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Risk Profiling of Juvenile Sexual Offenders: Predicting Outcome in a Community-Based Treatment Program

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RISK PROFILING OF JUVENILE SEXUAL OFFENDERS:
PREDICTING OUTCOME IN A COMMUNITY-BASED TREATMENT PROGRAM

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Statement of Problem

It is currently believed that juveniles, particularly adolescent males, account for a relatively high percentage of the sexual assaults committed against children and women in our society. Studies suggest that juveniles are responsible for 30% to 60% of the cases of child sexual abuse, and 20% to 30% of the rapes, that are committed in this country each year (Brown, Flanagan, & McLeon, 1984; Fehrenbach, Smith, Monastersky, & Deishner, 1986). Furthermore, consistent with an overall trend of increased violent crime committed by juveniles during the past decade, there has been a steady rise in the number of juveniles arrested for sexual offenses (Snyder & Sickmund, 1995). The above cited incidence data, coupled with retrospective studies indicating that up to 60% of adult sex offenders report a juvenile onset to the offending behavior, have provided impetus for the development of effective intervention programs for this population.

Efforts to develop effective approaches to managing the problem of juvenile sexual offending have lead to debate over the relative value of treatment versus criminal justice sanctions in deterring this behavior. Within the mental health field, there has been a dramatic rise since the early 1980’s in the number of providers offering services to this population, as well as in the types and levels of care offered. Currently, there are several hundred providers offering services ranging on a continuum of intensity from outpatient counseling to highly structured residential care.
Concurrently, there has risen considerable political momentum in recent years to develop a stronger criminal justice system response to the problem of youth perpetrated violence. As a result, the age at which juveniles can be tried as adults has been lowered in many states, and increased local, state, and federal funding have been provided for the development of both new youth correctional institutions, as well as alternative correctional programming for lower risk youths (e.g. "bootcamps"). While these movements have occasionally been at philosophical and political odds with one another, most public officials and mental health professionals would agree that some interface between the two systems is necessary to the effecting of sound public health policy.

Of major current concern is how to determine the most appropriate disposition for any given juvenile sex offender who enters the criminal justice system. This problem is made relatively complex by the observation that the juvenile sex offender population is quite heterogeneous. Youthful offenders appear to vary on a number of important dimensions, including: their manifest level of delinquency/criminality, the nature and extent of their sexual maladjustment and deviancy, their overall psychological adjustment, and the degree of their social competency. Furthermore, these youths range from those with significantly above average intelligence to the borderline and mentally retarded, and transverse social class, economic, and racial boundaries. While many of these youths appear highly amenable to treatment, others reflect core psychopathy and/or sexual deviancy and are refractory to intervention efforts. Still others appear to fail in treatment programs not because of level
of delinquency or sexual pathology, but because they seem to lack motivation and proper familial support and supervision.

The seriousness of the problem of determining most appropriate disposition is compounded by issues of community safety and the need to prudently manage finite public resources. Errors of judgement regarding placement of high risk youths in community-based programs may result in further public victimization, as well as inefficient use of limited court and mental health fiscal and human resources. Conversely, errors regarding commitment of low to moderate risk youths to correctional centers exacerbates the problem of overcrowding in such centers, and the soaring public cost of operating these programs. Of additional concern, such misplacement may deprive these lesser disturbed youths of normalizing familial and community socialization experiences, and ultimately contribute to their delinquency by virtue of their confinement in an environment with predominantly anti-social individuals.

Presently, there is not an empirically validated typology of juvenile sexual offenders or a means by which to objectively profile the risk that individual juvenile sexual offenders represent for engaging in further sexual or non-sexual delinquency. Furthermore, there currently does not exist an objective method of assessing the likelihood of program failure due to poor motivation and/or familial non-compliance. As such, the judicial system is
dependent on the subjective assessment of amenability to treatment and appropriateness of community-based care.

Review of the Juvenile Sex Offender Literature

Patterns and Etiology

Analysis of patterns of juvenile male perpetrated child molestation suggests that although these youths molest children of both genders, they proportionally account for a greater percentage of the sexual assaults against young males than young females. Whereas they account for only 10% to 15% of the perpetrations against female children, they are responsible for 65% to 70% of the sexual perpetrations of young males (Hunter, 1991; Rogers & Terry, 1984). The likelihood of a male being selected as victim of sexual abuse appears to be inversely related to his age, with younger males being at significantly greater risk than older males (Becker, Harris, & Sales, 1993; Davis & Leitenberg, 1987). The above data are consistent with the observation that female children are more likely than male children to be molested in the context of an incestuous relationship with an adult offender, especially a father or stepfather (Hunter, 1991).

In contrast to adult sexual offenders, juvenile sexual offenders evidence less gender specificity in their selection of victims, and are more likely to engage in multiple paraphilic behaviors (approximately 60% of juveniles versus 10% to 15% of adults). Furthermore, it does not appear that a meaningful distinction can be made between incestuous and
extrafamilial sexual offending in juveniles. Unlike their adult counterparts, incestuous juvenile sex offenders do not evidence relatively less deviant sexual arousal on phallometric assessment, have fewer victims, or have begun offending at an older age than extrafamilial offenders (Hunter, Goodwin, & Becker, 1994; Marshall, Barbaree, & Eccles, 1991).

Data suggest that patterns of sexual offending which emerge during adolescence may signify more chronic proclivities. Studies reveal that up to 60% of adult sex offenders report a juvenile onset to their sexual offending behavior, with many displaying a progression from less serious to more serious sexual offending over time (Abel, Becker, Cunningham-Rathner, Mittelman, Murphy, & Rouleau, 1987). With regard to child molestation, a juvenile onset to the offending behavior has been observed far more frequently in extrafamilial than intrafamilial-only adult offenders, with the earliest average age of onset found in males who develop patterns of same gender pedophilia (Marshall et al., 1991). Recent data suggest that rapists also frequently begin to offend during adolescence, with one longitudinal study showing an average age of onset of sixteen (Elliott, 1994).

The study of juvenile male sex offenders has led to exploration of etiological factors which help explain the developmental origin of child molestation and rape. Factors which have received empirical and clinical attention in the literature to date include the following: maltreatment experiences, exposure to pornography, substance abuse, and exposure to aggressive role models. Each of these factors is briefly reviewed in the following.
Childhood maltreatment, including both physical and sexual abuse experiences, has been frequently cited as playing a prominent role in the emergence of patterns of sexual perpetration in juveniles (Paperny & Deisher, 1983; Rogers & Terry, 1984; Ryan, 1989). Interest in the influence of maltreatment on the male child's potential for engaging in sexually exploitive behavior stems from the observation that a relatively high percentage of juvenile sexual offenders report that they were sexually and/or physically abused prior to ever having engaged in acts of sexual perpetration. In this regard, a reported history of physical abuse has been found in 25 to 50% of sampled adolescent sexual offenders, and a history of sexual abuse in approximately 40 to 80% of these youths (Kahn & Chambers, 1991; Ryan, Lane, Davis, & Isaac, 1987; Smith, 1988). Generally, higher incidence rates of sexual victimization have been found in samples of younger and more psychosexually and psychiatrically disturbed juvenile sex offenders (Hunter & Becker, 1994).

The influence of maltreatment on a young male's potential for sexual perpetration has been discussed from a number of theoretical perspectives. It has been suggested that the sexual acting-out of the majority of prepubescent children is in reaction to their own abuse histories and associated with Posttraumatic Stress Disorder (PTSD) (Gil & Johnson, 1992). These children appear to be prone towards engagement in repetition-compulsion phenomena which can be interpreted as an attempt to gain mastery over painful inner affects and cognitions stemming from their abuse. The manner in which early maltreatment experiences can create a greater propensity for later sexual aggression has also been
discussed from the perspective of social learning theory and the influence of modeling (Becker, Hunter, Stein, & Kaplan, 1989; Freeman-Longo, 1986). It is believed that abused children may later imitate the sexually aggressive behavior of their perpetrator(s) in their subsequent interactions with others. The influence of modeling may be amplified in cases where the youth's familial environment is devoid of healthy male role modeling.

Kobayashi, Sales, Becker, Figueredo, and Kaplan (1995) provided empirical support to the above discussed salience of maltreatment experiences and modeling in the etiology of sexual aggression in juvenile males. Using structural equation modeling, these investigators demonstrated that increased sexual aggressiveness in juvenile sex offenders could be predicted by histories of physical abuse by the father and sexual abuse by males. Hunter and Figueredo (in press) also utilized structural equation modeling to investigate the relationship between sexual victimization, personality and adjustment, and family support variables in the prediction of patterns of sexual perpetration in adolescent males. Their results demonstrated that a younger age at time of victimization, a greater number of incidents of abuse, a longer period of waiting to report the abuse, and a lower level of perceived family support post-revelation of the abuse predicted sexual perpetrator classification.

In addition to the above cited studies, other researchers have examined the potential link between exposure to violence during childhood and ensuant aggressive and sexual
acting-out. Studies of children who have witnessed domestic violence have shown that male children, in particular, are prone towards engaging in externalizing behaviors, including acts of aggression toward others (Hughes, 1988; Jaffe, Wolfe, Wilson, & Zak, 1986; Stagg, Wills, & Howell, 1989). Other studies have established that exposure to domestic violence is a correlate of both the likelihood of sexually perpetrating as a juvenile, as well as severity of psychosexual disturbance (Fagan & Wexler, 1988; Smith 1988). Studies have also consistently demonstrated an association between juvenile delinquency and poor parent-child emotional bonding (Loeber & Stouthamer-Loeber, 1986; Patterson, Reid, & Dishion, 1992), as well as the prevalence of histories of problematic father-son relationships in sexually aggressive adult males (Hazelwood & Warren, 1989; Lisak, 1994; Lisak & Roth, 1990).

While the literature is replete with studies demonstrating an association between violent crime and alcohol use, the connection between sexual acting-out and substance abuse has not been as well established (Davis & Leitenberg, 1987; Lightfoot & Barbaree, 1993). Lightfoot and Barbaree (1993) point out that there appears to be little agreement as to the extent of alcohol/drug abuse in juvenile sexual offenders. Furthermore, the self-report of juvenile sex offenders with histories of alcohol or drug use suggests that the majority did not believe that the drugs or alcohol had any affect on their sexual arousal (Becker & Stein, 1991).
Likewise, the influence of pornography on the developing male’s potential for sexually offending has been an issue of some controversy. A number of experimental studies, using non-offender male volunteers, have demonstrated that viewing films depicting violence towards women and sexual aggression can adversely affect attitudes toward women and increase acceptance of interpersonal violence (Linz, Donnerstein, & Adams, 1989; Weisz & Earls, 1995). However, relatively few studies have examined the use and role of pornography in identified populations of sex offenders.

In one of the few available studies, Ford and Linney (1995) found that juvenile sex offenders were exposed to pornographic magazines at younger ages on the average (between five and eight years of age) than status offenders or violent non-sex offender youths. Furthermore, these investigators found that juvenile sex offenders were more likely than the comparison two groups to have been exposed to "hard-core" sex magazines. Becker and Stein (1991) found that the majority of juvenile sex offenders that they studied (89%) acknowledged the use of sexual erotica (e.g. magazines, videos, etc.) and stated that sexually explicit material increased their sexual arousal.

