

CRIMINAL DETERRENCE AND SENTENCE SEVERITY: AN ANALYSIS OF RECENT RESEARCH, A. von Hirsch, A. E. Bottoms, E. Burney and P-O. Wikström (Portland, Oregon: Hart, 1999)

I. INTRODUCTION

One of the most used and most abused terms in the law and practice of sentencing in criminal cases is “deterrence.” The basic idea behind the invocation of the term is that persons may be induced to choose not to undertake particular activities because of the consequences that are likely to accompany or follow those activities.¹ We find deterrence referred to as one of the objectives of sentencing in s. 718 of the *Criminal Code*:

The fundamental purpose of sentencing is to contribute, along with crime prevention initiatives, to respect for the law and the maintenance of a just, peaceful and safe society by imposing just sanctions that have one or more of the following objectives:

...

(b) to deter the offender and other persons from committing offences.²

Sentencing judges routinely refer to “deterrence” as a factor to be considered in setting penalties, typically when a relatively severe sentence is contemplated.³ Politicians often advocate harsh sentences to enhance the deterrent effects of sentencing. Unfortunately, the concept of deterrence is seldom analyzed and purported deterrence effects are seldom measured. Fortunately, *Criminal Deterrence and Sentence Severity: An Analysis of Recent Research*⁴ provides a brief, clear, and sensible review of the concept of deterrence and of recent literature exploring its predictive value. The work is short enough so that those concerned with sentencing have no excuse not to read it; it is rich enough so that the time spent by those who do read it will be an excellent investment.

CDSS has four main elements — (A) a sketch of the type of human motivation that must exist for deterrence to have any sort of grip; (B) outlines of a grammar of deterrence; (C) a review of recent deterrence research; and (D) some overall (tentative) conclusions.⁵

¹ A. von Hirsch *et al.*, *Criminal Deterrence and Sentence Severity: An Analysis of Recent Research* (Portland, Oregon: Hart, 1999) [hereinafter *CDSS*], following Beyleveld’s account of deterrence at 5.

² *Criminal Code*, R.S.C. 1985, c. C-46, s. 718 [hereinafter *Criminal Code*].

³ See, for example, *R. v. Campbell* (1981), 64 C.C.C. (2d) 336 (B.C.C.A.), Nemetz C.J.; *R. v. Johnas* (1982), 2 C.C.C. (3d) 490 (Alta. C.A.), *per curiam*.

⁴ *CDSS*, *supra* note 1.

⁵ *CDSS* also has a brief appendix concerning mandatory minimum penalties and deterrence. *CDSS* sets out some conditions that must be met for such penalties to be effective: (i) the penalties must be more certain or severe than penalties that are already imposed by the courts; (ii) the penalties must apply to “reasonably common instances of the offence”; (iii) the penalties “must apply to those most likely to commit the offences” (e.g., if a type of offence is primarily committed by young offenders, the mandatory minimum penalty must apply to young offenders); (iv) the penalty must in fact be imposed by the courts (e.g., cases to which the penalty might have applied cannot be chronically avoided through plea bargains); and (v) potential offenders must be aware of the penalties, and the

II. AN OVERVIEW OF CDSS

A. SKETCH OF HUMAN MOTIVATION

CDSS finds the possibility of deterrence on a sensible account of “bounded rationality,” which may be explained as follows: From a highly schematic, highly simplified perspective, future human behaviour may be controlled externally or internally. External controls, generally, do not depend on target individuals’ motivations to be effective. External controls stop or hinder individuals from performing activities, regardless of their choices, preferences, or motivations. These controls incapacitate. External controls may be imposed on potential actors (*e.g.*, through chains, prison cells, or chemical castration) or on potential targets of action (the strategy of “target hardening” — *e.g.*, security measures at airports and anti-theft equipment on vehicles).⁶ Internal controls, in contrast, depend on choice and motivation, rather than on physically preventing an actor from doing what he or she wants to do. Internal controls may be non-instrumental or instrumental.⁷ Non-instrumental controls appeal to the individual’s sense of good or right, regardless (at least primarily) of whether doing the act or refraining from doing the act would maximize the benefits to the individual in the circumstances. The individual is motivated to do what is good or right (whether to perform an action or to refrain from some action) because that is what the individual “should” do, not because of any particular anticipated benefit or detriment associated with performing or refraining from performing the action.⁸ In legal contexts, an individual’s non-instrumental decision to follow a legal rule would be determined by the fact that a rule is a “law,” even though following that rule in the circumstances may be inconvenient or otherwise prejudicial to the individual.⁹ Non-instrumental controls appeal to individuals as “moral” agents, in the words of CDSS.¹⁰ Individuals, however, are not fully or always moral agents. Moral appeals may be backed up by prudential or instrumental controls.¹¹ Instrumental controls appeal to the individual’s wish to avoid anticipated harms or to achieve benefits associated with performing an action or refraining from performing an action. Instrumental controls may be incentive-based (conduct is elicited through the promise of benefits, *e.g.*, “time off for good behaviour” or payment for turning in prohibited weapons) or disincentive-based (conduct is rendered undesirable through the attachment of risks of harm to the conduct).

