

The effects of community sanctions and incarceration on recidivism

By **Paul Gendreau** and **Claire Goggin**¹

Centre for Criminal Justice Studies, University of New Brunswick

Francis T. Cullen²

Division of Criminal Justice, University of Cincinnati

and **Donald A. Andrews**³

Department of Psychology, Carleton University

Within recent years “get tough” strategies have become the latest panacea for dealing with offenders. This article quantitatively summarizes a substantial body of literature that assesses the effectiveness of two types of “get tough” programmes: community sanctions and incarceration. A brief history of the development of these initiatives is provided accompanied by a meta-analytic summary of the data.

Community sanctions

At one time, some of the services provided in probation and parole settings adhered to a dynamic rehabilitative model wherein it was gratifying to discover well-conceptualized programmes of sound therapeutic integrity.⁴ Reductions in recidivism of 20%-60% were reported for some of these programmes.

What kinds of programmes were these? First, treatment staff conformed to the principles and techniques of the therapies they were employing. Secondly, staff were carefully monitored by the programme developers who themselves had excellent skills in behavioural treatment and their assessments, with ongoing training being frequently provided. Thirdly, offenders’ individual differences relative to varying styles of service delivery were considered. Finally, the programmes were intense; contact between offenders and therapist was frequent and focussed on learning pro-social skills.

The following three programmes best illustrate the above. The first of these, by Walter and Mills,⁵ was a behavioural employment programme for juvenile probationers utilizing a token economy, contingency contracting, and life skills interventions. The programme was admirable in that its treatment design intimately linked the courts with community-based employers who were trained as paraprofessional behaviour modifiers. The second example came from Andrews and Kiessling’s⁶ Canadian Volunteers in Corrections Programme which combined professionals with paraprofessionals in an adult probation supervision programme. The major features of the counselling and supervision practices were the use of authority, anti-criminal

modelling and reinforcement, and problem-solving techniques. The quality of interpersonal relationships was also considered when pairing offenders with probation and parole officers. The theoretical importance of this study should not be understated as the treatment guidelines employed herein were instrumental to the continuing development of the principles of effective correctional treatment literature.⁷

Thirdly, there was a series of studies by Davidson, Robinson, and Seidman that featured an amalgam of behavioural techniques, relationships skills training, child advocacy, and matching of offenders and therapists.⁸ As community psychologists, they were among the first researchers to be aware of the need to overcome system-based barriers in delivering effective interventions.

Just when it seemed, however, that progress was being made in the confirmation and promulgation of effective services for probation and parole, a counterrevolution began to evolve: the new epoch of punishment-based strategies.⁹ The reasons why this new epoch gained favour is reviewed elsewhere.¹⁰ With the exception of occasional reports of successful intervention programmes in probation and parole, distinct forms of “get tough” strategies known as intermediate sanctions began to proliferate in probation and parole settings. The term “intermediate” was derived from the notion that deterrence strategies based on excessive use of incarceration were too crude and expensive while regular probation (with or without treatment services), on the other hand, was too “soft”. Interestingly, some proponents of intermediate sanctions asserted that probation could be even more punishing than prison.¹¹ The most common form of intermediate sanction was intensive supervision programming (ISP). As Billie J. Erwin so forcefully put it when referring to the Georgia ISP, considered by many to be a model for the United States: “...We are in the business of increasing the heat on probationers...satisfying the public’s demand for just punishment...Criminals must be punished for their misdeeds”.¹²

This new generation of ISPs quickly spread throughout the United States, and to a much lesser extent, within Canada. They turned up the heat by: greatly increasing contact between supervisors and offenders; confining offenders to their homes; enforcing curfews; submitting offenders to random drug testing; requiring offenders to pay restitution to victims; electronically monitoring offenders, and requiring offenders to pay for the privilege of being supervised. Most ISPs have employed arbitrary combinations of the above sanction types in varying degrees with the major emphasis for most being an increase in the frequency of offender-probation/parole contacts. Boot camps and quick/brief arrests or citations, often in response to spousal abuse offences, are other types of sanctions that may fall under the intermediate sanctions umbrella.