**Clinical Characteristics**

The clinical characteristics typically ascribed to juvenile sexual offenders are primarily those which have been identified through clinical observation, as opposed to empirical investigation. Furthermore, as will be discussed in the proceeding section, professional
perception of juvenile sexual offenders and their treatment needs has closely paralleled earlier work with adult sex offenders. Consequently, there is growing cognizance in the field of the need for empirical validation of common clinical assumptions and modification of diagnostic conceptualizations and treatment approaches as necessary. The more salient clinical characteristics traditionally ascribed to juvenile sexual offenders, and supportive empirical data for each, are reviewed in the following.

A considerable body of literature exists on the role of sexual deviancy in male sexual offending, including the presence of deviant sexual arousal and distorted cognitions regarding the acceptability of sexual aggression and sexual relations with children. Support for the validity of deviant sexual arousal as a major motivator of sexual acting-out comes largely from the adult sex offender literature and phallometric study of the arousal patterns of pedophiles versus incest offenders and normal controls. A number of such studies have shown that pedophiles typically show more pronounced arousal to sexual stimuli depicting children than the latter two groups, and that the highest ratios of deviant to non-deviant arousal are found in adult pedophiles who molest children of the same gender (Marshall et al., 1991). Data have not been so compelling in supporting the relevance of deviant arousal in understanding why men rape (Barbaree, Seto, Serin, Amos, & Preston, 1994; Baxter, Barbaree, & Marshall, 1986).
It has been empirically established that juvenile sexual offenders produce reliable patterns of arousal upon phallometric assessment, and that such patterns can be differentiated according to erection profile characteristics: non-responder and minimal responder, non-discriminator, and child, peer, or adult-child responder (Becker, Hunter, Goodwin, Kaplan, & Martinez, 1992; Becker, Kaplan, & Tenke, 1992). However, as a result of recent investigation, questions have been raised about the relevance of deviant sexual arousal in general, and the ratio of deviant to non-deviant arousal in particular, to understanding the majority of cases of juvenile sexual offending. Research suggests that there is greater fluidity in the arousal patterns of juvenile than adult sex offenders and generally less correspondence between phallometrically measured arousal patterns and offense characteristics. This research suggests that deviant sexual arousal as a construct may be most valid in understanding juvenile sexual offending against young male victims, or cases of early onset same gender pedophilia (Hunter, Goodwin, & Becker, 1994).

Similarly, it has not yet been empirically established that adolescent sex offenders are more likely than non-sex offending controls to endorse distorted cognitions or beliefs regarding sexual misbehavior (Hunter, Becker, Kaplan, & Goodwin, 1991). However, this construct has received only limited research attention in the juvenile sexual offender literature, and there are no known studies examining this variable across different juvenile sex offender subgroups. In a recent study of adult sex offenders, Hayashino, Wurtele, & Klebe (1995) found that extrafamilial child molesters were more likely than incestuous
offenders or rapists to endorse distorted cognitions. Interestingly, in the above cited study the latter two offender groups did not score significantly higher on a measure of cognitive distortions than a group of normal controls.

Psychopathy, or the presence of anti-social personality traits and criminal tendencies, has also received theoretical attention in an attempt to explain why some juveniles sexual offend. Interest in this variable has been relatively long-standing (Doshay, 1943) and centers on the question of whether juvenile sexual offenders are inherently different from other juvenile delinquents. It has been suggested that all socially deviant behavior, including sexual offending, can be accounted for by a common criminologic trait of low self-control (Gottfredson & Hirschi, 1990).

In support of a general delinquency factor, several studies have documented that juvenile sex offenders share a number of similarities with nonsexual offending, delinquent youths, including: family background variables and abuse histories, histories of academic problems, and tendencies to engage in a wide variety of antisocial behaviors (Awad & Saunders, 1989; Awad, Saunders, & Levene, 1984). With regard to the latter, a number of investigators have documented that in non-forensic samples of juvenile sexual offenders 40 to 50% have histories of having engaged in non-sexual legal offenses. Such histories are even more prevalent in samples of incarcerated juvenile sexual offenders (Amir, 1971;
Data contradicting a general delinquency factor for explaining juvenile sexual offending come from a number of studies showing that only about one-half of juvenile sex offenders meet diagnostic criteria for a conduct disorder. Juvenile sex offenders also show more deficits in emotional functioning and peer relationships, and have more extensive histories of physical and sexual abuse than other types of juvenile offenders (Becker et al., 1986; Blaske, Borduin, Henggeler, & Mann, 1989; Ford & Linney, 1995). France and Hudson (1993) point out that nonsexual delinquency is more likely to be found in the histories of "hands on" aggressive sex offenders than non-aggressive offenders, and that non-conduct disordered juvenile sexual offenders may be quite unique from their more delinquent and aggressive counterparts.

Adolescent sex offenders have also been characterized as suffering from deficits in social competency, self-esteem, and empathy which hamper their ability to form and maintain healthy peer relationships and successfully resolve interpersonal conflicts (Blaske et al., 1989; Figia, Lang, Plutchik, & Holden, 1987; Becker & Abel, 1985). Closely associated with the above referenced deficits are ascribed fears of emotional intimacy and pronounced feelings of loneliness and social alienation (Awad & Saunders, 1989; Fehrenbach, Smith, Monastersky, & Deishner, 1986).
In spite of the relative popularity of the above assumptions, until very recently there had been no studies wherein juvenile sexual offenders were compared to other populations of adolescents on the above cited variables. In the previously cited study, Ford and Linney (1995) found that juvenile child molesters manifested a greater need for control and inclusion in interpersonal relationships relative to juvenile rapists, violent non-sex offenders, and status offenders. The juvenile rapists showed more emotional detachment than the child molesters. Although the differences were not statistically significant, the group of child molesters evidenced more problems with self-esteem (e.g. physical appearance, popularity, etc.), and more dysphoria and anxiety than youths in the other comparison groups.

Similarly, Hunter and Figueredo (in press) found that adolescent child molesters evidenced greater deficits in self-sufficiency and had more pessimistic explanatory styles than nonsexual offending controls. Self-sufficiency was defined as reflecting attitudes of self-confidence, independence, assertiveness and self-satisfaction. With regard to pessimism, the sex offending youths showed a greater tendency than controls to assign internal, stable, and global attributions for the occurrence of negative events in their lives. The results of this study were interpreted as supporting a conceptualization of juvenile child molesters as youths who are lacking in social competencies and who are perhaps competitively disadvantaged relative to their peers.
In addition to the above purported causal factors, a number of other clinical characteristics have been found to be associated with juvenile sex offenders. Learning disabilities and/or poor academic performance have been found in 30 to 60% of samples of adolescent sexual offenders (Awad & Saunders, 1991; Fehrenbach et al., 1986; Hunter & Goodwin, 1992). Impulse control problems and associated difficulties with disinhibition have also been frequently clinically observed (Smith, Monastersky, & Deishner, 1987), although there are no known experimental studies comparing juvenile sex offenders to controls on neurological or neuropsychological function related to the same.

The index of psychiatric co-morbidity in samples of juvenile sexual offenders is relatively high, particularly in those derived from residential treatment settings. Aside from the diagnosis of conduct disorder, the most frequently observed psychiatric condition in juvenile sexual offenders is depression. Depressive symptomatology appears prevalent in both residential as well as outpatient samples of juvenile sexual offenders, with one study showing that 42% of an outpatient sample of youthful sexual perpetrators met clinical criteria for diagnosis of depression as established by the Beck Depression Inventory (Becker, Kaplan, Tenke, & Tartaglini, 1991).

Treatment Approaches

Very few treatment programs were available for juvenile sexual offenders prior to the 1980's. From that point until present there has been a steady proliferation of both
outpatient and residential treatment programs for youthful offenders. As evidence of the rapid growth in the field, a survey by the Safer Society identified 346 treatment programs for juvenile sexual offenders in the United States in 1986, in contrast to 755 in 1992. Of the existent programs, approximately 80% are outpatient and 20% residential (Safer Society, personal communication, July 25, 1995).

Historically, approaches to the treatment of juvenile sexual offenders have been heavily influenced by both adult sex offender treatment models, as well as the philosophy of the juvenile criminal justice system. With regard to the latter, most practitioners have developed an appreciation for the value of prosecution in holding sex offenders accountable for their behavior. It is currently the consensus of most experts in the field that the placement of legal contingencies on juvenile sexual offenders enhances their amenability to treatment and helps ensure that standards of public safety will be maintained (National Task Force, 1993).

While a number of theoretical conceptualizations have been drawn upon in explaining the etiology of sexual offending in juveniles, and the treatment needs of this population, cognitive-behavioral approaches have perhaps been most often endorsed and adopted (Hunter & Becker, 1994). Theorists and practitioners working this framework have utilized conditioning and social learning theory models to explain the onset and maintenance of deviant sexual behavior, and have developed interventions aimed at the following:
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diminishing aberrant sexual interest and arousal patterns, improving cognitive controls, correcting faulty belief systems, and teaching prosocial and relapse prevention skills (Becker, 1994, Becker & Hunter, 1997). This school of thought has also been influential in encouraging the use of objective assessment instruments and the conducting of empirical research on the efficacy of intervention methodologies.

Other theoretical influences on the treatment of juvenile sexual offenders include psychodynamic and developmental, biological, family systems, and feminist models. Practitioners influenced by psychodynamic and developmental theory have created greater cognizance of the importance of examining and treating the juvenile's psychosexual problems in a holistic manner, and with an appreciation with his overall emotional and psychological needs. These practitioners have also brought attention to the importance of examining the manner in which early maltreatment and deprivation experiences disrupted normal developmental and attachment processes and left these youths with deficits in capacity for empathy and healthy relationship functioning (Bremer, 1992; Ryan & Lane, 1991; Steele, 1985).

Biologically oriented practitioners have pointed to the potential utility of pharmacological therapies in the treatment of juvenile sexual offenders. Such approaches include consideration of the use of serotonergic reuptake inhibitors with youths who show evidence of depression and obsessive-compulsive spectrum disorders, and hormonal agents
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(e.g. medroxyprogesterone acetate) with more seriously disturbed young adults (18 or older) who experience persistent and pronounced deviant sexual arousal and interests (e.g. sexual sadism) (Bradford, 1993).

Family systems therapists have emphasized the importance of understanding the juvenile sexual offender’s behavior in the context of the larger familial and community systems in which he functions, and effecting systems changes which support the long-term maintenance of more adaptive styles of relating to others (Blaske, Borduin, Henggeler, & Mann, 1989; Henggeler, 1989). Proponents of feminist theory have raised awareness as to the relationship between the perpetration of sexual aggression toward females and larger societal attitudes and practices which support the oppression of women (Brownmiller, 1975; Herman, 1990).

