DIFFUSION OF CRIME CONTROL BENEFITS: OBSERVATIONS ON THE REVERSE OF DISPLACEMENT

by Ronald V. Clarke and

David Weisburd

School of Criminal Justice,

Rutgers, The State University of New Jersey

Abstract: Preoccupation with the threat of displacement has led crime prevention researchers to overlook the phenomenon of "diffusion of benefits," the unexpected reduction of crimes not directly targeted by the preventive action. This phenomenon, which can bring considerable added value to sltuatlonal measures, has been described as the "complete reverse" of displacement. Two processes underlying diffusion are Identified Involving, on the one hand, offenders' uncertainty about the extent of the Increased risk, and, on the other, their exaggerated perception that the rewards of particular crimes are no longer commensurate with the effort These processes are labeled, respectively, deterrence and discouragement. Recent research provides numerous examples of both kinds of diffusion. Ways of enhancing diffusion are explored, and a program of research Is advocated on offender perceptions of the opening and closing of criminal opportunities.

INTRODUCTION

The principal theoretical criticism leveled against opportunity-reducing forms of crime prevention, such as situational prevention, is that thwarted offenders will turn their attention to some other target or location, commit their crimes at another time, change their methods or

Address for correspondence: Ronald V. Clarke, School of Criminal Justice, Rutgers University, 15 Washington Street, Newark, NJ 07102.

even turn to some other form of crime. Many early studies did indeed find evidence of such displacement of crime (Gabor. 1990), but more recently a series of empirical studies have found less evidence of displacement following reductions in crime opportunities. These recent findings have been of two kinds relating, first, to the consequences of fortuitous reductions in opportunity and, second, to the effect of specific crime prevention measures. In the first group would be included Mayhew et al.'s (1989) finding that there was no substantial displacement to thefts of cars or bicycles following the reduction in motorcycle thefts caused by the introduction of helmet-wearing laws in Germany. Also included would be the finding that detoxification of the domestic gas supply in England and Wales, which eliminated domestic gas suicides, was not accompanied by substantial displacement to other methods (Farmer and Rohde, 1980; Clarke and Mayhew, 1988). The second group of studies would include more than 20 case studies of "successful" situational prevention recently reprinted in Clarke (1992). which reported real reductions in targeted crimes with apparently little displacement. These targeted crimes included such diverse offenses as auto theft from parking lots, vandalism of public telephones and buses, robberies of bus drivers, obscene phone calls, prostitution, check frauds, slug use in parking meters, fare evasion on public transport, and subway graffiti.

While a consensus has now begun to develop that displacement of crime may be quite limited following reductions in opportunity (Gabor 1990; Barr and Pease 1990; Clarke 1992), conclusive proof of this is extremely difficult to obtain because displacement can in theory take so many different forms. This means that no research study, however sophisticated, can adequately cover all the possibilities. As Pease has argued:

Even if money (for evaluation) were unlimited but displacement were to diverse offences and places, the effect would disappear into the normal variation in crime rates. Thus if some burglars turn to robberies close to home, some to cheque fraud, some to drug dealing and so on, even total displacement would be undetectable [Pease, 1993].

This empirical impasse has led to a theoretical re-examination of displacement employing routine activity theory and the rational choice perspective (Cornish and Clarke. 1986, 1987). The presumed inevitability of displacement was a consequence of the "dispositional" bias (Clarke. 1980) of most conventional criminological theory, which regarded situational factors as playing a subordinate role in the commission of crime. Under this view, situational changes could affect the pattern of crime but not its volume; the latter was determined by motivational factors. Under routine activity theory (Cohen and Felson. 1979), however, the volume of crime is dependent as much on the numbers of suitable targets and capable guardians as of likely offenders. Thus, if targets decline and guardianship increases, reductions in crime would be expected to follow without any threat of displacement.

Under the rational choice perspective, the view of displacement falls somewhere between the two extremes implied by the dispositional and routine activity approaches. The likelihood of displacement would depend on the extent to which other crimes could yield roughly the same benefits without a disproportionate increase in risks or effort, and it would certainly not be inevitable. Thus, the relative absence of displacement to other methods of suicide in Britain following detoxification of domestic gas can be explained by the fact no other method offered the advantages of domestic gas—for example, it requires less planning than overdoses and is much more lethal. Again, the lack of displacement to car and bike theft following reduced opportunities to steal motorcycles in Germany may have been due to the fact that neither bicycles nor cars offer the thrills afforded by motorcycles. In addition, cars may generally be more secure, while bicycles afford a more limited form of temporary transportation.

