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Original Citation

Walmsley, Edward John (2014) Situational crime prevention: the public's engagement with, support for, and their opinions on the effectiveness of SCP techniques and measures within a residential setting. Masters thesis, University of Huddersfield.

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Situational Crime Prevention: The public's engagement with, support for, and their opinions on the effectiveness of SCP techniques and measures within a residential setting

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0962905011

A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the degree of MSc by Research

The University of Huddersfield

April 2014

Acknowledgements

First of all I would like to offer my sincerest thanks to those who have offered advice and support during the researching and writing of this project. In particular, I would like to give special thanks to my supervisors, in the near future Dr., Melanie Wellsmithand Dr. Rachel Armitage for all their relentless hard work, enthusiasm and much appreciated guidance and assistance throughout the entirety of the project. I would also like to thankall the members of the public who generously gave up their time tofill in the survey and to participate in the project,without them the research itself would not have been possible and for this I am extremely grateful.My family also deserve a small slice of appreciation, especially my brother who drove me to and picked me up from University every day and my dad who had to leave work and bring me my USB when I forgot it…Finally, I would like to pay a special acknowledgement to computer CS5C -28 within the Huddersfield University library, which allowed me to complete the research day in day out.

This research project is dedicated to my mum who hasalways given methe best possible chance to succeed through unremittingsupport and belief. Thank you, Mum.

"A man who has never gone to school may steal from a freight car; but if he has a university education, he may steal the whole railroad."

Theodore Roosevelt

Abstract

There was little previous literature assessing public opinions of specific crime prevention strategies. Therefore the aim of this study was to investigate whether or not the public engage with situational crime prevention (SCP) techniques and measures, whether they support it, and whether or not they believe it to be effective. These main three opinions were then tested against four factors: area of residence; socio-demographic features; victimisation; and fear of crime.

The study used a quantitative methodology and collected survey data from 196 participants from two separate locations of opposing crime rates within Kirklees, West Yorkshire. The study found that in general the sample strongly engaged with, supported, and felt SCP techniques and measures within their area of residence to be effective, although the latter measure was unconvincing. A key finding was that all three factors had positive correlations indicating that engagement can increase support and opinions on effectiveness and vice versa. Evidence was found to show that the four factors effected opinions on the effectiveness of SCP, however, no conclusive evidence was found to show that area of residence, socio-demographic features, victimisation, and fear of crime significantly affect engagement and support of SCP. Further results did indicate though, that the public were in favour of a number of Crime Prevention through Environmental Design features, especially improved community cohesion.

As a result of the findings, the study suggests a number of policy implications, such as increased community cohesion and educating the public on the positive effects and success of SCP implementation. As well as this, future research should concentrate on exploring fear of crime: in particular do security measures increase it and if so can preventative initiatives such as Designing out Crime and Secured by Design be effective in reducing it.

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List of Abbreviations

SCP   -   Situational Crime Prevention

CCTV -   Closed Circuit Television

RCP   -   Rational Choice Perspective

RAT   -   Routine Activities Theory

CPT   -   Crime Pattern Theory

BCS   -   British Crime Survey

SBD   -   Secured by Design

DOC   -   Designing out Crime

ALOs -   Architectural Liaison Officers

CPDAs-   Crime Prevention Design Advisors

FOC   -   Fear of Crime

Word Count: 27, 224

Introduction

Safety and freedom from crime are very important in everyday life, and are certainly high on people's agendas of most important issues in many countries worldwide (Glasson and Cozens, 2010). Crime prevention, however, can be seen to be both disarmingly simple and bewilderingly complex (Tilley, 2005). According to Tilley (2005), simple forms can include avoiding seemingly threatening people and places, trying to protect property from predators and keeping an eye open for those dear to us. The complex nature of crime prevention relates to issues such as; the process involved in the implementation of preventative measures, responsibility and involvement, the measurement of crime patterns, and estimating the costs and benefits of different methods of crime prevention (Tilley, 2005).

