1993 for a brief discussion on differentiating between groups).

The general delinquency literature has established that youth antisocial behavior is predicted (directly or indirectly) by individual characteristics (e.g., low IQ); peer characteristics (e.g., associating with delinquent peers and not associating with prosocial peers); family characteristics (e.g., low parental monitoring; low parental warmth); and school characteristics (e.g., low school involvement, high drop out and suspension rates; Elliott, 1994; Huizinga, 1995; Loeber & Farrington, 1998; Loeber, Keenan, & Zhang, 1997). Very different characteristics have been hypothesized as relevant in the development and/or maintenance of juvenile sexual offending including deviant sexual interest or arousal (e.g., see Marshall & Eccles, 1993, for a thoughtful discussion on the potential role of sexual fantasies in juvenile sexual offending), denial and minimization (Barbaree & Cortoni, 1993), low empathy for victims (Barbaree & Cortoni, 1993), low social skills (Fehrenbach, Smith, Monastersky, & Deisher, 1986), and prior history of sexual victimizations (Rogers & Terry, 1984). Hypothesized characteristics have also included family environment (e.g., Knight & Prentky, 1993; Marshall & Eccles 1993) but have not usually included peer and school factors. However, the empirical literature supports the view that juvenile sex offenders, as a group, are similar in their characteristics to other juvenile delinquents and do not represent a distinct or unique type of offender. The most important piece of evidence that supports the similarities of youth in these groups is their recidivism patterns. Both sexually and nonsexually delinquent youth are far more likely to reoffend with nonsexual crimes than with sexual crimes (see Alexander, 1999; Caldwell, 2002; Zimring 2004). This finding is consistent across nearly all examinations of recidivism and seems strongly suggestive that sexual offending is just one type of delinquent behavior and not unique from other delinquent behavior (Caldwell, 2002; Zimring, 2004).

Another important piece of information comes from research on deviant sexual arousal. Deviant sexual arousal is a clear motivator for adult child molesters and, when measured by penile plethysmography, is the single best predictor of adult sexual recidivism (Hanson & Bussière, 1998; Kuban, Barbaree, & Blanchard, 1999; O'Donohue & Letourneau, 1992). It is therefore not surprising that deviant sexual arousal has also been hypothesized as a causal factor in juvenile sex offending and a risk factor for juvenile sexual recidivism (e.g., juvenile sex offender risk assessment measures include estimates of deviant arousal) (Prentky & Righthand, 2001; Worling, 2004; Worling & Curwen, 2001). However, research evidence fails to support the usefulness of deviant sexual arousal as either a predictor of recidivism or a reliable differentiating factor between sexually and nonsexually delinquent youth. Because concerns about deviant sexual arousal (and its persistence into adulthood) seem to have driven juvenile legal and clinical interventions,

this literature is reviewed in greater detail than will be the case for other hypothesized characteristics of juvenile sex offenders.

Prior to reviewing the literature on deviant arousal, there are two issues to address. First, there are no published studies regarding the sexual arousal patterns of nonoffending boys. Thus, there are no "norms" regarding youths' arousal patterns and consequently, no adequate method for determining what is "deviant' and what is "nondeviant" in the arousal patterns of boys who sexually offend. The second issue pertains to terminology. The term "deviant sexual arousal" is sometimes differentiated from the term "deviant sexual interest" with arousal referring to a physiological construct that can be measured by penile plethysmography and interest referring to a cognitive construct that can be measured by self-report questionnaires or viewing time measurement. It is also often the case that these two terms are used interchangeably.

