The Therapeutic Challenge of the Learning Impaired Sex Offender

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Abstract

Learning impairment in childhood and adolescence was examined in a sample of 1915 sex offenders and 279 non-sex offender and community controls. They were compared on school dropouts, grade failures, and placement in special education classes. The sex offenders showed significantly lower education and higher incidences of dropouts than community controls. The offender groups more often had failed grades and had been in special education classes than the population at large. Neurodevelopmental factors such as birth complications and defects, motor and language developmental abnormalities, ADHD, neurological disease and injuries, mental retardation, and learning disorders, all contributed to the educational deficits, but learning disorders diagnosed in childhood contributed most. The importance of assessing learning impairment for treatment compliance and effectiveness is discussed.

Key words: learning impairment, sexual offenders, treatment

Therapy is a learning process that ranges from the emotive to the didactic. Contemporary therapies for sex offenders, such as relapse prevention therapy or anger management, often are administered in groups and have didactic components with lectures on the principles of relapse, victim empathy, etc., and often include 'written homework assignments,' mimicking a classroom setting in school. Some sex offenders, who have educational deficits, as evidenced by incomplete education, i.e., dropped out of school, experienced grade failures or, or special education placement, may have developed a negative attitude toward school and learning situations in general. , which in their past were associated with ridicule, and which they may believe will be repeated in therapy. Their negative childhood and adolescent experience may be a hidden dimension of treatment that is a precursor to learning difficulties encountered during therapy, and may contribute to the sex offenders refusing or dropping out of therapy. They may also be less capable of benefiting from therapy because of their learning impairment. The question raised by the present study is: How common are educational deficits and learning impairment in childhood and adolescence among sex offenders?

Learning impairment may manifest in a variety of ways. A readily available index of such impairment is represented in educational deficits. School dropouts among criminals in general have been examined in a number of studies and some reports over the years suggested that school dropouts were more likely to be involved in later crime, to be unemployed, and to use the welfare system (e.g., Drapela, 2005; Ferguson, Swain-Campbell, & Horwood, 2002; Ferguson, Gallagher, Morley, & St. Ledger, 1986; Hathaway, Reynolds, & Monacheri, 1969, Jonson-Reid, & Way, 2001). Sex offenders were typically not mentioned separately in the studies of school dropouts, but a few studies did examine them specifically.

Bonheur and Rosner (1981) found that 90.6% of a sample of 64 sex offenders (classed as 44 rapists, 13 sodomy, 4 sexual abuse, 1 sexual misconduct, 1 promoting prostitution, and 1 public

lewdness) were high school dropouts and 7.8% were in special educational programs for 'the intellectually limited and the emotionally or behaviorally disordered'. Langevin and Pope (1993) examined a sample of 76 sex offenders (classified as 25 pedophilic, 25 incest offenders, and 26 sexual aggressives against adult females) and found that more than half had failed a grade in primary or high school. The majority of grade failures were at the public school level (K to 8), suggesting that sex offenders have early learning problems, often prior to the onset of puberty and prior to the presence of their sexual disorder. Kelly, Richardson, Hunter, and Knapp (2002) found that 50% of 39 male adolescent sex offenders (classed as 5 intra-familial, 10 extra-familial, 6 mixed, and 9 versus peers or adults) had 'special educational needs'. Two additional studies mentioned special educational needs of sex offenders, but did not specify numbers. Similarly, Bailey, Thornton, and Weaver (1994) examined 100 adolescents admitted to a secure unit and reported that sex offenders among them were more often than other delinquents to be involved with special education, child psychiatry, and welfare services. Jonson-Reid and Way (2001) also examined 304 adolescent sex offenders, 3091 violent and 2687 non-violent property or drug related offenders and stated that the sex offenders were twice as likely to be receiving special education services as non-sex offenders. In other unpublished studies, Pawlak (1994) reported that 64% of 50 rapists were high school dropouts compared to 34.1% of 41 non-offenders. Mattingly (1999) examined 120 sex offenders and 134 non-sex offenders and found that none of the sex offenders and only one control completed high school. In the same study, 47.1% of the sex offenders and 41.8% of the non-sex offenders had been in special education classes. Although these studies had small sample sizes of mixed groups of sex offenders and did not examine school dropouts, grade failures, and special education placement together, In sum, these their results suggest that there may be substantial educational deficits among sex offenders who enter therapy.