Besides serving an underlying retributive purpose and reducing prison overcrowding costs, an important expectation was that ISPs would effect pro-social conformity through the threat of punishment.¹³

How well are intermediate sanctions working? So far they appear to be “widening the net” by targeting low-risk offenders who would normally receive periods of regular probation. The data indicate that the use of intermediate sanctions can increase the number of technical violations and lead to higher rates of incarceration.¹⁴ As to recidivism, we found little evidence of the effectiveness of intermediate sanctions among this sample of studies. These results are illustrated in Table 1. Of note, a positive correlation indicates that the sanction was associated with an increase in recidivism while a negative correlation means the sanction has suppressed or decreased recidivism. Within

Category 1, ISPs, there were 47 comparisons of the recidivism rates of offenders in an ISP with those receiving regular probation. These comparisons involved 19,403 offenders with a mean treatment effect of .00, expressed as a phi coefficient (ϕ), indicating no difference in percentage recidivism rates between the two groups. The recidivism rate for each of the ISP and comparison groups was 29%.

The confidence interval (CI) is a useful index of the likelihood that a given range of values will contain the “true” population parameter. In the case of ISPs, the CI about ϕ is -.05 to .05, reflecting recidivism rates ranging from a 5 per cent reduction ($\phi = -.05$) to a 5 per cent increase ($\phi = .05$). Also of note, when a CI contains 0, one can infer a lack of significant treatment effects ($p > .05$).

The z^{\pm} value is a weighted estimate of ϕ . That is, each effect size is weighted by the inverse of its variance ($\sqrt{N} - 3^k$) thereby giving more emphasis to effect sizes generated with larger sample sizes. The z^{\pm} for ISPs indicates that they were associated with a 6% increase in recidivism with an associated CI of .04 to .07.

Upon examining the mean ϕ and z^{\pm} values for each of the eight types of intermediate sanctions, one can see that 13 of the 16 CIs contain 0. Only in the case of restitution and fines was there any indication of a suppression of recidivism (i.e., CI did not include 0) but these results were criterion-dependent. A summary of the data from all of the eight categories produced mean effect sizes of .00 with a CI of -.02 to .03 for ϕ , and .02 for z^{\pm} with an associated CI of .01 to .03.

In fact, an examination of the effect sizes from intermediate sanctions that purported to provide a

Table 1

Mean Effect of Community Sanctions on Recidivism							
Type of Sanction (k)	N	%E	%C	M ϕ	CI ϕ	Z $^{\pm}$	CI z^{\pm}
1. Intensive Supervision Programs (47)	19,403	29	29	.00	-.05 to .05	.06	.04 to .07
2. Arrest (24)	7,779	38	39	.01	-.05 to .04	.00	-.02 to .02
3. Fines (18)	7,162	41	45	-.04	-.08 to .00	-.04	-.06 to -.02
4. Restitution (17)	8,715	39	40	-.02	-.15 to -.01	.03	-.01 to .05
5. Boot Camp (13)	6,831	31	30	.00	-.05 to .08	.00	-.02 to .02
6. Scared Straight (12)	1,891	46	37	.07	-.05 to .18	.04	-.01 to .09
7. Drug Testing (3)	419	13	12	.05	-.12 to .12	.00	-.10 to .10
8. Electronic Monitoring (6)	1,414	6	4	.05	-.02 to .11	.03	-.02 to .08
9. Total (140)	53,614	33	33	.00	-.02 to .03	.02	-.01 to .03

Note. k = number of effect sizes per type of sanction; N = total sample size per type of treatment; %E = percentage recidivism for the group receiving the sanction; %C = percentage recidivism for the comparison group (regular probation); M ϕ = mean phi per type of sanction; CI ϕ = confidence interval about mean phi; z $^{\pm}$ = weighted estimation of phi per type of sanction; CI z^{\pm} = confidence interval about z $^{\pm}$.

modicum of “treatment” — in each case the treatment was ill-defined and, therefore, impossible to assess as to quality — an interesting result was uncovered. The addition of a treatment component produced a 10% reduction in recidivism. On this evidence, one can tentatively conclude that the effectiveness of intermediate sanctions is mediated solely through the provision of treatment.

Incarceration

The view that the experience of prison in itself acts as a deterrent has a long history in criminal justice.¹⁵ It is rooted in specific deterrence theory,¹⁶ which predicts that individuals experiencing a more severe sanction are more likely to reduce their criminal activities in the future. Research strongly indicates that both the public and many policy-makers assume incarceration has powerful deterrent effects. Amongst academics, economists have taken the lead in support of the specific deterrence model.¹⁷ They maintain that incarceration imposes direct and indirect costs on inmates (e.g., loss of income, stigmatization) such that, faced with the prospect of going to prison or after having experienced prison life, the rational individual would choose not to engage in further criminal activities.

