

SITUATIONAL CRIME PREVENTION AND CRIME DISPLACEMENT: MYTHS AND MIRACLES?

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Abstract

The criminologically orthodox view of crime displacement is that displacement is not inevitable; is often less than anticipated, and that Situational Crime Prevention Initiatives may even lead to a 'diffusion of benefits'. Advocates of this viewpoint cite empirical literature that purports to show little evidence of displacement. A secondary analysis of this literature shows that displacement may in fact be more common than is widely claimed, particularly in the case of studies with offenders. Furthermore, the findings of the Kirkholt Burglary Prevention Project, which purport to demonstrate a diffusion of benefits, are shown to be based on questionable evidence.

This dissertation therefore questions the accepted view of crime displacement, and the soundness of the evidence on which it is based; and recommends that a large scale research project should be conducted with offenders, to discover a more accurate picture of crime displacement.

¹ This Dissertation is submitted in part-fulfilment of the degree of Bachelor of Arts (Honours) Criminology, Nottingham Trent University Division of Criminology, Public Health and Policy Studies, BA (Hons) Criminolog, May 2011

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Acknowledgements

I would like to thank my children- Melanie, Joanna, Robin, and Faye, and my friends- especially Shirl and Liz, for their belief in me, and their support during the past three years. Surprisingly, they have not run out of patience yet, despite my protracted periods 'in the cave'!

I would also like to thank all of the Criminology staff at NTU, particularly Roger Hopkins Burke and Natasha Chubbock for giving me the chance to do this degree, and Matt Long for his infectious enthusiasm and continuing encouragement.

My very special thanks to Mike Sutton, whose vision, encouragement, and tireless support has been inspirational.

For my parents;

I hope they would have been proud.

Chapter 1: Introduction

'In our reasonings concerning matter of fact, there are all imaginable degrees of assurance, from the highest certainty to the lowest species of moral evidence. A wise man, therefore, proportions his belief to the evidence' (Hume, 2005:62, originally 1739).

Archimedes, the famous mathematician from Syracuse, discovered the principle that 'The vertical force of buoyancy on a submerged object is equal to the weight of fluid the object displaces' (Pickover, 2008:44). Can the same principle be applied to criminal activity? If a crime is prevented, will it simply be displaced? Can this hydraulic theory of criminality be used to explain this facet of criminal behaviour, or does the offender rationally weigh up the costs and benefits of taking up an alternative criminal opportunity before deciding whether to proceed or not?

The aim of this research is to discover whether the criminologically orthodox 'knowledge' that interventions do not result in 100% crime displacement, and may even lead to a 'diffusion of benefits' - defined as 'the unexpected reduction of crimes not directly targeted by the preventive action' (Clarke and Weisburd, 1994:165); is supported by sound evidence. The research will consist of examining the origins of this notion and its dissemination, with close regard to Rational Choice Theory (henceforth RCT), and Situational Crime Prevention (henceforth SCP), practitioners and theorists who support it. The research will also include an analysis of the published empirical studies used to support this orthodox view.

Research into crime displacement is important as considerably larger amounts of money are spent in the UK on SCP initiatives, compared to those seeking to tackle directly the underlying socio-economic conditions for particular crimes. For example, £927 million was awarded in grants by the Home Office between 1994-2004 (Crawford, 2007). If the evaluation of these initiatives is weak (Knutsson and Tilley, 2009); if displacement has not been measured accurately; or if the accepted view of displacement is based on erroneous assumptions about offender behaviour, then this has enormous implications for SCP initiatives, the funders of those initiatives, wider society and criminology in general.

The dissertation will be broken down into several objectives and they will each form a separate chapter:

- Chapter 2 provides a brief discussion of the methodology used to gather information for the literature review and the analysis of data.
- Chapter 3 examines the origins of SCP and specifically how it aims to prevent crime. SCP has its origins in the RCT of explaining criminal behaviour, and has had a major influence on the development of research and thinking on crime displacement.
- Chapter 4 examines the literature on crime displacement itself, and determines to what extent RCT/SCP hypotheses about displacement and diffusion of benefits have become the dominant, or orthodox view.
- Chapter 5 presents the results of a review of the literature that has been used to support the displacement and diffusion of benefits hypothesis, and the evidence, which is relied upon by Right Realist criminologists and Crime Science advocates, to purport that displacement and diffusion of benefits have been effectively measured.
- Chapter 6 examines the problems of measuring displacement accurately.

- Chapter 7 provides a discussion of the research findings in this dissertation, with particular focus upon its main research aim. Here too, recommendations are made for the future research analysis of crime displacement.

The author's own anecdotal 'knowledge' gained from many years working with problem drug using offenders, is that crime displacement is an inevitable consequence of blocked opportunities for this group of offenders. These offenders often have no choice but to raise money in order to feed their drug habit. Offenders that have been deterred from shoplifting for instance, have resorted to robbing each other, burgling the house of their parents, committing distraction burglary on a woman in her 90s, and selling sex for £5 (the price of a wrap of heroin). However, their displaced activity may be more serious than the original intended offence, or may not be criminal at all. These activities would certainly not always be visible through an analysis of crime statistics. In the case of the distraction burglary, the addicts who robbed each other, and the offender who robbed his parent's house, the victims all declined to report these incidents to the police (as far as the author knows). Realising that this evidence is only anecdotal, and being contradictory to the widely accepted 'knowledge' of crime displacement and the diffusion of benefits hypothesis, it was decided to conduct a thorough exploration of the subject by means of a scholarly undergraduate dissertation.

Chapter 2: Methodology

The aim of this research, which is to conduct a review of existing literature and undertake a secondary analysis of published results of empirical data, dictated that the research would be secondary, rather than primary. Therefore, the sources used for this research are books, journal articles, Home Office reports, and the Internet. These are all secondary sources.

Two of the advantages of researching published literature according to Bryman (2008), are those of cost and time. Analysis of such secondary sources facilitates access to good quality data for a fraction of the resources involved in the collection of data for primary research analysis. Particularly relevant for this piece of research is the fact that evaluations of SCP initiatives need to take place over a period of time, and studying one first hand was obviously not possible given the time constraints of an undergraduate dissertation. In addition, in order to meet the main aim of this research, it is necessary to compare the findings of several studies of displacement, which would again be an impossible task in terms of time, not to mention the difficulties of an undergraduate finding, joining, or setting up and funding a SCP initiative to obtain primary data.

Bryman (2008), further points out the advantage that a reanalysis of the work of others may offer a new interpretation of existing findings; but also warns against second hand sources, as it has been well documented that some authors can misinterpret these findings. The case of Platt (1984, cited in Bryman, 2008:105), demonstrates that several books and articles discussing the findings of the original research, misinterpreted the findings. In addition, a lack of familiarity with often complex data can be a problem for secondary researchers.

The Internet can be a valuable tool in searching for relevant literature as it can provide easy, quick access to literature. However, it is important to be cautious when using websites for information, making sure that the information is actually up to date, useful, and from a trusted source (Bryman, 2008).

Once the most relevant studies were identified, it became apparent that many of them are Home Office reports or government funded research projects. Noaks and Wincup (2004), warn that the political landscape may shape the outcome of much research, and according to Chan (1979), there is a tendency towards confirmation bias, whereby authors may minimize unfavourable evidence if funding agencies have a vested interest in the success of the programme. Similarly, 'social context plays a critical role in nourishing certain ways of theorizing about crime' (Lilley et al, 2007). Einstadter and Henry (2006), argue that criminological theory in this way interprets what it is actually trying to explain. So, for example within RCT, economic explanations of criminality use the language of economics in the explanation; economics thus becomes a methodological element of the research, the focus and context of which may be narrowed as a result.