DIFFUSION OF BENEFITS

The advocates of situational prevention might not have been so preoccupied with the displacement threat had criminological theories been developed earlier that gave more importance to situational and choice factors. As it happens, the defensive posture into which they were forced led them to overlook the possibility that the results of displacement may sometimes be "benign"—for example, by spreading the burden of victimization more equitably across a community or by replacing more serious with less serious crimes (Barr and Pease, 1990). More important, advocates of situational prevention also neglected the fact that the effects of situational measures may sometimes extend beyond the targeted offenses to bring more general benefits of crime reduction.

This is the "complete reverse" of displacement (Poyner, 1988), but may be no less common. Indeed, the phenomenon has been noted in a number of evaluations of situational measures, without its general nature being recognized. Consequently, a variety of terms have been employed to describe it. For example, Chaiken et al. (1974) referred to the "multiplier effect." Scherdin (1986) to the "halo" effect, Clarke (1989) to "spill over benefits," and Miethe (1991) to "free rider" effects. In addition, Sherman (1990) has referred to the "free bonus" effect of police crackdowns when the deterrent effect of the crackdown extends beyond the period it is in force. ¹ Despite the variety of terminology, in all these cases the same phenomenon has been observed. That is to say, reductions in crime have occurred which are difficult to attribute to the direct action of situational measures. These reductions may take the form of crime not directly addressed by the measures, may occur at times when they were not in force, or may involve targets and places not protected.

We are not making reference here to the "side effects" of situational measures—secondary benefits which are not unexceptional and may not even be unexpected. For example, successful situational measures might sometimes produce reductions in levels of fear as well as in targeted offenses. Or they might lead to reductions in other offenses not addressed by the measures, but committed by the same group of offenders who have been "deflected" from the area by the reduced opportunities for the targeted offenses. Thus, in a successful effort to close down a red-light area in North London. Matthews (1990) found not only a decline in prostitution and cruising, but also reductions in a range of serious crimes, such as burglary and auto theft, which had probably been committed by the prostitutes, pimps and Johns who no longer had reason to come to the area. While these may be "side effects" of the situational measures, they are linked to them in a direct causal chain and there is nothing unexpected or difficult to explain.

Nor do we mean to refer here to the well known "broken windows" theory (Wilson and Kelling, 1982), which holds that the control of incivilities and nuisance behavior in urban areas may prevent the emergence of more serious crime patterns. Under this theory, deliberate action is taken to nip trouble in the bud, and the link between the action and intended consequences is clear. In contrast, the reductions in crimes that sometimes occur apparently beyond the focus of situational measures are counter-intuitive and not readily explicable. Hence the wide range of somewhat vague terms—"halo" effect, "free bonus" effect and "multiplier" effect—invoked to explain these effects.

Adoption of a standard terminology and definition would assist our understanding of these processes. The term ''diffusion of benefits'' is proposed to refer to *the spread of the beneficial influence of an intervention beyond the places which are directly targeted, the individuals who are the subject of control, the crimes which are the focus of intervention or the time periods in which an intervention is brought.* Whereas displacement refers to the processes that shift crime away from the targets that are the focus of crime prevention efforts, diffusion is concerned with the processes that spread the crime reduction benefits beyond those targets. In both cases, the terms convey the idea of movement, and both suggest that the immediately contiguous times, targets and locations might be most affected. In effect, crime prevention may be seen as having two quite different but parallel "secondary" impacts on crime beyond the impact on the "primary target" (see Figure 1). It may displace crime beyond the "target" (with "malign" or "benign" consequences), or it may diffuse crime prevention benefits beyond it.

