

A TWO-STAGE MODEL OF SITUATIONAL CRIME PREVENTION

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## ABSTRACT

In a recent critique of situational crime prevention (Wortley, 1997) it was argued that there are two distinct kinds of situational forces acting on behavior -- those which are responsible for precipitating action and those which regulate behavior by the opportunities they present. The present paper proposes a two-stage prevention model for conceptualising precipitating and regulating situational forces. There are two major implications of the model. First, it is suggested that by intervening at the precipitation stage some criminal behaviour can be averted prior to the offender experiencing any inclination to offend. This has particular implications for explaining why crime displacement often does not occur. Second, the model proposes a 'feed-back loop' by which, in some circumstances, excessive constraint can transform into a situational precipitator. This aspect of the model can be used to help explain counterproductive effects of some opportunity-reduction strategies. In the light of the model, the issue of 'hard' and 'soft' situational crime prevention is discussed.

Key words: situational crime prevention, crime prevention, opportunity-reduction, opportunity, displacement.

In his second edition to *Crime Prevention Through Environmental Design*, Jeffery (1977) bemoaned the direction which the practice of situational crime prevention had taken since the first edition of his book in 1971. As Jeffery noted, initial approaches to situational crime prevention relied on the subtle interplay between person and environment. However, he complained, as situational prevention developed, crude target-hardening approaches came to dominate. The use of territorial boundaries in crime prevention is an example of this change. In the early crime prevention literature, the emphasis was on the deterrent effects of symbolic territorial markers which exerted an influence over potential offenders of which they may not have been fully aware. However, subsequently, territorial boundaries were more likely to involve real fences and bars which are used to physically prevent potential offenders carrying out their intended courses of action.

Since Jeffery's observations of over twenty years ago, critics of situational prevention have continued to focus on the target hardening aspects of the model. Quite apart from the social and ethical objections which are invariably raised, there are two major theoretical limitations of crime prevention which relies largely on physically blocking criminal opportunities. First, such a model provides a weak theoretical defence to the common criticism that situational methods may displace, but will not prevent, criminal behavior. According to the opportunity-reduction thesis, when potential offenders are thwarted in one location, the effort of moving on to a new crime location is often sufficient deterrent to further criminal behaviour. This argument is based on the crucial role accorded the person-situation interaction in the performance of criminal behavior. However, reducing the crime prevention task to that of physically repelling the motivated perpetrator ironically perpetuates a view of offenders as internally driven, a view which is not much different from that to be found in the familiar dispositional theories of crime. From this perspective, having an initial crime avenue blocked

seems a rather trivial setback for criminally motivated individuals and unlikely to dissuade them from simply trying their luck elsewhere.

The second theoretical difficulty with a narrow opportunity-reduction model of crime prevention is its inability to adequately account for interventions which produce opposite outcomes to those intended. It is often asserted that situational measures which physically restrict or constrain potential offenders may be counterproductive and produce the very conditions which support criminal behavior (e.g., Bottoms et al, 1995; Weiss, 1987).

Grabosky (1996) details a number of specific ways that situational prevention can backfire. He notes, for example, that threats of punishment may incite defiance, and that blocking criminal opportunities may provoke frustration and expressive violence. Rather than having the desired deterrent effects on potential law-breakers, these measures may actually escalate crime. In explaining these counterproductive effects, Grabosky argues against narrowly defining offenders as 'utility maximizers' and calls for a better understanding of 'basic causal processes'. However, he stops short of suggesting how these apparently anomalous outcomes might be explained and predicted by a more general situational framework.

That opportunity reduction need not necessarily entail obtrusive physical interventions has been reinforced in ongoing theoretical developments in the area (Clarke, 1997; Felson, 1994). Nevertheless, as Wortley (1997) has argued, even opportunity reduction broadly defined continues to present a limited picture of the role of situations in crime. The present paper describes a two-stage situational prevention model which attempts to give fuller recognition to the complexity of the person-environment relationship, and, in doing so, to also address the theoretical problems of crime displacement and counterproductive prevention described above. The model has been developed from arguments outlined in Wortley (1997) proposing

that a distinction be made between situations which have a precipitating function for behavior and situations which regulate behavior through the opportunity characteristics they possess. According to these arguments, there are a variety of psychological processes by which individuals may be actively induced to engage in criminal conduct which they may not have otherwise undertaken. Once behavior has been precipitated, performance of the behavior is then subject to consideration of the consequences which are likely to follow. To date, little explicit recognition has been given in situational crime prevention to the role of crime-precipitators. It is the latter stage of the offending process -- the cost-benefit analysis -- which has been the traditional focus and which has provided the rationale for opportunity-reduction strategies aimed at blocking offenders' criminal behavior.<sup>1</sup>

The proposed relationship between precipitating situations and regulating situations is shown in Figure 1. The model extends the traditional opportunity-reduction model in two ways. First, the model suggests that some criminal behavior may be entirely avoided by intervention at the crime-precipitation stage without the need in these cases for opportunity-reducing strategies. Second, the model includes a feedback-loop whereby the excessive use of constraint is seen to increase precipitating pressures on behaviour. These two aspects of the model and their implications for crime prevention are elaborated upon in the following sections.

(Figure 1 about here)

## PRECIPITATING FACTORS

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<sup>1</sup> Wortley (1997) used the term 'readying' to describe the role of situational inducements to offend. However, as Newman (1997) pointed out, this term has already been used in the situational prevention literature to describe a number of distinct phenomena. The alternative term 'precipitating' is used in this article. Precipitating conveys

Figure 1 shows four ways in which situations can precipitate crime: situations can present cues which *prompt* the individual to perform criminal behavior, they can exert social *pressure* on an individual to offend, they can induce disinhibition and *permit* potential offenders to commit normally proscribed illegal acts, and they can produce emotional arousal which *provokes* a criminal response (Wortley 1997).