As noted earlier, deviant sexual arousal has been linked to recidivism in adult sex offenders. Deviant sexual arousal, as measured by penile plethysmography, was not found to be related to sexual recidivism in juvenile sex offenders in the single published study examining this relationship (Gretton, McBride, Hare, O'Shaughness, & Kumka, 2001). In this regard, juvenile sex offenders do not appear to resemble adult sex offenders. Although arousal may not predict recidivism, several researchers hypothesize that deviant sexual interest does predict recidivism, and a recent report sites three studies supporting this hypothesis (Worling & Langstrom, 2003). However, all three studies employed measures of deviant sexual interest that in some ways failed to properly assess this construct. For example, one study relied on scales that combined items assessing deviant sexual fantasies with items assessing prior sexual behaviors, making it impossible to determine whether the relationship found between one (of two) deviant sexual interest scales and recidivism was due to items about sexual fantasies or items about past sexual behaviors (Worling & Curwen, 2000). A second study reported a "trend" for a relationship between deviant sexual arousal and recidivism (Schram, Milloy, & Rowe, 1991). However, no statistical analysis was presented and the operational definition of "deviant arousal" was problematic. Specifically, deviant arousal was indicated for a youth if a program administrator or therapist rated the youth as "having or possibly having, a deviant sexual arousal pattern" (p. 16). A third study examined the records of youth who had sexually reoffended versus those who had not and reported a statistically significant relationship between deviant sexual fantasies and sexual recidivism (Kenny, Keogh, & Seidler, 2001). However, the definition of deviant sexual fantasies was problematic. Specifically, youths' accounts of their index offenses were coded for the presence of deviant sexual fantasies. Whether specific statements in legal documents equate to actual deviant sexual interest (or fantasy) seems at least questionable. Thus, none of the three studies cited to support a link between deviant sexual interest and sexual recidivism among juvenile offenders employed an unequivocal measure

of the construct of interest. Furthermore, two studies have been conducted that did employ valid measures of deviant sexual interest and both failed to differentiate between juvenile sex offenders and other juvenile delinquents. One of these studies utilized a measure specifically designed to assess the sexual fantasies of youth and failed to distinguish between juvenile sex offenders and a comparison group of nonsexually delinquent youth (Daleiden, Kaufman, Hilliker & O'Neil, 1998). A more recent study employed a visual response time measure designed to examine deviant sexual interest (Smith & Fischer, 1999). Juvenile sex offenders and other delinquent youth were not reliably discriminated using this measure (however, see Abel, 2000 for concerns regarding this particular study).

Given the lack of discrimination in the sexual interests of sexually and nonsexually delinquent youth and the lack of an association between arousal (as measured by plethysmography) and sexual recidivism by juvenile sex offenders, there is, in our opinion, little to suggest that deviant sexual arousal or interest are principle factors in the genesis or maintenance of sexual offending by most youth. In this regard, it appears that juvenile sex offenders are more similar to their delinquent peers than to adult sex offenders.

Beyond the individual characteristics of sexual arousal and interest, there are other ways in which juvenile sex offenders differ from adult offenders (e.g., see Miranda & Corcoran, 2000 for a comparison of juvenile and adult sex offenders) and ways in which juvenile sex offender appear similar to other delinquent youth. For example, as with the families of other delinquents, the families of juvenile sex offenders were often characterized by less positive communication, less warmth, and more parental violence than were families of nondelinquent youth (Ageton, 1983; Bischof, Stith, & Whitney, 1995; Ford & Linney, 1995). Thus, family relationships of juvenile sex offenders appear to be challenged, but may not present greater clinical challenges than do the families of other delinquents. Several uncontrolled studies indicate that adolescent sexual offenders tend to have academic deficits (Awad & Saunders, 1989; Fehrenbach, et al, 1986), and these problems occur at rates similar to the rates of other delinquent youth (Ford & Linney, 1995; Jacobs, Kennedy, & Meyer, 1997). Like family problems, academic problems appear to function as nonspecific delinquency risk factors. The peer relations of juvenile sex offenders are characterized by different problems than are typically seen in delinquent youth. Specifically, several studies suggest that juvenile sex offenders experience social isolation, low bonding with peers, low popularity, and low association with deviant peers (Blaske, Borduin, Henggeler, & Mann, 1989; Ford & Linney, 1995; Milloy, 1994). However, subgroups of juvenile sex offenders may be characterized by different peer-related problems. Youth who offend against much younger children tend to be immature relative to same-age peers (Graves, Openshaw, Ascione, & Ericksen, 1996), and might be more likely to choose younger children as friends and subsequent sexual targets. Youth who

offend against peers, however, are more likely to associate with deviant peers (e.g., Ageton, 1983).

