

Evaluating the Effectiveness of Professionally-Facilitated Volunteerism in the Community-Based Management of High-Risk Sexual Offenders: Part Two – A Comparison of Recidivism Rates

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Abstract: This study represents an examination of recidivism rates associated with the pilot project of Circles of Support and Accountability (COSA) in South-Central Ontario, Canada. A group of 60 high-risk sexual offenders involved in COSA after having been released at the end of their sentence were matched to a group of 60 high-risk sexual offenders who had been released at the end of their sentence, but who did not become involved in COSA. Results show that the offenders who participated in the COSA pilot project had significantly lower rates of any type of reoffending than did the offenders who did not participate in COSA. Specifically, offenders who participated in COSA had a 70% reduction in sexual recidivism in contrast to the matched comparison group (5% vs. 16.7%), a 57% reduction in all types of violent recidivism (including sexual – 15% vs. 35%), and an overall reduction of 35% in all types of recidivism (including violent and sexual – 28.3% vs. 43.4%). Further, a considerable harm reduction function was noted in the COSA sample, in that sexual reoffences in this group were categorically less severe than prior offences by the same individual. This function was not observed in the matched comparison group.

The release to the community of a sexual offender is frequently accompanied by intense coverage by the media which, ultimately, forces many offenders into hiding or out of one community and into

another, where the process starts all over again. This state of affairs is counterproductive to both offender integration and community safety. Secrecy is a critical element of sexual offending, and forcing offenders into hiding does nothing to increase community safety or offender accountability.

In the summer of 1994, a low-functioning, repeat child molester was released at his warrant expiry date (WED – that is, the end of his sentence) to the city of Hamilton in South-Central Ontario. This release was accompanied by considerable media attention and public outcry. The Hamilton Police Service instituted around-the-clock surveillance, reportedly at a cost of many thousands of dollars, and community groups picketed the offender's residence. In a bold and unprecedented move, the Reverend Harry Nigh – a Mennonite pastor from a small urban congregation – agreed to offer assistance to the offender. Reverend Nigh gathered a small group of members of his church and asked them to volunteer some of their time to help this offender establish himself in the community. This was the birth of Circles of Support and Accountability (COSA – see Correctional Service of Canada 2002; Wilson, Huculak and McWhinnie 2002; Wilson and Picheca 2005; Wilson, Picheca and Prinzo 2005, 2007; Wilson and Prinzo 2001; Wilson *et al.* 2007b), although, at the time, it was really a rather *ad hoc* approach to assisting an offender's reintegration to the community.

When a similar offender was released a few months later in neighbouring Toronto, a colleague of the Hamilton pastor decided to try the same approach. A short time later, the Mennonite Central Committee of Ontario (MCCO) accepted a small contract from the Correctional Service of Canada (CSC) to establish a pilot project to investigate whether Reverend Nigh's approach could be operationalised and more broadly implemented. Parallel to that endeavour, a research protocol was established to ascertain the efficacy of Circles of Support and Accountability in promoting community safety.

The corrections literature in the 1990s, and continuing into the 21st Century, has been dominated by catch-phrases like 'what works?' and 'evidence-based practice'. Canadian correctional workers have been greatly influenced by the 'risk, need, and responsivity' concepts introduced by Andrews and Bonta (2003), which state that effective interventions are those which match treatment intensity to offender risk, while ensuring that criminogenic needs are precisely targeted in a manner which gives the offender ample opportunity and motivation to change in the desired direction.

One critical aspect of the evidence-based practice movement is the need to demonstrate empirically that an intervention is achieving the desired goal. Project effectiveness has been traditionally gauged by relative rates of recidivism between treatment subjects and matched comparison subjects; however, given relatively low base-rates in many offence categories, particularly with sexual offenders (see Barbaree 1997), statistical significance has often been difficult to achieve. As such, other researchers (see Gendreau, Little and Goggin 1996) have suggested that we consider the

social significance associated with decreases in recidivism that may not reach the traditional statistical $p < 0.05$ level. In the evaluation of the COSA pilot project, we endeavoured to assess the data from both perspectives, in considering not only the rates of reoffending, but also the impact the project has had on a variety of community stakeholders.

The evaluation of the COSA pilot project in South-Central Ontario was accomplished in two phases (see also Wilson, Picheca and Prinzo 2005). The first phase (Wilson, Picheca and Prinzo 2007) examined the experiences of various COSA stakeholders, as well as effects on the community-at-large. This second study compared a group of ex-offenders in a Circle with a group of matched ex-offenders not participating in a Circle.