#### SITUATIONS THAT PROMPT

Situations may present salient cues to potential offenders which prompt criminal reactions. The concept of prompting is based on learning theory's stimulus-response (S-R) principle which holds that virtually all action must be initiated by an appropriate cue in the immediate environment. Even if a criminal pattern of behavior has been learned and internalised by an individual, situational conditions govern if and when this behavior is emitted. In every-day terminology, environmental cues may be said to tempt us, jog our memory, evoke moods, set examples to follow, create expectations, stimulate us and alert us to impending consequences.

Some environmental cues elicit automatic or reflex responses. There are many everyday examples where particular situations become associated with predictable physiological or behavioural reactions -- viewing erotic images produces sexual arousal, the sight of blood makes many people feel nauseous, the smell of food makes people feel hungry, and so forth. Thus, even an habitual pedophile may require external prompts -- the sight of children, pornographic images and so forth -- in order to become sexually aroused and ready to offend. Keeping pedophiles away from children not only limits their physical opportunity to offend but helps them keep their sexual desires in check.

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the concept of urging on behavior, but does not have quite the deterministic connotations of other terms such as 'triggering' or 'instigating'.

Cues may also signal the likely consequence of a particular behaviour. Depending upon the nature of the likely outcome, behaviour will be pursued or avoided. For example, a green traffic light signals to drivers that they may proceed safely through an intersection; observing a police officer in the rear-view mirror signals that the drivers will nevertheless need to take care not to speed when doing so. Based on this principle, prompts may be introduced into an environment to indicate that certain behaviours are now appropriate. Signs clarify expected standards of behavior and may specify the consequences of non-compliance, strategically placed litter bins prompt people not to litter, symbolic territorial boundary markers (low fences, shrubs, personal items etc.) signal to people not trespass, and so on.

Other cues prompt imitation. Children who observe other children engaging in aggressive play are likely themselves to also play aggressively, particularly if the model is seen to receive a reward (Bandura, 1965). Lefkowitz et al (1955) demonstrated that a pedestrian crossing the street against a red light will readily prompt others to follow. Controlling imitation effects by increasing exposure to prosocial models or reducing the exposure to undesirable models is a popular method of attempting to influence behaviour. Parents screen their children's associates in a common-sense attempt to manage imitation influences. Public education campaigns (litter reduction, anti-smoking, seat-belt wearing and the like) enlist the aid of sporting personalities and the like in the hope that the public will be induced to imitate the example the celebrities set. The elimination of undesirable imitation influences is the rationale for restricting or censoring media portrayals of pornography and violence (Lab, 1992).

## SITUATIONS THAT EXERT PRESSURE

Situations may exert social pressure on individuals to perform illegal behavior. A fundamental premise of social psychology is that people behave differently in the company of others than when alone. Human beings are social animals and are strongly influenced by the expectations of those around them. Individuals are subject to pressures to conform to group norms and to comply with the demands of authority figures. History is replete with examples of crimes and acts of brutality carried out by individuals simply going along with the crowd or obediently following the commands of superiors.

Corruption within organisations is a good example of the power of conformity to induce illegal behavior. A new employee entering an organization in which corrupt practices are common faces social pressures to also engage in those practices (Clark & Hollinger, 1984). Initially, individuals may accede to group pressure in order to avoid disapproval and to gain acceptance. However, individuals also look to the group for guidelines for correct behavior and may come to accept corrupt practices as normal. Social support for the corrupt activity may be expressed in group norms such as ‘everybody does it’ and ‘it goes with the job’.

The most commonly cited real-world example of the potency of obedience effects is the routine, brutal treatment of Jews by Nazi soldiers and concentration camps guards in World War II. Milgram (1974) suggested that many societies overvalue obedience and provide insufficient models for the appropriate defiance of orders. Individuals obey unreasonable commands because of a preoccupation with the administrative rather than moral component of their job and through a sense of loyalty and duty to their organisation. When brutal orders are carried out, Milgram argued, ‘typically we do not find a heroic figure struggling with conscience, nor a pathologically aggressive man ruthlessly exploiting a position of power, but



a functionary who has been given a job to do and who strives to create an impression of competence in his work' (1974, p. 187).

#### SITUATIONS THAT PERMIT

Situations may induce disinhibition and permit individuals to engage in normally proscribed behaviours. While disinhibition is usually associated with drug-induced states, there are a number of ways that environmental factors can interfere with individuals' ability to keep a check on their behavior. Situations in which potential offenders are made to feel anonymous, are able to submerge their identities in a crowd, are able to diffuse responsibility for their behavior, or are encouraged to portray potential victims in a dehumanised fashion all interfere with self-censuring and self-control mechanisms.

Zimbardo (1970) examined the role of anonymity in criminal behavior. He abandoned a car in New York and another in Palo Alto (population about 55,000). He found that the car in New York was quickly stripped by looters of all valuable parts while the car in Palo Alto was left untouched. Zimbardo argued that the behaviour of New Yorkers could be explained by the anonymity they felt living in a large city and the sense of licence such anonymity provided.

A similar disinhibiting social process is deindividuation. Deindividuation refers to the sense of depersonalisation typically experienced by individuals when they become immersed in a group. Under the state of deindividuation, individuals have reduced capacity to exercise normal self-control over their behaviour and become more susceptible to situational pressures. Deindividuated behavior is characterised its unrestrained and indiscriminate nature, and observers may be struck by the joyous, carnival-like atmosphere as the crowd

rampages (Zimbardo, 1970). In its extreme form, deindividuation is exemplified by the herd mentality and frenzied behaviour displayed by members of a 'lynch-mob' (Colman, 1991).

Depersonalisation of potential victims in the eyes of the offender is also disinhibiting. It is easier to victimize those who can be stereotyped as sub-human or unworthy, or even those who are simply outsiders or anonymous (Bandura 1976, 1977; Bandura et al, 1996).