Clinical and research data suggest that juvenile sexual offenders are a heterogenous clinical population with a variety of types and levels of sexual and non-sexual disturbances represented. As such, there is an apparent need for the establishment of a continuum of care to meet their differential treatment needs, ranging from intensive and comprehensive residential services for more severely psychosexually and psychiatrically impaired youths, to community-based treatment programs for less maladjusted youths. There also appears to be a need for the availability of correctional options for more characterologically and less therapeutically motivated adolescents.
Specialized residential treatment programs provide a structured and secure environment for the treatment of those juvenile sexual offenders who cannot be safely or effectively treated on a community-based level due to the magnitude of their psychosexual and/or other emotional and behavioral problems. Although there is considerable variability in the level of professional care provided in residential programs across the United States, the more intensively clinically staffed programs offer a comprehensive array of specialized and more traditional psychiatric and psychological treatment services to sexually abusive youths, including: psychiatric assessment and treatment; individual, group, and family therapy; educational and vocational programming; independent living skills programming; medical care; milieu therapy; and adjunctive therapies (e.g. art, music, etc.). Ideally, youths placed in such programs transition from a highly structured living environment to less structured environments (e.g. group home) wherein they have increased opportunity for interfacing with the community prior to discharge.

Community-based treatment programs are most appropriate for less seriously psychosexually, psychiatrically, and characterologically disturbed youths. Typically, these are youths whose sexual acting-out has not been of a long-standing nature and has not involved a high level of aggression or violence. Furthermore, these youths are those who do not appear to be primarily delinquent or seriously characterologically disturbed, and those who are capable of being maintained in home, school, and community environments without constant supervision. For such youths, early intervention of a specialized nature may help
stem the development of more serious sexual problems. Programming for the above described juvenile sexual offenders typically involves participation in weekly group therapy of a specialized nature, supplemented by family and individual therapies. Additionally, the parents of these youths often times participate in a supportive educational program.

Some youths in community-based programming may also require psychiatric consultation and support, especially in cases where the individual has a concomitant psychiatric problem which directly or indirectly impacts on his sexual behavior and ability to exercise appropriate judgement and impulse control. Some youths also require supplemental services in the form of in-home services, evening and after-school programs, or group home placement. Youths who have sexually offended against younger siblings typically require removal from the home (e.g. placement in a group home with a relative, etc.) until significant progress has been attained and it has been determined that the youth’s return will not jeopardize the physical or emotional well-being of younger siblings or other family members.

Unfortunately, there appears to be a subset of juvenile sexual offenders who are not amenable to treatment due to a high level of character pathology. Such individuals may present as highly psychopathic and/or narcissistic and show little remorse for their offending behavior and little empathy or concern for others. Many of these individuals present with relatively lengthy histories of antisocial behavior, beginning early in childhood, and have been
refractory to treatment interventions. Confinement in a correctional setting may be the most appropriate disposition for this group of juvenile sexual offenders. More limited treatment services are available in a number of such settings for those juveniles who show some motivation to change.

Areas of Therapeutic Focus

Becker and Hunter (1997) outline clinical components of the treatment process with adolescent sex offenders. These include: the clarification of sexual values as they are relevant to the cessation of destructive and exploitive sexual relationships, and the promotion of healthy and age appropriate relationships; cognitive restructuring to assist juveniles in understanding the thoughts, feelings, and events that contributed to their sexual acting-out, and to correct distortions in their thinking that relate to a tendency to minimize, rationalize or project blame onto others for their behavior; empathy training to provide these youths with instruction and experiential practice designed to enhance their capacity to appreciate and understand the feelings and needs of others, and the negative impact of their behavior on the victim and the victim's family; education in healthy human sexuality so as to promote the formation of healthy, consensual, age appropriate relationships; anger management to assist them in learning to gain control over anger impulses and replace aggression with assertiveness; impulse control to assist them in acquiring skills related to the ability to interrupt deviant sexual thoughts which lead to heightened sexual arousal and eventual acting-out, and to improve their overall social judgement and behavioral control; and
education as to the nature of adolescent sexual perpetration, including its etiology and treatment. Other components of a comprehensive approach to treatment include: assistance with academics, including providing special education instruction and support to youths who are learning disabled and emotionally troubled, and who cannot function in a regular education environment; basic vocational and living skills training to older adolescents who are attempting to achieve independent living status; family therapy to assist the youth's family in understanding the nature of his sexual and emotional problems, and to address family systems dysfunctions that may contribute to the reemergence of his sexual behavior problem; and psychiatric assessment and intervention, as necessary.

Program Evaluation and Outcome Data

Presently, there is a dearth of empirically conducted treatment outcome studies on juvenile sexual offenders. Hopefully, with the increased attention that this subject has received in recent years, and the rapid growth in number of treatment programs for juvenile sexual offenders across the country, there will be a commensurate rise in outcome research activity in the near future. The currently available, and more empirically sound, reports on juvenile sex offender treatment outcome are reviewed in the following.

Borduin, Henggeler, Blaske, & Stein (1990) compared "multisystemic therapy" with individual therapy in the outpatient treatment of sixteen adolescent sex offenders. Multisystemic therapy was defined by the investigators as a systems approach which
attempted to decrease denial and cognitive distortions, enhance empathy, strengthen family and peer relationships, and improve academic performance. Youths were randomly assigned to one of the two treatment conditions, with youths in each group receiving approximately the same number of hours of therapeutic contact.

Using rearrest records as a measure of recidivism (sexual and non-sexual), the above two groups were compared at a three year follow-up interval. Results revealed that the youths receiving multisystemic therapy had recidivism rates of 12.5% for sexual offenses and 25% for non-sexual offenses, while those receiving individual therapy had recidivism rates of 75% for sexual offenses and 50% for non-sexual offenses.

Becker (1990) reported an 8% sexual recidivism rate for a sample of 80 outpatient treated juvenile sex offenders over a follow-up period of up to two years. These youths had participated in a cognitive-behavioral treatment program which focused on reducing deviant sexual thoughts and arousal, correcting faulty beliefs regarding the acceptability of sexual aggression or sexual relations with children, improving impulse control and judgement, and increasing social skills and sexual knowledge. Recidivism data were gathered through interviewing the youths, their families, and referral sources. No control groups were included in this study.
Kahn and Chambers (1991) conducted a retrospective study of 221 juvenile sexual offenders (95% male; 5% female) who entered one of ten treatment programs in the State of Washington during a ten month period during 1984. Eight of these treatment programs were outpatient and two institutional-based correctional programs. Post-treatment conviction records were reviewed over an average follow-up period of twenty months. Results showed that although the overall rate of recidivism (any type of offense) was high (44.8%), the sexual recidivism rate was relatively low (7.5%). High rates of sexual recidivism were found for those youths who used verbal threats in the commission of their offenses, and those who blamed the victim for the offense. This study did not compare the rates of recidivism between "hands-on" and "hands-off" offenders, or examine outcome according to therapeutic approach, length of treatment, whether the offender completed treatment, or gender of the perpetrator.

Schram, Milloy, and Rowe (1991) reported the results of an extended follow-up study on 197 male juvenile sexual offenders who participated in the above referenced Washington State treatment outcome project. These investigators extended the length of follow-up by five years. Results revealed that the rate of arrest for new sexual offenses remained relatively low (12.2%) in comparison to non-sexual offenses (50.8%). Sexual recidivism was found to be associated with a history of truancy, thinking errors (including blaming the victim), a prior conviction for a sexual offense, and higher deviant sexual arousal. In this
study, deviant sexual arousal was identified via therapist assessments rather than through phallometric measurement.

A relatively low rate of sexual recidivism in residentially treated juvenile sexual offenders was also found by Bremer (1992). Bremer reported that only 6% of the treated youths were convicted of new sexual offenses following release from the residential program. Survey data indicated that the sexual recidivism rate rose to 11% if self-report of reoffending was included. The length of follow-up in this study ranged from less than 6 months to 8.5 years.

Although the above described studies suggest that the rate of sexual recidivism in treated juvenile sexual offenders is relatively low, and thus provide reason for optimism about the amenability of the majority of this clinical population to focused intervention, many questions remain unanswered. To date, there have been no large, experimentally well-controlled outcome studies which have assessed the rate of sexual recidivism in treated versus untreated juvenile sexual offenders, or the relative efficacy of differential intervention approaches, including incarceration alone. Furthermore, there are currently little data on differential recidivism rates based on type of juvenile sexual offender, or data on increased risk of recidivism as a function of program failure or length of period of follow-up.
Objectives of Study

This study sought to demonstrate the utility of risk profiling in predicting response to community-based alternative treatment programming for juvenile sexual offenders. Specifically, this proposal was designed to identify variables that predict clinical decisions regarding appropriateness of admission to a community-based treatment program, and various treatment outcomes. Constructs assessed as predictors of outcomes included those related to: sexual deviancy, general psychological maladjustment, psychopathy, attitudes toward treatment, and legal status. This study was seen as a preliminary step in developing a comprehensive system for classifying juvenile sex offenders at the point of intake, including their amenability to treatment, and the risk that they represent for further sexual and non-sexual delinquency.

Methods

Participants

Participants in the study consisted of 204 youths referred for community-based juvenile sex offender treatment between 1991 and 1995. The racial composition of the studied population was approximately as follows: 43% caucasian; 53% African American; and 4% "other" minority groups (e.g. hispanic, asian). These youths ranged in age from 5 to 18, with the mean age being 14.3 years old at the time of evaluation. A juvenile court was involved in approximately 71% of the referrals, a Department of Social Services in 22% of the referrals, and another agency (i.e. school) or individual in approximately 7% of the
cases. At the time of referral, 73.9% were court adjudicated, 11.8% under court advisement, and 14.3% without court involvement.

The reference offense for the referred youths was child molestation (≥ 3 years older than victim) in 76.0% of the cases, rape of a peer or older individual in 8.8% of the cases, and exposure in 2.9% of the cases. Approximately 12% of the youths were referred for engagement in some other form of sexual misbehavior (e.g. frottage). Of those referred for child molestation, 75% were referred for sexual molestation of a female child and 25% for a male child. Of the rapists, nearly 78% were referred for victimization of a female, with approximately 22% having a male victim. All of the victims of those referred for exposure were female. The vast majority of these youths (approximately 95%) had acted alone in the commission of the reference offense.

The developmental histories of this sample of youths revealed a moderate to high level of maltreatment and previously existent emotional and behavioral disturbance. Over 42% had a previous arrest record for a nonsexual offense, with slightly less than 10% having been previously arrested for a sexual offense. A personal history of child sexual abuse was reported by 55.5% of these youths. A history of substance abuse was indicated with the following frequency: "none" - 61.3%; "some" (1-3 times per month) - 19.7%; "frequent" (more than 3 times per month) - 19.0% of the cases. A history of suicidal ideation and/or
gesturing was present as follows: "none" - 58.7%; "some" (history of 1-3 episodes) - 31.5%;
and "frequent" (history of more than 3 episodes) - 9.8% of the cases.

**Description of Assessed Program**

Data were drawn from the Regional Juvenile Sex Offender Program (RJSOP) operated by the Pines Treatment Center in Portsmouth, Virginia. This program was developed in 1991 with the support of a demonstration grant from the Virginia Department of Criminal Justice Services. The clinical programming was designed to provide specialized alternative intervention to less chronically and severely disturbed juvenile sexual offenders across the five cities which comprise Tidewater, Virginia: Norfolk, Virginia Beach, Portsmouth, Chesapeake, and Suffolk. The population base of this region is approximately 1.5 million. Youths accepted into the program were typically referred from one of three participating agencies in each city: the juvenile court, the Department of Social Services, or a school system. Each referred youth was comprehensively evaluated as to appropriateness for placement in the treatment program prior to the initiation of treatment. Those deemed as not appropriate were referred back to the referral agency with recommendations for alternative disposition (e.g. correctional placement, residential care, etc.).