Chapter 3: The Origins of SCP

3.1: Background

The basic principles behind SCP techniques are not new. Land owners in medieval Britain protected their castles with drawbridges, moats, and lookouts on the castle walls. More basic SCP techniques have been adopted by the general population in the form of locks and bolts; and these simple target hardening measures have become classified into a framework of opportunity reducing measures as part of the 'crime as opportunity' paradigm shift in criminology. Mayhew et al. (1976), argued that crime prevention should encompass physical crime prevention practices and the availability of opportunities for crime, in addition to the social crime prevention studies that had dominated much criminological theory in the past.

However, a major criticism of such physical SCP strategies has been the threat of crime displacement, and the assertion that 'the foreclosure of one type of criminal opportunity (will) simply shift the incidence of crime to different forms, times and locales' (Repetto, 1976:167).

Cornish and Clarke (1987), argue that if displacement is viewed from the RCT perspective, displacement is not inevitable as an offender will weigh up the costs, benefits and opportunities of an offence before deciding whether to displace. Eck (1993), argues that when attempts are made to detect displacement, it is often not found and where it is, it is much less than 100%. He therefore asserts that the RCT prediction of criminal behaviour is accurate. In order to fully understand this viewpoint, and the 'crime as opportunity' paradigm shift in criminology, it is necessary to explore RCT and SCP theory in more depth.

3.2: RCT and SCP

The RCT of criminal behaviour belongs to the Classical School of criminology, which originated in the eighteenth century. The basic premise is that people will rationally seek pleasure and avoid pain. Classical theorists do not take account of differences between individuals, they make no distinction between children or the mentally ill for instance, nor do they take account of biological, sociological or psychological explanations of criminal behaviour. They also maintain that punishments should be proportionate to the crime committed and should be administered according to the law, ignoring differences between offenders (Hopkins Burke, 2005). These ideas formed the basis of the criminal justice and penal systems of today, based on notions of equality and proportionality. However, these ways of thinking about crime and criminal behaviour largely went out of fashion in the twentieth century. They were replaced by dispositional explanations of criminal behaviour, including the ideas of Lombroso, Marxist criminology, the restorative justice programmes and the welfarist movement in youth justice (Hayward, 2007).

In the late 1970s and 1980s however, these rehabilitative methods became discredited as crime figures continued to rise and Martinson (1974), famously declared that 'nothing works'. Coupled with the rise of the political right in the UK and USA, criminal activity seen as a consequence of rational choice, and punishment that was seen to be swift and severe, regained popularity. The British Home Office demonstrated much enthusiasm for SCP measures as a pragmatic method of reducing crime and removing the opportunity to offend (Hopkins Burke, 2005).

In the 1980s this 'administrative criminology' (Young, 1994), fused the RCT theoretical model with the practical crime prevention initiatives of SCP under the leadership of Ron Clarke, a criminologist working at the Home Office (Pease, 2006).

The RCT of explaining criminal behaviour encompasses economic theories of crime and asserts that:

'crime is purposive behaviour designed to meet the offender's commonplace needs for things such as money, status, sex and excitement, and that meeting these needs involves the making of (sometimes quite rudimentary) decisions and choices, constrained as these are by limits of time and ability and the availability of relevant information' (Clarke, 1997:9).

Central to this paradigm has been the incorporation of Routine Activity Theory (henceforth RAT), which argues that the crime setting is 'the central organizing feature of crime and its absence' and that criminal acts always have 'a likely offender; a suitable target and the absence of a capable guardian against the offense' (Felson and Boba, 2010:28). RAT asserts that everyone takes routine precautions to prevent crime in the course of their everyday lives, by locking doors, installing burglar alarms, and avoiding what are perceived to be dangerous places or people. Similarly, commercial organisations routinely safeguard themselves, their employees, and their clients against crime. SCP is seen as the 'scientific arm' of these routine precautions that has been developed to make them more effective (Clarke, 1997:3).

SCP concentrates on the analysis of the circumstances giving rise to specific types of crime and seeks to reduce crime by the manipulation of the settings in which crime takes place, rather than focus on the detection or sanction of those committing the crime. Nor does it seek to remove criminal tendency by improving conditions in society, but merely seeks to make criminality less attractive to the offender (Clarke, 1997).

SCP comprises opportunity-reducing measures that are directed at specific forms of crime, and proposes that the commission of crime depends on particular environmental opportunities. SCP therefore involves the management, design, or manipulation of the immediate environment. The decision-making processes of the offender are thought to involve a degree of rationality when weighing up the costs and benefits of committing a crime. Therefore, crime can be made to appear more difficult and risky, or less rewarding and excusable. Implicit in this point is the assumption that offenders make an evaluation of the moral implications of certain types of offending, and that this will impose limits on crime displacement (ibid).

3.3: The Four Components of SCP

1. A theoretical foundation based on RAT as described above, but which also includes elements of environmental criminology. SCP is essentially British in origin, but has developed to incorporate American ideas about 'defensible space' (Newman, 1972 cited in Clarke, 1997:7); 'crime prevention through environmental design' (CPTED) (Jeffery, 1971, ibid), and 'problem-oriented policing' (Goldstein, 1979, ibid). A synthesis of these various elements has given rise to ten principles of opportunity and crime reproduced in Appendix 1.

2. A standard methodology based on the action research paradigm. This should include: the collection of data on the specific crime problem; an analysis of the conditions which facilitate the crime; the systematic study of the ways in which the crime can be blocked and an analysis of the costs involved; implementation of the measures which appear to be most effective, and the monitoring of the results. Clarke (1997:15), admits however, that this methodology is 'not always followed in practice'.
3. A set of opportunity reducing techniques. The classification of opportunity reducing techniques is constantly evolving and increasing. A table of twenty-five techniques together with two examples of each is reproduced in Appendix 2.
4. A body of evaluated practice including studies of displacement. These studies will be the focus of Chapter 5.

Chapter 4: The Literature on Crime Displacement

4.1: Displacement

Repetto (1976:167), wrote that ‘---the ultimate value of mechanical crime prevention programmes appears critically dependant on their capacity to avoid large scale displacement effects’. In order to address this ‘need’, and in the absence of comprehensive quantitative research on the subject, Repetto (1976), put forward his theoretical underpinnings for the future analysis of the displacement phenomenon. He outlined five types of crime displacement:

- **Temporal**-committing the intended crime at a different time
- **Tactical**-committing the intended crime in a different way
- **Target**-committing the intended crime type on a different target
- **Spatial**-committing the intended crime type to the same target in a different place
- **Functional**-committing a different type of crime

Barr and Pease (1990), identify a sixth type:

- **Perpetrator**-where a crime opportunity is so compelling that the offence will continue to be committed by a succession of different offenders filling the ‘opportunity’ vacuum.

Repetto (1976), argues that there are two basic (erroneous) assumptions about offenders: that they are totally deterministic in that they must commit a certain number of offences every day, week, or month, and that therefore, reducing opportunities or increasing the risks, will not lessen the frequency of crimes; and that offenders possess total mobility with regard to tactics, time, target, and area of operation.

According to Eck (1993), different theoretical stances on the causes of criminal behaviour dictate a different reaction to the blocked opportunities presented by a crime prevention initiative. Deterministic theories that cite the causes of criminal behaviour as outside the individual’s control- such as unemployment, inability to succeed, or subcultural values,- suggest that attempts to block criminal opportunities will merely lead offenders to explore other opportunities to commit crimes. Determinists therefore, will expect much crime displacement. RCT on the other hand, which holds that crime is the outcome of choices, maintains that displacement is dependent on the relative costs and gains of the alternative offending being considered.