Appearance, dress and mannerisms may facilitate the process of depersonalization and increase chances of victimisation. For example, Zimbardo et al (1982) showed that the wearing of uniforms and badges of outgroup membership by victims encouraged their stereotyping by aggressors. Dehumanisation may be further facilitated by the physical environments in which potential victims are located. The finding that victimisation rates are high in large housing estates and run-down ghettos (Newman, 1973) may be partly explained by the ease with which inhabitants of these environments are rendered anonymous and devoid of personal qualities.

#### SITUATIONS THAT PROVOKE

Situations may provoke emotional arousal which can trigger an antisocial response. Aversive emotional arousal can be generated by frustrating and stressful situations. Organisms attempt to manage or adapt to these aversive conditions with a fight or flight response. Reactions may be physiological (e.g., arousal, increased adrenaline activity, physical illness), emotional (e.g., irritability, anxiety, depression) and behavioural (e.g., aggression, withdrawal, suicide).

Frustration is the emotional state produced when an individual is thwarted in their pursuit of goal-directed behaviour. Originally it was argued that frustration was the direct and inevitable cause of aggression (Dollard et al, 1939). According to Dollard et al, when an animal --

including the human animal -- is prevented from performing behaviour which has previously delivered rewards, the animal automatically experiences an increased level of physiological arousal. The animal is then driven to reduce the unpleasant effects of this arousal and does so by responding with some form of aggressive behaviour (snarling, scratching, biting etc.). More recently it has been realized that frustration does not always produce aggression and nor is aggression always caused by frustration. Some people respond to frustration by productively striving to overcome the frustrating situation, while others simply become resigned to defeat. Similarly, Bandura (1977) pointed out that frustration is just one of a number of events which people experience as aversive. Verbal threats and insults, physical assaults, painful treatment, failure experiences, and delay or deprivation of rewards can all increase emotional arousal and provoke aggressive responses.

According to the environmental stress model, many factors in the environment -- geographic and climactic variables such as temperature, sunshine, wind and humidity, and the products of urbanisation including high-density living, workplace noise, lighting and interior design -- influence behaviour because of their aversive nature and the threat they pose to human well-being (Baum et al, 1981; Lazarus & Folkman, 1984; Veitch & Arkelin, 1995). Taken individually, these environmental stressors may represent little more than background irritation. However, collectively and accumulatively, ambient noxious stimulation may seriously affect psychological functioning. For example, a number of studies have reported a correlation between temperature and violent crime (Anderson, 1987; Cotton, 1986; Harries & Stadler, 1988). Banzinger and Owens (1978) found a correlation between wind speed and delinquency. Other studies have found correlations between urban population density and crime rates (Galle et al, 1972; Gove et al, 1977), as well as a relationship between crowding

and behavioral problems in specific settings such as prisons (Cox et al, 1984; Paulus, 1988), night-clubs (Macintyre & Homel, 1997) and naval ships (Dean et al, 1978)

### COUNTERPRODUCTIVE CONSTRAINT

In the event that behavior is precipitated, performance of that behavior is regulated by consideration of the consequences which are likely to follow. Regulators may take the form of rewards and punishments, or environmental conditions which place more direct physical constraints on behavior. Regulating behavior is the usual focus of situational crime prevention and the logic of this approach is comprehensively described by rational choice perspective and the opportunity-reduction model of situational prevention (Clarke, 1992, 1997). To the traditional opportunity-reduction model, the model shown in Figure 1 adds the proposal that there are critical bands within which regulating factors operate. The absence of appropriate disincentives or constraints will permit or encourage behavior; appropriate disincentives or constraints will prevent or discourage behavior. However, the model includes a feedback-loop whereby the excessive use of constraint is seen to be counterproductive and increase precipitating pressures on behaviour. If prevention methods aimed at reducing opportunity are too heavy-handed, then, rather than preventing crime, they may encourage criminal acts. As detailed below, excessive constraint can transform into each of the four categories of precipitation described earlier.

### EXCESSIVE CONSTRAINT AND SITUATIONAL PROMPTS

Some methods of constraining potential offenders can inadvertently present cues which prompt criminal behavior. According to the principle of classical conditioning, a neutral stimulus can take on the response-evoking properties of an eliciting stimulus if the two stimuli have been previously paired. It is by this process that Pavlov's dogs came to salivate

at the sound of a bell (neutral stimulus) which earlier had been rung in the presence of food (eliciting stimulus). Applying this principle to crime prevention, if an object used to help control behavior has associations with situations which have elicited antisocial responses in the past, then the object may itself elicit an antisocial response.

An example of unintentional cueing is the so-called weapons effect (Berkowitz, 1983; Berkowitz & Page, 1967). It has been found that the mere presence in the immediate environment of a firearm increases the probability of aggression. Berkowitz hypothesised that, through their repeated association with violence, firearms become eliciting stimuli which conjure aggressive images and moods and facilitate overt aggression. There may be times, then, where the overt wearing of firearms and other militaristic paraphernalia by police, prison guards and security officers may actually provoke the very responses that these objects are intended to deter.

A related phenomenon, also based on classical conditioning, is the expectancy effect. Expectancy refers to the tendency for individuals to respond on the basis of preconceived beliefs about a situation. These beliefs may be elicited or at least confirmed by relevant cues within the situation. For example, Graham and Homel (1996) argued that levels of night-club violence were related to the reputations which the night-clubs had acquired, and that these reputations were in turn partly determined by physical characteristics of the premises. Patrons visited certain night-clubs anticipating that they would be involved in violent incidents, and this expectation acted as a self-fulfilling prophecy. Gentrifying the decor of violent night-clubs signals that non-violent behavior is now expected from patrons. On the other hand, responding with an over-reliance on ugly, vandal-proof fittings may only exacerbate the

problem by confirming the self-fulfilling message that violent and destructive behavior is expected.

#### EXCESSIVE CONSTRAINT AND SOCIAL PRESSURE

The use of coercive force against members of a group can provoke collective defiance.