Recognition of diffusion will bring a much needed balance to criminological analysis of crime prevention, but it also provides an opportunity for maximizing crime control benefits. If the processes that lead to diffusion could be identified, crime prevention programs designed to harness this phenomenon could be more clearly defined. This paper explores the mechanisms and processes underlying diffusion, and speculates about ways in which its effects may be predicted and used in crime prevention programs. Diffusion is viewed as a common result of crime prevention activity. However, a systematic review of the literature will not be attempted because there has never been any deliberate effort to measure diffusion, which has always been observed serendipitously. Retrospective assessments of previous studies would be complicated by research designs that frequently rely upon "no-treatment" control groups that, in reality, could be the direct beneficiaries of diffusion. For example, reductions in thefts and robberies were observed by Mayhew et al. (1979) not just in the London Underground stations where closed-circuit television (CCTV) was installed to improve surveillance, but also in nearby stations. At the time, this crime reduction in stations not covered by the **CCTV** was seen as a coincidental drop which complicated the evaluation, but it could just as easily have been the result of diffusion.





SECONDARY IMPACT

-170-

TWO KINDS OF DIFFUSION

It is possible to find examples of "diffusion" that parallel the various forms of displacement (spatial, temporal, target, method and crime type) first described by Reppetto (1076). However, a more useful classification of diffusion effects can be obtained from attention to the different processes underlying the phenomenon. By utilizing a rational choice framework, two such processes—deterrence and discouragement—have been identified which might be manipulated to maximize preventive benefits.

Deterrence

Sherman's (1990) "free bonus" effect of police crackdowns is essentially a carryover of the deterrent effect beyond the period that the crackdown is in force. Even though offenders are no longer under an increased threat of detection and arrest, many of them continue to believe that they may be and, in line with rational choice theory, behave accordingly. Similarly, the deterrent reach of situational measures seems also to be sometimes overestimated by potential offenders, who believe that they are under a greater threat of apprehension than is, in fact, the case.

The clearest example to date of this form of diffusion of benefits is provided by Poyner's (1988) evaluation of the use of CCTV to combat vandalism and graffiti on a fleet of 80 double-deck buses in the North of England. Even though live cameras were installed on only two of the buses and dummy cameras on another three, vandalism and graffiti declined sharply for the whole fleet. This diffusion seems to have been assisted by some well-publicized apprehensions of juvenile vandals resulting from use of the CCTV. and by a deliberate effort to demonstrate the operation of the CCTV by taking one of the "video buses" around the schools in the area. As Poyner comments: "The children have learned...that the cameras will enable misbehaving individuals to be picked out and that action will be taken. However, what they do not know is how extensive the risk is. They appear to believe that most buses have cameras, or at least they are uncertain about which buses have cameras" (Poyner, 1988:50).

This "deterrent" explanation is similar to that provided by Scherdin (1986) for what she calls the "halo" effect of installing an electronic security system in a university library: Even though thefts of audiovisual cassettes could not be detected by the system, library users seemed to be unaware of this because thefts of cassettes declined as markedly as those of books.

Two other examples of diffusion by deterrence concern measures taken to prevent auto thefts at a university parking lot in England, and employee thefts from an electronics warehouse in New Jersey. In an evaluation of a **CCTV** system installed to protect parking lots at the University of Surrey, Poyner (1991) found an equal reduction in auto thefts at lots that were and were not protected by the new cameras. He attributes this to the fact that "the CCTV system enabled the security guards to make three arrests immediately after the system became operational and three further arrests and two specific loudspeaker warnings in the following three months" (Poyner, 1991:100). In an evaluation of efforts to combat theft by warehouse staff in an electronics superstore. Masuda (1992) reports that repeated daily counting by security staff of camcorders and VCRs kept in a secure storage area led not only to sharp reductions in theft of these items, but also in theft of other vulnerable items (such as radar detectors and portable CD players) not subject to counting. Warehouse staff were seemingly unaware of which items were being counted and were therefore deterred from stealing any merchandise.

Discouragement

"Situational deterrence" (Cusson, 1993), which underlies the first kind of diffusion, achieves its effect by increasing the fear of arrest. However, risk of apprehension (and the subsequent punishment) is only one of the factors that offenders weigh when deciding to commit crime. According to the rational choice perspective, they also consider effort and reward. When the former has become incommensurate with the latter, offenders may be discouraged from crime even if the risks of detection have not increased. The spread of such discouragement beyond the crimes targeted constitutes the second form of diffusion.