Many methods of crime prevention exist in research and application in society and can be classified in a number of different ways. This study will focus solely on 'situational crime prevention' (SCP). SCP, according to Clarke (1995), is a strategy which seeks to reduce the opportunities for specific categories of crime by increasing the associated risks and decreasing the rewards of committing a crime. It is important to point out that SCP has antecedents throughout history, and is used in everyday life by the public without being aware that they are taking steps to reduce crime. In ancient times, as Laycock and Heal (1989) note, the constructors of the Egyptian pyramids clearly pursued something akin to a strategy of design against crime to protect the buried Pharaoh's body and his belongings. Whenever individuals or groups seek to protect themselves or their property from the depredations of outsiders, their activities are preventative in one way or another (Gilling, 2000). SCP affects everyone, every single day, by either simply locking our houses and cars, or more intentional tactics such as walking on the better-lit side of the street, and avoiding geographical areas that we believe to be especially dangerous (Tilley, 2009). However, evidence of what the public think about SCP as a crime prevention strategy is scarce and this provides a niche for the current study.

This research aims to establish whether or not the public believe techniques and measures of SCP within a residential setting to be; effective, whether they support them, and how much they engage in them. Crime preventioninitiatives rely heavily on individual and community participation to successfully prevent crime and therefore public opinion on such matters is of vital importance. Now more than ever, as a result of the Police and Crime Commissioner elections that took place across the UK in November 2012. The Police and Crime Commissioner is charged with giving the public a voice at the highest level and this research aims to provide that voice on SCP as a crime prevention technique and measure.

The research will also look to assess these opinions and test them against four specific factors: area of residence; socio-demographic features, victimisation, and fear of crime. The literature on crime tells us that crime is concentrated in clusters or 'hotspots' (Sherman et al., 1989) and the shape of the clustering is greatly influenced by where people live. It is therefore important to consider an individual's area of residence as a factor affecting public opinion, and as a result the study will look to assess the potentially different outlooks that could emerge from two separate locations from within the Kirklees area that appear at opposite ends of the 'crime domain' from the English indices of

deprivation. Socio-demographic features have been included in the study to see whether or not factors such as age, gender, ethnicity, employment status, living arrangements and household income also affect engagement with, support of, and opinions on the effectiveness of SCP. Victimisation and the literature regarding 'repeat victimisation' will also be utilised as a factor that could potentially affect public opinion of SCP. This is particularly important to see if victims of crime engage in and support SCP more than non-victims. Finally, literature suggests that the public is adversely affected by their fear of crime; as such, any consequent decisions on security implications within residential settings, arguably, should reflect public opinion and this research aims to provide evidence of those opinions.

The study acknowledges that crime problems are complex and ever-changing. According to Hughes (1998), in unchanging conditions it might be possible to establish 'what works' and apply it in the reasonable expectation that what produced a preventative impact in one place and at one time would also produce the same effect at another time. Unfortunately this is not the case, as illustrated by Tilley (1993) who claims context impinges on the impact of crime prevention strategies which is important in ensuring success and identifying whether particular strategies will work across different contexts. Failure to do so is a key reason that program replication in the crime prevention field has such a dismal record (Crawford & Jones 1996; Tilley 1993). As a result, this research merely aims to give an insight, however small, into the opinions of the public on just one form of crime prevention, in one area of the UK.

This first chapter of the study will review the literature on SCP, discussing the background context; theoretical underpinnings; social and political policy; implementation; research evidence; and the nature and importance of public opinion on crime prevention. The methodology, in the second chapter, will firstly discuss the research strategy and design, the use of a quantitative methodology and explain why a questionnaire/survey was used as method of data collection. Next, the ethical considerations of the study will be assessed, the reliability and validity of the study, the results of a pilot, the sample used in the study, and finally the use of SPSS as a tool of data analysis will be reviewed. The third section of the study will examine the results and findings of the data through the use of descriptive and inferential statistics, such as frequency tables and tests of correlation and difference. The following section - the discussion, will explore the results, linking the findings back to the literature, as well as highlighting the various limitations of the study and discussing implications for further research and policy. Finally, the study will conclude the main findings from the research.