Groups typically have two responses to perceived external threats and conflicts. First, there is an increase in intra-group cohesion and greater pressure on individual members to conform to group norms (Dion, 1979; Forsyth, 1990). Second, in-group/out-group differentiations become more sharply drawn. Members of a cohesive group develop a strong sense of in-group righteousness and a corresponding belief in the moral illegitimacy of the threatening outsiders. To accentuate the differences between 'us' and 'them', the group may even adopt norms and behaviours which are explicitly oppositional to those of the outgroup with whom they are in conflict, and which, in turn, serve to entrench and escalate the tension between the parties (Forsyth, 1990; Turner & Killian, 1987).

The effects of intergroup conflict in producing chronic group solidarity and defiance are common themes in early micro-sociological analyses of prison behavior (e.g., Clemmer, 1958; Goffman, 1961; Sykes, 1958). These descriptions of prison life emphasise the division between prisoners and guards and the formation within the prison walls of two conflicting societies. Faced with the harshness of the prison environment, prisoners are forced to band together for physical and psychological protection. Group cohesion is reinforced by an inmate code which not only espouses values of in-group loyalty -- 'never rat on a con' -- but proscribes the conventional values of hard work and submission to authority which are held by society and enforced the prison guards. The more repressive the institutional regime, the greater the pressures on prisoners to maintain a unified resistance.

However, the counterproductive effects on excessive constraint on group behavior can be more acute. There are numerous documented cases of collective disturbances which have been precipitated by overpolicing (Reicher, 1987; Scarman, 1981; Veno & Veno, 1993). Veno and Veno's (1993) description of recurring disorder at an annual motor cycle race provides the typical elements. In this case, because rioting had become an almost annual event, police and patrons arrived at the scene each year with established in-group allegiances and negative expectancies about each other's behaviour. The police response to the problem over the years was to increase police numbers (from a low of 110 to a high of 400) and to introduce progressively more confrontational and draconian control strategies (the formation of a special riot squad complete with full riot gear, the construction of a police operations centre at the race site, the imposition of severe alcohol and movement restrictions, a heavy reliance on arrest and so forth). These strategies were not just ineffective but were provocative. Police and patrons quickly separated into two warring factions, and invariably, the riots began with assaults by the crowd on the police operations centre. Veno and Veno's suggestion (which proved to be effective) was to ease crowd restrictions and reduce, not increase, the police profile at the race.

Reicher (1987) stressed the purposefulness of cohesive groups. He argued that the behavior of cohesive groups is not random but is consistent with the values and aims of the collective. He points out, for example, that often the targets of rioting crowds are carefully selected and are restricted to people or objects associated with the perceived enemy of the group. He gives as an example the 'St Paul's riot'. The riot was triggered by a show of force by police aimed at clearing crowds which had gathered after the arrest of a local man. In the ensuing conflict, police were the only people injured in collective attacks by the rioters, and, while 21 police

vehicles were damaged, there were no reports of damage to private property. Reicher argued that riots have a 'social form' and that participants pursue objectives which are collectively regarded as legitimate.

#### EXCESSIVE CONSTRAINT AND DISINHIBITION

Under certain conditions, the group solidarity described in the preceding section can progress to deindividuation. One of the key determinants of deindividuation, in addition to group membership, is arousal (Forsyth, 1990). Thus, provocative methods of crowd control -- sometimes a single triggering incident -- can induce deindividuation by heightening the sense of righteous rage of crowd members. Colman's (1991) account of a number of murders carried out by rioting crowds in apartheid-era South Africa draws upon the concept of deindividuation. In one incident, he describes how, after an unprovoked police attack on a meeting which left 11 people dead, a crowd singled out a suspected police-collaborator. The crowd sang and danced in celebration while the victim lay dying with a burning car tire around her neck.

The depersonalisation of potential victims may also be an unintended consequence of crime prevention. 'Over-hardened' environments may help divest individuals of their human qualities and so render them psychologically more acceptable targets for victimization (Wortley, 1996). High walls, security guards, locks, bars and so forth not only create physical barriers between potential offenders and victims, they create psychological barriers as well. For example, the traditional approach to protecting prison officers from assaults by prisoners is to minimise the need for personal contact between the two groups through the installation of bars, bullet-proof glass, automatic doors, video cameras and so forth (Atlas & Dunham, 1990). However, such strategies also serve to weaken the social bonds between prisoners and



guards, and to encourage a perception of each group by the other as objects. The alternative is to reduce the physical barriers which separate prisoners and guards and encourage greater interpersonal contact between the two groups. Prisons which encourage direct contact between prisoners and guards report lower levels of violence than prisons which rely on traditional methods of segregation and reactive security (Wener et al, 1987).

#### EXCESSIVE CONSTRAINT AND AVERSIVE EMOTIONAL AROUSAL\_

Attempts to constrain behavior can be stress-producing. In particular, over-control can generate frustration. Reducing crime opportunities often involves blocking goal directed behavior. Being thwarted need not necessarily produce frustration and aggression. However, if the methods of control are aversive or the legitimacy of the control is questioned, then the resulting aggressive response may be such as to overwhelm the attempts at control which produced it.

Veno and Veno (1993) described the role of frustration in the motor cycle riots discussed earlier. They highlight, in particular, the police tactic of enforcing the 'letter of the law'. On average, each patron was stopped three times by police before arriving at the event. On each occasion, the patron was searched and was often issued a citation for a trivial violation (e.g., having a dirty licence plate). Searching required the patron to unpack all belongings and to remove leathers and jackets. Searches were carried out by groups of up to five uniformed police officers armed with long batons. By the time the patrons arrived at the race, they had already been subjected to considerable frustration which detracted from their anticipated enjoyment and undoubtedly contributed to the conflict with police which ensued.