Clinical assessment included record review, clinical interviewing, and administration of objective measures of personality adjustment and psychosexual attitudes and interests.
Psychometric assessment typically included administration of the Minnesota Multiphasic Personality Inventory (MMPI) and the Multiphasic Sex Inventory (MSI). The MMPI (Hathaway & McKinley, 1942) is an objective personality inventory designed to provide description of personality functioning on three validity and ten clinical scales (Lie, F, K, Hypochondriasis, Depression, Hyst eria, Psychopathic Deviate, Masculinity-Femininity Paranoia, Psychasthenia, Schizophrenia, Mania, and Social Introversion). Recently, a version of this instrument was developed specifically for adolescents (MMPI-A) (Butcher, Williams, Graham, Archer, Tellegen, Ben-Porath, Kaemmer, 1992). The MSI (Nichols & Molinder, 1984) has 21 clinical scales, including those differentiating subtypes of sex offenders (e.g. rapist, child molester, exhibitionist), and those which measure sexual obsessions and paraphilic interests. This instrument also has four validity and three accountability scales.

Youths accepted into the program were typically placed in a treatment protocol that consisted of weekly specialized group therapy, bi-weekly family therapy, and weekly individual therapy. The program addressed areas of therapeutic focus outlined by Becker and Hunter (1997). Specifically, therapeutic attention was given to the following: values clarification, sex education, social skills training, anger management, correction of cognitive distortions, improvement of impulse control and judgement, empathy enhancement, and relapse prevention. The program’s operation was overseen by an advisory board which consisted of representatives from key referral agencies in the Tidewater area.
Procedure

Data were coded for analysis from extensive clinical record review of the 204 participants. These record reviews were conducted by trained research assistants using a data coding instrument designed by the principal investigator and statistical consultant (see Appendix A). The clinical records from which data were coded were generally comprehensive and included: reason for referral, background information, presenting clinical characteristics, and disposition. For those youths accepted into treatment, the charts also included clinical progress notes and information as to the client’s status at the time of review or discharge from the program.

The data coding instrument utilized in this study included the recording of data relevant to the following: type of sexual offense leading to referral; source of referral and client’s legal status at intake; background information related to maltreatment experiences and history of emotional, behavioral, and academic problems; and familial history. This instrument also provided criteria for determining categorization of clinical outcome for the program participants. Five categories of clinical outcome were defined a priori: satisfactory program compliance or completion; expulsion for failure to comply with attendance and/or therapeutic directives; expulsion for engagement in non-sexual delinquency; expulsion for engagement in sexual delinquency; and expulsion from the program for reasons extraneous to the attitude and/or behavior of the youth (e.g. family moved out of area, etc.).
Prior to the initiation of formal data collection, interrater reliability was established by having the two research assistants independently code data from 20 randomly selected files. This resulted in 83.8% agreement between the raters on the scoring of multiple selected variables.

Charts which contained missing data on key variables essential to the completion of coding activities were identified to the clinical supervisor of the outpatient treatment program. This individual then ensured that the missing documentation was provided. In a few instances, this involved the clinical caseworker verbally communicating to the research assistant the required information.

All coded data were reviewed by the principal investigator before they were entered into the computerized database. These reviews were conducted to ensure that chart coding was complete and that the case met criteria for inclusion in the study. Inclusion criteria centered on gender of client (i.e. male), completion of a clinical intake interview, and an elapsed period of ≥12 months following intake.

Psychometric assessment data from the MMPI and the MSI were also loaded into the database as they were available. The MMPI was available in 50.5% of the cases, and MSI data in 65.2% of the cases. These data were included so as to permit an analysis of their contribution to the prediction of various clinical outcomes.
The outcome measures were coded as a system of three-point scales representing the various outcomes of treatment with respect to how and under what circumstances each study participant either failed or successfully complied with treatment. These various alternative outcomes were ranked in decreasing levels of severity:

Y1. Expelled from program for sexual recidivism,
Y2. Expelled from program for engagement in delinquent behaviors of a non-sexual nature,
Y3. Expelled from program due to non-compliance with attendance requirements and/or therapeutic directives,
Y4. Discharged from program due to circumstances unrelated to the behavior of the youth (e.g., the family moved out of the area),
Y5. Remained in and/or completed treatment program.

For the first four outcomes (Y1-Y4), the three points on each scale were used to represent whether and when each particular mode of treatment failure occurred. The numerical scores for these four unfavorable outcomes are ranked from best to worst within each category, based upon whether each mode of treatment failure either: (0) never took place during the entire length of treatment, (1) took place some time after the first 12 months of treatment, or (2) took place some time during the first 12 months of treatment. The fifth scale (Y5), representing relative treatment success, is ranked from least to most
favorable outcome, based upon whether the participant: (0) did not either remain in or complete at least 12 months of treatment, for whatever reason, (1) remained in or completed 12 months of treatment, and (2) remained in or completed more than 12 months of treatment. Because these five scales represent alternative causes for either favorable or unfavorable outcomes of treatment, they are necessarily mutually exclusive and exhaustive categories for all study participants that were accepted into the program and therefore provided treatment.

However, there is also a residual category of those who were initially rejected for treatment. This final category is needed to distinguish between those initially accepted for but not completing treatment, for whatever reason, and those not even initially accepted for treatment. As a group, the rejected individuals were coded [0,0,0,0,0], representing the only class of cases where a [0] on the fifth outcome scale (Y5) is not associated with either a [1] or a [2] on any of the first four outcome scales (Y1-Y4). For example, a youth who was expelled for a nonsexual offense within the first 12 months of treatment would be coded [0,2,0,0,0] and a youth who was expelled for sexual recidivism after the first 12 months of treatment would be coded [1,0,0,0,0]. Thus, a study participant was coded as having been initially rejected for treatment if that individual was coded as not having remained in or completed treatment but was not coded as either expelled or discharged from treatment for any particular reason.
Data Analytic Strategy

In addition to descriptive data analysis, multivariate statistical analyses were performed using the SAS (SAS Institute, 1989) and EQS (Bentler, 1989) software packages. Covariance matrices were constructed using the SAS CORR procedure; confirmatory factor analyses were performed and related factor analytic structural equation models were developed using the EQS causal modeling program. A factor analytic structural equations model consists of two major components: (1) a "measurement" model, and (2) a "structural" model.

The Measurement Model. The "measurement" model is essentially a confirmatory factor analysis, wherein a number of directly measured items (called "manifest" variables or "indicators") are related to a smaller set of hypothetical constructs (called "latent" variables or "common factors") presumed to be underlying the correlations between them. For present purposes, this procedure is superior to traditional exploratory factor analysis in that the latter derives the multivariate constructs empirically from the correlations between manifest indicators and consequently runs the risks of capitalization upon chance associations ("alpha slippage") and of equivocal post hoc interpretation of the factors. Instead, confirmatory factor analysis permits the theoretical specification of the latent constructs as a priori hypotheses to be tested against the correlational data. By the exclusive prior assignment of each item to the theoretically specified hypothetical constructs, confirmatory
factor analysis also reduces the number of factor loadings needed and so enhances the
efficiency of parameter estimation.

Because of the great multicollinearity among many of the measures in this study
(Pedhazur, 1982; Cohen & Cohen, 1983), two common factors were constructed for the
hypothetical constructs relating to psychopathology, using subscales of the MMPI, and to
sexual maladjustment, using subscales of the MSI. Social Sexual Desirability (SSD) was used
as an additional predictor of the various subscales of both the psychopathology (MMPI) and
the sexual maladjustment (MSI) factors in order to statistically control for this potential
source of common bias among these self-report measures. This insured that the common
factor variance forming the psychopathology and sexual maladjustment factors were not
attributable to spurious correlations between measures that might have been caused by SSD.

The Structural Model. The "structural" component of the model is essentially a path
analysis between the latent constructs that were produced by the factor analysis. Path
analysis, or structural equations modeling, consists of imposing a restricted set of causal
pathways, also specified a priori, and testing them against the correlations between
constructs. A "saturated" structural model is merely one that freely estimates the direct
correlations between all of the common factors; any structural model that can adequately
reproduce that pattern of intercorrelations with a reduced set of hypothesized causal
pathways is deemed to be superior by the principle of parsimony. Structural equations
modeling permits the modeling of factor intercorrelations by any combination of direct effects, indirect effects, spurious effects, and residual effects (James, Mulaik, & Brett, 1982).

The reason that a path analysis was needed in this study is that we were dealing with several mutually exclusive outcomes, which were, by definition, highly intercorrelated. Therefore, the various causes of each discrete outcome had to be discriminated from each other by statistically controlling for the possible indirect effects of the model predictors through each of the other outcomes. This was done hierarchically by first ranking the outcomes in order of severity and then including each of the causally prior outcomes as covariates in each successive structural equation. Using \([X_1,X_2,X_3,...]\) to represent our set of model predictors, this analytical strategy can be represented schematically as follows:

\[
\begin{align*}
Y_1 &= X_1 X_2 X_3...; \\
Y_2 &= Y_1 X_1 X_2 X_3...; \\
Y_3 &= Y_2 Y_1 X_1 X_2 X_3...; \\
Y_4 &= Y_3 Y_2 Y_1 X_1 X_2 X_3...; \\
Y_5 &= Y_4 Y_3 Y_2 Y_1 X_1 X_2 X_3....
\end{align*}
\]

Thus, each successive endogenous variable statistically controlled for the effects of all prior endogenous variables, and therefore any indirect effects of the exogenous variables that might have been causally mediated through the former. The fundamental logic of this
procedure is essentially equivalent to that of sequential canonical analysis, which Gorsuch & Figueredo (1991) have extended and applied to the design of exploratory path analysis (cf., Cohen & Cohen, 1983.)

Structural equation models were evaluated by the use of the statistics chi-squared, CFI (the Bentler-Bonnett Comparative Fit Index), NFI (the Bentler-Bonnett Normed Fit Index), and NNFI (the Bentler-Bonnett Non-Normed Fit Index). Chi-squared measures the statistical goodness-of-fit of the covariance matrix observed to that reproduced by the factor model. A significant chi-squared is therefore grounds for rejection of the factor model specified, and a non-significant chi-squared is grounds for its tentative acceptance. The Bentler-Bonnett Comparative, Normed, and Non-Normed Fit Indices are measures of "practical" goodness-of-fit for large sample sizes. With large samples, a small effect will result in a statistically significant lack of fit. However, with such large samples, the CFI, NFI, and NNFI values should be greater than 0.90 to be considered satisfactory levels of practical goodness-of-fit, even if significant chi-squared values are obtained (Bentler & Bonnett, 1980; Bentler, 1989).