An example of this form of diffusion is provided by Pease's (1991) evaluation of a package of measures taken to reduce burglary on a British public housing estate. Pease argued that one effective component of this package was the replacement of coin-fed gas and electricity meters with ordinary billed meters. Coin meters had been the targets of a substantial number of the burglaries on the estate. Though meters were removed only from homes that had already suffered a burglary, the benefits of a reduced burglary risk diffused throughout the estate as a whole. The likely explanation for this can be found in Hill's (1986) wider study of the meter theft/burglary problem: "...where coin meters are concentrated on an estate, the odds of a burglar finding a prepayment meter are raised to the point where he will burgle at random...the vulnerability of all homes on that estate is therefore increased, whether they have coin meters or not" (Hill. 1986:5). Taking out a proportion of the meters, as in the case of the estate studied by Pease, seems to have been enough to discourage potential burglars. They could no longer be sure of finding a meter containing cash without expending a great deal of additional effort.

This is similar to arguments used by Decker (1972) and by Poyner and Webb (1987) to account for apparent diffusion of benefits found in their studies. In evaluating new parking meters with a slug-rejector device. Decker (1972) found a decline in slug use both for areas where the new meters had been installed and for "control" areas where they had not been. He argues that the latter decreases "might be attributed to the experiences of slug users having their slugs rejected by nearly identical meters which were equipped with the slug-rejector device" (Decker, 1972:139). This may not have been because the people involved could not distinguish between the new and old meters, but because they had reconciled themselves to the reduced opportunity to use slugs and no longer went prepared to do so. Poyner and Webb (1987) accounted for the reduction in thefts from all city center markets in Birmingham, after action was taken to improve lighting and reduce congestion in the most vulnerable of the markets, as follows: "What seems to have happened is that by improving the worst areas of risk, the whole markets area has benefited. The general attractiveness of this area for thieves has been reduced" (Poyner and Webb, 1987:79).

This explanation recalls the "multiplier effect" described by Chaiken et al. (1974) in their attempt to explain precipitate increases and subsequent decreases in bus and subway robberies in New York in the 1970s.

When a few people demonstrate that a particular type of crime or time of day is relatively safe and profitable, others are encouraged to try it, and the incidence of that crime increases very rapidly. Then, the institution of an anticrime measure demonstrates that the odds have changed and. at least temporarily, the multiplier effect operates in the opposite direction, causing a decrease that may even be greater than I that] merited by the effectiveness of the measure [Chaiken et al., 1974:30).

Other evidence of robbers having been more discouraged than merited by preventive measures comes from two studies undertaken in England and Australia. In the first of these (Ekblom, 1988), it was shown that anti-bandit screens installed in London post offices to prevent over-thecounter robberies also achieved a reduction in robberies of staff and customers not protected by the screens. This result was attributed to the fact that would-be robbers had been "put ofT by the "very general message that something had been done to improve security at sub-post offices" (Ekblom. 1088:39). Since the measures were intended to frustrate the commission of robbery, rather than result in the arrest of perpetrators, this would be an example of discouragement and not deterrence. Similarly, in the second study, Clarke et al. (1901) suggested that the reduction in robberies of all commercial targets (including convenience stores, gas stations and betting shops) following an intensive target-hardening program undertaken in Australian banks during the late 1980s might have been due to a feeling induced in the minds of many commercial robbers, not just those specializing in banks, that this form of crime was no longer worth undertaking.

ENHANCING DIFFUSION

Having got something for nothing, it is only natural to wonder how one might get even more. Thus, having identified the -free bonus'' of police crackdowns. Sherman immediately begins to speculate about ways in which crime control policy might enhance its goals as much "by barking as by biting or by bluffing rather than by showing its hand'' (Sherman, 1090:11). This involves making offenders believe that the probabilities of being caught are greater than they really are. Sherman's proposed solution is to manipulate uncertainty about the risks in force by using available patrol resources in a continuous series of crackdowns and back-offs rotated randomly at different times and places, rather than spreading the same resources in a more even distribution. This keeps offenders in perpetual uncertainty about the actual risks and may lead them to overestimate these just in order to be safe.

Patrol is a preventive resource of considerable flexibility, but Sherman's (1990) strategy of creating uncertainty about actual risks can be adapted to enhance diffusion of benefits for situational measures that are "fixed" and cannot readily be switched from time to time or place to place. This can be illustrated by a discussion of Caller-ID, a device that allows the person receiving a phone call to read the caller's number. Purchase of this device, now available in many parts of the U.S., is intended to protect the subscriber from obscene or harassing phone calls.

