Risk Factors for Criminal Recidivism in Older Sexual Offenders

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Sexual offenders constitute a substantial proportion of the older male prison population. Recent research findings, with potential consequences for risk management, indicate that recidivism risk might be lower in older sexual offenders. We followed up all adult male sexual offenders released from prison in Sweden during 1993–1997 (N = 1,303) for criminal reconviction for an average of 8.9 years. We studied rates of repeat offending (sexual and any violent) by four age bands (<25, 25–39, 40–54, and 55 + years), and examined whether risk factors for recidivism remained stable across age groups. Results showed that recidivism rates decreased significantly in older age bands. In addition, the effect of certain risk factors varied by age band. These findings on recidivism rates in older sexual offenders concur with studies from the United Kingdom, United States, and Canada and may suggest some generalizability in Western settings. Further research is needed to address underlying mechanisms.

KEY WORDS: sexual offenders; criminal recidivism; ageing; risk factor; risk assessment.

Older sexual offenders are an increasing problem for the criminal justice system. In Western countries, the numbers of older prisoners are rising faster than other age groups and around half of the male prison population of the over 60s are sex offenders (Greenfield, 1997; UK Home Office, 2003; Uzoaba, 1998). Furthermore, the proportion that older prisoners make of the total prison population has been increasing (Fazel & Jacoby, 2002). In the community, increasing pressure is being placed on community treatment programs to accommodate older sexual offenders who have completed their prison terms and who have been given community sentences. Cross-sectional

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information on the demographic, psychiatric, and personality characteristics of 101 older male sex offenders in the United Kingdom demonstrated potentially important personality differences in older sex offenders compared with other elderly criminals that might contribute to risk assessment and treatment interventions (Fazel et al., 2002).

Reconviction rates for any sexual or other violent offence in sexual offenders are approximately 20% within 2 years of release (UK Home Office, 2003). However, little is known about age-related factors associated with recidivism in sexual offenders. A recent contribution described sexual recidivism among mainly Canadian sex offenders released from prison and leaving secure hospitals (without accounting for time at risk), and investigated differences in recidivism rates by comparing rapists, incest offenders, and extrafamilial child molesters (Hanson, 2002), finding potentially interesting differences. This work suggested that sexual recidivism rates were negatively correlated to age in rapists, but this was less apparent in other types of sexual offenders. Overall, it found a sexual recidivism rate of 3.8% in sexual offenders aged over 60 compared with 17.5% in the whole sample. In the United States, official statistics from sexual offenders released in 1994 also found a lower rate of reoffending for a new sexual crime in those over 45 years (3.3% at 3 years) compared with younger age groups (5.5–6.1%) (Langan, Schmitt, & Durose, 2003).

In this study, we aimed to report rates of repeat offending by age and examine whether risk factors for violent recidivism are stable across age groups. Reliable identification of the determinants of repeat offending could help to improve the assessment of risk and prevention of recidivism. We used a cohort of 1,303 sexual offenders released from prison in Sweden during 1993–1997.

METHODS

A cohort of all sex offenders released from Swedish prisons during 1993–1997 ($N = 1,303$) was identified. The cohort consisted of males, aged 18 or older when released from prison. Sexual offences were defined in accordance with the sixth chapter of the Swedish penal code, which includes contact and noncontact offences. Sexual offences included rape, sexual coercion (contact offences), child molestation (rape of a child and other contact offences), and other nonpenetrative offences (e.g., exhibitionism, obscene phone calls), but excluded internet pornography or prostitution. The sample included 551 prisoners (42%) convicted of rape or sexual coercion, 596 prisoners (46%) convicted of child molestation, and 156 prisoners (12%) convicted of other nonpenetrative offences—all of these are index offences. Contact offences made up the vast majority of the index offences ($n = 1,243$ or 95%; $n = 40$ noncontact offences; $n = 20$ unknown). Any violent offence was defined as attempted or completed homicide, assault, robbery, threats (verbal or using a weapon), or violence against an officer and also included any

sexual offence. The classification of violent offences to include noncontact of-fences is consistent with other work in the field (Hanson & Morton-Bourgon, 2004). Because the Swedish judicial system does not allow for plea bargaining, sexual assault charges are essentially never pleaded down to general assault, pre-cluding the loss of cases due to plea bargaining. The offenders in this cohort were representative of the more serious end of the sexual offender spectrum, as 75–80% of all Swedish sexual offenders are sentenced to prison (National Council for Crime Prevention, 2004). At the time, Swedish prison programs aimed at reducing sexual offender recidivism were neither evidence-based, nor available to all pris-oners. In addition, offender participation and compliance with such interventions, when available, were not adequately documented. Therefore, any treatment effect could not be reliably evaluated.