Results

Clinical Outcomes

Of those youths referred to RJSOP for assessment and treatment, 59.6% (n=121) were accepted into the program. Of those youths, 50.4% remained in the program for at
least 12 months and were deemed to be making satisfactory progress at the end of the first year of treatment. Of the remainder, 22.6% were expelled from the program due to non-compliance with attendance requirements and/or therapeutic directives; 3.4% were expelled for engagement in delinquent behavior of a non-sexual nature; 3.4% were expelled from the program for sexual recidivism; and 20.2% were discharged from the program due to circumstances unrelated to the behavior of the youth.

For those remaining in treatment at the end of the first 12 months (n=60), 46.7% (n=28) had completed the program at the time of the current study. The average length of time required for program completion was 21.9 months. Of the remaining youths, 16.7% (n=10) were still in treatment at the time of the current study, and 36.7% (n=22) had been discharged as unsuccessful in fulfilling program requirements. Of those discharged as not successfully completing the program, 59.1% (n=13) were dismissed for non-compliance; 18.2% (n=4) for non-sexual delinquency; 9.1% (n=2) for sexual reoffending, and 13.6% (n=3) for reasons extraneous to the attitude or behavior of the youth.

The Measurement Model

The two hypothesized common factors for general psychopathology (MMPI) and for sexual maladjustment (MSI) were confirmed. Furthermore, there was no significant factor intercorrelation between these two latent constructs. As predicted, Social Sexual Desirability (SSD) was a statistically significant and strong predictor of all of the measures used for both
of these latent constructs. Nevertheless, all but one of the hypothesized factor loadings were found statistically significant, although often not as strong as the corresponding effects of SSD, even when controlling for this confound (i.e., the spurious components of the covariance that were attributable to the common influence of SSD on the participant self-reports.) The one exception was sexual knowledge (SEXKNO), which was almost entirely predicted by Social Sexual Desirability (SSD). The factor pattern, including the effects of SSD, is shown in Table 1.
Table 1

Factor Pattern (Standardized Regression Coefficients) For Sexual Maladjustment (MSI) and General Psychopathology (MMPI), Controlling For Social Sexual Desirability (SSD).

<table>
<thead>
<tr>
<th>Subscale</th>
<th>SSD</th>
<th>MSI</th>
<th>MMPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>JUS</td>
<td>.513*</td>
<td>.509*</td>
<td></td>
</tr>
<tr>
<td>TXTATT</td>
<td>.704*</td>
<td>.328*</td>
<td></td>
</tr>
<tr>
<td>SEXOB</td>
<td>.708*</td>
<td>.426*</td>
<td></td>
</tr>
<tr>
<td>CDIM</td>
<td>.707*</td>
<td>.332*</td>
<td></td>
</tr>
<tr>
<td>CM</td>
<td>.697*</td>
<td>.457*</td>
<td></td>
</tr>
<tr>
<td>RAPE</td>
<td>.365*</td>
<td>.888*</td>
<td></td>
</tr>
<tr>
<td>EXH</td>
<td>.476*</td>
<td>.600*</td>
<td></td>
</tr>
<tr>
<td>PAR</td>
<td>.402*</td>
<td>.815*</td>
<td></td>
</tr>
<tr>
<td>SEXDYS</td>
<td>.338*</td>
<td>.786*</td>
<td></td>
</tr>
<tr>
<td>SEXKNO</td>
<td>.861</td>
<td>.069*</td>
<td></td>
</tr>
<tr>
<td>PD</td>
<td>.633*</td>
<td></td>
<td>.737*</td>
</tr>
<tr>
<td>D</td>
<td>.594*</td>
<td></td>
<td>.765*</td>
</tr>
<tr>
<td>PT</td>
<td>.624*</td>
<td></td>
<td>.772*</td>
</tr>
<tr>
<td>SC</td>
<td>.609*</td>
<td></td>
<td>.785*</td>
</tr>
<tr>
<td>MA</td>
<td>.621*</td>
<td></td>
<td>.750*</td>
</tr>
<tr>
<td>SI</td>
<td>.618*</td>
<td></td>
<td>.758*</td>
</tr>
</tbody>
</table>

* p < .05
The Structural Model

The chi-square for the entire model, including the measurement and structural components, was statistically rejectable ($X^2(435) = 891.037, p<.001$), as is usual for larger sample sizes. Nevertheless, the model was acceptable by the "parsimonious" practical indices of fit (NFI= .871, NNFI=.895, and CFI=.927), indicating that the model does a very good job of summarizing a lot of empirical data with few structural parameters. The statistically significant effects of the model predictors on the treatment outcomes are summarized below. The structural coefficients representing the necessarily inverse correlations of the alternative treatment outcomes ($Y_1$-$Y_5$) with each other were omitted from any detailed discussion for clarity and brevity of exposition. These coefficients were left in the structural equations for the purpose of statistical control of indirect effects, regardless of statistical significance, and are presented in Table 2 for easy reference.
Table 2

Standardized Structural Coefficients Between Successive Endogenous Outcome Variables (Y1-Y5).

<table>
<thead>
<tr>
<th></th>
<th>Y1</th>
<th>Y2</th>
<th>Y3</th>
<th>Y4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y2</td>
<td></td>
<td>-.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y3</td>
<td>-.069</td>
<td></td>
<td>-.113</td>
<td></td>
</tr>
<tr>
<td>Y4</td>
<td>-.076</td>
<td>-.122</td>
<td></td>
<td>-.210*</td>
</tr>
<tr>
<td>Y5</td>
<td>-.124*</td>
<td>-.175*</td>
<td>-.334*</td>
<td>-.380*</td>
</tr>
</tbody>
</table>

* p < .05
The effects of the two psychometric common factors, representing sexual maladjustment (MSI) and general psychopathology (MMPI), were also tested. Only one of the direct effects of either of the two latent common factors, was found statistically significant. This single significant effect was that of sexual maladjustment (MSI) upon expulsion due to non-compliance (Y3). The remaining coefficients were also left in the structural equations because of their conceptual importance, regardless of statistical significance, and are shown in Table 3. Although MSI and MMPI were already controlled for SSD, this variable was also retained in all the structural equations, regardless of statistical significance, to control for any self-report biases in the remaining predictors (cf., Cohen & Cohen, 1983). These effects are also shown in Table 3. It is worthy of note, however, that SSD, which was originally conceived of as merely a control variable, had several significant direct effects of its own upon the treatment outcomes. The interesting implications of this finding will be considered further in the discussion below in conjunction with those of the other predictors that were also found significant.
Table 3

Standardized Structural Coefficients Between Psychometric Common Factors and Successive Endogenous Outcome Variables (Y1-Y5).

<table>
<thead>
<tr>
<th></th>
<th>SSD</th>
<th>MSI</th>
<th>MMPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>-.030</td>
<td>-.039</td>
<td>.036</td>
</tr>
<tr>
<td>Y2</td>
<td>.171*</td>
<td>.056</td>
<td>-.009</td>
</tr>
<tr>
<td>Y3</td>
<td>.097</td>
<td>.227*</td>
<td>.013</td>
</tr>
<tr>
<td>Y4</td>
<td>.181*</td>
<td>-.075</td>
<td>-.017</td>
</tr>
<tr>
<td>Y5</td>
<td>.182*</td>
<td>-.041</td>
<td>.066</td>
</tr>
</tbody>
</table>

* p < .05
The statistically significant direct effects of all other self-report predictors are shown in Table 4. The risk of expulsion for sexual recidivism (Y1) was somewhat elevated if the presenting offense at intake was initially for sexual exposure (EXPSR). The risk of expulsion for non-sexual delinquency (Y2) was elevated by the participant's self-reported lack of accountability for his own behavior, but was reduced by approximately the same amount if the participant's ethnicity was African-American (AFRO). The risk of expulsion for non-compliance (Y3) was not predicted by anything other than sexual maladjustment (MSI), which elevated it substantially. The risk of discharge for "behaviorally-unrelated" circumstances (Y4) was mysteriously reduced by the participant's self-reported level of defensiveness (DENIAL). Because this direct effect was statistically adjusted for other causes of expulsion, it casts a certain degree of plausible suspicion on the purportedly "unrelated" nature of the discharge. Finally, the participant's chances of remaining in or completing the program was also systematically reduced by the participant's self-reported level of defensiveness (DENIAL). None of the other hypothesized predictors of the various treatment outcomes were found statistically significant in this study.
Table 4

Standardized Structural Coefficients Between Self-Report Predictors and Successive Endogenous Outcome Variables (Y1-Y5).

<table>
<thead>
<tr>
<th></th>
<th>EXPSR</th>
<th>DENIAL</th>
<th>NOACCNT</th>
<th>AFRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>.166*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y2</td>
<td></td>
<td>.143*</td>
<td>-.156*</td>
<td></td>
</tr>
<tr>
<td>Y3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y4</td>
<td></td>
<td>-.229*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y5</td>
<td></td>
<td></td>
<td>-.281*</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
Outcomes by Defining Variables

To further illustrate the relationship between various clinical outcomes and variables which predict them, the following tables have been constructed. For simplicity, these tables show the relationship between selected predictive variables and outcomes at 12 months. It is noted that outcomes at 12 months were predicted by the same variables as outcomes beyond 12 months. The former was chosen for illustrative purposes given that it was an elapsed period of time common to all participants in the study. Given the previously discussed ambiguity associated with being discharged for "behaviorally unrelated" circumstances, these cases were omitted from the tables.

Table 5 depicts acceptance status by level of denial/defensiveness. As shown, those individuals who were in complete denial were seldom accepted into the program (less than 19%), while those who completely acknowledged their offenses were generally accepted for treatment (over 81%).
Table 5
Percentages of Acceptance x Levels of Denial at Intake

<table>
<thead>
<tr>
<th>Acceptance</th>
<th>Level of Denial</th>
<th>&quot;None&quot;</th>
<th>&quot;Some&quot;</th>
<th>&quot;Complete&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>&quot;None&quot;</td>
<td>18.1%</td>
<td>44.1%</td>
<td>81.4%</td>
</tr>
<tr>
<td></td>
<td>n = 17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>&quot;None&quot;</td>
<td>81.9%</td>
<td>55.9%</td>
<td>18.6%</td>
</tr>
<tr>
<td></td>
<td>n = 77</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows successful program compliance status by level of denial/defensiveness at intake. As illustrated, nearly three-quarters of those youths who showed no denial at intake successfully complied with program requirements for at least 12 months. Only slightly over one-fourth of those in complete denial at intake successfully complied with the program over the ensuing 12 months.
### Table 6

**Percentages of Program Compliance x Level of Denial at Intake**

<table>
<thead>
<tr>
<th>Level of Denial</th>
<th>&quot;None&quot;</th>
<th>&quot;Some&quot;</th>
<th>&quot;Complete&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no</td>
<td>27.4%</td>
<td>48.5%</td>
<td>71.4%</td>
</tr>
<tr>
<td></td>
<td>n = 14</td>
<td>n = 16</td>
<td>n = 5</td>
</tr>
<tr>
<td>yes</td>
<td>72.6%</td>
<td>51.5%</td>
<td>28.6%</td>
</tr>
<tr>
<td></td>
<td>n = 37</td>
<td>n = 17</td>
<td>n = 2</td>
</tr>
</tbody>
</table>

* 12 months

### Table 7

**Sexual Recidivism Status x Type of Referral Offense**

<table>
<thead>
<tr>
<th>Type of Sexual Offense</th>
<th>Child Molestation</th>
<th>Rape</th>
<th>Exposure</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>97.4%</td>
<td>100%</td>
<td>67.7%</td>
<td>88.9%</td>
</tr>
<tr>
<td></td>
<td>n = 74</td>
<td>n = 5</td>
<td>n = 2</td>
<td>n = 8</td>
</tr>
<tr>
<td>yes</td>
<td>2.6%</td>
<td>0%</td>
<td>33.3%</td>
<td>11.1%</td>
</tr>
<tr>
<td></td>
<td>n = 2</td>
<td>n = 0</td>
<td>n = 1</td>
<td>n = 1</td>
</tr>
</tbody>
</table>

Table 7 illustrates sexual recidivism status at 12 months by type of presenting sexual offense at time of intake. As shown, approximately one-third of those referred for exposure sexually reoffended, in contrast to less than 12% of the other offense referral groups.
Table 8 depicts levels of client accountability for their sexual perpetration for those dismissed for non-sexual delinquency within the first year versus the remainder of the youths accepted for treatment. As shown, the majority of those expelled for non-sexual delinquency were those who took no responsibility for their sexual misbehavior at time of intake.