Thus, with some exceptions (e.g., deficient relations with same-age peers), the available research suggests that juvenile sex offenders have much in common with other delinquents (Milloy, 1994). Hanson (2002) has suggested that the initial peak in ages of sex offenders (which occurs at age 13) may be due to "generally antisocial, aggressive youth becoming sexually active" (p. 1,047). The belief that "sex offenders are a very unique type of criminal" (Shapiro, 1998, p. 117) is not supported when applied to juvenile offenders. As discussed subsequently, these findings have important implications for the design of effective interventions. For example, as has been recently emphasized (e.g., Caldwell, 2002; Chaffin et al., 2002; Seagrave & Grisso, 2002; Zimring, 2004), the practice of singling out juvenile sex offenders from other juvenile delinquents for purposes of sex offender-specific legal and clinical interventions is questionable.

Assumption 3: Juvenile Sex Offenders are at High Risk of Reoffending

Amidst growing beliefs that juvenile offenders require harsh sanctions to interrupt "a life of crime" (McBride, Scott, Schlessing, Dillingham, & Buckman, 1992, cited in Howell, 2003, p. xiv) and more specific concerns that nothing works with sex offenders (e.g., see Schwartz, 1992 for review and counterargument), restrictive and long-term legal and clinical interventions have been adapted from use with adult offenders for use with juvenile sex offenders. However, the evidence suggests that sexual recidivism rates of juvenile sex offenders are low—both statistically and as compared with nonsexual recidivism rates. For example, of 25 studies that reported sexual recidivism rates for juvenile sex offenders (wherein recidivism was defined as either new arrests or new convictions), the mean rate of recidivism was 9% (Caldwell, 2002). These same youth were more than six times as likely to be rearrested for nonsexual crimes (Caldwell, 2002). By comparison, a review of 61 studies of adult sex offenders reported a mean sexual recidivism rate of 13.4% (49% higher than for juveniles) and a mean general recidivism rate of 36.3% (Hanson & Bussière, 1998). Thus, juveniles appear to be less likely to reoffend sexually and more likely to reoffend with nonsexual offenses than are adults (see also Zimring, 2004, for a recent review of sex crime rates and comparison of adult and juvenile rates).

This is not to say that high-risk juvenile sex offenders do not exist. For example, in a small sample of 14 youth subjected to the highest level of community notification in Washington State, most (79%) were rearrested within 4.5 years for a new offense of any kind and 43% were rearrested for new sex crimes (Lieb, 1996; Schram & Milloy, 1995). Nevertheless, it appears that the majority of juvenile sex offenders do not continue as career sex offenders. Again, this information

should be greeted with enthusiasm, but appears to have been largely overlooked or even disbelieved by policy makers and providers (Finkelhor, 2002, 2003). Furthermore, specific statements overestimating the risk for sexual recidivism posed by untreated juvenile sex offenders regularly appear in the media (e.g., Davis, 2002) and statements that are suggestive (if not specific) about high rates of sexual reoffending are easy to locate in brochures and on web sites of treatment centers. Beliefs about the high risk of sexual recidivism have likely contributed to the shifting of funds from community-based treatment programs to more restrictive and expensive residential treatment programs that have yet to be subjected to randomized clinical trials (e.g., Chaffin et al., 2002; Letourneau, 2004) and the application of adult legal consequences such as registration and community notification to juvenile sex offenders (Caldwell, 2002; Trivits & Reppucci, 2002; Zimring, 2004).