penalties must represent significant subjective threats (*ibid.* at 51). CDSS finds little evidence that mandatory minimum sentences have deterrent effects (*ibid.* at 52).

⁶ *Ibid.* at 3-4. Target hardening can involve deterrence as well, as when the “hardening” is accomplished through manifest surveillance, which encourages the belief by potential offenders that they are likely to be observed and apprehended, which may discourage the commission of offences.

⁷ In particular cases, the two may overlap — I may do what I believe is right in the circumstances, and I may also believe that doing the right thing will benefit me.

⁸ CDSS, *supra* note 1 at 3.

⁹ Non-instrumental decisions based on the law depend on an acceptance of the legitimacy or authority of the law.

¹⁰ CDSS, *supra* note 1 at 39.

¹¹ *Ibid.*

Deterrence depends on the existence of instrumental disincentive-based reasoning. For deterrence through criminal sentencing to have any effect on individuals' conduct, at least some of us, at least some of the time, in relation to specific types of conduct, must engage in calculations of the anticipated costs and benefits of the conduct. To a degree, in some circumstances, we are rational utility maximizers. This is the modest psychological assumption of deterrence.¹² No claim is made that we are always or only rational utility maximizers. We sometimes act impulsively; we sometimes act for non-instrumental, rather than instrumental reasons.

B. THE GRAMMAR OF DETERRENCE

CDSS draws distinctions that usefully clarify our thinking about deterrence.

To begin with, deterrence is but one of a variety of mechanisms to induce persons to obey the law.¹³ As indicated above, incapacitation measures and their effects must be distinguished from deterrence measures and their effects.¹⁴

Deterrence may be "formal" or "informal." Informal deterrence is the product of anticipated peer or social group responses to actions, or even the anticipated response of a single individual who is significant to the actor. Formal deterrence is the type of deterrence that figures in the penal system. It involves officially endorsed "risks" posed by state agencies pursuant to state-created rules.

Formal deterrence may be "specific" ("special") or "general."¹⁵ Specific deterrence is aimed at regulating the conduct of a particular individual, the offender who is the subject of a sentence. He or she is to be deterred from engaging in prohibited behaviour in the future. General deterrence — the type of deterrence usually promoted and envisaged in sentencing — is aimed at regulating the conduct of a more or less extensive set of potential offenders other than the individual sentenced. All of these potential offenders are to be deterred from engaging in the prohibited behaviour in the future. General deterrence may be targeted at particular groups or types of offenders (e.g., first offenders or drug traffickers) or it may have no particular targets. General deterrence may aim at eliminating a type of criminal conduct entirely, or it may seek to cause offenders to engage in less severe types of criminal conduct.

The deterrence mechanism has two main components — the certainty of punishment and the severity of punishment.¹⁶ Certainty of punishment concerns the likelihood that an offender will be caught, arrested, convicted, and punished by the sanction in question. Severity concerns the degree or type of sanction in question.¹⁷ In theory, either or both variables may be modified to induce changes in future behaviour.

¹² *Ibid.* at 6.

¹³ *Ibid.* at 3.

¹⁴ Section 718 of the *Criminal Code*, *supra* note 2, properly distinguishes incapacitation from deterrence by giving incapacitation its own paragraph (c): "to separate offenders from society, where necessary."