What kind of data is used to support the hypothesis that prison time suppresses criminal behaviour? The most compelling evidence comes from some ecological studies where the results are based on rates or averages (aggregate data). An example of one of the most positive results came from a study by Fabelo¹⁸ that reported a 30% increase in incarceration rates across 50 U.S. states,

The addition of this body of evidence to the “what works” debate leads to the inescapable conclusion that, when it comes to reducing individual offender recidivism, the “only game in town” is appropriate cognitive-behavioural treatments which embody known principles of effective intervention.

corresponding with a decrease of 5% in the crime rate for a five-year period. Fabelo’s data has been interpreted as convincing evidence that prisons deter crime.

To be fair to deterrence aficionados, we must acknowledge that there are a number of caveats about the potency of prison in this regard. These include the following: deterrent effects are more likely to be found among lower risk offenders, harsher prison living conditions, and aggregate data which tend to wildly inflate results in favour of deterrence.¹⁹

To return to the original question as to whether longer periods of incarceration are associated with reductions in recidivism, we examined two sets of data that addressed the above-noted caveats and provide the most exacting assessment of the issue to date. We located 222 comparisons of groups of offenders ($n = 68,248$) who spent more (an average of 30 months) versus less (an average of 17 months) time in prison. The groups were similar on approximately 1 to 5 risk factors. As seen in Table 2, offenders who did more time had slight increases in recidivism of 3% regardless of whether the effect sizes were unweighted ($\bar{\phi}$) or weighted ($\bar{\phi}^{\pm}$).

The second sample involved 103 comparisons of 267,804 offenders who were either sent to prison for brief periods (only 18% of effect sizes had length of incarceration noted) or received a community-based sanction. Once again, the results from Table 2 indicate no deterrent effect. Using $\bar{\phi}$ as a measure of outcome, we see an increase

Table 2

Mean phi ($\bar{\phi}$) and mean weighted phi ($\bar{\phi}^{\pm}$) for More vs. Less and Incarceration vs. Community sanctions

Type of Sanction (k)	N	M $\bar{\phi}$ (SD)	CI $\bar{\phi}$	Z [±]	CI Z [±]
1. More vs. Less (222) ^a	68,248	.03(.11)	.02 to .05	.03	.02 to .04
2. Incarceration vs. Community (103) ^b	267,804	.07(.12)	.05 to .09	.00	.00 to .00
3. Total (325)	336,052	.04(.12)	.03 to .06	.02	.02 to .02

Note: k = number of effect sizes per type of sanction; N = total sample size per type of sanction; M $\bar{\phi}$ (SD) = mean phi and standard deviation per type of sanction;

CI $\bar{\phi}$ = confidence interval about mean phi; Z[±] = weighted estimation of $\bar{\phi}$ per type of sanction; CI Z[±] = confidence about Z[±].

^a More vs. Less — mean prison time in months (k = 190): More = 30.0 mths, Less = 12.9 mths, Difference = 17.2 mths.

^b Incarceration vs. Community — mean prison time in months (k = 19): 10.5 mths.

in recidivism of 7% but no effect (0%) when effect size is weighted by sample size.

Clearly, the prison as deterrent hypothesis is not supported. The opposite conclusion, and one that is widely endorsed in some correctional circles, is that prisons do increase recidivism, in other words act as “schools for crime”. This is problematic in our view. The studies in this data base are sufficient information to adequately assess this question. Moreover, the design strength of many of the comparison groups leaves much to be desired, albeit we found no correlation between quality of design and effect size (). While this is the “best” available evidence with which to assess the enthusiastic claims of prison deterrence supporters, the only really

satisfactory answer to this particular question is for prison authorities to periodically assess incarcerated on a comprehensive list of dynamic risk factors and correlate time served and changes in risk while incarcerated with future recidivism. This will prove, by far, to be the most sensitive analysis. Regrettably, evaluations of this type have rarely been reported in the corrections literature.

In summary, the addition of this body of evidence to the “what works” debate leads to the inescapable conclusion that, when it comes to reducing individual offender recidivism, the “only game in town” is appropriate cognitive-behavioural treatments which embody known principles of effective intervention.²⁰ ■

¹ P.O. Box 5050, Saint John, New Brunswick E2L 4L5.