Cornish and Clarke (1987), argue that determinists see displacement as inevitable, and view crime and displacement in the hydraulic sense. However, if displacement is viewed from the standpoint of RCT, it is not inevitable, as an offender will weigh up the costs, benefits and opportunities of an offence, before deciding whether to displace elsewhere. Furthermore, ‘If frustrated from committing a particular crime, the offender is not compelled to seek out another crime nor even a non-criminal solution. He may desist from any further action at all--’ (ibid: 934).

Cornish and Clarke (1987), propose also that the decision-making processes, and the factors taken into account by potential offenders, vary greatly at different stages of the process and among different crimes. They argue therefore, that the analysis of criminal choice and of

displacement needs to be crime specific 'just as reductions in target crimes brought about by situational measures may be modest and difficult to detect---so, too, evidence of displacement may lie concealed within the same overall crime statistics' (ibid:934).

A more promising way of explaining criminal behaviour and displacement is suggested then by taking a crime specific approach, as offenders are not fuelled by a general disposition to offend, but rather specific crimes are chosen for particular reasons. The final decision to commit a crime is influenced by the characteristics of the offender and the properties of the offence, and is a product of interaction between the two. This leads to choice structuring properties of particular offences; and the willingness of an offender to substitute one offence for another, will depend on whether the offence characteristics are compatible with the offender's goals and abilities. This crime specific process of decision-making is crucial therefore when trying to understand displacement (Cornish and Clarke, 1987).

Eck (1993), recognised this need to examine offender choice structures and actions in developing the theory of displacement. Offender choices have been studied to some extent, but have been limited to spatial displacement; Repetto (1976), used two studies with convicted burglars to form his opinion that many crimes are opportunistic, and that if opportunities are blocked in a familiar location, displacement to other familiar areas is most likely, and displacement to unfamiliar areas is least likely. Repetto also found that older, more skilled offenders are more likely to displace. Cohen and Felson's (1979), assertion that criminal opportunity is often linked to the travel patterns of offenders, which forms the basis of RAT, corroborates this viewpoint. Sherman (1990:10), however put a time limit on these blocked criminal opportunities, stating that offenders are more likely to return to a familiar area once the blocking tactics are understood. He called this the 'initial deterrence decay'. Eck (1993: 537), generalised these findings on spatial displacement to other forms of displacement and hypothesised that displacement is therefore 'most likely to occur in the direction of familiar places, times, targets and behaviours'. He called this 'familiarity decay'.

4.2: Diffusion of Benefits

Diffusion of benefits is seen to be the opposite of displacement. A reduction in crime is observed that is not the target of the SCP initiative; this can be a reduction in other types of crime, or a reduction in crime outside the area targeted. Clarke and Weisburd (1994:169), define it as:

'---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.'

Clarke and Weisburd (1994), claim that a preoccupation with the threat of displacement has led to the possibility that diffusion of benefits is being overlooked as an outcome of SCP initiatives, perhaps because theoretical developments of situational and choice factors were lacking in early SCP measures. An oft quoted example is the Kirkholt Burglary Prevention Project (Forrester et al., 1988), in which it is claimed that the surrounding areas also benefitted from a reduction in crime, even though they were not subject to the same measures as the Kirkholt estate (Welsh and Farrington, 1999). Meanwhile Clarke and Weisburd (1994), claim that the whole estate benefitted from a diffusion of benefits, not just the victims of burglary who were the primary targets of the project. This study will be examined in more detail in Chapter 5. Other examples are Eckblom (1988), in which it is claimed anti-bandit screens installed in London post-offices also resulted in a reduction in robbery in those premises without screens.

4.3: Benign and Malign Displacement

Barr and Pease (1990), take a slightly different and more pragmatic view of crime displacement. They propose that displacement can be viewed as benign, in which a prevented crime is displaced to one of less seriousness; or as malign, in which the displaced crime leads to the commission of a more serious one.

An example of benign displacement is given by Mayhew et al (1976), in which steering column locks were introduced on all new cars. The introduction displaced car crime to older cars which did not have steering column locks. Barr and Pease (1990), argue that this is benign displacement, as the financial losses are less with older cars than with new ones.

On the other hand, malign displacement occurs when crime is changed in ways that are deemed to be socially undesirable. A study by Schumacker and Leitner (1999), found spatial crime displacement following the redevelopment of an urban area in Baltimore, USA; increased security personnel, improved street lighting, and increased pedestrian traffic resulted in a significant drop in the crime rate. However, crime rates in the city remained high, and an analysis suggested that crime was displaced to other areas of the city. The authors argue that the benefits of redevelopment did not reach all the city's residents, and that those living outside the redevelopment area have suffered as a result of redevelopment through an increase in crime rates.

The review by Barr and Pease (1990), has been used to support the theory that crime displacement is not very widespread, despite the fact that only one of their studies showed no displacement at all. This is presumably because the focus of the study was to demonstrate that displacement could be benign or malign. Examples of benign displacement are promoted as a 'desirable' outcome of SCP initiatives, and displacement should be used as a tool with which to work towards a 'distributive justice' (ibid: 285). They argue that displacement would only render a crime prevention initiative undesirable if the substitute crimes were as serious as, or more serious than, the target crimes; implying that a deflection of crime to alternative targets, in a different place, at a different time, may be socially acceptable in redistributing crime more equally among victims.

This assertion however begs the question, more desirable for whom? The victim of a displaced crime may not view the experience as benign, despite assurances that the original intended crime would have been more serious. There is also the danger in this perspective that in this post-modern era of increasingly pluralised policing practices, that protection and security will be the preserve of those who can afford to pay for it. Moreover, the relatively rich who can afford ever more sophisticated target hardening strategies, will retreat into so called 'gated communities', leaving the poor to bear the brunt of displaced crime and a reduced police force (Newburn and Reiner, 2007).

4.4: Consensus of Opinion

The generally accepted theory of crime displacement is one heavily influenced by RCT as can be demonstrated in the following quotes:

'Studies of displacement tend to assume rational decision making on the part of the offender' (Hesseling, 1994:199).

‘(W)hen attempts to detect displacement have been made, it is not often found, and, if found, it is far less than 100%. This suggests that rational choice theories provide a better description of criminal behaviour than deterministic theories’ (Eck, 1993:528-529).

‘We know from research that, in general, displacement is less likely than it is assumed to be, and although it may happen there is usually a net reduction in offending, bearing in mind that in some cases there may be an increase in seriousness’ (Laycock, 2005:681). ‘(D)isplacement theory generally neglects the important causal roles of temptation and opportunity, and that ‘those who assume displacement is inevitable overestimate its capacity to occur’ and ‘Rational Choice Theory predicts that offenders will displace their prevented crimes when the benefits for doing so outweigh the costs. They will not displace their crimes when the costs outweigh the benefits’ (Felson and Clarke, 1998:26-27).

‘Empirical studies have generally concluded that fears of displacement have been exaggerated (Hesseling, 1994). In some cases none has been detected and complete displacement appears to be very rare within the limits of practical measurement’ (Tilley, 2009:118).

‘Diffusion (of benefits) is viewed as a common result of crime prevention activity’ (Clarke and Weisburd, 1994:169).

Chapter 5: Secondary Analysis of Displacement Studies.

5.1: Empirical Studies and Displacement

Only four published literature reviews of empirical studies that looked at displacement were found: Barr and Pease (1990); Eck (1993); Hesselning (1994), and Guerette and Bowers (2009).

The study by Guerette and Bowers (2009), is an amalgamation of 102 studies of SCP and it is entirely possible that their analysis includes studies contained in the other three. This cannot be ascertained because no list of the studies is included, other than a sub-sample of 13. It was therefore decided that the statistical information provided should be analysed separately. Guerette and Bowers found evidence of displacement in 34 or 33.33% of the 102 studies, finding no displacement in 68 or 66.66%.