Criminological information was gathered from all 1,303 individual offender files. Two raters (GS and NL) independently scored 20 cases. Interrater reliability was high according to Cohen's Kappa with average $\kappa = 0.90$ and no single kappa below 0.83 (Cohen, 1960). Subsequent to this, GS completed the data collection from the subject files. Data addressed whether offenders had been convicted of previous sex offences, any other convictions had occurred (before the index offence), any noncontact sex offence (either as part of the index offence or a previous offence), any concomitant index violent nonsexual offence, any previous conviction for a nonsexual violent offence, whether the victim was unrelated (acquaintance or stranger), a stranger or male, whether the offender was aged 24 or younger at time of release from prison, and whether the perpetrator had been married or cohabiting with an intimate adult partner for at least 2 years. The choice of these characteristics was based on previous work on repeat offending in sexual offenders (Hanson & Bussière, 1998). Information on reoffending—sexual and violent—was requested from the national offender database until March 30, 2004. Two outcomes were examined—reconviction due to any sexual offence and reconviction due to any violent (including sexual) offending. These two outcomes were not mutually exclusive.

Previous studies using this database have investigated risk factors for reof-fending regardless of age up to December 31, 1998 (mean follow-up = 3.7 years, Sjöstedt & Långström, 2001), the usefulness of actuarial measures of recidivism risk with sexual offenders belonging to ethnic minorities (Långström, 2004), and psychiatric morbidity among sexual offenders (Långström, Sjöstedt, & Grann, 2004, mean follow-up in both the latter studies = 5.7 years). This study extended the follow-up period by more than 5 years compared with the original study and investigated risk factors by age group. The following age bands were used: <25, 25–39, 40–54, and 55 + years. All those who were ordered out of Sweden after release from prison were excluded from the original cohort.

To account for variable time to reconviction, multivariate Cox regression models were used, and hazard ratios were calculated for each risk factor using

Table I. Rates of Criminal Reconviction by Age Band in 1,303 Sexual Offenders Released From Prison in Sweden during 1993–1997

Age band (age on release from prison, years)	Sexual reconviction (no. reoffended/total no., %)	Any violent (including sexual) reconviction (no. reoffended/total no., %)
<25	11/103 (10.7)	44/103 (42.7)
25–39	47/498 (9.4)	141/498 (28.3)
40–54	30/539 (5.6)	81/539 (15.0)
55 +	10/163 (6.1)	11/163 (6.7)
Statistic	χ^2 for trend $= 5.7$, $p = .02$	χ^2 for trend $= 74.6$, $p < .001$

SPSS version 11.5. As there were multiple comparisons in the analysis of risk factors by age band, only p values of $<.01$ were reported, which tested the comparison of an observed hazard ratio with the ratio corresponding to the null hypothesis of no effect. Chi-square for trend was used to investigate rates of recidivism by age band using EpiInfo version 6. Ethics approval was given by Huddinge University Hospital.

RESULTS

Rates of Reconviction

The overall base rates of reconviction were 7.5% for sexual offending ($n = 98$), 16.3% for any other violent (nonsexual) reconviction ($n = 213$), and 21.3% for any violent (including sexual) reconviction ($n = 277$). Mean follow-up was 8.93 years ($SD = 1.39$, range 6.25–11.25). There were significant differences in the rates of reconviction by the four age bands investigated. Those aged 55 years and over sexually reoffended at a rate of 6.1%, compared with a rate of 10.7% for those aged under 25 (Table I). The trend appeared to be more pronounced for any violent (including sexual) reoffending; using Cox regression, the beta coefficient for age as a continuous variable was -0.05, which equates to a hazard ratio of 0.95 per year (95% CI: 0.94–0.96).