<div align="center">**Chapter One:**

Literature Review</div>

The purpose of the literature review is to explore the main bodies of literature that are relevant to, and have informed, the current study. Firstly, this section will discuss the background context of SCP, as well as its emergence and development. Next, the theoretical underpinnings of the approach within Environmental Criminology and opportunity theories will be explored such as; Rational Choice Perspective (RCP), Routine Activity Theory (RAT), and Crime Pattern Theory (CPT). The review will then investigate the social and political context in which SCP emerged and developed, for instance the development of multi-agency initiatives. Fourthly, implementation of SCP will be analysed, looking at the SCP framework as well as various SCP interventions such as; Crime Prevention through Environmental Design (CPTED) and Secured By Design (SBD). Next, the review will explore evidence from several important research studies that support SCP, as well as a number of studies that outline the criticisms and shortcomings such as geographical displacement. Finally, the importance of public opinion on crime and crime prevention is discussed, along with literature on factors that can impact upon public opinion such as fear of crime (FOC) and prior victimisation. It is the final section of the review which forms the focus of this study to investigate public opinion of SCP as a crime prevention strategy.

Background Context

In terms of crime, arguably the most important questions in criminology are: what causes crime and how can it be prevented? This study however, is only interested in how crime can be prevented, and in particular through SCP. Firstly, it is important to outline that there are many methods of crime prevention which are classified in different ways.

Brantingham and Faust (1976) distinguish 'primary', 'secondary' and 'tertiary' prevention, referring respectively to the prevention of the crime event in the first place, the prevention of criminality amongst those at risk of becoming involved and the prevention of continued criminal behaviour amongst those already involved in it. Van Dijk & de Waard (1991) then built on that and proposed a two dimensional approach to create a distinction between situational, offender-orientated and victim-orientated measures (Crawford, 1998:15). Further development was made by Tonry and Farrington (1995) who focused mainly on three strategies of crime prevention; 'social' also known as 'community' crime prevention (Hughes, 1998), 'developmental' prevention, and 'situational' prevention.

SCP offers a different approach (Clarke, 2008) and departs radically from most criminology in its orientation (Clarke and Mayhew, 1980). SCP focuses on the settings for crime, rather than upon those committing criminal acts, and seeks to forestall the occurrence of crime, rather than to detect and sanction offenders (Clarke, 1997). SCP is defined by Clarke as:

> Comprising measures directed at highly specific forms of crime that involve the management , design, or manipulation of the immediate environment in as systematic and permanent a way

as possible so as to reduce the opportunities for crime and increase its risks as perceived by a wider range of offenders (1983:225).

Such intervention relies upon a number of important requirements: firstly the need to be crime-specific (Cornish, 1994; Cornish and Clarke, 1987); which means that distinctions must be made, not between broad categories such as burglary and robbery, but rather between the different kinds of offenses falling under each of these categories (Clarke, 1997). An example of this can be seen in the study by Poyner and Webb (1991) who suggested different preventative methods for burglaries of electronic goods in the city, and the same offence carried out at newer distant suburbs. The second point within the definition is that of changing the immediate environment (Clarke, 1997) in order to affect assessments made by potential offenders about the costs and benefits associated with committing particular crimes. This implies some rationality and a considerable degree of adaptability, when making a crime/non crime decision on the part of the offenders. A further important point deriving from the definition is to reduce the opportunities for crime. By focusing on opportunities for crime, and thus making it harder for potential offenders to find a prospect for offending that is perceived as low risk, the numbers of crimes committed will naturally fall: "If there were no opportunities there would be no crimes" (Laycock, 2003:5). Finally, despite early applications of SCP involving common property crimes of theft and vandalism , the definition of SCP assumes to be applicable to every kind of crime, not just 'opportunistic' or acquisitive property offenses, but also to more calculated or deeply-motivated offenses (Clarke, 1997). This argument is evident in a number of studies using SCP with offences such as; robberies and assaults of immigrant shopkeepers (Ekblom et al. 1988), internet and identity theft (Newman and Clarke, 2003), and organised crime (Von Lampe, 2011).