In conclusion, belief in the three assumptions discussed above has influenced the legal and clinical interventions employed with juvenile sex offenders. If any one of the three assumptions were true—if there was an epidemic of violent juvenile offending; if juvenile sex offenders were unique, or if most (or even many) juvenile sex offenders were at high risk of sexual recidivism, the highly restrictive legal and clinical interventions that have proliferated over the past 20 years might be appropriate. However, the bulk of the data do not support any of these beliefs.

Current legal and clinical interventions often ignore or minimize the developmental differences between adult and juvenile sex offenders, the similarities between juvenile sex offenders and other juvenile delinquents, and do little to address the multiple determinants of juvenile offending in a manner that is responsive to these youths' developmental needs.

CURRENT LEGAL AND CLINICAL INTERVENTIONS FOR JUVENILE SEX OFFENDERS

Legal Interventions

The assumptions reviewed above have driven, in part, changes in the legal treatment of juvenile sex offenders. If there is an epidemic of juvenile offenders who resemble adult offenders and who will reoffend at any cost (as suggested by the three beliefs reviewed above), then legal interventions should be harsh, lengthy, and need not identify youth as different from adults, as they are presently. Three trends characterize legal interventions for juvenile offenders in the United States. First, these interventions have become harsher for juvenile delinquents in general over the past two decades, with boot camps and incarceration often replacing community-based treatment interventions (Howell, 2003). Second, an increasing number of adolescents and younger children are now tried as adults and no longer

have access to the juvenile justice system (Cauffman & Steinberg, 2001; Griffin, Torbet, & Szymanski, 1998). Once within the adult correction system, youthful offenders are far less likely to receive treatment of any type and are at increased risk for a number of adverse events, including increased recidivism (Howell, 2003). Third, in many states, youth are often subjected to postincarceration legal interventions initially designed to target adult sexual recidivists. These interventions include registration, community notification, and civil commitment. Per federal guidelines, states are not required to employ these postincarceration interventions with juvenile sex offenders, except those youths prosecuted as adults. However, many states include youth on their registries, within their notification schemes, and refer juvenile sex offenders to civil commitment facilities (DesLauriers & Gardner, 1999; National Center for Prosecution of Child Abuse, 1999).

The goals of these postincarceration interventions include improving (1) community safety by providing police officers with information that can aid investigations of new sex crimes and citizens with information to keep themselves and their children safer and (2) reducing sex crimes by deterring initial sexual offending and sexual recidivism. Little research has been conducted on the actual impact of registration and community notification, and no outcome research has been conducted with juvenile sex offenders. Anecdotal reports indicate that youths required to register on publicly available registries (i.e., Internet-based registries) have been subjected to physical and emotional harm, ostracism from peers and adults in their communities, and interrupted schooling (Trivits & Reppucci, 2002). Furthermore, research has found that being labeled as "deviant" may diminish a youth's social bonds, and thus free him/her to participate in criminal behavior, including sex offending (Paternoster & Iovanni, 1989; Triplett & Jarjoura, 1994). In a longitudinal study, Hayes (1997) found that such labeling was a risk factor for youths remaining involved with delinquent peers, and thus maintaining delinquent behavior over time. Accordingly, although punishment is not an intended effect of sex offender-specific legislation, it appears to be a relatively likely outcome, especially with respect to increasing rejection from socially accepted groups and organizations. Ongoing developmental research indicates that both the initiation of criminal behavior and its maintenance over time is related, at least partially, to an individual's feelings of powerlessness (Ross & Mirowsky, 1987) and his or her bonding to conventional individuals and institutions (Huizinga, 1995; Menard, Elliott, & Wofford, 1993). It is possible that registration, notification, and civil commitment would negatively influence these factors.

In conclusion, it is reasonable to hypothesize that lengthy incarcerations, incarceration with adult offenders, public registration, community notification and civil commitment (with high risk, adult sex offenders) are iatrogenic when applied to most juveniles. Concerns about potential iatrogenic effects need to be weighed with respect to the potential for improved community safety and reduced sexual offending.