If these educational deficits are substantiated in a larger sample of sex offenders, one may ask what the sources of the deficits are. Learning impairment, as reflected in educational deficits, may arise from a variety of sources, but the focus here is on long-term neuropsychological and developmental factors, which are considered enduring features of the individual. Congenital abnormalities and/or anoxia at birth may be associated with neurological damage or dysfunction that places the individual behind other children in ability to learn from a very early age. These abnormalities may lead to accumulated deficits by the time the child starts school and lead to grade failures, special education, and eventual school dropout. The congenital neurological abnormalities may only be manifested as motor and language developmental delays in infancy.

Children may also acquire learning deficits from neurological disease, such as meningitis, or from head injuries in motor vehicle or other accidents. Results of a study by Langevin (2005) suggest that a significant number of sex offenders may have sustained brain injuries and may have special learning needs in therapy. Of the 513 sex offenders examined, 49.3% had sustained a head injury that rendered them unconscious prior to their first sexual crime and 22.5% had sustained major brain trauma. Other research studies have indicated that sex offenders have neurocognitive impairment and structural brain damage, and may be over-represented among the mentally retarded (e.g., Blanchard, Watson, et al, 1999; Cantor, Blanchard et al, 2004; Daderman, Lingren & Ledberg, 2004; DelBello, Soutello, Zimmerman, et al., 2004; Hawk, Rosenfeld, & Warren, 1993; Hucker, Langevin, Dickey, et al, 1988; Hucker, Langevin, Wortzman et al, 1986; Langevin, Lang, et al, 1989; Langevin, Wortzman, et al 1989; Luiselli, Marchese, Potoczny-Gray, & Rosso, 2000; Murray, McKenzie, et al, 2001; Purins, & Langevin, 1985; Regenstein, & Reich, 1978; Simpson, Blaszczynski, & Hodgkinson, 1999; Weinstein, 1974; and Wright, Nobrega, Langevin, & Wortzman, 1990).

Learning impairment may be recognized only when the child starts school. Diagnosed learning disorders are often identified as the source of the learning impairment and typically involve language, i.e., an inability to read, write, or process language; features that may also be problems in therapy. In addition, lLearning disorders are often associated with ADHD (see Wender, 2000), a disorder that is over-represented in the criminal population and is common among sex offenders

(Ponsetti, Viah-Koch, & Bosinski, 2001; Vaih-Koch, Ponsetti & Bosinski, 2001). In addition to the learning disorder, the ADHD itself, which is associated with inattentiveness and disruptive hyperactivity in the classroom, may lead to special education placement.
In an attempt to replicate the findings of earlier studies with small numbers of sex offenders, the present study examined a larger and more varied sample of sex offenders, non-sex offenders, and community controls for the incidence of school dropouts, grade failures, and placement in special education classes for children with learning problems. Moreover, some of the childhood neurodevelopmental abnormalities that may be associated with these educational deficits were examined as possible contributing factors to learning impairment. In particular, birth complications and congenital defects, motor and language developmental abnormalities, and childhood identification of mental retardation, learning disorders, ADHD, head injuries, and neurological abnormalities were examined as possible background factors to school difficulties. If substantial numbers of sex offenders have these problems, it suggests that special learning procedures may be necessary for effective therapy. Based on the existing literature, it was hypothesized that sex offenders in general will show higher incidences of grade failure, school dropout, and placement in special education than non-sex offenders or than the population at large.

Method

Participants

From a forensic database of men assessed between 1966 and 2004 at a university hospital and/or private clinic in a large urban community, a sample of 2194 men was examined, which included 1915 sex offenders, 150 violent non-sex offenders (hereafter, VNS), 63 non-violent non-sex offenders (hereafter, NVNS) from the same clinics (these latter two groups also collectively referred hereafter as the non-sex offender controls), and 66 community non-offender volunteers for research. All controls were selected on the basis of having no deviant sexual history or charges for sex crimes. Community controls were solicited from advertisements around the university and in the community and anyone with a criminal or psychiatric history was excluded. All of the men were selected from the database on the basis of having information about one or more of educational attainment, grade failures, and/or placement in special education. A total of 2092 offenders had educational attainment information (1831 sex offenders and 261 controls), but only 1315 had information about grade failures (1184 sex offenders and 131 offender controls) and 1036 on special educational placement (904 sex offenders and 132 non-sex offender controls).