The first signs of SCP can be traced back to work by writers such as Colquhoun in 1795 (Garland, 2000), but it is generally agreed that during the 1960s and 1970s the driving force behind the re-emergence and development of SCP in the UK was that of the Home Office Research Unit (Clarke, 1997; Clarke and Cornish, 1983), sometimes referred to as 'administrative criminologists' (Tilley, 2009; Young, 1994).The researchers from the Home Office Research Unit concluded that little more could be done to prevent crime through conventional justice system responses (Linden, 2007) and that the most effective approach would be to focus on situational strategies.

Prior to this, dispositional theories had dominated, however the 'crisis' in criminal justice, exemplified by increasing crime rates and recidivism, resulted in a loss of faith in the rehabilitative ideal (Hughes et al, 2002). This is most notably seen in Martinsons's misquoted 'nothing works'. The time was right to seek more 'realistic'; practical responses to crime.

As a result of the studies conducted by Home Office researchers as well as Martinson's study, the Home Office Research Unit, charged with making a practical contribution to criminal policy, reviewed the scope and effectiveness of other forms of crime control (Clarke, 1997). The review identified that reducing opportunities for crime and a 'situational approach', was a worthwhile topic for further research, largely on the basis of some findings about misbehaviour in institutions (Clarke, 1995).

This research showed that misbehaviour in juvenile institutions seemed to depend more on the way the institution was run than on the personality or the background of the juvenile (Clarke, 1995). Studies by Sinclair (1971) and Clarke and Martin (1975), taken together, provided striking evidence of the effects of the immediate environment on inmates' behaviour; this consequently pointed to the influence of the current environment on potential offending behaviour. Criminologists, including Matza (1964) and Briar and Piliavin (1965), began to explore the idea that delinquents were not strongly committed to their deviance, but in many cases were reacting to situational inducements.

This led researchers to hypothesize; if institutional misconduct could in theory be controlled by manipulating situational factors, the same might be true of other, everyday forms of crime (Clarke, 1995). Though not consistent with contemporary dispositional theory, support for the Home Office position was found in criminological studies that demonstrated immediate situational influences playing an important role in crime (Clarke, 1997). One early example was Burt's (1925) studies of delinquency in London, which showed longer hours of darkness promoted higher rates of property offending in the winter. Further, psychological research into personality traits and behaviour had found a greater than expected role for situational influences (Mischel, 1968). Taken together, this body of work suggested that criminal conduct was much more susceptible to variations in opportunity and to transitory pressures and inducements than conventional dispositional theories allowed (Clarke, 1997). It also became clear from interviews with residential burglars (Brantingham and Brantingham, 1975; Reppetto, 1974; Waller and Okihiro 1978) that the avoidance of risk and effort plays a large part in target selection decisions, with offenders reporting to researchers that they selected targets based on their perception of risk and reward (Clarke, 1997). This dynamic view of crime provided a more satisfactory basis for SCP and led to the formulation of a simple "choice" model (Clarke, 1977; 1980). This required information about the offender's immediate motives, moral judgements, perceptions of criminal opportunity, and ability to take advantage of them or create them, and assessment of the risks of being caught, as well as the likely consequences (Clarke, 1977).

This model was later developed into the Rational Choice Theory (RCT) (Cornish and Clarke, 1985); which forms a key underpinning theory of SCP. The RCT and other fundamental underpinning theories of SCP are discussed in the following section.

Theoretical Underpinnings

SCP departs radically from most criminology in its orientation and focuses on the situation in which crimes occur (Clarke, 1980; Clarke and Mayhew, 1980), and the overriding principle that reducing opportunities can result in immediate reductions in crime (Wortley and Mazerolle, 2008). Before exploring the three main theories that underpin SCP, it is important to briefly discuss a number of theories that shaped SCP and suggested that the environment, and the manipulation of it, can influence behaviour.