174

However, an early study by Clarke (1990) has suggested that Caller-ID has a more general value in deterring obscene phone callers since the offenders usually have no way of knowing whether the number they have dialed is equipped with Caller-ID. Clarke found that annoying phone calls declined by about 20% following the introduction of Caller-ID in parts of New Jersey, even though only about 1 to 2% of customers had the devices.

Caller-ID quickly attracted customers but, had it not. considerable savings for the police and phone companies in investigating obscene phone calls might have been achieved through free distribution of the devices to a random selection of subscribers. Judged by Clarke's findings in New Jersey, this sample might not have had to be large and, indeed, there may be other situations when free distribution of preventive measures could become an economically feasible vehicle of public policy. One such example involves vehicle tracking devices that can be concealed in cars to facilitate their recovery when stolen. These devices tend to be purchased by people with valuable automobiles living in areas with high rates of auto theft. Having invested a considerable sum of money in fitting the device, these owners naturally want to advertise the fact on the car since this helps to confer some further protection from theft. Viewed from a public policy perspective, however, this is unfortunate because it assists the offender in finding an unprotected car. Wider public benefits might result from an approach involving free fitting of these devices to a random selection of vehicles in a high-risk area (for example, at the time of purchase or yearly inspection). Only the local police would know which cars had been fitted and would trigger the device when the car was reported stolen. This would raise the risks for auto thieves in a relatively economical way.

This example may prove impractical on closer examination, but ways of creating uncertainty in offenders' minds about levels of risk in force warrant further study. One familiar method is to invest a proportion of available preventive resources in deploying cheaper, "dummy" measures in the hope that offenders will believe these to be real. In theory, this approach results in more targets being given protection or in the same number of targets being protected for greater lengths of time. For example, the CCTV cameras on three of the five buses in the fleet studied by Poyner (1988) were dummies, and the use of dummy cameras is not unusual in shops. In many cases, these measures would be unlikely to fool offenders for long, but they also have some disadvantages that limit their use in public places. They may induce a false sense of security in members of the public, and they carry the danger of lawsuits from people victimized when supposedly under protection.

A third way of bluffing offenders may be to concentrate protective resources on the most highly visible or attractive targets in the hope that offenders will assume that preventive action has been taken more generally. For example, protecting banks may achieve greater robbery diffusion benefits than protecting convenience stores. Pease's (1091) "drip feed" policy, which involves concentrating preventive resources on the targets of multiple victimization, is a variant of this approach. Since these targets have already been the focus of offenders' attention, protecting them first may carry greater diffusion benefits.

Sherman (1990) recognized that effective manipulation of uncertainty about risks requires potential offenders to be alerted to imminent crackdowns through publicity. It is not only in relation to crackdowns, however, that publicity has a role in promoting diffusion. For example, it is unlikely that the fitting of CCTV cameras to only a small proportion of the buses in the fleet studied by Poyner (1988) would have resulted in such dramatic declines in vandalism and graffiti for the fleet as a whole if local schoolchildren had not been exposed to considerable publicity about the new measures and their effectiveness. Even if the "buff* might have been called when children learned that the risks were much smaller than they first had thought (as has occurred in some of the drunk-driving crack-downs, e.g.. Ross. 1973), the additional crime prevention benefits may still have been worth having.²

Outside of drunk-driving initiatives, there has been little research into the effects of publicity directed at modifying the behavior of potential offenders. At the simplest level, little is known about offenders' evaluations of warnings posted about prosecution of theft or vandalism, let alone about the more complex processes involved in their response to media information about new control or prevention programs. If diffusion is to be effectively harnessed and exploited, it will be necessary to discover how offenders evaluate such information. Do they generally discount it, preferring perhaps to rely on their own observation or on information gained from associates? If so, it would also be important to know how far these tendencies vary with the nature of the preventive action and with the offenses or offenders targeted.