An analysis of the other three studies showed that some crime reduction schemes were included in more than one of the studies; therefore any overlapping studies were removed. The findings from the other three studies have been summarised in Table 1 below, and a full list of the studies is reproduced in Appendix 3:

Table 1: A re-analysis of empirical findings from the literature on displacement

| Study | Displacement | No displacement | Total | Offender studies |
|---------------------|---------------------|------------------------|------------------|-------------------------|
| Barr & Pease (1990) | 11 | 0 | 11 | 1 |
| Eck (1993) | 4 | 6 | 10 | 4 |
| Hesselning (1994) | 33 | 22 | 55 | 6 |
| Totals | 48 (63.16%) | 28 (36.84%) | 76 (100%) | 11 |

Displacement was evident in just over 63% of these studies. Therefore, these figures do not tally with the accepted view that displacement is less likely, rather than more likely to occur. Because diffusion of benefits and displacement could not occur simultaneously-the current measure of which occurred is simply a binary yes/no condition. However, this is arrived at in two ways:

1. area crime data analysis; otherwise known as crime pattern analysis (see Brantingham and Brantingham, 1984), and
2. qualitative offender interviews, which illicit an overall response regarding whether offenders said they generally ceased to offend, offended elsewhere, or offended in a different way.

We must treat each measure with caution for different reasons. Crime data analysis may suffer from measurement failure, or failure to seek to measure what is important. Qualitative data is extremely crude and may be subject to respondent bias, or the nature of interview schedules.

Additionally, it is also important to note that the study by Barr and Pease (1990), was intended to demonstrate that displacement could be benign or malign, and therefore focussed on studies where displacement was evident.

The number of studies that involved either interviews with, or observations of, offenders has also been identified in Table 1 for further analysis in 5.2; but it was impossible to identify any such studies in Guerette and Bowers (2009), as has been discussed above.

5.2: Offender Studies

In order to ascertain whether offender studies support the dominant view that displacement is less likely rather than more likely to occur, and bearing in mind the author's observations of offenders outlined in Chapter 1; the number of studies in the empirical literature that involve interviews with, or observations of, offenders has been identified. In addition to the eleven studies identified above, a search of the Center for Problem Oriented Policing Database was also conducted. Of 221 SCP initiatives that were evaluated, only 108 examined displacement at all (Center for Problem Oriented Policing, 2010). It was impossible to determine how many of these found any displacement, since not all of the studies are available. However, of those that are available, two offender studies that examined displacement and either interviewed or observed offenders were found. A total of 13 offender studies were therefore available for secondary analysis, and the findings can be summarised thus:

11 of the 13 or 84.6% of the offender studies show displacement, which is a considerably higher proportion than in the number of displacement studies overall which show displacement at 63%. Again, these figures do not support the current orthodox criminological 'knowledge' that crime displacement is less likely, rather than more likely to occur (Clarke and Weisburd, 1994; Laycock, 2005; Tilley, 2009). Table 2 shows these findings and the type(s) of displacement demonstrated:

Table 2: Offender studies and displacement.

| Source | Study | Crime type | Displacement type |
|--------------------------------------|-----------------------------------|---|--|
| Barr & Pease (1990) | Letkemann (1973) | Burglary | Crime type |
| | Matthews (1990) | Prostitution | None |
| | Matthews (1993) | Prostitution | Some spatial, temporal |
| | Knutsson & Kelhorn (1992) | Cheque forgery | None |
| | Sviridoff et al. (1992) | Drug dealing | Spatial, temporal, target, tactical, perpetrator |
| Hesseling (1994) | Bennett & Wright (1984) | Burglary | Temporal, spatial |
| | Van Burik & Van Overbeeke (1991)* | Burglary | Target, spatial, tactical |
| | Gabor et al. (1987) | Robbery | Crime type |
| | Grapendaal et al. (1991) | Index crimes | Crime type |
| | Cromwell et al. (1991) | Burglary | Target, spatial |
| | Bieleman & Kroes (1991)* | Index crimes | Target, spatial, crime type |
| Center for Problem Oriented Policing | Chaiken et al. (1974) | Robbery | Temporal, target |
| | Young et al. (2006) | Prostitution, drug dealing, rough sleeping, street drinking | Spatial, tactical |

* These studies can only be summarised from the work by Hesseling (1994), as they were published in the original Dutch. Letkemann (1973), through interviews with offenders, found that the invention of night depositories, complex burglar alarm systems and credit cards, has displaced the burglary of banks and business establishments to armed robbery. It can be argued that this is an example of malign displacement as discussed in 4.3.

Matthews (1990), investigated the incidence of prostitution and kerb crawling in Finsbury Park, North London, before and after a period of intensive policing and a road closure scheme. Matthews lists the benefits of the operation as: an increased sense of security amongst residents; a reduction in the volume of traffic; a reduction in the number of reported crimes other than prostitution and kerb crawling, and improved relations between the police, public and local authority. Matthews also claims that the anticipated level of displacement did not occur as the women engaged in prostitution in Finsbury Park did not move to new locations. It is claimed that 'away day' girls who came to the area because they had heard it was a good place to work were, in the most part deterred, and gave up prostitution or moved back home or elsewhere. Matthews therefore maintained that there was no evidence of displacement.

A different outcome was recorded when Matthews (1993), examined a similar scheme in Streatham. He found that most of the trade moved to the north of the area (spatial displacement), and he also found evidence of temporal displacement, in that some of the prostitutes started to work later in the evening and into the early hours of the morning to avoid increased police patrols. However, Matthews argues that this evidence of displacement does not mean that the initiative was a failure, but that the movement of prostitution and kerb crawling away from the residential area towards the High Street and a park can be viewed as an example of benign displacement.

Knutsson and Kelhorn (1992), conducted a study of offenders involved in cheque forgeries in Sweden, and stated that they found no evidence of displacement. In 1971, new measures were introduced which meant that cheques for less than 300 Swedish Kronor were no longer guaranteed by the banks. They studied two populations of offenders, those who had committed the offence before the changes, and those who had committed the crime afterwards. In order to eliminate changes due to police routines or legal procedures, they also chose two additional groups as comparisons; those who had been convicted of crimes of property acquisition in 1970, and in 1975. They found that criminals involved in cheque forgeries before 1971, did not show a tendency to switch to other types of crime or more serious crimes. This group also had a lower rate of recidivism, which indicates, in their view, that the measures were effective in reducing crime rather than displacing it.

Sviridoff et al. (1992), undertook observations of street drug market (specifically crack) activity in New York, both during and after interventions by the Tactical Narcotics Team (henceforth TNT), of the New York City Police Department. They found that:

- Crack was no less available during/after the TNT operation, and that there was no increase in search time for crack users (except where the TNT was visibly present at the spot they usually bought).
- The number of regular sellers decreased noticeably at outdoor locations where the TNT was deployed.
- Arrested sellers were replaced during the TNT operation by 'recycled sellers' (those who had been serving time on arrests made prior); by consumers turned sellers; by part time or one shot sellers, and by new sellers.
- As the crack market decreased in the TNT area, instability and violence in the area increased; new sellers fought over turf, and sellers and users fought over the quality of the crack.
- Sellers showed a variety of adaptations to the TNT operation: they varied their hours of business to avoid TNT officers; they created lookout networks or expanded existing ones; they restricted sales to known customers and developed a more stable clientele; they reduced the visibility of transactions; made greater use of intermediaries, and laundered money from buyers as often as possible.
- The observers did not see evidence of drugs market activity moving to other neighbourhoods, but they did see sellers moving location within the TNT area. (There has been ample evidence of displacement to other areas in other TNT studies. Such areas were dominated by organised crack distributors rather than freelance sellers, and they moved to areas more conducive to the selling of drugs. Observers have also found that areas that are under regeneration are less likely to attract displacement).