Frustration can also occur when an offender is thwarted in the process of committing a crime, and this may have the effect of escalating the offence. Indermaur (1996) interviewed perpetrators and victims of robbery with violence. He found the degree of violence against victims was related to the level of resistance that they offered during the offence. Victims who tried to defend themselves or to mount an attack only succeeded in enraging the offender and provoking further violence against themselves. Indermaur advised that the safest strategy for victims was to adopt non-confrontational techniques and allow the offender to proceed with the robbery.

It is also possible that obtrusive opportunity-reduction strategies contribute to environmental stress and in this way increase levels of antisocial behavior. This may be a particular problem in institutional settings where the options for escaping environmental pressures are limited. One potential source of institutional stress is the conflict between the surveillance needs of staff and the privacy needs of inmates. Benton and Obenland (1975) compared the adjustment of prisoners in correctional institutions using CCTV with that of prisoners in institutions which did not. They found that the use of CCTV had a negative 'psychological effect' on inmates, increased their sense of institutional alienation, reduced their levels of interpersonal interaction, and resulted in them feeling *less* safe.

## IMPLICATIONS AND CONCLUSIONS

The inclusion of precipitating factors in considerations about the causes of crime presents a much more dynamic view of offender motivation, one which more accurately reflects the person-situation interaction as it is presented in the psychological literature. Mischel (1968), whose cogent rebuttal of the static, cross-situationally consistent model of personality is invariably cited as supporting evidence for situational crime prevention, was saying more

than that people consciously adjust their behavior to suit the circumstances. Mischel's point was that people *themselves* change with the situations -- that *who* someone is depends in part upon *where* that someone is. It is this profound nature of the relationship between the person and the situation which an opportunity-reduction model by itself fails to capture.

The idea that crime might be actively precipitated by situational factors has considerable significance for the crime displacement debate. If the inclination to offend, and not just the opportunity to do so, is situationally dependent, then the efficacy of situational prevention becomes more theoretically plausible. Whereas opportunity-reduction implies a reliance on reactive strategies designed to repel the motivated offender, intervention at the precipitation stage involves proactive attempts to inhibit criminal intentions before they are formulated. Where the latter can be achieved, the issue of individuals seeking out new crime opportunities does not arise.

It should be noted that it is not claimed here that researchers and practitioners have totally ignored crime prevention at the precipitation stage. Clarke (1992), and later Clarke and Homel (1997) and Wortley (1996), proposed classification systems of opportunity-reduction which, though not explicitly acknowledging it, included strategies for controlling crime-precipitating events. For example, the crime prevention category 'deflecting offenders', which is classified by Clarke and Homel as an opportunity-reduction strategy, seeks to preempt trouble by ensuring that potential offenders do not enter criminogenic situations. Arguably, then, deflecting offenders is more accurately described as an example of precipitation-control. The argument for separating crime-precipitating situations from opportunity-related situations is based more on the need for conceptual clarity than on the assumption that there necessarily will be a resultant dramatic increase in available techniques

(Wortley, 1997). Suggestions of how some of the strategies originally conceptualized within an opportunity-reduction framework might be reclassified in terms of the proposed categories of crime-precipitation are shown in Table 1.

(Table 1 about here)

The distinction between interventions aimed at controlling crime precipitators and those aimed at reducing crime opportunities broadly parallels the distinction which has been made previously between ‘soft’ and ‘hard’ situational crime prevention (Wortley, 1996). The concept of soft situational crime prevention was originally proposed to describe strategies involving the manipulation of social and psychological situational elements in an effort to induce in the potential offenders a sense of guilt and shame for their contemplated crime. Soft prevention was so-called because the strategies were seen to be relatively unobtrusive and could be distinguished from the more usual methods of opportunity reduction -- and especially target hardening -- which relied largely on the manipulation of physical costs and benefits. While soft situational prevention was originally conceived of in terms of reducing social and psychological ‘opportunities’ to offend, many of the strategies suggested in Wortley (1996) fit more logically in the crime-precipitation stage (see Table 1). Similarly, additional strategies to inhibit the inclination to offend which have been suggested in the present paper and in Wortley (1997) often involve softening in some way those harsh and impersonal environmental elements which might generate criminal behaviour.

The distinction between ‘soft’ and ‘hard’ prevention has been highlighted before in the crime prevention literature (although not necessarily in these terms). Typically, however, the argument has been framed as a choice between situational methods (hard) and social and

community approaches (soft) (Bottoms, 1990; Bottoms et al, 1995; Weiss, 1987). Usually, the distinction between the two approaches has been made in order to stress the supposed draconian nature of situational prevention. However, the present paper suggests that some interventions thought of as social prevention may in fact be situational. Bottoms et al (1995), for example, compared management regimes in two prisons, one which emphasised tight security and restrictions on prisoner movements, and one that emphasised high levels of prisoner privileges and autonomy. The first regime, which Bottoms et al labelled situational prevention, sought to maintain order by reducing opportunities to misbehave. The second regime, labelled social prevention, sought to maintain order by reducing the frustrations and deprivations of prison life. Clearly, however, both of these approaches are ‘situational’ according to the scope of the model proposed in this present paper. Opportunity and frustration are equally products of an immediate environment. Similarly, the efficacy of both opportunity-reduction and frustration-reduction depends upon the situational variability of behavior.

There is no implication intended in this paper that one form of intervention is necessarily superior to the other. Whether ‘soft’ precipitation-control or ‘hard’ opportunity-reduction is appropriate will depend upon the circumstances. Undoubtedly there are predatory offenders who enter situations already determined to offend and ready to exploit any perceived security weakness. In these cases, the crime prevention emphasis will be on opportunity-reduction strategies. By the same token, some precipitating events may be so powerful as to override any meaningful cost-benefit analysis by the offender. Extremely frustrated individuals, for example, may lash out with little regard to the immediate consequences of their behavior. In this case, frustration-reduction strategies are likely to be more important than attempts to constrain the behavior. In many cases, both hard and soft approaches may be called for and

form complimentary elements within a total crime prevention package. Even in Bottoms et al's liberal prison regime there were limits to prisoner autonomy and an ultimate reliance on opportunity-reducing strategies. The prisoners, after all, remained securely contained behind prison walls.