176

OFFENDER PERCEPTIONS AND THE CRIMINAL OPPORTUNITY STRUCTURE

Research into the ways that offenders learn about and evaluate new preventive initiatives would have wider theoretical interest (and ultimately be of greater practical significance) were it to be undertaken within the context of a more general study of the acquisition of knowledge by offenders about new criminal opportunities and how to exploit these effectively. Such studies fall within the social learning tradition in criminology, and much may be gained by utilizing the insights of that approach in studying offenders' knowledge of the changing opportunity structure. Sutherland and Cressey, for example, in their influential statement of differential association, emphasized that "the person who is not already trained in crime does not invent criminal behavior, just as a person does not make mechanical inventions unless he has had training in mechanics" (Sutherland and Cressey, 1960:77). However, as Tremblay (1986) has observed, neither Sutherland nor others who have followed similar social learning approaches have paid sufficient attention to the problem of how offenders learn about opportunities for crime. Rather, the attentions of these researchers has have generally been drawn to the associations that influence offenders to become involved in criminality.³

What is needed for the program of work advocated here is a reorientation from the more abstract questions of criminal motivation and drive that have preoccupied the social learning theorists, to a concern with how offenders gain information on the risks of criminal conduct in specific situations. Is such information gained primarily in interaction with others who carry out crime, or is it a more solitary process governed by observation as people scout for crime opportunities? To what extent do offenders draw their information about criminal opportunities (and crime prevention) from talking to ordinary citizens or from media discussion of events in specific areas or communities?

These questions have begun to be examined in two recently developed lines of research influenced by Sutherland's (1947) theoretical framework, dealing, respectively, with criminal networks and co-offending, and with the life cycle of crime waves. As for the first of these, there is growing recognition in criminology that offenders are often linked one to another in a set of complex social networks (Reiss and Farrington, 1991; Tremblay. 1993: Waring, 1993). These networks can be very large, including many potential partners in crime. Offenders are therefore likely to draw information about crime opportunities and how these are changed by crime prevention action from a wide network of co-offenders. However, the extent to which these networks provide the major source of information for offenders about the opening and closing of criminal opportunities is as yet unknown and needs to be explored.

Though still in its infancy, the study of crime waves constitutes a second promising approach to the more general topic of offender perceptions of the opportunity structure. Since, by definition, crime waves have a beginning and ending point, models will need to be developed that include not only triggering and sustaining events, but also the events that lead to the wave being terminated. In a study of a wave of check-guarantee frauds that washed across Toronto and Quebec during 1978 to 1981, Tremblay (1986) argues convincingly that these new "quantity frauds" were committed by a few small independent teams of offenders. Most of these offenders were already professionally engaged in somewhat less lucrative credit-card frauds, and more or less simultaneously perceived and began to exploit new opportunities for check fraud. These had been created by banks anxious to expand their business by liberalizing check cashing procedures.

The crime wave quickly subsided as the banks were forced to improve their early warning systems relating to the use of stolen checks and check-guarantee cards. The termination of crime waves has particular relevance for the topic of diffusion, but the processes involved are unlikely to be the same in all cases. As Tremblay cautions, "models that explain a given kind of crime wave may be of little relevance in understanding remaining varieties" (Tremblay, 1986:243). Many examples of crime waves will need to be studied, therefore, before it will be safe to draw any general conclusions about the spread among offenders of knowledge about countermeasures.

CONCLUSIONS

In drawing attention to diffusion, this paper has sought to provide a balance to the debate about situational and other opportunity-reducing approaches to prevention. In our view, the development of these forms of crime prevention has been hampered by exaggerated concerns about displacement. Recognition of the importance of diffusion of benefits places the problem of displacement in perspective, since it suggests that the research community needs to be aware not only of the potential for

178

spreading crime beyond the targets of crime prevention action, but also of the possibility that the benefits of crime prevention may be spread beyond those targets. Recent evidence leads to the conclusion that the latter process may be no less common than the former. However, whatever the balance that exists in any particular crime-prevention setting, researchers must recognize that a proper evaluation of any strategy necessitates not only the measurement of problems of displacement, but also of the benefits of diffusion.

At the simplest level, a failure to examine diffusion may mean that additional impacts of programs beyond the targeted areas or crimes are missed by the investigators, who are therefore led to underestimate the crime-control benefits of particular strategies. But underestimation of these benefits is not the most serious omission that develops from a failure to recognize the phenomenon of diffusion. Of more concern would be cases where programs are assumed to be failures either because diffusion was not balanced against displacement or was not taken into account in the design of the evaluation.