**Table 8**

**Levels of Accountability x Outcome**

<table>
<thead>
<tr>
<th>Level of Accountability</th>
<th>Expulsion for Non-sexual Delinquency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;None&quot;</td>
</tr>
<tr>
<td><strong>no</strong></td>
<td>88.5%</td>
</tr>
<tr>
<td>n = 23</td>
<td>n = 28</td>
</tr>
<tr>
<td><strong>yes</strong></td>
<td>11.5%</td>
</tr>
<tr>
<td>n = 3</td>
<td>n = 1</td>
</tr>
</tbody>
</table>

Table 9 illustrates levels of sexual maladjustment on selected scales of the MSI for those who were dismissed for non-compliance within the first year versus the remainder of the youths accepted for treatment. As shown, the dismissed youths showed higher overall levels of sexual maladjustment, including lower levels of acknowledged interest in "normal" sexuality (Social Sexual Desirability).
Table 9

Selected MSI Scale Scores x Outcome

<table>
<thead>
<tr>
<th>MSI Scale</th>
<th>Treatment Compliant n=56</th>
<th>Treatment Non-Compliant n=22</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Rape</td>
<td>3.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Paraphilias</td>
<td>2.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Sexual Obsessions</td>
<td>4.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Child Molestation</td>
<td>10.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Sexual Dysfunction</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Justifications</td>
<td>4.1</td>
<td>3.7</td>
</tr>
<tr>
<td>Treatment Attitudes</td>
<td>3.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Sex Knowledge</td>
<td>12.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Exhibitionism</td>
<td>2.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Social Sexual Desirability</td>
<td>20.1</td>
<td>7.2</td>
</tr>
<tr>
<td>Cognitive Distortions</td>
<td>6.9</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Psychometric Profile Characteristics

Table 10 summarizes the MSI profile characteristics of the overall sample. This study examined the following scales: Sexual Obsessions, Cognitive Distortions and Immaturity,
Social Sexual Desirability, Child Molestation, Rape, Exhibitionism, Paraphilias, Sexual Dysfunction, Sexual Knowledge, Justifications, and Treatment Attitudes. Table 11 summarizes the MMPI profile characteristics for the overall sample, including the percent of clients who scored in the clinically significant range (≥ 1.5 SD’s above normative mean) on the studied scales (Depression, Psychopathic Deviation, Psychasthenia, Schizophrenia, Mania, and Social Introversion).
Table 10

Selected MSI Scales Scores for Sample

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>&quot;n&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justifications</td>
<td>4.2</td>
<td>3.7</td>
<td>133</td>
</tr>
<tr>
<td>Treatment Attitudes</td>
<td>3.2</td>
<td>1.8</td>
<td>133</td>
</tr>
<tr>
<td>Sexual Obsessions</td>
<td>4.6</td>
<td>3.4</td>
<td>133</td>
</tr>
<tr>
<td>Cognitive Distortions/Immaturity</td>
<td>6.6</td>
<td>3.1</td>
<td>133</td>
</tr>
<tr>
<td>Social Sexual Desirability</td>
<td>20.0</td>
<td>7.2</td>
<td>133</td>
</tr>
<tr>
<td>Child Molest</td>
<td>10.0</td>
<td>6.0</td>
<td>133</td>
</tr>
<tr>
<td>Rape</td>
<td>4.3</td>
<td>5.1</td>
<td>131</td>
</tr>
<tr>
<td>Exhibitionism</td>
<td>2.8</td>
<td>3.1</td>
<td>133</td>
</tr>
<tr>
<td>Paraphilias</td>
<td>4.0</td>
<td>5.1</td>
<td>131</td>
</tr>
<tr>
<td>Sexual Dysfunction</td>
<td>1.7</td>
<td>2.0</td>
<td>130</td>
</tr>
<tr>
<td>Sexual Knowledge and Beliefs</td>
<td>12.8</td>
<td>3.6</td>
<td>133</td>
</tr>
</tbody>
</table>
Table 11

**Selected MMPI Scale Scores for Sample**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>&quot;n&quot;</th>
<th>%T&gt;65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>55.9</td>
<td>10.6</td>
<td>103</td>
<td>9.7%</td>
</tr>
<tr>
<td>Psychopathic Deviate</td>
<td>58.4</td>
<td>11.4</td>
<td>103</td>
<td>25.2%</td>
</tr>
<tr>
<td>Psychasthenia</td>
<td>54.5</td>
<td>11.2</td>
<td>103</td>
<td>9.7%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>55.4</td>
<td>11.4</td>
<td>103</td>
<td>11.6%</td>
</tr>
<tr>
<td>Manic</td>
<td>56.1</td>
<td>11.0</td>
<td>102</td>
<td>7.8%</td>
</tr>
<tr>
<td>Social Introversion</td>
<td>52.9</td>
<td>10.0</td>
<td>102</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

**Significant Correlations Between Outcome Predictor Variables and Other Studied Variables**

Table 12 shows significant correlations between denial/defensiveness and other predictor variables examined in the study. Table 13 depicts significant correlations between referral for exposure and other studied variables. Table 14 illustrates significant correlations between accountability and other predictor variables. Table 15 shows the relationship between Social Sexual Desirability and other variables.
Table 12

Significant Correlations Between Denial/Defensiveness and Other Predictor Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Degree of Denial/Defensiveness</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjudication status</td>
<td>-.20**</td>
<td>196</td>
</tr>
<tr>
<td>No. of Perpetrators in Reference Offense</td>
<td>.16*</td>
<td>196</td>
</tr>
<tr>
<td>Perpetrator Race = Caucasian</td>
<td>.15*</td>
<td>197</td>
</tr>
<tr>
<td>Level of Accountability</td>
<td>.52***</td>
<td>193</td>
</tr>
<tr>
<td>No. of Previous Arrests for Non-sexual Offense</td>
<td>.29***</td>
<td>141</td>
</tr>
<tr>
<td>Hx. of School Truancy</td>
<td>.18*</td>
<td>138</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01  *** p < .001
<table>
<thead>
<tr>
<th>Variable</th>
<th>Referral for Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Molest/MSI</td>
<td>-.18*</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Mania/MMPI</td>
<td>-.20*</td>
</tr>
<tr>
<td></td>
<td>n = 103</td>
</tr>
</tbody>
</table>

* p < .05
### Table 14

**Significant Correlations Between Accountability and Other Predictor Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Degree of Accountability</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjudication status</td>
<td>-.14*</td>
<td>193</td>
</tr>
<tr>
<td>Sexual Obsessions</td>
<td>.20*</td>
<td>128</td>
</tr>
<tr>
<td>Social Sexual Desirability</td>
<td>.30**</td>
<td>128</td>
</tr>
<tr>
<td>Child Molestation</td>
<td>.22*</td>
<td>128</td>
</tr>
<tr>
<td>Level of Denial</td>
<td>.52**</td>
<td>193</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01
### Table 15

**Significant Correlations Between Social Sexual Desirability and Other Predictor Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perpetrator Race = Caucasian</td>
<td>.25**</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Perpetrator Race = African American</td>
<td>-.27**</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Treatment Attitudes</td>
<td>.23**</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Sexual Obsessions</td>
<td>.42***</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Child Molestation</td>
<td>.27**</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Court Referred</td>
<td>.21*</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>No. of Previous Victims</td>
<td>.24**</td>
</tr>
<tr>
<td></td>
<td>n = 117</td>
</tr>
<tr>
<td>Hx. of Suicidal Ideation</td>
<td>.24*</td>
</tr>
<tr>
<td></td>
<td>n = 108</td>
</tr>
<tr>
<td>Perpetrator Age</td>
<td>.38***</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Sexual Knowledge</td>
<td>.40***</td>
</tr>
<tr>
<td></td>
<td>n = 133</td>
</tr>
<tr>
<td>Depression</td>
<td>-.22*</td>
</tr>
<tr>
<td></td>
<td>n = 99</td>
</tr>
<tr>
<td>Level of Accountability</td>
<td>.30***</td>
</tr>
<tr>
<td></td>
<td>n = 128</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01  *** p < .001
Discussion

The results from this study argue for reexamination of the field’s current approach to conceptualizing juvenile sex offender risk assessment and treatment planning. As previously reviewed, juvenile sex offender treatment programs have historically been heavily influenced by theoretical constructs derived from clinical work and research on adult sex offenders, particularly retrospective studies of adults who began to sexually offend during their juvenile years. The above work has resulted in the assumption that sexually deviant behaviors are primarily reflective of sexual cognitions and interests which are idiosyncratically acquired early in life, and which are stable (if not progressive) unless addressed in the context of highly focused clinical interventions.

These influences have resulted in an emphasis on objective and clinical assessment of the juvenile sex offender’s sexual attitudes, interests, and impulse control. Treatment approaches have typically focused on the modification of sexually maladaptive cognitions and interests and the formulation of relapse prevention plans which stress avoidance of high risk situations and the employment of coping strategies as a means of reducing the risk of future loss of behavioral control. Within the above framework, risk assessment primarily involves the measurement of specific sexual interests and characteristics which are believed to explain past sexual misbehavior and the potential for reengagement in such behavior. Risk under such conceptualizations is essentially framed as likelihood of sexual reoffending, and
treatment failure as failure to sufficiently alter the underlying cognitions and interests which give rise to such behavior.

Youths perceived as having longer-standing and more pronounced paraphilic attitudes and interests, and those reflecting greater overall characterological impairment and psychopathology, have been typically viewed as being at greater risk for sexual reoffending and as having a poorer treatment prognosis than lesser disturbed youths. Of some controversy, has been the issue of client admission of having engaged in the alleged perpetrations as a prerequisite for acceptance into treatment. While most professionals view overcoming client denial or minimization as a necessary and integral component of the treatment process (Barbaree & Cortoni, 1993), some have stressed that denial is linked to general treatment resistance and should be a factor in determining disposition (National Task Force Report, 1993). Furthermore, there has been some divergence of opinion in the field as to the extent to which client accountability in admitting all of the alleged offenses should remain an on-going focus of treatment efforts, and one of the criteria for determining treatment progress and readiness for discharge.