Risk Factors for Reconviction

Risk factors across all age bands were investigated (Table II). Most factors were associated with a significantly increased relative risk for sexual reconviction and for any violent (including sexual) reconviction. Two did not: having a male victim (which predicted a sexual reconviction but not any violent reconviction) and being convicted of a violent index offence in addition to the sexual offence (which predicted any violent reconviction).

Table II. Risk Factors for Criminal Reconviction in 1,303 Released Sexual Offenders

Risk factor	Base rate (%)	Sexual reconviction		Any violent (including sexual) reconviction	
		Hazard ratio	95% CI	Hazard ratio	95% CI
Any previous sexual conviction	12	5.8	3.9–8.7	2.7	2.1–3.6
Any previous conviction	33	2.7	1.8–4.0	3.6	2.8–4.6
Any non-contact sexual conviction	24	2.6	1.7–3.8	1.8	1.4–2.2
Index offence included non-sexual violence	27	1.0	0.7–1.6	2.2	1.7–2.8
Previous non-sexual violence	30	1.5	1.1–2.4	3.4	2.7–4.3
Any unrelated victim (acquaintance or stranger)	49	3.6	2.3–5.9	2.1	1.6–2.7
Any stranger victim	21	3.1	2.1–4.6	2.6	2.1–3.3
Any male victim	8	1.8	1.0–3.2	0.8	0.5–1.3
Age < 25 at release	7	1.6	0.9–3.0	2.6	1.9–3.6
Single status	25	1.9	1.3–2.8	2.1	1.7–2.7

Risk Factors by Age Band

Risk factors by age band were examined (Table III). Hazard ratios were then calculated for any violent (including sexual) reconviction by age band for selected risk factors (Table IV). The risk factor of being less than 25 years was not included. We found potentially interesting differences in one risk factor, having a stranger victim. Having a stranger victim was a strong risk factor in those 55 and over (HR = 7.9 [95% CI: 2.4–26.0]): 26.1% (6/23) of older sexual offenders who had offender against stranger victims reoffended violently. As this was based on only 6 reconvictions, it should be interpreted cautiously. Having a stranger victim was also a risk factor specifically for sexual reoffending in the older age group (HR = 9.7 [2.7–34.5]), and the effect of this risk factor appeared not as strong in younger age bands (data not shown).

Table III. Prevalence of Risk Factors in 1,303 Sexual Offenders by Age Band

Risk factor	N (%)			
	<25 years	25–39 years	40–54 yrs	55+ yrs
Any previous sexual conviction	9 (8.7)	57 (11.4)	80 (14.8)	13 (8.0)
Any previous conviction	38 (36.9)	196 (39.4)	170 (31.5)	26 (16.0)*
Any non-contact sexual conviction	21 (20.4)	107 (21.5)	130 (24.1)	52 (31.9)
Index offence included non-sexual violence	37 (35.9)	176 (35.5)	121 (22.5)	14 (8.6)*
Previous non-sexual violence	38 (36.9)	170 (34.1)	156 (28.9)	24 (14.7)*
Any unrelated victim (acquaintance or stranger)	78 (76.5)	247 (50.0)	227 (42.4)	91 (56.2)*
Any stranger victim	47 (46.1)	123 (25.0)	80 (15.0)	23 (14.4)*
Any male victim	3 (2.9)	31 (6.3)	54 (10.1)	17 (10.5)
Single status	90 (88.2)	154 (31.0)	63 (11.8)	13 (8.0)*

*$p < .01$ (χ^2 test for difference between age bands).

In those 55 years and older, we were able to gather offence information on 9 of the 11 sexual reconvictions. One was for rape of an adult, and the others were for noncontact sexual offences and touching.