In the former case, the present focus on displacement (without attention to diffusion) can lead investigators to overestimate the negative impacts of programs beyond the areas or crimes targeted. In the latter, a lack of recognition of diffusion may lead investigators to design studies that are from the outset doomed to a finding of no effect. This would result, for example, when diffusion is ignored and comparison areas are used that are likely to be within the zones where diffusion of benefits is likely to occur. If such diffusion is large enough, it might lead to relatively few differences between areas targeted and not targeted, thus leading to a general finding that a strategy has been ineffective. In fact, in such a situation the strategy has been enhanced beyond the investigator's expectation, but in a way that masks his or her ability to define the program's positive impact.

In conclusion, we return to the central point of this paper: Just as situational measures might have unintended costs in terms of displacement, they might also have equal unexpected benefits in terms of diffusion. In the context of the proven value of opportunity-reducing forms of crime prevention, recognition of diffusion provides additional reasons for promoting these powerful techniques. However, to extract the maximum benefits from the techniques, they need to be pursued in tandem with an active program of research into the ways that offenders perceive and react to the ever-changing criminal opportunity structure.

NOTES

1. In his review of 18 police crackdowns directed at particular offenses such as drunk driving, drug dealing, prostitution and public disorder. Sherman (1990) examined not merely the intended effect upon crime, but also unintended effects including displacement and what he called the "free bonus" effect of some residual deterrence after the termination of the crackdown. Displacement was measured in ten of the studies and found in only four, all of which focused on drug markets. A free bonus effect was found in five of the six studies in which it was studied, three of which evaluated drunk-driving crackdowns.

2. In cases where the target offenses are faddish in nature, "bluffing" may work long enough for the crimes to go out of fashion.

3. The roots of this attitude can be seen in Sutherland's (1947) introduction to his theory of differential association. While he recognized that specific circumstances were needed for a criminal act to occur. Sutherland believed it was the task of criminologists to focus on why certain people and not others took advantage of situational opportunities for crime:

The situation operates in many ways, of which perhaps the least important is the provision of the opportunity for a criminal act. A thief may steal from a fruit stand when the owner is not in sight but refrain when the owner is in sight; a bank burglar may attack a bank which is poorly protected but refrain from attacking a bank protected by watchmen and burglar alarms. A corporation which manufactures automobiles seldom violates the pure food and drug laws, but a meat-packing corporation might violate these laws with great frequency [Sutherland, 1947:5].

REFERENCES

- Barr, R. and K. Pease (1990). "Crime Placement. Displacement and Deflection." In: M. Tonry and N. Morris (eds.), *Crime and Justice: A Review* of Research, Vol. 12. Chicago: University of Chicago Press.
- Chaiken, J., M. Lawless and K. Stevenson (1974). *The Impact of Police* Activity on Crime: Robberies on the New York City Subway System. Report No. R-1424-N.Y.C. Santa Monica. CA: Rand Corporation.
- Clarke, R.V. (1980). "Situational Crime Prevention: Theory and Practice." *British Journal of Criminology* 20:136-147.