¹⁵ *CDSS*, *supra* note 1 at 5.

¹⁶ *Ibid.* at 5-6.

¹⁷ *Ibid.* at 6.

The “initial” effects of general deterrence must be distinguished from its “marginal” effects.¹⁸ “Initial” effects occur when conduct is first prohibited under threat of penal sanction. The “marginal” effects concern the increase or decrease in offence-commission rates caused by a particular alteration of an existing deterrence mechanism.

“Short-term” and “long-term” deterrent effects should be distinguished. A change in penal policy may, in the short term, be correlated with reduced criminal activity. That short-term result, however, does not necessarily entail that over the longer term offence rates will remain at that short-term level (the rates may go up or down).

The “intended” and “unintended” effects of a deterrence policy should be distinguished. An intended effect of a deterrence policy is, of course, to reduce the incidence of criminal activity. An unintended effect of a deterrence policy, however, may be a decrease in conviction rates or a decrease in the imposition of relatively severe sentences. Another unintended consequence might be an increase in more serious offences accompanying a decrease in less serious offences. If the penalty for less serious offences approaches the penalty for more serious offences, an offender may have little enhanced marginal risk in choosing the more serious offence.¹⁹ Expanded penalties for less severe offences may even be correlated with an increase in the crime rate: if too many types of conduct are prohibited and punished, punishment may come to appear normal; criminal conduct becomes “destigmatized,” and the inducement not to offend is reduced.

A distinction must be drawn between deterrence policies themselves (a set of penalties attaching to convictions for a set of offences) and the perception of those policies by individuals. *CDSS* rightly emphasizes the subjective aspect of deterrence. Deterrence involves perception, findings of relevance, and evaluation and assessments of prospective costs and benefits of contemplated actions.²⁰ If no one knows that a set of penalties exists, the penalties can have no deterrent effect. Deterrence also has an “intersubjective” aspect. If, within a particular subgroup, penalties are not perceived as injurious — for example, if serving time in prison is looked on as a rite of passage and not as a grievous blemish on one’s personal history — then the penalties will have no deterrent effect. The meaning or significance of deterrence measures cannot be understood in the abstract, or from the perspective of only one social group.

These reflections lead to an important set of comments in *CDSS*. A deterrence policy must be set in a “normative” or moral framework. *CDSS* appeals to H.L.A. Hart’s famous observation — obedience induced by a threatening gunman is not the same as obedience induced by law.²¹ Legal deterrence, at least for a significant portion of the population, cannot be founded on merely instrumental reasoning. Within a moral framework, penalties may have normative effects, in addition to their direct physical or financial effects on an individual. A penalty may express “censure” or “disapprobation” by the punitive agent on

¹⁸ *Ibid.*

¹⁹ *Ibid.* at 8.

²⁰ *Ibid.* at 6.

²¹ *Ibid.* at 39.

behalf of society as a whole.²² In response to a penalty, an individual may experience “shame” if he or she accepts the censure implicit in the penalty.²³ In response to the penalty, third parties may judge the individual adversely; the individual thereby suffers “stigma” from the penalty.²⁴ These normative effects of penalties should be distinguished from the deterrent effects of penalties.

The distinctions made by *CDSS* help clarify the questions that empirical research must answer: Can “target groups” susceptible to deterrence be identified? Can a deterrence policy reduce the severity of types of crimes committed, while not reducing the overall crime rate? May incapacitative effects of a penal policy be distinguished from its deterrent effects? What are the “marginal” effects of a change in deterrence policy? Which factor has the greatest marginal deterrent effect — changes in sentence severity or changes in the certainty of punishment? What are the long-term effects of changes in deterrence policy? What unintended consequences follow changes in deterrence policy? What types of state behaviours reinforce the normative effects of deterrence? To what extent is legal compliance induced by normative responses to offending, rather than by instrumental deterrent effects? To what extent do informal responses to offences induce legal compliance? Armed with its distinctions and questions like the foregoing, *CDSS* turns to an assessment of the research literature concerning deterrence.

C. ASSESSMENT OF RESEARCH

CDSS provides a brief history of the deterrence literature from the 1960s to 1980. It provides a detailed review of major studies published between 1980 and early 1998. It reviews association studies and perceptual/contextual studies.