That said, on occasions hard and soft strategies clearly involve contradictory logics. The two prison regimes described by Bottom et al demonstrate opposing solutions to the specific problem of maintaining internal order. One course of action -- maximizing prisoner autonomy -- necessarily precludes the other -- minimizing prisoner autonomy. More seriously, adopting one approach may actively work to the detriment of the other -- granting prisoners greater freedom may increase opportunities for misbehavior while restricting prisoner movements may increase frustrations. This paper has raised a number of other examples where there is a fundamental dilemma of whether it is better to 'come down hard' or 'go in soft' in order to prevent crime. Should vandalism targets be hardened or beautified? Is it better to control crowds by a high-profile or low-profile police presence? Should crime victims be advised to resist aggressors or cooperate with them?

Such choices about appropriate responses to crime problems, however, rarely involve static decisions (Cohen et al, 1995; Vila, 1994). Rather, the adoption of a particular crime control strategy is typically preceded by a series of earlier (and increasingly ineffective) prevention attempts. The crime strategies employed by offenders and the counter strategies employed in the name of crime prevention are in a dynamic relationship. Offender behavior shifts in response to control strategies which in turn must change to meet the altered crime problem. 'Too hard' control, then, is frequently the end point of a crime strategy/prevention strategy spiral. For example, the repressive police tactics in responding to the motor cycle riots

described by Veno and Veno (1993) evolved and hardened over several years. Viewed from an evolutionary perspective -- and as demonstrated by Veno and Veno -- the adoption of soft prevention strategies may present an opportunity to disengage from this process of escalation.

All of this begs the question: when does a prevention strategy become 'too hard'? While there is no simple answer to this question, a number of guidelines for utilising constraining tactics have been suggested in this paper. In particular, methods of control which are experienced as aversive, those which are perceived as illegitimate, and those which interfere with people's sense of humanness run the risk of encouraging crime rather than preventing it. Such unintended outcomes, however, should not be cited as evidence that the principle of situational prevention is conceptually flawed. On the contrary, even counterproductive prevention demonstrates the power of situations to influence people. Nor should these examples be simply dismissed as anomalies. Rather, the task for those interested in situational prevention is to develop predictive models which adequately account for the various effects which situational interventions produce. It is hoped that the distinction between precipitation-control and opportunity-reduction outlined here contributes to this aim.

## REFERENCES

**Anderson, C.A.** (1987). Temperature and aggression: Effects on quarterly, yearly and city rates of violent and non-violent crime. *Journal of Personality and Social Psychology* 52:1161-1173.

**Atlas, R.I. & Dunham, R.G.** (1990). Changes in prison facilities as a function of correctional philosophy. In: Murphy, J.W. & Dison, J.E., eds. *Are prisons any better? Twenty years of correctional reform* (pp. 43-59). Newbury Park, CA: Sage.

**Bandura, A.** (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. *Journal of Personality and Social Psychology* 1:589-95.

**Bandura, A.** (1976). Social learning analysis of aggression. In: Ribes-Inesta, E. & Bandura, A., eds. *Analysis of delinquency and aggression* (pp. 203-232). Hillsdale, NJ: Erlbaum.

**Bandura, A.** (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

**Bandura, A., Barbaranelli, C., Capara, G.V. & Pastorelli, C.** (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology* 71:364-374.

**Baum, A., Singer, J.E. & Baum, C.S.** (1981). Stress and the environment. *Journal of Social Issues* 37:4-35.



**Banzinger, G. & Owens, K.** (1978). Geophysical variables and behavior: Weather factors as predictors of local social indicators of maladaptation in two non-urban areas. *Psychological Reports* 43:427-34.

**Benton, F.W. & Obenland, R.** (1975). *Prison and jail security*. National Clearing House for Criminal Justice Planning and Architecture.

**Berkowitz, L.** (1983). The experience of anger as a parallel process in the display of impulsive, 'angry' aggression. In: Green, R.G. & Donnerstein, E.I., eds. *Aggression: Theoretical and empirical reviews*. Vol 1 (pp. 103-133). New York, NY: Academic Press.

**Berkowitz, L. & Page** (1967). Weapons as aggression-eliciting stimuli. *Journal of Personality and Social Psychology* 7:202-207.

**Bottoms, A.E.** (1990). Crime prevention facing the 1990s. *Policing and Society* 1:3-22.

**Bottoms, A.E., Hay, W. & Sparks, J.R.** (1995). Situational and social approaches to the prevention of disorder in long-term prisons. In: Flanagan, T.J., ed. *Long-term imprisonment* (pp. 186-196). Thousand Oaks, CA: Sage.

**Clark, J.B. & Hollinger, R.C.** (1983). *Theft by employees in work organizations*. Washington, DC: U.S. Department of Justice.

**Clarke, R.V.** (1992). Introduction. In: Clarke, R.V., ed. *Situational crime prevention: Successful case studies* (pp. 3-36). Albany, NY: Harrow and Heston.

**Clarke, R.V.** (1997). Introduction. In: Clarke, R.V., ed. *Situational crime prevention: Successful case studies* (2nd edition) (pp. 1-43). Albany, NY: Harrow and Heston.

**Clarke, R.V. & Homel, R.** (1997). A revised classification of situational crime prevention techniques. In: Lab, S.P., ed. *Crime prevention at the crossroads* (pp. 17-27). Cincinnati, OH: Anderson.

**Clemmer, D.** (1958). *The prison community*. NY: Rinehart.

**Cohen, L.E., Vila, B.J. & Machaleck, R.** (1995). Expropriative crime and crime policy: An evolutionary ecological analysis. *Studies on Crime and Crime Prevention* 4:197-219.