- (1980). "Theoretical Background to Crime Prevention through Environmental Design (CPTED) and Situational Prevention." In: S. Geason and P. Wilson (eds.). *Designing Out Crime: The Conference Papers*. Canberra: Australian Institute of Criminology.
- (1992). Situational Crime Prevention: Successful Case Studies. Albany. NY: Harrow and Heston.
 - S. Field and G. McGrath (1991). "Target Hardening of Banks in Australia and Displacement of Robberies." *Security Journal* 2:84-90.
 - —and P. Mayhew (1988). "The British Gas Suicide Story and its Crimlnological Implications." In: M. Tonry and N. Morris (eds.). Crime and Justice, Vol. 10. Chicago: University of Chicago Press.
- Cohen. L.E. and M. Felson (1979). "Social Change and Crime Rate Trends: A Routine Activity Approach." *American Sociological Review* 44:588-608.
- Cornish. D.B. and R.V. Clarke, (eds.) (1986). *The Reasoning Criminal. Rational Choice Perspectives on Offending*. New York: Springer-Verlag.
- Cornish. D.B. and R.V. Clarke (1987). "Understanding Crime Displacement: An Application of Rational Choice Theory." *Criminology* 25:933-947.
- Cusson. M. (1993). "Situational Deterrence: Fear During the Criminal Event." In: R.V. Clarke (ed.). *Clime Prevention Studies, Vol. 1.* Monsey, NY: Criminal Justice Press.
- Decker, J.F. (1972). "Curbside Deterrence: An Analysis of the Effect of a Slug Rejector Device. Coin View Window and Warning Labels on Slug Usage in New York City Parking Meters." Criminology August: 127-142.
- Ekblom, P. (1988). "Preventing Post Office Robberies in London: Effects and Side Effects." *Journal of Security Administration* 11:36-43.
- Farmer, R.D.T. and J.R. Rohde (1980). "Effects of Availability and Acceptability of Lethal Instruments on Suicide Mortality." *Acta Psychtatrica Scandinavia* 62:436-446.
- Gabor, T. (1990). "Crime Displacement and Situational Prevention: Toward the Development of Some Principles." *Canadian Journal of Criminology* 32:41-74
- Hill, N. (1986). *Prepayment Coin Meters: A Target for Burglary*. Crime Prevention Unit Paper 6. London: Home Office.
- Masuda. B. (1992). "Displacement vs. Diffusion of Benefits and the Reduction of Inventory Losses in a Retail Environment." *Security Journal* 3:131-136.
- Matthews, R. (1990). "Developing More Effective Strategies for Curbing Prostitution." *Security Journal* 1:182-187.

- Mayhew, P., R.V. Clarke. J.N. Burrows, J.M. Hough and S.W.C. Winchester (1979). *Crime In Public View*. Home Office Research Study No. 49. London: HMSO.
- Miethe, T.D. (1991). "Citizen-Based Crime Control Activity and Victimization Risks: An Examination of Displacement and Free-Rider effects." *Criminology* 29:419-440.
- Pease, K. (1991). "The Kirkholt Project: Preventing Burglary on a British Public Housing Estate." *Security Journal* 2:73-77.
- (1993). "Crime Prevention." In R. Morgan. R. Reiner and M. Maguire (eds.), *Oxford Handbook of Criminology*. Oxford: Oxford University Press.
- Poyner. B. (1988). "Video Cameras and Bus Vandalism." Security Administration 11:44-51.
- Poyner, B. (1991). "Situational Crime Prevention in Two Parking Facilities." *Security Journal* 2:96-101.
 - —and B. Webb (1987). *Successful Crime Prevention: Case Studies*. London: Tavistock Institute of Human Relations.
- Reiss. A.J. and D.P. Farrington (1991). "Advancing Knowledge About Co-offending: Results from a Prospective Longitudinal Survey of London Males." *Journal of Criminal Law and Criminology* 82:360-395.
- Reppetto, T.A. (1976). "Crime Prevention and the Displacement Phenomenon." Crime & Delinquency, April: 166-177.
- Ross. H.L. (1973). "Law. Science and Accidents: The British Road Safety Act of 1967." *Journal of Legal Studies* 4:285-310.
- Scherdin, M.J. (1986). "The Halo Effect: Psychological Deterrence of Electronic Security Systems." *Information Technology and Libraries* September:232-235.
- Sherman, L.W. (1990). "Police Crackdowns: Initial and Residual Deterrence." In: M. Tonry and N. Morris (eds.), *Crime and Justice: A Review* of Research, Vol. 12. Chicago: University of Chicago Press.
- Sutherland, E.H. (1947). *Principles of Criminology* (fourth edition). Chicago: J.B. Lippincott Company.
- Tremblay, P. (1986). "Designing Crime." British Journal of Criminology 26:234-253.
- ——(1993). "Searching for Suitable Co-Offenders." In: R.V. Clarke and M. Felson (eds.). Routine Activity and Rational Choice, Advances In Crlminological Theory, Vol. 5. New Brunswick, NJ: Transaction.
- Waring, E.J. (1993). "Co-Offending in White Collar Crime: A Network-Approach." Doctoral dissertation, Yale University, New Haven. CT.

Wilson. J.g. and G.L. Kelling (1082). "Broken Windows." *Atlantic Monthly* (March):29-38.