Bennett and Wright (1984), conducted interviews with 128 offenders incarcerated for residential burglary. When asked what they would do if they were unable to go through with

a crime, almost half said they had never experienced such a blocked opportunity. Of the remainder who had: 43% said they committed the crime elsewhere (spatial displacement); 41% gave up either temporarily or permanently, and 16% said their reaction depended on the circumstances.

Van Burik and Van Overbeeke (1991), interviewed offenders who had experienced a failed attempt at burglary and 72% said they had chosen another target. When offenders were asked the question hypothetically: 30% said they would choose another target; 36% said they would commit another type of crime; 25 % said they would use different methods (tactical displacement), and only 4% said they would desist altogether.

Gabor et al. (1987), conducted a study of prisoners convicted of armed robbery. They found that this group of offenders were on the lookout for other, less violent and dangerous activities, even if the rewards were less lucrative. They found that armed robbers who claimed they had desisted from this crime type, shifted their focus to fraud and drug dealing in particular.

Grapendaal et al. (1991), studied the criminal behaviour of 89 drug addicts in Amsterdam. They assert that the inclination to commit crime for drugs is not constant and refute claims that, despite blocked opportunities, addicts are continually driven to commit crime to obtain drugs.

Cromwell et al. (1991), conducted a study of 30 active and drug addicted burglars. They found that crime prevention does not always lead to displacement. 'The research revealed numerous instances where an addicted offender planned a burglary and was deterred---. Occasionally, the deterred burglar located another burglary target---just as often, however, the planned crime was not committed and the potential burglar borrowed money, shoplifted, or sold something legitimately obtained' (ibid: 319). This author would argue however, that shoplifting is crime type displacement.

Bieleman and Kroes (1991), studied 62 drug addicts in Groningen who, when faced with crime prevention measures could be broadly categorised into 7 types of addict. The original criminal (15%), the instrumental criminal (20%), and the delinquent user (15%), were all inclined to displace, constituting 50% of the sample.

Chaiken et al. (1974), conducted a study of robberies on the New York subway system and examined the effect of increasing the number of Transit Police between the hours of 9am and 4pm. In the short term, there was no increase in the number of robberies outside the hours of increased patrol; but after 8 months, there was a significant increase showing temporal displacement. Moreover, a large increase in bus driver robbery above ground corresponded to a decrease in subway robbery, suggesting target displacement. When exact fares were introduced on the buses, the level of subway robbery returned to previous levels. A study of offenders arrested for subway robbery found that most of the offenders concentrated their illegal activities:

- in a small geographical area close to their homes
- in the hour before and the hour after the intensive patrols on the subway,

and that,

- many were heroin addicts,

- a large ‘take’ did not decrease the level of offending, suggesting that they were not simply operating on an economic level, and
- a small number of offenders were responsible for a large number of crimes.

Young et al. (2006), conducted a study in the King’s Cross area of London looking at the results of crime intervention strategies introduced by Camden Community Safety Partnership. The study looked at various offences, and the findings on displacement are detailed in Table 3:

Table 3: Displacement as a result of crime intervention strategies in King’s Cross.

| Offence: | Displacement found: | Type: |
|-----------------|----------------------------|-------------------|
| Prostitution | Yes | Spatial, tactical |
| Drug crime | Yes | Spatial, tactical |
| Street drinkers | Yes | Spatial, tactical |
| Rough sleepers | Yes | Spatial |

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Of the two offender studies that showed no displacement, it can be argued that the findings may be problematic. Matthews (1990), in his study of prostitution does not make it clear whether those women who moved to other areas were still engaged in prostitution. Moreover, he found that 20 or so of the women interviewed were “hard core” prostitutes and continued to work despite the police crackdown, moving their activities to their own homes via advertisements, or operating from the local pub. It could be argued that this would therefore constitute spatial displacement. Lowman (1992), has questioned Matthews’ claim that there was no sign of displacement to the surrounding areas, by citing his own evidence (Lowman, 1984, 1989); that if an area is cleared of prostitutes, it is at the expense of displacement to other locations. Moreover, Lowman (1992), criticises the fact that Matthews did not ascertain whether the prostitutes had moved to areas other than the one closest to Finsbury Park; whether they moved their operations indoors in other areas; or whether enough time had elapsed between the implementation of the operation and the writing of the report, to fully measure the long term effects.

Knutsson and Kelhorn (1992), in their study of cheque forgery acknowledged that waivers of prosecution increased dramatically during the period in question and these waivers were only kept on file for short periods. In addition, risks of detection decreased for this period. Therefore, some crimes may not have been recorded or detected. Knutsson and Kelhorn did not interview the offenders to find out whether this was the case, nor did they ascertain whether the offenders were committing fewer crimes for larger amounts.

5.3: Did a Miracle Happen in Kirkholt?

‘No testimony is sufficient to establish a miracle, unless the testimony be of such kind, that its falsehood would be more miraculous than the fact which it endeavours to establish’ (Hume, 2005:63, originally 1739).

The Kirkholt Burglary Prevention Project (Forrester et al., 1988, 1990), sponsored by the Home Office, has been celebrated as an exemplar of crime prevention (Burns, 1990). The aim of the project was to reduce the high level of residential burglary on a local authority housing

estate in Rochdale. A problem solving method was adopted whereby local offenders, burglary victims, and their neighbours were interviewed, and a series of preventative measures devised. The measures included improving the physical security of houses; removing coin operated gas and electricity meters, and introducing property marking and neighbourhood watch schemes. The project was regarded as a huge success, resulting in a 75% reduction in burglary on the estate over three years (Tilley, 1993).

Whilst it cannot be denied that the project was successful in reducing burglary on the Kirkholt estate; from the point of view of crime displacement, the results are not so clear-cut. In terms of burglary, the evaluation of the project found that there was no evidence to suggest that displacement of burglary occurred to areas immediately surrounding the Kirkholt estate (Forrester et al., 1988). Indeed, it has been argued that there was also a substantial reduction in the number of burglaries in the rest of the sub-division, indicating that there was no displacement, but rather, a diffusion of benefits in the areas surrounding Kikholt (Welsh and Farrington, 1999).

When evaluating displacement to other crimes, it was found that an increase in criminal damage, minor damage and acquisitive crimes had occurred on the Kirkholt estate, together with a large increase in acquisitive crime in areas surrounding Kirkholt. These findings are shown in Table 4:

Table 4: Comparison of offences on Kirkholt and surrounding areas 1986-87. Adapted from Forrester et al. (1988).

| KIRKHOLT | | | | SUBDIVISION EXCLUDING KIRKHOLT | | |
|-------------------------|------|------|---------|--------------------------------|------|---------|
| Crime type | 1986 | 1987 | %change | 1986 | 1987 | %change |
| Wounding | 24 | 19 | -21 | 233 | 270 | +16 |
| Criminal damage | 81 | 98 | +21 | 1031 | 940 | -9 |
| Minor damage | 131 | 148 | +13 | 808 | 835 | +3 |
| Other acquisitive crime | 288 | 313 | +9 | 4690 | 5810 | +24 |
| Total | 524 | 578 | +10 | 6762 | 7855 | +16 |

These figures show a possible displacement from burglary to acquisitive crime outside the Kikholt estate. However, the authors of the report state:

‘We cannot discount this possibility, but we find it implausible. There was no suggestion of a burglary initiative outside the Kirkholt estate, to dissuade the commission of burglaries elsewhere. It is easier to conceive of a movement to domestic burglary off the estate or to acquisitive crime within the estate. No evidence exists for either of these alternatives’ (Forrester et al., 1988:21).