**Colman, A.** (1991). Psychological evidence in South African murder trials. *The Psychologist* Nov:482-86.

**Cotton, J.L.** (1986). Ambient temperature and violent crime. *Journal of Applied Social Psychology* 16:786-801.

**Cox, V.C., Paulus, P.B. & McCain, G.** (1984). Prison crowding research: The relevance for prison housing standards and a general approach regarding crowding phenomena. *American Psychologist* 39:1148-60.

**Dean, L.M., Pugh, W.M. & Gunderson, E.K.** (1978). The behavioral effects of crowding: Definitions and methods. *Environment and Behavior* 10:413-31.

**Dion, K.L.** (1979). Intergroup conflict and intragroup cohesiveness. In: Austin, W.G. & Worchel, S., eds. *The social psychology of intergroup relations* (pp. 211-224). Pacific Grove, CA: Brooks/Cole.

**Dollard, J., Doob, L.W., Miller, N.E., Mowrer, O.H & Sears, R.R.** (1939). *Frustration and aggression*. New Haven, CT: Yale University Press.

**Felson, M.** (1994). *Crime and everyday life: Insight and implications for society*. Thousand Oaks, CA: Pine Forge Press.

**Forsyth, D.R.** (1990). *Group dynamics* (2nd ed.). Pacific Grove, CA: Brooks/Cole.

**Galle, O.R., Gove, W.R. & McPherson, J.** (1972). Population density and pathology: What are the relations for man? *Science* 176:23-30.

**Goffman, E.** (1961). *Asylums*. Garden City, NY: Anchor Books.

**Gove, W.R., Hughs, M. & Galle, O.R.** (1977). Overcrowding in the home: An empirical investigation of its possible pathological consequences. *American Sociological Review* 44:59-80.

**Grabosky, P.** (1996). Unintended consequences of crime prevention. In: Homel, R., ed. *The politics and practice of situational crime prevention. Crime prevention studies* vol 5 (pp. 25-56). Monsey, NY: Criminal Justice Press.

**Graham, K. & Homel, R.** (1996). Creating safer bars. In: Plant, M., Single, E. & Stockwell, T., eds. *Alcohol: Minimising the harm* (pp. 171-192). London: Free Association Press.

**Harries, K.D. & Stadler, S.J.** (1988). Heat and violence: New findings from the Dallas field data, 1980-1981. *Journal of Applied Social Psychology* 18:129-38.

**Indermaur, D.** (1996). Reducing opportunities for violence in robbery and property crime: The perspectives of offenders and victims. In: Homel, R., ed. *The politics and practice of situational crime prevention. Crime prevention studies* vol 5 (pp. 133-157). Monsey, NY: Criminal Justice Press.

**Jeffery, C.R.** (1977). *Crime prevention through environmental design* (2nd ed.). Beverly Hills, CA: Sage.

**Lab, S.P.** (1992). *Crime prevention: Approaches, practices and evaluations* (2nd ed.). Cincinnati, OH: Anderson.

**Lazarus, R.S. & Folkman, S.** (1984). *Stress, appraisal, and coping*. New York, NY: Springer-Verlag.

**Lefkowitz, M., Blake, R.R. & Mouton, J.S.** (1955). Status factors in pedestrian violation of traffic signals. *Journal of Abnormal and Social Psychology* 51:704-705.

**Macintyre, S. & Homel, R.** (1997). Danger on the dance floor. A study on interior design, crowding and aggression in nightclubs. In: Homel, R., ed., *Policing for prevention: Reducing crime, public intoxication and injury. Crime Prevention Studies Vol 7* (pp. 91-114). Monsey, NY: Criminal Justice Press.

**Milgram, S.** (1974). *Obedience to authority: An experimental view*. New York: Harper & Row.

**Mischel, W.** (1968). *Personality and assessment*. New York, NY: Wiley.

**Newman, G.** (1997). Introduction: Towards a theory of situational crime prevention. In: Newman, G., Clarke, R.V. & Shohan, S.G., eds. *Rational choice and situational crime prevention* (pp. 1-24). Aldershot: Ashgate Publishing.

**Newman, O.** (1973). *Defensible space: Crime prevention through urban design*. New York: Collier.

**Paulus, P.** (1988). *Prison crowding: A psychological perspective*. New York, NY: Springer-Verlag.

**Reicher, S.** (1987). Crowd behavior as social action. In: Turner, J.C., ed. *Rediscovering the social group: A self-categorization theory* (pp. 171-202). Oxford, UK: Basil Blackwell.

**Scarman, Lord** (1981). *The Brixton disorders: 10-12 April, 1981. Report of the inquiry*. London: Her Majesty's Stationery Office.

**Sykes, G.** (1958). *The society of captives*. Princeton, NJ: Princeton University Press.

**Turner, R.H. & Killian, L.M.** (1987). *Collective Behavior* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

**Veitch, R. & Arkelin, D.** (1995). *Environmental psychology: An interdisciplinary perspective*. Englewood Cliffs, NJ: Prentice Hall.

**Veno, A. & Veno, E.** (1993). Situational prevention of public disorder at the Australian Motorcycle Grand Prix. In: Clarke, R.V., ed. *Crime prevention studies* vol 1 (pp. 157-175). Monsey, NY: Criminal Justice Press.

**Vila, B.** (1994). A general paradigm for understanding criminal behavior: Extending evolutionary ecological theory. *Criminology* 32:311-359.

**Weiss, R.P.** (1987). The community and prevention. In: Johnson, E.H., ed. *Handbook on crime and delinquency prevention* (pp. 113-136). New York, NY: Greenwood Press.