1. ASSOCIATION STUDIES

Association studies consider the statistical association between changes in judicial sentencing policy and crime rates.²⁵ These studies are beset by a variety of dangers. The relationship between the purported cause (deterrence policy) and purported effect (rise or fall in crime rate) may be problematic. A mere correlation may be mistaken for causality.²⁶ Effects may be the result of other causes. Socio-economic or cultural factors may have higher predictive values than deterrence policies.²⁷ Association studies must control for causal influences other than deterrence policy.

Association studies rely on statistical information, yet this information is notoriously suspect. Often the data for gross political units, such as provinces or countries, are lumped

²² *Ibid.* at 40. Note that the penal objective listed first in s. 718(a) of the *Criminal Code* is “to denounce unlawful conduct” (*supra* note 2).

²³ *CDSS, ibid.* Paragraph 718(f) of the *Criminal Code* provides that one of the objectives of sanctions is “to promote a sense of responsibility in offenders, and acknowledgment of the harm done to victims and the community” (*supra* note 2).

²⁴ *CDSS, ibid.*

²⁵ *Ibid.* at 17.

²⁶ *Ibid.*

²⁷ *Ibid.* at 18.

together, obscuring significant local variations. Much of the data is initially collected by police agencies, which subjects the data to policing politics and practices.²⁸ In any event, the police can measure only reported crime and crime detected by policing agencies. The actual quantity of crime is thought to vastly exceed the quantity of reported crime, but since it is unmeasured, the actual quantity of crime (which may or may not be influenced by a deterrence policy) can only be guessed at. Data collected from prisons is also suspect, since imprisonment figures may depend on a host of factors other than deterrence policies, including the availability of space in prisons, the viability of release programs, patterns in plea bargaining, and sentencing policies. Prison data tends not to permit discrimination on the basis of certainty as opposed to severity; it often does not disclose how offenders were caught and convicted.²⁹

These difficulties aside, association studies face problems cast into relief by the grammar of deterrence. Studies must be designed to distinguish incapacitative effects from deterrence effects;³⁰ short-term from long-term effects;³¹ the effects of context or culture as opposed to the effects of penal policy; and, most importantly, the effects of changes in certainty of punishment from changes in penal severity.³² These studies must also be sensitive to the communication of sentencing policies (if deterrence policies are not well known, they cannot be effective), to the interpretation of sanctions in particular social contexts, and to the role of normative consequences of punishment.³³

CDSS finds that most association studies respecting the effects of deterrence ignored these dangers. The studies were methodologically flawed. Nonetheless, the studies tend to show that there is only a weak link between increases in sentencing severity and the reduction of crime.³⁴ A stronger link appears to exist between certainty of punishment and the reduction of crime.³⁵

2. PERCEPTUAL/CONTEXTUAL STUDIES

Perceptual or contextual studies are studies of offender decision-making. They examine links between perceptions and choices.³⁶ These studies are of two major types — survey-based studies and offender decision-making studies.

Survey-based studies select subgroups of the general population and poll members of these subgroups respecting their perceptions. Survey-based studies may be “cross-sectional,” covering a cross-section of a population at a given time; “longitudinal,” following a particular group of individuals over a period of time and surveying the group

²⁸ *Ibid.* at 3. See also J. Miller, *Search and Destroy: African-American Males in the Criminal Justice System* (Cambridge: Cambridge University Press, 1996) at 27, 41.

²⁹ *CDSS*, *supra* note 1 at 29.

³⁰ *Ibid.* at 8, 46.

³¹ *Ibid.* at 7.

³² *Ibid.* at 18.

³³ *Ibid.* at 21-22.

³⁴ *Ibid.* at 27.

³⁵ *Ibid.* at 45.