² 600 Dyer Hall, Cincinnati, Ohio 45221-0389.

³ 1125 Colonel By Drive, Ottawa, Ontario K1S 5B6

⁴ Gendreau, P., Paparozzi, M., Little, T. and Goddard, M. (1993). “Does ‘punishing smarter’ work? An assessment of the new generation of alternative sanctions in probation”. *Forum on Corrections Research*, 5 (3), 31-34.

⁵ Walter, T. L. and Mills, C. M. (1980). “A behavioral-employment intervention program for reducing juvenile delinquency”. In R. R. Ross and P. Gendreau (Eds), *Effective correctional treatment*, p. 185-206. Toronto, ON: Butterworths.

⁶ Andrews, D. A. and Kiessling, J. J. (1980) “Program structure and effective correctional practice: A summary of CaVic research”. In R. R. Ross and P. Gendreau (Eds), *Effective correctional treatment*, p. 439-463. Toronto, ON: Butterworths.

⁷ Andrews, D. A. (1995). “The psychology of criminal conduct and effective treatment”. In J. McGuire (Ed.), *What works: Reducing reoffending*, p. 35-62. West Sussex, UK: John Wiley. See also Gendreau, P. and Ross, R. R. (1983-1984). “Correctional treatment: Some recommendations for successful intervention”. *Juvenile and Family Court*, 34, p. 31-40.

⁸ C. H. Blakely, W. S. Davidson, II, C. A. Saylor and M. J. Robinson (1980). “Kentfields rehabilitation program: Ten years later”. In R. R. Ross and P. Gendreau (Eds.), *Effective correctional treatment*, Toronto, ON: Butterworths, p. 439-463. See also W. S. Davidson, II and M. J. Robinson (1975). “Community psychology and behavior modification: A community based program for the prevention of delinquency”, *Journal of Corrective Psychiatry and Behavior Therapy*, 21, p. 1-12.

⁹ Martinson, R. (1976). “California and the crossroads”. In R. Martinson, T. Palmer and S. Adams (Eds.), *Rehabilitation, recidivism and research*, p. 63-74. Hackensack, NJ: National Council on Crime and Delinquency.

¹⁰ Cullen, F. T. and Gendreau, P. (in press). “Assessing correctional rehabilitation: Policy, practice, and prospects”. In J. Horney (Ed.), *NIJ criminal justice 2000: Vol. 3. Changes in decision making and discretion in the criminal justice system*. Washington, DC: U.S. Department of Justice, National Institute of Justice.

¹¹ Petersilia, J. (1990). “When probation becomes more dreaded than prison”, *Federal Probation*, 54, p. 23-27.

¹² Erwin, B. (1986). “Turning up the heat on probationers in Georgia”. *Federal Probation*, 50, 17-24.

¹³ Gendreau, P., Cullen, F. T. and Bonta, J. (1994). “Intensive rehabilitation supervision: The next generation in community corrections?” *Federal Probation*, 58, p. 72-78.

¹⁴ Gendreau, P., Goggin, C. and Fulton, B. (2000). “Intensive supervision in probation and parole”. In C. R. Hollin (Ed.), *Handbook of offender assessment and treatment*. p. 195-204. Chichester, UK: John Wiley.

¹⁵ Cullen and Gendreau. (in press).

¹⁶ Andenaes, J. (1968). “Does punishment deter crime?” *Criminal Law Quarterly*, 11, p. 76-93.

¹⁷ von Hirsch, A., Bottoms, A. E., Burney, E. and Wikström, P.O. (1999). *Criminal deterrence and sentence severity: An analysis of recent research*. Oxford, UK: Hart Publishing.

¹⁸ Fabelo, T. (1995). *Testing the case for more incarceration in Texas: The record so far*. State of Texas: Criminal Justice Policy Council.

¹⁹ Gendreau, P., Goggin, C. and Cullen, F. (1999). *The effects of prison sentences on recidivism*. Ottawa, ON: Solicitor General Canada.

²⁰ Andrews, D. A., Dowden, C. and Gendreau, P. (1999). *Clinically relevant and psychologically informed approaches to reduced re-offending: A meta-analytic study of human service, risk, need, responsivity, and other concerns in justice contexts*. Unpublished manuscript, Carleton University, Ottawa, ON.