Method

Participants

Two groups of offenders were included in this study. The first group was comprised of 60 offenders who were involved in a COSA after having been released at the end of their sentence (known in Canada as 'warrant expiry date' or WED). The second group consisted of a matched comparison sample of 60 similar offenders who were also released at sentence completion but did not participate in a COSA. The groups were matched *a priori*, meaning that there was an intentional process involved in selecting the comparison sample, so that it would be a more comparable group for the COSA participants.

Matching criteria

In Canada, detention to sentence completion (WED) requires an order by the National Parole Board following a detailed review of the case. Detention is recommended only in those cases where reoffence is likely to occur prior to WED. As such, detention to WED is reasonably equivalent to a rating of 'high risk'. The COSA project was intended to address the post-release needs of offenders detained until WED. To ensure adequate matching, we included only similarly detained sexual offenders in the comparison sample. To further guarantee that the two groups were equivalent in criminality and risk levels, we scored each subject on the General Statistical Information on Recidivism scale (GSIR – Nuffield 1982). Each member of the COSA group was matched with a comparison subject in the same general risk category (for example, low, low-moderate, moderate, moderate-high, or high).

In matching the two groups of offenders, we also endeavoured to make sure that the matched subject was released on or about the same date as the subject in the COSA group. The purpose for doing so was twofold: first, this process ensured that the matched subjects were released to relatively the same political and community climate; and second, it allowed for an easy comparison of the length of time at risk before failure (for those offenders who did commit a new offence).

Last, we ensured that the two groups were matched with regard to prior involvement in sexual offender treatment programming. Given recent results suggesting that completion of a treatment programme adhering to the principles of effective correctional interventions can have a significant impact on recidivism, it was important to make sure that any differences found between the two groups were not the result of variations in previous treatment experiences.

Measures

STATIC-99 (Hanson and Thornton 1999)

The STATIC-99 is a tool that actuarially assesses risk for sexual and violent recidivism based primarily on static risk variables. This instrument has moderate predictive ability ($r = 0.33$, ROC area = 0.71), and has extensive survival data from which long-term prognosis of risk potential can be established.

Rapid Risk Assessment for Sexual Offence Recidivism (RRASOR – Hanson 1997)

The RRASOR is a four-item scale designed to actuarially assess risk for sexual reoffending in known sexual offenders. These four items are wholly contained in the STATIC-99 but, on their own, provide a moderately accurate screening of risk potential ($r = 0.27$, ROC area = 0.71). Recent research suggests that the RRASOR might actually outperform the STATIC-99 with certain subpopulations of offenders, including the developmentally-delayed (see Tough 2001).

Phallometric testing

The phallometric test is a psychophysiological procedure in which changes in penile circumference or volume are measured during presentation of audiovisual stimuli. Differential responding to various age, gender, or activity stimulus categories is helpful in diagnosing deviant sexual preferences (or paraphilic). Although conflicting research exists regarding the psychometric properties of the test (see Fernandez 2002; Freund and Watson 1991), it is generally accepted as a useful tool for diagnosis and, by extrapolation, risk assessment.

Recidivism

Recidivism was defined as being charged for a new sexual offence or for having breached a condition imposed by the court. Only official documentation was utilised and, in most cases, this information came in the form of CPIC (Canadian Police Information Check – a national database of offence histories) records indicating that a charge had been laid or a conviction registered.

Statistical significance

In this study, statistical significance was observed at the traditional $p < 0.05$. However, as noted above, there are times when it is useful to evaluate results in terms of their social significance, that is, the impact the particular finding has on the community. This concept was important in assessing the

relative rates of reoffending between the two groups, and is discussed in greater detail below.

Procedure

In order to assess the effects of COSAs on recidivism, we gathered data on the first 60 men offered COSAs in the pilot project. In order to understand better the results we obtained from these men, we also selected 60 similar offenders from the Ontario Region's Offender Management System (OMS) database. The 60 comparison subjects were matched to their COSA counterparts according to the criteria above.

Results

Demographic Variables

Demographic data are summarised in *Table 1*. No significant differences were found between the two groups with regard to age or the percentage of members who had deviant phallometric test results. The two groups were not significantly different on the STATIC-99; however, there is a somewhat higher average risk score for COSA participants. The COSA group is at significantly higher risk for sexual recidivism than the comparison group, when judged by RRASOR scores ($F[1,115] = 14.70$, $p < 0.01$). However, if the matching process was foolproof, these two groups should *not* differ with regard to risk. In this case, it is clear that there is an over-representation of higher risk WED sexual offenders in the COSA group.