At the heart of this controversy, is the question of whether initial client denial and defensiveness is more reflective of trait than state attributes, and therefore the extent to which denial specific to the sexual offending is indicative of more pervasive personality characteristics associated with general psychological defensiveness and resistance to
professional help. This issue is of more than academic interest, as it has direct policy and practice implications. Data supporting the assumption that client denial and defensiveness is more a state condition suggests that strategies could be developed to maximize client accountability and receptiveness to professional help. For example, if the denial was associated with fear of legal consequences and anticipated interpersonal rejection, it could be argued that such youths would benefit from strategies designed to allay fears associated with disclosure, including efforts to increase familial support for treatment. From this perspective, client defensiveness or denial could be viewed as more of a temporary impediment to treatment, rather than a prognosticator of lack of amenability to professional help.

Data pointing to the more global and characterological aspects of client resistance would argue for the validity of its inclusion as a construct to be assessed in determining prognosis, and therefore as a basis for making dispositional decisions. Furthermore, denial and accountability would properly be viewed as important not only to the assessment process, but issues which should be addressed throughout the therapeutic process. Whereas the interpretation that client resistance is more a function of anxiety argues for client support, the interpretation that it reflects poor socialization and insensitivity to others would argue for confrontational approaches which attempt to increase, as opposed to lower, level of apprehension. Youths manifesting such resistance would perhaps be those who do not
show adaptive levels of inhibitory anxiety similar to studied adults possessing a high level of psychopathy (Hare, 1996).

The findings of the current study suggest that the strong emphasis on assessing sexual deviancy in the determination of appropriateness for outpatient sex offender treatment, and risk of recidivism, may divert attention away from issues which more fundamentally affect outcome. Sexual recidivism, at least as measured over one to two years, does not appear to be a phenomenon of significant prevalence. In this study, only 3.4% of the youths accepted for treatment were found to have sexually reoffended within the first 12 months following intake, and only 5.0% following 12 months. Clearly, sexually reoffending, to the extent measurable, does not appear to occur with great frequency. These findings appear to be consistent with the previously reviewed studies showing a relatively low rate of sexual recidivism in treated juvenile sex offenders. The above data, however, should not be construed as indication that the majority of juvenile sex offenders referred for treatment successfully complete programs and no longer pose a risk to their communities. As data from the current study reflect, there is a relatively high rate of attrition in those youths accepted into treatment. In the current study, only about one-half of the youths accepted into the treatment program remained in treatment 12 months later. Approximately one-fifth of the youths were discharged for reasons extraneous to their behavior and attitudes (e.g. parent move from the area, etc.) and nearly one-third were expelled from the program as "treatment failures". However, of this latter group, sexual recidivism accounted for only
11.4% of the treatment failures. Over three-quarters of the treatment failures were accounted for by those youths who were discharged from the program for being non-compliant with attendance and/or therapeutic directives. Record review suggests that these were youths who were generally uncooperative, oppositional, and who did not attend scheduled therapy sessions on a consistent basis. The above data trends, namely high attribution for non-compliance and low sexual recidivism, continued in year two.

While the fate of those youths discharged for therapeutic non-compliance could not be determined from the present data set, data from other studies would suggest that they may be at high risk for future sexual or non-sexual delinquency. It has been a relatively consistent finding that both juvenile and adult sex offenders who fail to successfully complete treatment programs have a higher long-term rate of sexual recidivism than those who successfully complete treatment, with at least two studies suggesting that cognitive distortions regarding accountability (i.e. victim blame) are associated with elevated recidivism rates (Kahn & Chambers, 1991; Schram et al, 1991). Interestingly, the data from this study do not suggest that youths who fail to comply with therapeutic directives are those who are more sexually maladjusted than their more compliant counterparts, nor more pervasively psychologically disturbed. Therefore, their apparent increased risk of future delinquency may not be a function of sexual or psychological maladjustment per se, but instead attitudes which contribute to socially irresponsible behavior.
The data from this study point to the salience of the above discussed attitudes relating to denial and defensiveness as being highly influential in predicting both acceptance into treatment and treatment outcome. The current data support clinical observation that a large number of juvenile sex offenders, like their adult counterparts, manifest some degree of denial and defensiveness at the point of intake. In this study, over half of the sampled youths exhibited such attitudes with approximately one-fifth appearing to be in complete denial. Denial appeared to significantly influence clinical judgement as to appropriateness for treatment as less than 20% of those perceived to be in complete denial were admitted to the program, in contrast over 80% of those who did not manifest any denial. This factor appeared to weigh more heavily into clinical decision making than the youth’s sexual offense history (i.e. number of previous victims), his manifest level of sexual maladjustment as measured by the MSI, or his overall psychological maladjustment as measured by the MMPI.

Attitudes of denial at the time of referral appeared to not only influence clinical judgement as to appropriateness for treatment, but also proved to be predictive of who successfully complied with treatment. Individuals who evidenced complete denial at intake were not only more likely to be rejected for admission, but also less likely to successfully comply with program requirements once admitted. The current data reveal that youths who apparently acknowledged all of what they have been accused were almost three times more likely to be in successful compliance with program expectations 12 months after intake than
those in complete denial, and nearly 50% more likely to be in compliance than those youths who manifested partial denial at intake.

As expected, attitudes of denial appear to be closely related to degree of client accountability for his sexual misbehavior. Those youths who were high in denial were also those who apparently took less responsibility for their sexual misbehavior. However, neither client denial nor accountability appeared closely related to level of sexual deviancy, overall psychopathology, or psychopathic deviance as measured by the MMPI. Instead, client denial and accountability appeared to be related to circumstantial variables such as adjudication status. Whereas over 80% of those who were fully adjudicated completely acknowledged their offense, less than 12% of those who had no court involvement did so. Similarly, over 80% of the fully adjudicated youths were judged as taking full responsibility for their sexual misbehavior, in contrast to under 13% of the non-court involved youths.

The above data clearly point to the potential value of court involvement in increasing client accountability and receptivity to intervention. This finding is consistent with clinical observation that adjudicated youths are frequently more motivated for treatment than those not involved with the criminal justice system and less resistant to therapeutic directives (National Task Force Report, 1993). However, it should be noted that while adjudication status appears to be associated with acceptance for treatment, it did not appear to be directly related to treatment outcome. Therefore, it appears that the influence of
adjudication is on improving readiness for treatment, as opposed to being a deterrent to delinquency, per se.

The above data point to client defensiveness as being more of a circumstantial than a trait variable. However, it does not appear directly related to affective state as clinically measured by the MMPI. Instead, it appears to be more of an attitudinal state independent of level of psychopathology or sexual adjustment. It cannot be determined from the present data as to whether defensiveness regarding one's sexual offense is independent of, or linked to, more general psychological defensiveness. Likewise, these data do not preclude the interpretation that attitudes of denial and defensiveness may be linked to psychopathy, at least in some cases. While there was no apparent relationship between psychopathic deviance as measured by the MMPI and denial of sexual wrong-doing, denial did appear related to variables which could be construed as reflecting psychopathy. Specifically, those individuals who were high in denial were those who were more likely to have been previously arrested for a non-sexual offense and those who were more likely to have a history of school truancy. It is entirely possible that while most youths who manifest denial are not highly psychopathic, and that their denial is more a function of circumstance than psychological style (i.e. no court or familial pressure to admit), that some percentage of deniers are youths with lengthy histories of delinquency who generally take little responsibility for their behavior.
Denial and defensiveness, even though most likely more associated with circumstance than psychological style, may well remain stable over time. Although changes in these attitudes were not specifically assessed in the current study, the fact that such attitudes at intake predict outcomes of one to two years later strongly suggests their temporal stability. If, as appears, such attitudes are linked to external contingencies (e.g. legal circumstance, etc.), then they may well not change unless the circumstances that give rise to them change. The above interpretation would be consistent with clinical observation that youths in denial often do not admit to their offense unless, and until, legal and/or parental pressure is brought to bear and the consequences of not admitting is outweighed by any perceived negative consequences associated with admitting guilt and responsibility.

The influence of Social Sexual Desirability (SSD) on the prediction of outcomes appears to be related to attitudes of openness and willingness to disclose. This scale has been found by the publishers of the MSI to be associated with honesty and a lack of embarrassment in acknowledging normal sexual interests. In the current study, individuals who scored high on this scale appeared more willing to acknowledge the presence of sexual problems (past and present) and have a positive attitude towards receiving help. While its positive association with an increased likelihood of non-sexual delinquency is not clear, it may simply reflect the individuals’ greater willingness to acknowledge behaviors which could result in termination of treatment or revocation of probation. However, it is also possible that high scores on the scale are associated with a higher level of impulsivity. This possibility
is raised by virtue of the positive correlation between scores on this scale and number of known abuse victims previous to the reference offense, heightened level of deviant sexual interest as measured by the MSI, and a history of suicidal ideation and/or gesturing. A more complete explication of its link with both positive and negative treatment outcomes will have to await further research.

Summary and Recommendations

Overall, the results of this study suggest that clinical assessment and risk profiling efforts may at the current time be somewhat misguided in overemphasizing the importance of sexual deviance as a construct for explaining juvenile sexual offending and predicting response to treatment. The strong emphasis currently placed on this variable may divert attention away for more basic psychological processes which affect outcome, including those related to receptivity to intervention. Attitudes of openness and accountability appear to be reliable predictors of both judged amenability to treatment as well as a positive treatment outcome. These treatment attitudes do not appear directly related to overall psychopathology or sexual deviancy, per se, but do appear to be linked to the youth’s legal status at the time of evaluation.

Most juvenile sex offenders who do not complete treatment do not appear to fail because of engagement in either sexual or non-sexual delinquency. Instead, they appear to fail due to a lack of compliance with attendance requirements and/or therapeutic directives.
Whether these youths are at greater long-term risk for sexual or non-sexual delinquency cannot be determined from the current data, although other studies have suggested that they may be. It would therefore appear prudent for clinicians and court officials to carefully examine such attitudes in identified juvenile sex offenders and take them into consideration when making dispositional decisions and evaluating treatment progress.

While attitudes of denial and accountability are important in understanding response to treatment they certainly do not by themself completely explain the treatment outcome process. Furthermore, the present data do not provide complete answers to questions relating to the origins of such attitudes and their malleability. It is recommended that future research focus on these issues, particularly the extent to which these attitudes are circumstantial and can be altered by systemic approaches. Confirmation of the latter would provide clear indication for criminal justice and mental health systems collaboration in maximizing referred youths', and their families', awareness of the benefit of assumption of responsibility and cooperation with legal and treatment efforts.

Finally, the results of this study underline the importance of examining the phenomenon of juvenile sexual offending and treatment outcome from a comprehensive, multi-dimensional, and conceptually integrated perspective. In this regard, issues of client attitude toward treatment and accountability are likely best understood when examined in the context of their linkage to the youth's personality and level of social maturation, familial
attitudes and values, and external circumstances (i.e. legal contingencies). It is recommended that future research devoted to developing an empirically validated typology of the juvenile sexual offender include an examination of not only initial attitudes toward treatment, but their etiology, and the manner and conditions under which such attitudes may change over the course of treatment.
References


and females sexually molested as children. Journal of Interpersonal Violence, 6(2),
205-217.

sexual offending: Etiology, evaluation, and treatment. Criminal Justice and Behavior,
21(1), 132-149.