Procedure

A forensic clinical assessment, using standard questionnaires, phallometry, and interview, was undertaken that examined a number of factors, including among others, sexual history and preference and educational history (cf. Langevin, 1985; and Langevin & Watson, 1996 for details). Pertinent to the present study, sexual offender group classification was based on lifetime criminal history derived from clinical interview and questionnaires, all available hospital records including re-admissions up to 33 years later, and provincial and Royal Canadian Mounted Police (RCMP) records, as available. Educational attainment, grade failures, and placement in special education classes for children with learning problems were obtained from hospital records. Educational attainment was recorded as last year of school *completed*. Offenders who were currently students in public ((Kindergartenpre-school to 8) or high school (9-13) were excluded from the count of school dropouts. The actual grades failed were recorded, as available. If the offender left school during the academic year, it was *not* counted among the grade failures. Information in files on birth complications and congenital abnormalities, motor and language developmental abnormalities, and

head injuries that involved being rendered unconscious were noted as present or absent. Birth complications included any births that might be associated with anoxia or trauma to the fetus, i.e., premature or breech birth, blue at birth, respiratory distress, and congenital abnormalities, such as spinal and limb abnormalities, deafness, or fetal alcohol syndrome. Developmental problems included late walking and talking, lisping, slurred speech, or seizures as well as disease states that affected development delays, i.e., polio, meningitis, etc. Childhood diagnosis of mental retardation, learning disorders, Attention Deficit Hyperactivity Disorder (ADHD), neurological disorders, head injuries, and emotional problems were also recorded, as available. Information was obtained from all of the offenders themselves and, in some cases, from their parents or other external hospital records as well. Unfortunately many offenders did not have a precise diagnostic label for their developmental or learning problem, e.g., to say they were diagnosed as 'dyslexic'. Rather they stated they had a learning disability and had problems, typically with reading, which one might attribute to a variety of learning disorders. For purposes of the present study the developmental and learning problems were simply coded as present or absent. All information from community volunteers was obtained from them when they participated in our research projects. Results were analyzed using SPSS 12.0 analysis of variance, t-tests, and likelihood ratios as applicable. Not all information was available in very case and varying numbers of cases (N) are indicated when they differ from the total sample.

Results

The sample averaged 34.8 years of age at the time of their initial assessment (S.D.= 12.6, range 12 to 84) and 10.4 years of education (S.D. = 2.4, range 0 to 13, with 15.1% having some community college education and 22.1% some university education). A total of 41.9% were single never married, 28.9% married, 8.2% common-law, 4.3% divorced, 16.4% separated, and 0.4% widowed. Oneway analysis of variance comparing the VNS, NVNS, community control groups and sex offenders was significant ($F(3, 2179) = 25.32$, $p < .001$). Bonferroni correction post hoc tests indicated that only the community controls differed from the other three groups in being more educated.

Overall 57.1% of the sex offenders were high school dropouts, that is, they left school before completing high school, grade 12 (Table 1). With the exception of the low rate for community volunteers, overall the number of dropouts was substantial in both non-sex offender groups. The sex offenders, VNS, and NVNS groups dropped out of school significantly more often than community controls ($LR(3) = 97.85$, $p < .001$).When the three offender groups are compared, excluding community controls, there is a trend for sex offenders to dropout more often that the other two groups (LR(!) = 6.34, p < .04, Fisher exact p = .04, two tailed tests).

Table 1: Educational attainment, school dropouts, grade failures, and special education placement among sex offenders and control groups

Group	N	Mean Education	% Schol Dropout	% Grade Failure	% Special Education
Sex Offenders	1915	10.3	57.1	53.2	38.7
Community	66	12.9	3.5	---[a]	---[a]

volunteers					
Nonviolent nonsex	63	10.5	58.9	33.3	40.0
Violent nonsex	150	10.2	62.9	46.9	32.6
Total Controls	279	10.9	48.6	43.5	34.8
Grand Total	2194	10.4	56.1	52.2	38.2
Note: [a]This group was not asked about grade failures or special education.					

In total, 53.2% of the sex offenders had failed at least one grade in school. Of these men, 16.9% had failed two grades, 4.4% three grades, and 1.1% four or more grades, before leaving school. The majority of grades failed (71.7%) were before grade 8, indicating early manifestation of learning problems. Local policy in education is that children are not failed, but kept with their peers, making this result even more striking. Special education classes are available instead for children, who have learning difficulties and 2%-to-3% of children in the province are placed in such classes (See www.gov.on.ca, 2006 and www.statcan.ca, 2006 for more details). The sex offenders showed a trend to fail a grade more often than non-sex offenders were ($LR(1) = 4.45$, $p < .04$). The difference from non-violent non-sex offender controls was greater than from violent controls. Table 1 shows that 38.7% of the sex offenders in the present sample attended special education classes. The sex offenders did not differ significantly from non-sex offender controls on this measure ($LR(1) = 0.74$, *ns.*).