While the legal sanctions and procedures outlined here are common in the United States, they are not restricted to the United States. There are some indications that similar legal interventions are being considered (or enacted) in other countries. For example, in the United Kingdom, juvenile sex offenders are required to register and can be subjected to notification requirements (e.g., see The National Organization for the Treatment of Abusers, n.d.). Outcome research on the intended and unintended effects of sex offender-specific legal interventions would help policy makers as they begin to review the relative impact (on the community and on individual youth) of these interventions. Such research is long overdue (Zimring, 2004).

Current Clinical Interventions

As with legal interventions, it appears that clinical interventions have been influenced by belief in the three assumptions reviewed earlier. If juvenile offending is widespread, if juvenile sex offenders are unique from other juvenile delinquents, and if juvenile sex offenders are at high risk for sexual recidivism, then more treatment programs are needed, and these programs should target sex offender-specific characteristics, similar to programs offered for adult sex offenders, and should retain youth in treatment for long periods of time to reduce the likelihood of recidivism. Clinical interventions aimed at juvenile sex offenders do appear to be based on interventions developed specifically for adults (e.g., Becker, 1990) and follow from theories of sexual arousal, relapse prevention, and cycles of abuse (Becker & Kaplan, 1993; Gray & Pithers, 1993; Ryan, Lane, Davis, & Isaac, 1987). Treatment components that are common across programs target primarily individual characteristics, including deviant sexual arousal, denial and minimization of sex crimes, cognitive distortions, victim empathy, modus operandi, substance use, and anger management (Freeman-Longo, Bird, & Fiske, 1995; Knopp, Freeman-Longo, & Lane, 1997). As noted previously, however, these individual characteristics seem unlikely to constitute the primary predictors of juvenile sexual offending for the majority of offenders. Rather, sexual offending, like other juvenile delinquency, is likely caused by a combination of different individual, family, peer, school and other (e.g., community) characteristics for different youth. Although recent attempts have been made to modify juvenile sex offender programs to better reflect the developmental needs of youth (e.g., Hunter, Gilbertson, Vedros, Morton, 2004; Worling, 1998), the majority of juvenile treatment programs appear to follow from adult-oriented, cognitive-behavioral models and focus almost exclusively on individual characteristics as the primary mechanism of change (Becker & Hunter, 1997; Graham, Richardson, & Bhate, 1998). Indeed, the inclusion of family members (and, presumably, the targeting of relevant family characteristics) appears to have declined in recent years (c.f., Burton, Smith-Darden, Levins, Fiske, & Freeman-Longo, 2000) in spite of data indicating

that the more effective treatments in both the areas of delinquency (Elliott, 1998) and adolescent substance abuse (National Institute on Drug Abuse, 1999) focus on risk factors across youths' natural ecologies (i.e., family, peers, school) and substantially include caregivers in treatment.

In addition to the fact that many treatment programs focus heavily on individual characteristics of the youth, there is also evidence that the restrictiveness of treatment settings has increased over the past decade. For example, in 1996, 80% of juvenile sex offender treatment programs were community-based and 20% were residential; in 2000, only 65% of treatment programs were community-based and 35% were residential (Burton & Smith-Darden, 2001). The delivery of services in institutional settings may reduce treatment effectiveness (and/or increase the likelihood of iatrogenic effects) by increasing youths' association with other deviant peers, by removing youth from normal settings in which to develop socially, and by subjecting youth to an intense level of supervision that increases the risk for additional charges (e.g., for illegal but consenting sexual interactions with peers) that would not otherwise be brought to bear (Caldwell, 2002; Zimring, 2004). An extensive literature in the area of delinquency and adolescent substance abuse treatment (Arnold & Hughes, 1999; Dishion, McCord, & Poulin, 1999; Dishion, Patterson, Stoolmiller, & Skinner, 1991) suggests that group treatment of adolescents with antisocial behavior can be iatrogenic. This is an important consideration in light of the aforementioned findings that adolescent sexual offenders may be more similar to other juvenile offenders than not.