³⁶ *Ibid.* at 33.

at timed intervals; or scenario-based, in which survey subjects are asked to decide how they would act in scenarios simulating real-life situations.³⁷

Studies of offender decision-making involves interviews with actual offenders, whether in prison or on the street.³⁸ Interviewers probe the reasoning of offenders in relation to offences they committed and offences they did not commit.³⁹

Perceptual/contextual studies may correct and complement association studies. Like association studies, though, perceptual/contextual studies are beset by dangers. The studies depend on the accuracy of reports — and since the self-reporting concerns criminal activity, there is no substantial assurance of reliability. Persons are apt to rationalize their behaviour and to adapt their responses to what they believe the questioner wants to hear.⁴⁰ “Experiential effects” may play a role in responses. If, for example, offenders are asked about their perceptions of risk in relation to past offences, their perceptions at the time of questioning may influence their reports of their estimations of risk at the time of offending. Furthermore, offending causes a change in the perception of risk. (The perception of risk after offending may not be the same as the perception of risk before offending.)⁴¹ If persons are asked about hypothetical future offences, the type of offence (e.g., sexual assault as opposed to tax evasion) may be a factor in whether the persons would be inclined to claim that they would commit the offence, regardless of the penal risk.⁴² Studies must be designed to distinguish between effects attributable to changes in the certainty of punishment as opposed to changes in severity of punishment.

CDSS finds that most of the contextual/perceptual studies it reviewed were not attuned to these dangers and were methodologically flawed. Nonetheless, the perceptual/contextual studies have provided some useful insights. They have emphasized the impulsivity of many persistent offenders — and impulsivity makes deterrence difficult.⁴³ These studies tend to confirm the “80/20 rule”: “[I]n any cohort of identified offenders, a relatively small percentage of active violators are responsible for a high percentage (usually, over half) of the offences reported for the group as a whole.”⁴⁴ The studies have provided some evidence that risks of punishment affect more the manner in which offences are committed than whether offences are committed at all.⁴⁵ The studies also tend to confirm the suggestions arising from the association studies — that reductions in crime are only weakly associated with increases in penal severity but are more strongly associated with increases in the certainty of punishment.

³⁷ *Ibid.* at 34.

³⁸ An excellent work in this genre, which doubtlessly due to the timing of its publication was not mentioned in CDSS, is R.T. Wright & S.H. Decker, *Armed Robbers in Action: Stickups and Street Culture* (Boston: Northeastern University Press, 1997). Wright and Decker’s earlier work, *Burglars on the Job: Streetlife and Residential Break-ins* (Boston: Northeastern University Press, 1994) is discussed in CDSS (*ibid.* at 36).

³⁹ CDSS, *ibid.* at 33.

⁴⁰ *Ibid.* at 35-36.

⁴¹ *Ibid.* at 34.

⁴² *Ibid.*

⁴³ *Ibid.* at 36.

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

Perceptual/contextual studies provide an important contribution to the deterrence literature by drawing attention to the actual contexts of offending⁴⁶ and the interaction between deterrence and normative perspectives — between the “objective” penal risk and the significance of that risk for particular groups. The studies highlight the importance of social controls and relationships to deterrence policy.⁴⁷ They suggest that members of groups with reduced social bonds, or who have nothing to lose, are not easily deterred. Moreover, these studies provide some valuable indications that the perceived authority and legitimacy of the penal system, which affect its normative potential for affecting conduct, significantly depend on the perceived fairness of particular processes and punishments. Hence, one might surmise, adequate funding for Legal Aid and fair trials support deterrent effects and contribute to the maintenance of a peaceful and safe society. This is probably an unexpected lesson for many deterrence advocates.

D. CONCLUSIONS

CDSS can offer no grand conclusions, no recommendations supported by incontrovertible science. The research, such as it is, permits only some modest and humble conclusions. Deterrence does work, for some people, at some times, for some offences.⁴⁸ The key factor on which deterrence depends appears to be certainty of punishment and *not* severity of punishment. Deterrent effects must be understood in the social and normative contexts of those who are to be deterred. More and better research is required. What is not required is a large-scale increase in penal severity. Contrary to the intuitions and electioneering of too many politicians, increased penalties have little proven efficacy as deterrence measures.

CDSS has offered a reasoned and entirely useful intervention in the deterrence debate. One may only hope that it will not be ignored.

Wayne N. Renke
Associate Professor
Faculty of Law
University of Alberta

⁴⁶ *Ibid.* at 37.

⁴⁷ *Ibid.* at 35.

⁴⁸ *Ibid.* at 47.