Even if the liberal assumption is made that all missing data on grade failures and special education were for individuals, who did not fail a grade or were not in special education, there would still be an inordinate number of grade failures at 31.3% and special education placements at 18.0%, when missing data are included. It is noteworthy in the present study that only 62.86% of the men assessed were asked by clinicians about grade failures and 49.52% about special education placement. The differences reflect the practices of different decade in which the data were collected. However in all decades the educational deficits exceeded those expected by chance for the general population. The number of dropouts ranged from 27.6% in the 1970s to 60.0% in the 2000s ($LR(4) = 74.76$, $p < 001$) and the number of grade failures ranged from 68.6% in the 1960s to 29.0% in the 2000s ($LR(4) = 149.53$, $p < .001$). The corresponding numbers in special education were 54.8% in the 1970s and 25.6% in the 2000s. These results may reflect educational practices of the times and/or variations in clinical practice, but they all show an inordinate number of educational deficits in the present sample in each decade.

Although there may be a variety of reasons for these educational deficits, we also examined the factors associated with cognitive impairment that might contribute to long term learning deficits experienced by sex offenders. Table 2 shows the percent of sex offenders and offender controls with neurodevelopmental abnormalities. Neurocognitive and developmental problems were similar in both sex offenders and controls, with two exceptions. The offender controls had significantly more birth complications and defects (30.7% versus 23.0% for sex offenders, $LR(1) = 3.86$, $p < .05$) and fewer mentally retarded cases (1.7%, versus 13.5%, $LR(1) = 10.16$, $p < .001$). The number of cases with head injuries and diagnosed learning disorders was substantial in both groups.

Table 2: Neurodevelopmental abnormalities among sex offenders and controls

% Factor	Total N[a]	% Sex Offenders	% Offender Contorls
Birth Abnormality	1295	23.0	30.7*
Development Delays			
Motor	1244	8.3	7.7
Language	1201	18.9	18.6
Head injuries	831	64.8	66.3
Seizures	785	7.3	5.6
Other Neurological	729	23.4	21.6
ADHD diagnosis	607	13.1	18.9
Mentally retarded	556	13.5	1.7**
Learning disorder	577	31.1	28.3

*Note: * p< .05, ** p< .01*
[a]This column indicates the total number of cases for whom information was available on that factor.

The association of neurodevelopmental abnormalities and academic deficits are shown in Table 3. The largest contributor statistically was childhood diagnoses of learning disorders for dropouts, grade failures, and special education. Learning disorders were diagnosed in 50.7% of the dropouts versus 10.8% of high school graduates, and in 46.9% of the offenders who had failed a grade, but in only 10.1% of those who had not failed a grade. The differences were even greater for special education placement with 69.8% in special education diagnosed as suffering from learning disorders versus 4.4% who were not in special education. Mental retardation is also an important factor, especially for placement in special education. ADHD is probably under reported and/or under-diagnosed (cf. Ponsetti, Vaih-Koch, & Bosinski, 2001; and Vaih-Koch, Ponsetti, & Bosinski, 2001), but, even so, such diagnoses also were significantly associated with educational deficits.

Table 3: The contribution of neurodevelopmental abnormalities to academic deficits among sex offenders and controls

	School Dropout		Grade Failure		Special Education	
% Factor	No	Yes	No	Yes	No	Yes
Birth Abnormality	19.3	27.3***	20.9	27.4*	18.2	39.1***
Development Delays						
Motor	5.6	10.1**	6.3*	9.1+	4.6	16.5***
Language	13.3	23.1***	12.5	23.0***	9.5	41.1***

Head injuries	38.7	54.3***	40.2	53.0***	41.7	50.2*
Seizures	4.0	9.9***	3.8	10.2***	3.9	13.4***
Other Neurological	13.6	31.1***	15.5	24.9**	13.9	29.3***
ADHD diagnosis	6.8	22.3***	7.5	19.5***	5.9	28.4***
Mentally retarded	1.7	22.2***	2.5	13.4***	0.6	31.3***
Learning disorder	10.8	50.7***	10.1	46.9***	4.4	69.8***
*Note: $^{+}$ p < .10; * p < .05; ** p < .01; and *** p < .001.*						

Birth complications and early developmental problems were also associated with the learning impairment the sex offenders experienced in school. Offenders, who suffered from birth complications and language developmental problems especially, were significantly over-represented among the dropouts, grade failures, and those placed in special education. Seizures and neurological disorders contributed as well, as did head injuries leading to unconsciousness, but the latter was a statistically weaker effect.