Although juvenile sex offender treatment programs have proliferated during the past 25 years, only three controlled research studies have examined the efficacy of the prevailing cognitive-behavioral treatment approaches with juvenile sex offenders (Guarino-Ghezzi & Kimball, 1998; Lab, Shields, & Schondel, 1993; Worling & Curwen, 1998). None of these studies used random assignment to groups, and only one provided substantial support for the prevailing treatment model (see Hanson et al., 2002, and Letourneau, 2004, for detailed reviews of these studies). Several uncontrolled program evaluations suggest that juvenile sex offenders treated with cognitive-behavioral approaches have lower recidivism rates than untreated youth (Barbaree & Cortoni, 1993; Bremer, 1992; Hagan, King, & Patros, 1994; Hunter & Santos, 1990; Schram et al., 1991; Smets & Cebula, 1987). Nevertheless, the absence of control groups in these studies renders it impossible to determine whether the results were influenced by treatment. In combination, the results of the controlled and uncontrolled research is supportive of sex offender-specific treatment. However, more scientifically rigorous research is needed.

Another area of research has focused on the effectiveness of home-based treatment for juvenile sex offenders. Two small, randomized clinical trials support a home-based treatment model that specifically targets several of the systems in which youth are embedded (Borduin, Henggeler, Blaske, & Stein, 1990; Borduin & Schaeffer, 2002). Both studies examined the efficacy of a well-specified treatment

for juvenile delinquents (Multisystemic Therapy; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998) as compared with usual services (e.g., individual or group treatment). Results from both studies indicated significantly lower rates of sexual and nonsexual recidivism and fewer days incarcerated post-treatment for the youth treated with MST. A larger study is currently ongoing to examine the effectiveness of Multisystemic Therapy for juvenile sex offenders as compared with sex offender-specific treatment (Letourneau, 2003).

In conclusion, there is some evidence to support both sex offender-specific treatment for juvenile sex offenders and evidence (from more scientifically rigorous randomized trials) to support a home-based, general delinquency treatment for juvenile sex offenders. Additional research is needed to determine the most effective treatments for these youths and the least restrictive environments in which treatment can be safely delivered.

DISCUSSION

It is argued in this paper that three unsupported beliefs contributed to the current practice of applying adult legal and clinical models to juvenile sex offenders and that the general failure of policy makers, practitioners, and researchers to consider the developmental needs and differences of juvenile sex offenders has led to needlessly restrictive interventions that may be ineffective or worse. Specifically, there is clear evidence that some states apply adult sex offender legal sanctions to juvenile sex offenders with no regard for the developmental differences between these two populations (e.g., Zimring, 2004, Box 1, p. 12). There is also substantial overlap in the principal treatment components, delivery methods, and length between adult and juvenile sex offender treatment programs, and this overlap argues against the recognition of juvenile sex offenders as something other than younger adult offenders. At present, there is no evidence indicating whether sex offender-specific legal interventions achieve their intended effects or at what cost. There is some evidence of sex offender-specific treatment efficacy but more rigorous research is needed and the risk for iatrogenic effects cannot be ignored.

Although the present review may give the appearance of pessimism about the future, it is apparent that a paradigm shift is necessary and that such a shift is gaining momentum. Concerns about potential iatrogenic effects of harsh legal sanctions to juvenile sex offending, combined with the perceived low likelihood of substantively improving community safety are increasingly voiced by researchers, clinical practitioners, and legal scholars (Becker & Hicks, 2003; Caldwell, 2002; Chaffin, 1998; Chaffin et al., 2002; Garfinkle, 2003; Letourneau, 2004; Trivits & Reppucci 2002; Zimring, 2004). Regarding clinical responses to youth, larger randomized clinical trial studies are presently underway to further examine the treatment effectiveness of community-based sex offender specific treatment as compared