In looking at the victim profiles, the two groups were not different with regard to the percentages of unrelated or stranger victims. However, the COSA group has a significantly higher average number of victims ($F[1,118] = 4.160$, $p < 0.05$) and there are significantly more offenders in the comparison group with 'female only' victims (chi-squared [1] = 13.889, $p < 0.01$). This likely explains why the two groups were different on

TABLE 1
Offence-Specific Demographic Information

	Circles (n = 60)	Comparison (n = 60)
Mean (SD) age (years)	47.47 (12.27)	43.62 (10.84)
Mean (SD) STATIC-99	5.60 (2.22)	5.00 (2.00)
Mean (SD) RRASOR**	3.18 (1.65)	2.12 (1.31)
% deviant phallometric results	81.58	70.27
Victims		
Mean (SD) number*	3.10 (3.63)	2.05 (1.66)
female only**	43.33%	76.67%
familial only	15.00%	15.00%
children only	58.30%	53.30%

(Notes: * $p < 0.05$; ** $p < 0.01$)

TABLE 2
Recidivism Data

	Circles (n = 60)	Comparison (n = 60)
Mean (range) follow-up (months)	54.67 (3-123)	52.47 (3-124)
Mean time until first failure (months)	22.1	18.54
Recidivism		
Sexual*	5.00% (3)	16.67% (10)
Expected sexual	28.33% (17)**	26.45% (16)
Violent** (includes sexual)	15.00% (9)	35.00% (21)
Any (includes violent and sexual)	28.33% (17)	43.44% (26)
Dispositions	38	49

(Notes: * $p < 0.05$; ** $p < 0.01$)

actuarial prediction scores, as 'number of previous sexual offences' and 'male victim' are points on each of the sexual offence-related actuarial measures noted.

Time at Risk

As one of the matching variables was 'date of release', the groups should reoffend at the same rate and within the same time frame, if being in a COSA has no effect. Also, because the COSA group was found above to be of relatively higher risk for reoffence, if there was to be a difference, it should be the COSA members who reoffend faster. The opposite was found in our comparisons, although this difference is not statistically significant. The comparison group recidivated more quickly than the COSA group. Specifically, 17 offenders in the COSA group recidivated in any way with an average time at risk of 22.10 months while 26 of the comparison subjects reoffending with an average time at risk of 18.54 months (see *Table 2*).

Recidivism

As seen in *Table 2*, the COSA group reoffended in all domains at a rate considerably lower than their matched counterparts, despite having a higher risk profile. Specifically, regarding sexual recidivism, the comparison group had more than three times as many instances of recidivism as the COSA group (10 vs. 3), a statistically significant difference (chi-squared [1] = 4.23, $p < 0.05$).

An examination of the nature of the new offences in this study shows that in each of the three instances of sexual recidivism in the COSA group, the new offence was qualitatively less severe or invasive than the offence for which they had most recently served sentence. For instance, the new offence of one of the COSA members was making an obscene telephone call, while his prior offence was a violent rape. No function of harm reduction was found in the comparison sample; their new offences were just as violent and invasive as their most recent offences.

With regard to violent recidivism (argued by Quinsey *et al.* (1998) to be a more robust indicator of violent, including sexual, recidivism in sexual offender populations), again, the COSA group reoffended at a rate considerably lower than the comparison group (chi-squared [1] = 6.40, $p < 0.01$). The difference with regard to any recidivism is on the cusp of significance (chi-squared [1] = 2.94, $p < 0.07$), and should certainly be seen as socially significant according to the argument made above. Overall, 28.33% of COSA participants reoffended in any way in comparison to 43.44% of the non-COSA group.

As a group, we expected that offenders who had been assessed at high risk for sexual recidivism would reoffend at a rate commensurate with their actuarial scores. With regard to actuarial projections, the comparison group is much closer to STATIC-99 actuarial projections (10 observed *vs.* 16 expected), whereas the COSA group is reoffending sexually at a rate far below statistical projections (3 observed *vs.* 17 expected; chi-squared [1] = 11.76, $p < 0.001$).

'Dispositions' refers to the number of discrete reoffence occasions. It is more or less equivalent to 'sentencing dates' on the STATIC-99. In the COSA group, 17 offenders were responsible for 38 events, while 26 offenders were responsible for 49 events in the comparison group.

ROC Area Under the Curve

We predicted that the STATIC-99 would lose its predictive utility when applied to the high-risk subgroup of sexual offenders examined in this study, due to the lack of variability in scores. In fact, the reverse was found for those offenders who participated in a COSA. The ROC area under the curve for the COSA group regarding the STATIC-99 hit-rate was 0.71 for sexual recidivism, whereas the ROC area under the curve for the comparison group was only 0.58. Similar results were obtained with regard to any new recidivism and, to a lesser degree, violent recidivism.