**Wener, R., Frazier, W. & Farbstein, J.** (1987). Building better jails. *Psychology Today* 21(6): 40-49.

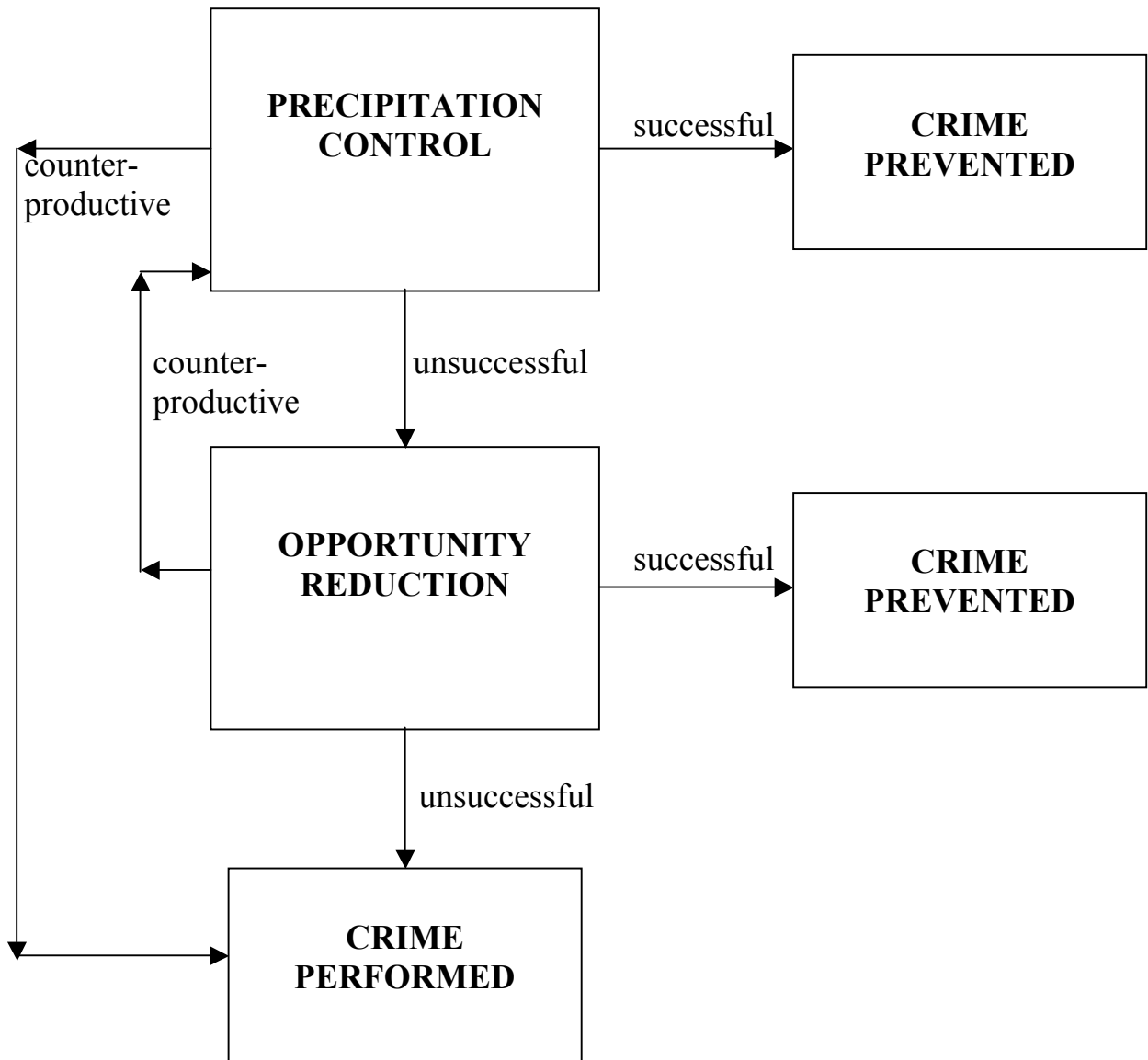
**Wortley, R.** (1996). Guilt, shame and situational crime prevention. In: Homel, R., ed. *The politics and practice of situational crime prevention*. *Crime prevention studies* vol 5 (pp. 115-132). Monsey, NY: Criminal Justice Press.

**Wortley, R.** (1997). Reconsidering the role of opportunity in situational crime prevention. In: Newman, G., Clarke, R.V. & Shohan, S.G., eds. *Rational choice and situational crime prevention* (pp. 65-81). Aldershot: Ashgate Publishing.

**Zimbardo, P.G.** (1970). The human choice: Individuation, reason, and order, vs deindividuation, impulse, and chaos. In: Arnold, W.J. & D. Levine, D., eds. *Nebraska symposium on motivation 1969* (pp. 237-307). Lincoln, NE: University of Nebraska Press.

**Zimbardo, P.G., Haney, C., Banks, W.C. & Jaffe, D.** (1982). The psychology of imprisonment. In: Brigham, J.C. & Wrightsman, L., eds., *Contemporary issues in social psychology* (4th ed.) (pp. 230-235). Monterey, CA: Brooks/Cole.

**Figure 1** The two-stage situational prevention model.







**Table 1** Overlaps between crime-precipitation categories and original opportunity-reduction classifications by Clarke and Homel (1997) and Wortley (1996).

| Precipitation Category         | Clarke & Homel   | Wortley   | Examples  |
|--------------------------------|--|---|---|
| Controlling environmental cues | Facilitating compliance<br><br>Reducing temptation<br><br>Controlling facilitators | <br><br><br>Increasing victim-worth<br><br>Reducing imitation | Litter bins<br><br>Off-street parking<br><br>Gun control<br><br>Environmental beautification<br><br>Discrediting models |
| Reducing social pressures      | Deflecting offenders   | <br><br>Reducing social approval                              | Tavern location<br><br>Dispersing school gangs  |
| Reducing disinhibition         | Controlling disinhibitors  | <br><br>Clarifying responsibility                             | Server intervention<br><br>Limiting uniform use   |
| Reducing stress & frustration  | Facilitating compliance  | <br><br>Crowd management<br><br>Increasing victim-worth       | Improved library check-out<br><br>Limiting patron density<br><br>Victim cooperation strategies                          |