It is not made clear why the authors of the report ‘find it implausible’ that crime could have been displaced in this way, as they accept that offenders could have demonstrated spatial displacement, but seem not to accept the possibility of crime type displacement. Furthermore, there is an overall increase in criminal and minor damage which Forrester et al. (1988:20),

attribute to higher reporting of such crimes because of more pride in the estate. On the other hand, this could be attributable to failed burglaries; in other words attempted burglaries.

However, if the RCT perspective is applied to this project; then an offender weighing up the opportunities on Kirkholt in light of the target hardening and increased vigilance, might well rationally choose to move his/her offending elsewhere, either to other crimes or other locations. A definitive answer would therefore have been possible if those offenders convicted of these acquisitive crimes had been interviewed.

Furthermore, part of the initiative involved the removal of pre-payment gas and electricity meters. Before the initiative, 49% of burglaries on the estate involved the theft of cash from these meters, and 27% involved the theft of meter cash only. In a previous study of this phenomenon it was found that in 86% of cases recorded by the police, either the occupant of the household, or a member of the family was responsible for the theft of cash from pre-payment meters (Hotson, 1970, cited in Hill, 1986). A study by Laycock (1985), used a similar estimate of 80% to explain a remarkable drop in thefts from pre-payment meters in a burglary prevention scheme in South Wales. It was argued that residents joining such a scheme prevented themselves from claiming that they had been burgled. Laycock also found no evidence of displacement to surrounding areas.

Indeed, if these suppositions are correct, it may well explain why there was no apparent evidence of displacement of burglary to the surrounding areas, both in the Laycock study and in Kirkholt; insurance fraudsters and individuals willing to rob their own meters because of a shortage of cash, may be unlikely to commit burglary as an alternative.

However, Forrester et al. (1988:14), dispute such notions when explaining the dramatic reductions in burglary on Kirkholt, although they acknowledge the possibility that some of the thefts from cash meters could be attributed to these 'own goals'. Forrester et al. claimed that victim interviews on the estate, and an examination of the crime statistics led them to believe that the incidence of such 'own goals' on Kirkholt was much lower. Since an 'own goal' is unlikely to be cleared, it is argued that if the clearance rate of burglaries involving meter cash is particularly low, then this can be attributable to 'own goals'. However, if the clearance rate for meter and non-meter burglaries is similar, then the influence of such 'own goals' is likely to be slight. In 1986, the clearance rate for burglaries involving meter cash on Kirkholt was 13.1%, and for all other burglaries it was 25.6%. Since an 'own goal' is unlikely to be cleared, it may be safe to assume therefore, that only about 50% of the burglaries involving meter cash were of this type, which would account for about 25% of all burglaries. Quite why these figures for 'own goals' are so startlingly different from those provided by Hotson (1970), is a question the authors of the Kirkholt study left strangely unexplored. But it was nevertheless argued on the basis of the above reasoning, that in order to be judged a success, the Kirkholt initiative must reduce burglary by over 25% (ibid).

Anomalies with the findings on Kirkholt, but with no mention of what might be called 'The Hotson Anomaly', were expressed by Osborn (1994), in a report for the Safer Neighbourhoods Unit. In a more in-depth study of the figures, it was shown that the main beneficiaries of a reduction in burglary were the 19-25 age groups, and that the elderly actually experienced an increase in burglary over the project period. If this is indicative of displacement of crime to the elderly; questions about malign displacement need to be asked in terms of the greater impact of crime on the elderly in financial and social terms, and would seem to challenge the assertions of Welsh and Farrington (1999), mentioned above.

Osborn (1994), also questioned whether the dramatic results might have been due, in part, to the local authority's Kirkholt Development Project which began before the Home Office project, and which invested a total of £1.25 million on security related works alone. Furthermore, Osborn highlights an epidemic of break-ins in an adjacent area, Ashfield Valley in 1989, where empty flats were stripped of valuable fittings. This occurred during the second phase of Kirkholt, and in 1990 the recorded number of burglaries on Kirkholt began to rise again, such that levels had returned to pre-1988 levels by 1992 (although not to the very high levels of 1987). No attempt has been made to discover how the possibly easier target of Ashfield Valley influenced the behaviour of offenders on Kirkholt. Indeed, figures for crimes other than burglary were not collected for the second phase of the Kirkholt Project (Forrester et al., 1990).

A further point about the exceptionally high burglary rate in 1987 in Kirkholt needs to be explored. Kirkholt is a small area, and as such, a decrease in crime rates from an unusually high rate, may be indicative of a regression towards the mean. In such cases an observed score is partly a true score, and partly error which varies randomly over time. An unusually high score is likely to include an above average error component and therefore, the next measurement is likely to be lower because the error component is likely to decrease (Farrington and Welsh, 2004). Forrester et al. (1990:27), discounted this explanation of the figures in Kirkholt, stating that '---pre implementation figures are not atypically high, and hence any changes are not attributable to statistical regression'. However, the same authors (Forrester et al. 1988:2), quite clearly state 'the rate of recorded domestic burglary on the estate was double the rate of all burglaries, reported and unreported--- in the 1984 British Crime Survey'. In the same way, the diffusion of benefits alluded to by Welsh and Farrington (1999), in areas surrounding Kirkholt, may also be a regression to the mean. But according to Farrington and Welsh (2004:465), 'More research is needed on the extent to which there might be regression to the mean of victim survey and police recorded crime rates in small areas'.

Given the above problems with the findings of the Kirkholt Project, it is perhaps not surprising that an independent opinion was sought by the Home Office. David Farrington (1992, unpublished) was commissioned to investigate, and concluded that reductions in burglary on the estate were solely the result of implementation measures of the Home Office project. The results were not a regression to the mean, nor were they due to other occurrences in the area at the time. No questions appear to have been raised in the academic literature about Farrington's actual 'independence' in light of the fact that his academic reputation was built on decades of on-going Home Office funded research with the Cambridge Study of Delinquency.

In summary, a secondary analysis of the empirical literature used to support the criminologically orthodox 'knowledge' that crime displacement is less likely, rather than more likely to occur, and that SCP initiatives may even lead to a diffusion of benefits, found that displacement was evident in 63% of cases. The analysis of offender studies is particularly striking, showing evidence of displacement in 84.6% of cases. These findings therefore do not support the orthodox view. A reanalysis of the Kirkholt Burglary Prevention Project also shows that the evidence is highly questionable.

Chapter 6: Problems of Measuring Displacement Accurately

This chapter will demonstrate that the accurate measurement of crime displacement is beset with problems, many of which stem from the methodological difficulties and flaws which are present in the evaluation of SCP initiatives.

Existing evaluations use a wide range of methods and whilst they all seem to point to the positive benefits of SCP techniques in general, Knutsson and Tilley (2009:2), insert a word of caution in terms of 'publication bias-the well-known tendency for positive findings to be published rather than negative ones', as discussed in Chapter 2. In addition, installing SCP techniques without prior and thorough evaluation of the problem, or the situation in which they are used can lead to 'mindless application' such as the almost blanket coverage in the UK of CCTV (ibid). Clarke (1997), recognises that more appropriate evaluation is required to take into account that each SCP measure is highly specific, not only to the crime or problem under consideration, but also to its circumstances, and that what works in one situation will not always work in another.

There are many attempts to measure the effectiveness of SCP initiatives, and in a summary of thirty-seven years of research into SCP efforts, Guerette (2009), found that of 206 initiatives evaluated, 75% claimed to be effective. However, of these 206 studies only 102 measured crime displacement effects. How could this be and why should this be so?