CONCLUSIONS

This study of 1,303 sexual offenders, released from prison in Sweden during 1993–1997, investigated rates and risk factors for sexual and violent reconviction. Its strengths are that a complete national cohort of released prisoners was analyzed, that it accounted for time to reconviction, and that the average follow-up was almost 9 years. To our knowledge, it constitutes the largest single sample examining risk factors for sexual recidivism by age. Its main findings are that rates of sexual and violent recidivism drop significantly by age, and in the older age band (55 + years), all but one reconviction were for sexual offences. Furthermore, there was some variation in the effect of risk factors by age band. One tentative finding that warrants further research is that a stranger victim in a sexual offence is a risk factor that should be highlighted in risk assessments in older sexual offenders.

Table IV. Hazard Ratios for Any Violent (Including Sexual) Reconviction in 1,303 Sexual Offenders by Age Band

Risk factor	Hazard ratio			
	<25 years	25–39 years	40–54 years	55+ years
Any previous sexual conviction	1.4	2.9*	3.4*	4.7
Any previous conviction	1.6	2.7*	6.4*	2.0
Any non-contact sexual conviction	1.0	1.9*	2.4*	3.7
Index offence included non-sexual violence	1.1	1.9*	2.2*	1.1
Previous non-sexual violence	1.9	2.5*	5.5*	2.1
Any unrelated victim (acquaintance or stranger)	1.4	1.8*	2.3*	3.6
Any stranger victim	1.7	2.0*	2.4*	7.9*
Any male victim	0.6	0.7	0.7	1.9
Single status	1.3	1.3	1.8	1.1

*$p < 0.01$ (for the comparison of the observed hazard ratio with the ratio corresponding to the null hypothesis of no effect).

This study updates previous work on this cohort on risk factors for reoffending. In addition to expected higher overall recidivism rates as compared to the Sjöstedt and Långström study (2001), the associations between individual risk factors and the two reconviction categories remained similar when comparing the present data with the findings from their 2001 study.

As base rates of repeat offending were low (21% for any violent [including sexual] reoffending in 9 years), this study lacked the power to investigate the differential effects of risk factors across age in more detail. In addition, it was not possible to study subsets of sexual offenders, such as incest offenders or rapists, as has been done in a recent meta-analysis (Hanson, 2002). As with all investigations using official criminal registers, we were only able to study convictions for sexual and violent repeat offending. Another possible limitation is that Cox regression assumes that the effect of a particular risk factor is the same over the follow-up period (Rothman & Greenland, 1998). Although there is no particular reason to believe that criminal history variables would have a differential effect over time, further research could investigate this.

The finding that rates of recidivism are reduced in older age groups replicates work in criminal justice and secure hospital settings in the United States, Canada, and the United Kingdom (Barbaree, Blanchard, & Langton, 2003; Hanson, 2002; Langan, Schmitt, & Durose, 2003). Possible explanations for this include lower sexual arousal in older men (Barbaree, Blanchard, & Langton, 2003), increased self-control with age (Hanson, 2002), and changes in victim access. Cohort effects may also be relevant. The importance of these has been demonstrated for suicide (Gunnell, Middleton, Whitley, Dorling, & Frankel, 2003) and it remains uncertain to what extent they effect criminal outcomes.

The other main finding—that risk factors for reconviction appeared to differ in prevalence and strength by age band—raises the wider issue of the applicability of present risk assessment instruments across all ages. Despite low base rates in this cohort, there were a number of such differences between the younger age group (less than 25 years) and the older ones, regarding, for example, risk factors relating to previous offending. In addition, there were some differences in the older age group (over 55 years) compared with younger ages: the importance of a concomitant conviction for a violent offence was not apparent in the older group, and the effect of having a stranger victim appeared more pronounced. The latter finding may reflect that sexual deviance such as exhibitionism may be a strong risk factor for sexual recidivism in older sexual offenders, even when age-related decreases in other risk factors may have occurred. The possibility that this difference was due to the prevalence of this risk factor varying by age band was not suggested—the prevalence of prior stranger victims was in fact lower in those aged over 55. Further research is needed to examine whether decreasing recidivism rates generalize to all older sexual offenders, irrespective of their individual risk and needs profiles. The effects of psychiatric risk factors, such as clinical depression, which is found in about one in three older prisoners (Fazel et al., 2001), on repeat offending would also be another area for further work.

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