Hunter, J.A. & Figueredo, A.J. (in press). The influence of personality and
history of sexual victimization in the prediction of juvenile perpetrated child
molestation. Behavior Modification.

discriminative utility of the Adolescent Cognition Scale for juvenile sexual offenses.
Annals of Sex Research, 4, 281-286.

Etiology of Juvenile Perpetrated Child Molesters. Manuscript submitted for
publication.

of juvenile sexual offenders: Variations and efficacy. Annals of Sex Research, 5, 71-
80.


Appendix A
Please refer back to the Clarification of Questionnaire Items if you have any questions.

**RISK PROFILING RESEARCH PROJECT**

### I. Intake Data

<table>
<thead>
<tr>
<th>1. Type of Offense (check all that apply for lowest victim)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Child molestation (more than 3 years younger)</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Notes on previous victims: ____________________________</td>
</tr>
<tr>
<td>b) Rape (attempted or actual vaginal or anal intercourse with an individual whose age is the same as, older than, or less than 3 years younger)</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>c) Exposure</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>d) Other: ___________ (voyeurism, obscene phone calls, fetishes, etc.)</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>e) Information Missing</td>
</tr>
<tr>
<td>Data not collected</td>
</tr>
<tr>
<td>Subject refused to answer</td>
</tr>
<tr>
<td>Data not interpretable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Legal Status (Time of Referral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjudicated (if P.O. or court services, assume adjudication)</td>
</tr>
<tr>
<td>Under advisement (diversion, etc. charges held)</td>
</tr>
<tr>
<td>No court involvement</td>
</tr>
<tr>
<td>Information Missing</td>
</tr>
<tr>
<td>Data not collected</td>
</tr>
<tr>
<td>Subject refused to answer</td>
</tr>
<tr>
<td>Data not interpretable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Referral Agency (from BSP - ineligible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Juvenile court</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>b) Social Services</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>c) Other: ___________ (e.g. parents, schools, physician)</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>
d) Information Missing
   Data not collected - x
   Subject refused to answer - y
   Data not interpretable - z

4. No. of Perpetrators in Reference Offense (in last offense only)
   Single - 0
   Multiple - 1
   Information Missing
   Data not collected - x
   Subject refused to answer - y
   Data not interpretable - z

5. Gender of Victim
   Female - 0
   Male - 1
   Information Missing
   Data not collected - x
   Subject refused to answer - y
   Data not interpretable - z

6. No. of Previous Sexual Abuse Victims
   Information Missing
   Data not collected - x
   Subject refused to answer - y
   Data not interpretable - z

7. Deviant Sexual Aggression Score (for reference offense)
   a) No. of incidents ______ for this victim "______"
   
   b) Highest level of aggression ______ (at any time w/this victim)
      0 = None
      1 = Verbal (somewhat abusive or coercive)
      2 = Threat of physical force
      3 = Physical force
      4 = Threat of weapon
      5 = Use of weapon
      6 = Excessive physical force (beyond necessary)
   
   c) Information Missing ("B" only)
      Data not collected - x
      Subject refused to answer - y
      Data not interpretable - z
8. **Level of Defensiveness/Denial** ("I did it" about the offense by the end of RJSOP evaluation)
   - Acknowledges everything accused of - 0
   - Acknowledges some part of what was accused of - 1
   - Completely denies allegations - 2
   - Information Missing
     - Data not collected - x
     - Subject refused to answer - y
     - Data not interpretable - z

9. **Level of Accountability** (Names others by end of RJSOP evaluation)
   - Assumes total responsibility for behavior - 0
   - Assumes partial responsibility for behavior - 1
   - Assumes no responsibility for behavior - 2
   - Information Missing
     - Data not collected - x
     - Subject refused to answer - y
     - Data not interpretable - z

10. **No. of Previous Arrests for Sexual Offenses**
    Information Missing
    - Data not collected - x
    - Subject refused to answer - y
    - Data not interpretable - z

11. **No. of Previous Arrests for Non-sexual Offenses**
    Information Missing
    - Data not collected - x
    - Subject refused to answer - y
    - Data not interpretable - z

12. **Hx. of School Truancy** (look in history of RA)
    - None - 0 (if not specifically mentioned in school report)
    - Some (1-3 x yr.) - 1
    - Frequent (>3 x yr.) - 2
    Information Missing
    - Data not collected - x (if no school report)
    - Subject refused to answer - y
    - Data not interpretable - z

13. **Hx. of School Suspension/Expulsion for Misbehavior** (e.g. if put out of school at all)
    - None - 0 (if not mentioned in school report)
    - Some (1-3 x yr.) - 1
    - Frequent (>3 x yr.) - 2
    Information Missing
    - Data not collected - x (if no school report)
    - Subject refused to answer - y
    - Data not interpretable - z
### 14. Hx. of Substance Abuse

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Some (1-3 x/mo.)</td>
<td>1</td>
</tr>
<tr>
<td>Frequent (&gt;3 x/mo.)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Information Missing**

- Data not collected: X (if not specifically mentioned)
- Subject refused to answer: Y
- Data not interpretable: Z

#### Notes:
- 0 (if specifically "No")
- 1 (any more than social drinking)
- 2 (if hospitalized for abuse)

### 15. Hx. of Previous Mental Health Treatment

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Outpatient only</td>
<td>1</td>
</tr>
<tr>
<td>Residential or acute care</td>
<td>2</td>
</tr>
</tbody>
</table>

**Information Missing**

- Data not collected: X (if not specifically mentioned)
- Subject refused to answer: Y
- Data not interpretable: Z

### 16. Hx. of Suicidal Ideation/Gesturing (over lifetime)

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Some (Hx. of 1-3 episodes)</td>
<td>1</td>
</tr>
<tr>
<td>Frequent (Hx. of &gt;3 episodes)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Information Missing**

- Data not collected: X (if not specifically mentioned)
- Subject refused to answer: Y
- Data not interpretable: Z

### 17. Hx. of Social Isolation (had friends/lover)

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
</tbody>
</table>

**Information Missing**

- Data not collected: X (only if no report on social relationships)
- Subject refused to answer: Y
- Data not interpretable: Z

### 18. Paternal Hx. of Substance Abuse

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
</tbody>
</table>

**Information Missing**

- Data not collected: X (if not specifically mentioned)
- Subject refused to answer: Y
- Data not interpretable: Z

---

4
<table>
<thead>
<tr>
<th>Question</th>
<th>No</th>
<th>Yes</th>
<th>Information Missing</th>
</tr>
</thead>
</table>
| 19. Maternal Hx. of Substance Abuse | - 0 (if specifically "No") | - 1 | Data not collected - x (if not specifically mentioned)  
Subject refused to answer - y  
Data not interpretable - z |
| 20. Paternal Hx. of Arrest (for any offense) | - 0 (if specifically "No") | - 1 | Data not collected - x (if not specifically mentioned)  
Subject refused to answer - y  
Data not interpretable - z |
| 21. Maternal Hx. of Arrest | - 0 (if specifically "No") | - 1 | Data not collected - x (if not specifically mentioned)  
Subject refused to answer - y  
Data not interpretable - z |
| 22. Hx. of Child Sexual Abuse (Perp. victimized) | - 0 (if specifically "No") | - 1 | Data not collected - x (if not specifically mentioned)  
Subject refused to answer - y  
Data not interpretable - z |
| 23. Hx. of Physical Abuse | - 0 (if specifically "No") | - 1 | Data not collected - x (if not specifically mentioned)  
Subject refused to answer - y  
Data not interpretable - z |
| 24. Client's Age at Time of RJSOP Evaluation | _____ (in yrs.) |  | Data not collected - x  
Subject refused to answer - y  
Data not interpretable - z |
25. Client’s Race
   a) Asian
      No - 0
      Yes - 1
   b) Caucasian
      No - 0
      Yes - 1
   c) Hispanic
      No - 0
      Yes - 1
   d) African-American
      No - 0
      Yes - 1
   e) Information Missing
      Data not collected - x
      Subject refused to answer - y
      Data not interpretable - z

26. MMPI
   No - 0 (if not in file)
   Yes - 1
   Information Missing
      Data not collected - x (only if form is missing but explained)
      Subject refused to answer - y 
      Data not interpretable - z 

27. Cognitions Scale
   No - 0 (if not in file)
   Yes - 1
   Information Missing
      Data not collected - x (only if form is missing but explained)
      Subject refused to answer - y 
      Data not interpretable - z 

28. Sexual Interest Card Sort
   No - 0 (in not in file)
   Yes - 1
   Information Missing
      Data not collected - x (only if form is missing but explained)
      Subject refused to answer - y 
      Data not interpretable - z 

Testing done for RJSOP or within 60 days of evaluation only!
29. MSI

<table>
<thead>
<tr>
<th>Option</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Information Missing</td>
<td>x</td>
</tr>
<tr>
<td>Data not collected</td>
<td>y</td>
</tr>
<tr>
<td>Subject refused to answer</td>
<td>z</td>
</tr>
</tbody>
</table>

30. Phallometric Assessment (1st 30 days of referral)

<table>
<thead>
<tr>
<th>Option</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Information Missing</td>
<td>x</td>
</tr>
<tr>
<td>Data not collected</td>
<td>y</td>
</tr>
<tr>
<td>Subject refused to answer</td>
<td>z</td>
</tr>
</tbody>
</table>

II. Outcome - if unclear, contact RJSOP!

1. Accepted into Program (RJSOP only)

<table>
<thead>
<tr>
<th>Option</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (If no, stop at this point)</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>Information Missing</td>
<td>x</td>
</tr>
</tbody>
</table>

   Comments: ______________________

2. Txt. Outcome (within 1st 12 months ONLY)

   a) Remained in program for twelve months
   b) Expelled from program due to non-compliance with attendance requirements and/or therapeutic directives
   c) Expelled from program for engagement in delinquent behaviors of a non-sexual nature
   d) Expelled from program for sexual recidivism
   e) Discharged from program due to circumstances unrelated to the behavior of the youth (e.g. family moved out of area).
3. Txt. Outcome (Current Status) after 12 mo.s
   a) Remains in active phase of treatment? YES or NO
      1) Number of months in program? ______

   b) Completed active phase of treatment? YES or NO
      1) Number of months required to complete program? ______ (e.g. 14th mo.s)

   c) Expelled/discharged from program (after year one) YES or NO
      1) Circle reason for expulsion/discharge
         i) Expelled from program due to non-compliance with attendance requirements and/or therapeutic directives
         ii) Expelled from program for engagement in delinquent behaviors of a non-sexual nature
         iii) Expelled from program for sexual recidivism
         iv) Discharged from program due to circumstances unrelated to the behavior of the youth (e.g. family moved out of area).

      2) List month of discharge (number of mo.s elapsed from admission to discharge)______

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Docx 6000
Baltimore, MD 20849-6000