Difficulties with the measurement of displacement were recognised quite early on; Cornish and Clarke (1987:934), state that research which 'merely analyses crime patterns, is likely to yield only limited information about displacement'. Barr and Pease (1990), concurred, and argued that because there are so many types of displacement, it is almost impossible to measure accurately, because instances of it are likely to merge into overall crime figures, or fall outside the types of crime being studied. They acknowledge that the methodological problems of measuring displacement are unlikely to be resolved stating that 'The wider the scope of the study in terms of types of crimes and places, the thinner the patina of displaced crime could be spread across them; thus disappearing into the realm of measurement error'(ibid:293).

Eck (1993:535), also recognised that methodological problems in measuring displacement may well prevent the ability to 'categorically state that displacement is not a problem', citing small sample size and random fluctuations in crime which may cloud the results.

So, what are the limits in terms of crime type, time and area for measuring displacement in an open-system social environment, as opposed to the laboratory settings used to measure much in the natural sciences? SCP evaluation initiatives may seek to measure crime in the area of operation as well as areas bordering it, but where should the imaginary lines be drawn in looking for the evidence of displacement?

Many evaluations of SCP are based on the assumption that offender populations are 'rigid, fixed in space, and comprise individuals who specialize in one form of crime' (Gabor, 1990:43), and will therefore only look at the particular crime type being targeted and in the surrounding areas. Assumptions about offender behaviour however can be problematic. If we look at the RCT view of offender mobility, which has been briefly discussed in 4.1, Cohen and Felson (1979), argue that offender mobility is often linked to routine activities such as travel to work, school or leisure. Gibbens and Garrity (1962), found that mobility of

offenders is not only limited geographically, in terms of the ability to travel and knowledge of a local area, but also in terms of choices made about offence type, which can be linked to personality. In terms of age, younger offenders have fewer skills and tend to be less mobile than older offenders, and they tend to steal a less wide variety of goods because of problems with disposal. However, Repetto (1974, cited in Gabor, 1990), found in a study of adult burglars that a quarter were willing to travel over 24 hours to reach a target. We cannot therefore assume that offenders are limited to a particular area of activity. Indeed, Gabor (1990), argues that offenders are far more adaptable than formerly thought, and that offender mobility varies greatly from one crime type and offender category to another. Furthermore, Schneider (2005), refutes the assumption that offenders tend to specialise in one type of offence, although it is recognised that they may move from one type of offending to another throughout the course of a criminal career. Schneider's research has clearly shown that 'criminals operate outside their perceived boxes', and that, prolific burglars regularly committed shoplifting offences in order to 'boost' their income (ibid: 399).

In his review of SCP evaluations, Guerrette (2009), found that of those studies that did measure displacement; 77% examined spatial displacement; 27% examined target displacement; 15% offence; 10% tactical, and 5% temporal. None of the studies evaluated examined perpetrator displacement (percentages add up to more than 100% as several studies examined more than one type of displacement). It is evident therefore that most evaluations of displacement concentrate on spatial displacement.

Guerette (2009), concluded that in the future the analysis of displacement should be incorporated into the research design of SCP evaluations, so that the overall outcome of the initiative can be measured accurately. In addition, analysis of displacement should include all forms of it rather than concentrating on spatial displacement. 'Few examinations of displacement---have explored or tried to measure the myriad ways displacement might behave' (ibid: 50).

In the secondary analysis of the empirical literature on crime displacement in Chapter 5, it can be seen that these studies do not measure displacement in any quantifiable way. More specifically, Guerette and Bowers (2009:1338), state that the empirical studies prior to their own 'are limited in several ways.' First, they have been based on a small number of studies available for review at the time. Second, all the reviews have been descriptive in their method because of a lack of data, and in many cases this was limited to the author's reporting of whether displacement was found or not.

Third, they claim that even if sufficient data were available at the time, the statistical methods for a reliable empirical determination have only recently become available.

Elsewhere, Bowers (Bowers and Johnson, 2003), has stated that the net effect of a SCP initiative is the direct preventative effect, plus the diffusion of benefits, minus the displacement effects. In pursuit of a quantifiable approach, displacement can therefore be measured in the weighted displacement quotient or WDQ thus (Guerette and Bowers, 2009):

$$WDQ = \frac{Da/Ca - Db/Cb}{Ra/Ca - Rb/Cb}$$

where Da is the crime count in any surrounding areas post initiative and Db is the crime count in the same area pre initiative; Ca is the crime count in a control area post initiative and Cb is the crime count in that area pre initiative; Ra is the crime count in the target area post

initiative and R_b is the crime count in that area pre initiative. However, it can be seen that this formula is capable only of measuring spatial displacement.

The displacement of crime may not be due to the SCP initiative being evaluated; it could also be a reflection of more general conditions in a particular community such as increased police patrols. There may be several factors that impact simultaneously on a community that may have an effect on crime (Gabor, 1990), this was echoed by Osborn (1994), in a critique of the findings of the Kirkholt Burglary Prevention Project discussed in Chapter 5.

In assessing the problems outlined above Hamilton-Smith (2002:12), states that ‘---the theoretical foundations of displacement have been well developed--- (but there is) ---limited application of this theory to the development of theoretically-informed measurement strategies’. Moreover, displacement and diffusion of benefits have been evaluated via the comparison of crime figures in project areas with neighbouring geographic areas on the basis of rigidly applied criteria and unspecified or loosely applied principles. He provides a useful summary of these problems thus:

1. If offenders do employ rational decision making when offending, and if they operate in an environment with a large supply of criminal opportunities, predicting any possible displacement will be problematic.
2. Offender studies have shown that most offenders do not specialise in one type of crime and will change their criminal behaviour to take advantage of different opportunities.
3. Both offenders and victims are increasingly mobile.
4. Any evaluation of crime prevention projects that is spread too thinly across time, space, and offence type, will encounter difficulties in distinguishing the effects of the project from natural variations in crime rates.
5. Similarly, it may be difficult to distinguish the effects of the project from other influences in the area (ibid).

In summary, it would seem that, as recommended by Cornish and Clarke (1987), and in line with RCT theory, most SCP evaluations of crime displacement are crime specific and concentrate on spatial displacement. These views of displacement are thus bounded by crime type or area, and therefore fail to measure all the ways in which crime displacement may be manifested.

Chapter 7: Conclusions, Discussion and Recommendations

7.1: Conclusions

The orthodox view of crime displacement is that displacement is not inevitable, is often less than anticipated, and that SCP initiatives may even lead to a 'diffusion of benefits'. This view is based on the theories of RCT and RAT, and makes assumptions about the choice structuring properties of offences and travel patterns of offenders.

In challenging this orthodox view; the main findings of this dissertation can be summarised thus:

- A secondary analysis of published empirical evidence from crime reduction initiatives, conducted as research for this dissertation, shows displacement in 63% of cases, and a review of offender studies shows displacement in 84.6% of cases. Therefore, the orthodox view, while based on sound evidence, is selectively biased in that it has ignored a greater amount of evidence to the contrary. Is the orthodox view therefore based on a myth?

The fact that the crime reduction literature has not considered the weight of the evidence is itself indicative of poor scholarship; but it would also appear, despite extensive searching, that this anomaly has not been questioned elsewhere in the academic literature. On this basis, the author claims that this dissertation makes an original contribution to criminological knowledge.

- A re-analysis of the Kirkholt Burglary Prevention Project shows that its claims in relation to reducing burglary on the estate, and the displacement of crime and diffusion of benefits to areas surrounding the estate are questionable in fact. A number of irrational assumptions seem to have been made in Kirkholt with regard to:
 - (a) evidence of displacement from burglary to acquisitive crime outside the estate which Forrester et al. (1998: 21), find 'implausible'; and
 - (b) previous research in connection with the 'own goal' phenomenon of theft of cash from pre-payment gas and electricity meters. Forrester et al. (1988), discount these findings, and use a much lower estimate of 50% in relation to Kirkholt.Furthermore, if the 'independent' reviewer David Farrington, who works for the Home Office, is indeed independent, and who upheld the findings of the Kirkholt team, then why are his findings unpublished and his report unavailable?
- Despite the acknowledged problems of measuring displacement, most SCP evaluations are crime specific and concentrate on spatial displacement in small geographical areas. They therefore fail to measure displacement accurately.