Discussion

The recidivism results compiled in evaluating the COSA pilot project are very encouraging. Sexual recidivism by COSA Core Members is 70% lower than that of the matched comparison sample, and is less than one-quarter of the actuarial sexual recidivism rates projected by the Hanson and Thornton STATIC-99 survival curves – both statistically significant results. While recidivism of any sort is tragic and regrettable, the harm reduction effect observed in those unfortunate instances where a Core Member did recidivate sexually was also particularly encouraging.

Given the differences in RRASOR scores between the two groups, it would appear that the matching protocol used in this evaluation was less than exact. Interestingly, this deficiency should have resulted in differences between the two groups that served to increase type 2 error, in support of the null hypothesis that COSAs have no effect on offender success in the community. The fact that the COSA group is a higher-risk group is

apparently the result of a selection bias; that is, the highest-risk WED releases were actively targeted for involvement in a COSA. Given the resource difficulties of the MCCO COSA project, it was imperative that the limited services available be provided to those who needed them the most. As a result, it appears that those offenders at particularly high risk to reoffend were 'skimmed' off the top, leaving a somewhat lower-risk group for selection of comparison subjects. All in all, given these deficiencies in the matching protocol, we would have expected rates of reoffending to be higher in the COSA group, with longer survival rates in the comparison sample. In fact, the opposite was found – the comparison group reoffended faster and at a higher rate. This result underscores the ultimate position that COSAs have a marked positive effect on the community integration and long-term functioning of high-risk sexual offenders released at WED.

The comparisons between the two groups on both sexual and violent recidivism reached a conventional level of statistical significance. As the number of discrete dispositions is more than 25% higher in the comparison sample, it is clear that the comparison group has been responsible for considerably more mayhem in the community than their COSA compatriots. Of further indication of the effectiveness of the initiative is the finding of a harm reduction function (Marlatt 1998) in the COSA group. As mentioned earlier, in each of the three instances of sexual recidivism in the COSA group, the new offence was qualitatively less severe or invasive than the offence for which they had most recently served sentence.

The predicted rate of sexual reoffence, as suggested by STATIC-99, was higher in both groups than the rate actually observed. This may be the result of the skewed risk profile in each group (both groups have high average STATIC-99 scores). However, it is also possible that this difference is due to differing base rates between Canadian and international samples of sexual offenders. Generally, rates of sexual reoffending in Canadian populations tend to be relatively lower than international norms (cf. Hanson and Thornton (1999) *vs.* Motiuk and Brown (1996) or Barbaree, Seto and Maric (1996)).

We predicted that the STATIC-99 would not provide further assistance in determining which members, within these already high-risk groups, would be at highest risk to recidivate, due to the truncated nature of the risk scores. However, the higher ROC value for the COSA group suggests that recidivism in this group conforms to logical models of risk prediction, in that recidivism was positively related to higher STATIC-99 scores. The low ROC value found in the comparison group suggests that recidivism is occurring without a link between scores and outcome in this group. Ultimately, this finding suggests that the Andrews and Bonta risk principle still holds – the highest degrees of support and monitoring should be given to those offenders with the highest-risk profiles. In other words, even within COSAs, additional attention should be paid to those offenders who have particularly high STATIC-99 scores.

The results of this evaluation show that reinvolvement in crime, generally, is considerably less in the COSA group. In a review by Detective

Wendy Leaver of the Toronto Police Service, offenders on a CCC 810.1 order (that is, a modification of peace bond legislation) were found to be substantially less likely to reoffend when that order was paired with involvement in a COSA (Leaver, personal communication). In fact, after years of 'putting these guys in jail', Detective Leaver is now a particularly active and vocal COSA adherent, having sat on several Circles as a volunteer and served as a critical liaison between the MCCO project and the Toronto Police Service.

The current results need to be put in context with the literature and discussion on treatment and recidivism, generally. The Collaborative Data Project of the Association for the Treatment of Sexual Abusers (Hanson *et al.* 2002) has recently demonstrated a substantial treatment effect, in which the treated group reoffended at a rate 41% less than the untreated comparison group (10% *vs.* 17%, respectively). A recent review of the recidivism rates associated with the Central Ontario Parole District's relapse prevention maintenance programme showed that considerable incremental reductions in reoffending can be achieved through a combination of informed parole supervision and community-based follow-up of institutional sexual offender treatment programming (Wilson *et al.* 2007a; see also Wilson *et al.* 2000). COSAs are very much in line with these findings; however, it is important to note that both groups of men included in this study are generally of a much higher average risk rating than those reported in most treatment effectiveness reports. The results of this study provide strong evidence that adherence to principles of effective interventions, even when accomplished by community volunteers, can dramatically affect rates of reoffending.¹

Note

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