with home-based, nonspecific delinquency treatment (Letourneau, 2003). More research is needed, particularly studies that compare home and community-based treatments with residential offender programs. Fortunately, efforts are underway to begin such research (M. Chaffin, personal communication, March 27, 2004). Additional research is ongoing regarding the causes and typologies of juvenile sex offenders, focusing on developmental factors that may lead to better understanding of the course of this behavior (e.g., Hunter, Figueredo, Malamuth, & Becker, 2003; Miner & Munns, in press). This research should point to important developmental and environmental predictors of the persistence of sexually inappropriate behavior and the identification of differing treatment needs across groups. Well-designed projects (e.g., those that include random assignment of youth to groups) will continue to shed light on appropriate treatments as well as on the actual effects of registration and notification. Longitudinal studies are also underway (e.g., see Worling, 2004) that will help to determine whether certain factors distinguish those youths at highest risk for sexual recidivism from the great majority who will desist after adolescence.

The research base for clinical and legal response to juvenile sex offenders is growing and holds great promise for guiding future interventions. Furthermore, the general delinquency and developmental literatures are well developed and can serve as guides for current legal and clinical interventions with juvenile sex offenders. First, the general delinquency literature indicates that grouping antisocial youth together (whether for treatment or incarceration) carries with it the risk of actually increasing recidivism rates. Incarcerated juvenile offenders and those treated within peer group-focused interventions have higher rates of reoffending than comparable youth who receive intensive family and community-based interventions (Tarolla, Wagner, Rabinowitz, & Tubman, 2002). Clearly, interventions that include grouping delinquent youth together (or with adult criminals) should be reconsidered. Although there may always be a small percentage of youth whose crimes are so horrific as to require incarceration, it seems worthwhile to consider whether many more youth could be safely maintained in their own homes.

Second, the most well validated treatment interventions with juvenile delinquents are home-based and focus on the multi-determined nature of offending (for a review, see Elliott, 1998, and Tarolla et al., 2002). Early evidence is supportive that these types of treatment are also effective with juvenile sex offenders. Again, it may be the case that a small percentage of juvenile sex offenders require treatment away from their homes or communities but the majority might benefit from being treated within their natural ecologies. Relatedly, the developmental literature suggests that treatments that focus primarily on changing the individual characteristics (e.g., cognitions and behaviors) of youthful offenders, without also targeting relevant factors with caregivers (e.g., monitoring), peers (e.g., improving ties with prosocial peers), and school (e.g., increasing and improving caregiver-teacher communications) might be of limited usefulness. Specifically,

research indicates that conditional reasoning (that is the ability to discern cause-effect relationships), and the ability to understand how others feel and what others think shows considerable improvement between childhood and later adolescence (Müller, Overton, & Reene, 2001; Piaget, 1972). Thus, treatment interventions that require such cognitive skills (e.g., empathy training; expecting offender to take "full" responsibility for their behavior) might be less effective with many youthful offenders, especially in the absence of substantive interventions with other members of youths' ecologies.

Finally, as reviewed above, evidence suggests that youth who view themselves as outside the mainstream or as "delinquent" are less likely to change patterns of offending. Interventions for juvenile sex offenders are likely to be more effective if they foster a concept of self as "normal" and if they retain youth in ecologies with positive interpersonal relationships. Programs that promote youths' concepts of themselves as sex offenders, either intentionally (e.g., treatment programs that force youth to recount their offenses and label themselves as sex offenders at the start of therapy sessions) or unintentionally (e.g., treatment programs that last years) seem likely to interrupt the natural process of developing a positive identify of oneself.

Juvenile sex offenders are similar to other juvenile delinquents, and most would benefit from similar legal and clinical interventions. Although the specifics of their offenses cannot, and should not be ignored, nor should the presence of a sexual offense cause a youth to be pulled out from his or her natural ecology, sometimes for years at a time, and permanently labeled as a sex offender. The completion of well-designed research studies on juvenile sex offenders and the integration of those studies with findings from general delinquency and developmental literatures will lead to the development of more appropriate and effective legal and clinical interventions for these youths.

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