7.2: Discussion

The above findings demonstrate that the orthodox view of crime displacement and diffusion of benefits is overall, based on a questionable weighing of all the evidence. Nevertheless, Hayward (2007: 232), in a critique of RCT and SCP, cites the 'considerable success in combating certain forms of economic/acquisitive criminality (e.g. Ken Pease's work on

preventing repeat burglary victimization---)'. So it would seem that even the critics of RCT and SCP accept the orthodox view.

The SCP and RAT focus on preventing crime and the focus on acquisitive crime, neglects crime in which it is difficult to theorise that a rational calculation of costs and benefits has taken place. Expressive crimes such as graffiti, or violent crimes such as domestic violence, demand a much more detailed examination of the causes and variance in motivation behind these types of criminal behaviour. If RCT is to be a viable theory for all crimes, then it also has to address alternative reactions to the blocked opportunities of SCP initiatives. Therefore, in order to avoid these possible criticisms of SCP initiatives, an accurate assessment of their effectiveness, including any possible displacement is needed. Many SCP initiatives do not attempt to assess whether crime displacement has occurred at all, and if they do, most only try to measure spatial displacement. Thus, their overall claims to effectiveness must be questioned.

Furthermore, 'wishful thinking is no substitute for theoretical understanding' (Grabosky, 1996:39), and inappropriate applications of general theory, and a failure to take account of situational variations can render SCP initiatives ineffective. This is bad science. Effective interventions should understand the context and the mechanism of the intended activity, rather than concentrating on opportunity and deterrence in isolation (ibid; see also Pawson and Tilley, 1994).

If we accept that SCP initiatives need to be crime specific (e.g. Clarke, 1997), then; in order to prevent a particular crime, we can follow this RCT perspective through in Cornish and Clarke's (1987), assertion that the analysis of crime displacement needs to be crime specific also. The potential displacement will depend on the properties of the offence *and the characteristics of the offender*. However, it can be argued that SCP initiatives have neglected to measure all the possible manifestations of displacement, because they have concentrated on the spatial displacement of particular offences, and not the offender.

Barr and Pease (1990), have proposed already that the study of criminal careers should be seen as complimentary to crime prevention strategies. The potential for displacement might be greater where offenders have a dedicated criminal career, as they may be the most versatile offenders, but this could only be ascertained by dedicated qualitative research with offenders. Moreover, given that each offender will react differently to a given set of circumstances, research with offenders would give a more comprehensive view of displacement activity, and allow a more thorough understanding of criminal behaviour.

7.3: Recommendations

Based on the above findings and discussion, it is recommended that to fully analyse crime displacement:

1. A more comprehensive definition of displacement is required. The following is suggested : 'Crime displacement occurs when an offender (or potential offender), who is prevented from committing a crime, commits the same crime at another time or in another place; chooses a different target, different methods, or substitutes a different type of crime; or where a different offender (or potential offender), commits the same crime. The displaced crime may be malign (more serious), or benign (less serious), than the original prevented crime'.

2. A large scale qualitative study with offenders is undertaken to ascertain:
 - a more accurate picture of the level of crime displacement;
 - in cases where displacement has occurred, the type of displacement which has taken place;
 - the offender's motivation for the particular type of displacement; and
 - an exploration of how the decision to displace was reached, i.e. whether the costs and benefits were taken into account in a rational way.

Appendix 1.

Ten principles of opportunity and crime. Adapted from Felson and Clarke (1998).

| | |
|---|--|
| 1. Opportunities play a role in causing all crime. | Not just property crime, but fraud, drug dealing and violent and sexual offences. |
| 2. Crime opportunities are highly specific. | Bank robbery is reliant on a different set of opportunities from mugging for instance. |
| 3. Crime opportunities are concentrated in time and space. | Crime patterns vary by time and location even within high crime areas, reflecting different levels of opportunity. |
| 4. Crime opportunities depend on everyday movements of activity. | Offenders and targets move according to patterns of work, leisure etc. |
| 5. One crime produces opportunities for another. | Burglary can facilitate credit card fraud and buying and selling stolen goods for instance. |
| 6. Some products offer more tempting crime opportunities. | Otherwise known as VIVA, this reflects the value, inertia, visibility and access of crime targets. |
| 7. Social and technological changes produce new crime opportunities. | New products go through four stages: innovation, growth, mass marketing and saturation, making them highly desirable crime targets in the middle stages. |
| 8. Crime can be prevented by reducing opportunities. | Under four main methods: increasing the perceived efforts, increasing the perceived risks, reducing the anticipated rewards, and removing the excuses of crime. |
| 9. Reducing opportunities does not usually displace crime. | Evaluations of SCP initiatives have shown little evidence of the displacement of crime. |
| 10. Focussed opportunity reduction can produce wider declines in crime. | SCP initiatives in one location or time can lead to a 'diffusion of benefits' to a nearby location or time as offenders overestimate the scope of the initiatives. |

Appendix 2.

Twenty-five opportunity reducing techniques: Cornish and Clarke (2003).

| Increase the effort | Increase the risks | Reduce the rewards | Reduce provocations | Remove the excuses |
|--|---|---|--|---|
| 1. Harden targets. <i>immobilisers in cars, anti-robbery screens</i> | 6. Extend guardianship. <i>Cocooning, neighbour-hood watch</i> | 11. Conceal targets. <i>gender-neutral phone directories, off-street parking</i> | 16. Reduce frustration and stress. <i>efficient queuing, soothing lighting</i> | 21. Set rules. <i>rental agreements, hotel registration</i> |
| 2. Control access to facilities. <i>alley gating, entry phones</i> | 7. Assist natural surveillance. <i>improved street lighting, neighbour-hood watch hotlines</i> | 12. Remove targets. <i>removable car radios, pre-paid public phone cards</i> | 17. Avoid disputes. <i>fixed cab fares, reduce crowding in pubs</i> | 22. Post instructions. <i>'no parking', 'private property'</i> |
| 3. Screen exits. <i>tickets needed, electronic tags for libraries</i> | 8. Reduce anonymity. <i>taxi driver ID's, 'how's my driving?' signs</i> | 13. Identify property. <i>property marking, vehicle licensing</i> | 18. Reduce emotional arousal. <i>controls on violent porn, prohibit paedophiles working with children</i> | 23. Alert conscience. <i>roadside speed display signs, 'shoplifting is stealing'</i> |
| 4. Deflect offenders. <i>street closures in red light districts, separate toilets for women</i> | 9. Utilise place managers. <i>train employees to prevent crime, support whistle blowers</i> | 14. Disrupt markets. <i>checks on pawn brokers, licensed street vendors</i> | 19. Neutralise peer pressure. <i>'idiots drink and drive' 'it's ok to say no'</i> | 24. Assist compliance. <i>litter bins, public lavatories</i> |
| 5. Control tools/weapons. <i>toughened beer glasses, photos on credit cards</i> | 10. Strengthen formal surveillance. <i>speed cameras, CCTV in town centres</i> | 15. Deny benefits. <i>ink merchandise tags, graffiti cleaning</i> | 20. Discourage imitation. <i>rapid vandalism repair, V chips in TV'S</i> | 25. Control drugs/alcohol. <i>breathalysers in pubs, alcohol-free events</i> |

Appendix 3.

Full list of studies used in Table 1.

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Source: Hesseling (1994):

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