Discussion

The present study confirms, in a large sample, results of previous studies on small samples, that sex offenders had an inordinate number of high school dropouts, grade failures, and special education placements as children, compared to the population at large.The results represent a variety of sex offender groups seen over a 38 year period, suggesting that the problems are pervasive, albeit, this is only one study in one city and other settings may have different results. Based on the present results, more than half of sex offenders suffered some learning impairment that potentially could interfere with learning in therapy. Results indicate that the learning deficits are not unique to sex offenders and that non-sex offenders have many of the same issues surrounding learning that sex offenders do. Based on the present results, one can expect learning deficits to be greater in the criminal population overall than in the general population. Nevertheless, the learning deficits may have a special bearing on therapy for sex offenders in two ways; in terms of their ability to profit from therapy and their willingness to be in learning situations.

First, how capable are the learning impaired offenders of benefiting from therapy? This study found that more than seven-in-ten offenders who failed a grade did so early in their education, before grade 8. Many indicated difficulties with reading and language processing which may be the result of perception, brain process, or response expression. Such individuals may be the silent members in groups or the ones who do not complete homework or complete the reading assignments, in part, because they are unable to do so, although there are many other reasons individuals do not participate fully in therapy.

Second, clinical encounters with learning impaired sex offenders indicates that many have an attitude to learning situations, although this has not been formally documented. In a study of desire for treatment, attendance and completion of treatment, Langevin (2006) found that only 54.7% of men who failed a grade in school (N = 539) and 50.9% of those in special education (N = 470) wished to be in therapy and only 18.5% and 10.8% respectively completed even a short course of treatment. The grade failures and special education cases more often wanted therapy and participated, but in the end did not complete therapy any more than individuals who did not fail grades or have special education placements. While there were a variety of reasons for refusing and/or completing treatment, the experiences of the sex offenders in school as measured by grade failures and placement in special education classes for children with learning problems often carry

stigmas that may shape the attitude of the offenders to any learning situation. As Drapela (2005) noted, there is some evidence that dropping out of school can increase an adolescent s feelings of self-esteem and personal control. Many sex offenders described how they were teased and abused as children because of their learning impairment. The offenders often related that they were eager to leave school and thus one sees the large number of dropouts, even though their economic and employment opportunities were limited by their incomplete education and their learning impairment. When offered therapy as adult sex offenders, many refuse, perhaps to protect a fragile ego, but also because they do not want to be in a learning situation again, where they may be out of control, mocked, and look stupid. This is not to imply that it is a hopeless situation to attempt to engage learning impaired individuals in therapy. Langevin, Marentette, and Rosati (1996) found that recognition of learning impairment in the sex offender and introduction of special conditions to assist them in learning improved their cooperation and progress in therapy. It was perhaps their attitude to learning situations and the attitude of others toward them that were even more important than their learning impairment in shaping who they were.

Violent and non-violent offenders in the study also had large numbers with academic deficits, similar to sex offenders, but, as expected, all groups showed higher rates of dropping out of school than non-criminal community volunteers did. Thus learning impairment in school was not unique to sex offenders, but learning disorders were common among them and may reflect etiological factors correlated with learning disorders, and which contribute to the development of sexual disorders or general disinhibition that is reflected in the later adult commission of crimes. ADHD cases in particular are over-represented in the criminal population generally (Ponsetti, et al., 2001; Vaih-Koch et al., 2001) and it may be their impulsive and disinhibited behavior that contributes significantly to their crimes.

Neuropsychological assessment requires extensive and specialized testing and makes it difficult and time consuming to identify the potential learning impaired sex offender. Asking about educational attainment, school dropouts, grade failures, placement in special education classes, and developmental abnormalities offers a quick means of identifying these problems. Examining educational attainment alone is insufficient and all offenders should be asked about grade failures and special education placement, which may have a more important bearing on therapy progress and their attitude to therapy, as noted in Langevin, Marentette, and Rosati (1996). Questioning the sex offenders about their feelings and attitude toward school may be revealing about their attitude toward therapy. Although attitude to treatment was not examined in the present study, such information may have significant implications for maintaining sex offenders in therapy and should be examined further, as those who enter therapy may have difficulty with the whole learning process and dropout of that learning situation as well.

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