As Joyce (2009) points out, SCP methods are associated with the introduction of various forms of interventions (often of a physical nature) to alter the conditions within which crime occurs.This naturally links SCP with research conducted by authors such as Wood (1961), Jacobs (1961), Jeffery

(1971) and Newman (1973). Wood (1961) focused on the micro-environment of blocks of public housing in the United States, which emphasised the need to improve visibility in areas of leisure within public and semi-public spaces (Armitage, 2013). Jacobs' (1961) work has been highly influential within the fields of urban design, planning and designing out crime (Armitage, 2013). Jacobs recommended there should be a clear demarcation between public and private space as a means of promoting a sense of ownership amongst residents and also introduced the concept of 'eyes on the street' or natural surveillance (Armitage, 2013). 'Defensible space' (Newman, 1973) suggested focusing on reconstructing residential environments to foster territoriality, to facilitate natural surveillance and re-establish access control. It is argued that an important and crucial phrase in Newman's theory is the reference to the direct and implied notion of 'perceptions', which have been largely ignored by subsequent researchers (Cozens et al, 2010; Ham-Rowbottom et al., 1999) and forms a key outline of the current study.

Newman's theory gained popular support, however this was followed by widespread criticism, firstly on a practical level (Mayhew, 1979) and the notion of displacement. Kaplan claimed: "What we have is not crime prevention through urban design . . . but crime displacement" (Kaplan, 1973:8 cited in Cozens et al., 2001), a phenomenon that is discussed later. Despite such criticism, 'defensible space' formed a key principle of CPTED first coined by Jeffery in 1971 (Cozens et al., 2010). This approach asserts that urban design and land use is widely associated with enhancing or reducing opportunities for crime (Cozens, 2008b).The principles of CPTED adapted from Newman (1973) are: defensible space, territoriality, access control, surveillance, target hardening, image, and activity support(Cozens, 2005; Cozens, 2008a;Cozens et al., 2005). CPTED is a crucial component of the current study, but rather than exploring it fully here, it will be discussed in much further detail as an implementation of SCP, later in the review.

When SCP was first described, it was dismissed as atheoretical and simplistic (Tilley, 2005), but its theoretical base was strengthened by the development of three crime theories: RAT, the RCP, and CPT (Tilley, 2009). Also known as 'opportunity theories' (Felson and Clarke, 1998) and 'criminologies of everyday life' (Garland, 2000) because they treat the occurrence of crime as theoretically unproblematic, resulting from normal human impulses. The key premise of opportunity theories is that individual behaviour is a product of an interaction between the person and the setting (Felson and Clarke, 1998) and it is the perspective which has received much stronger empirical support than any other prevention strategy (Linden, 2007).

<u>Routine Activities Theory</u>

RAT considers how the structure of modern society and the routine activities of everyday life have created more opportunities for criminal activities (Armitage, 2013). The primary tenet, established by Cohen and Felson (1979), is based on how opportunities for criminal activity are maximised when there is a convergence in space and time of: a likely offender (someone motivated to commit crime), a suitable victim or target (someone or something that the likely offender will be attracted to offend against) and a lack of capable guardians (someone who is able and empowered to protect the victim

or target). From the SCP perspective, the capable guardian plays a decisive role in the crime event, as the actors who take up the responsibility of being the ultimate protectors and defenders of any target of crime—be it people or property (Reynald, 2010). Felson (1995) distinguishes three different types of 'guardian': those who watch crime targets, those (intimate) handlers who supervise potential offenders, such as parents, and those (place) managers who monitor the places in which crimes might occur. Felson (1995) also suggested guardians have a level of responsibility for discouraging crime set out by Clarke (1992) as: personal discouragement exerted by family andfriends; assigned discouragement, by those so employed; diffuse discouragement, by those employed but not assigned to that specific task; and general discouragement, by unpaid persons lacking a personal tie or occupational responsibility.

The central hypothesis is that criminals learn of possibilities for crime, or seek them out, as part of their daily, legitimate actions (work/school, visiting friends, shopping and entertainment) (Cohen and Felson, 1979). The approach takes the likely offender as given and focuses on guardians; anybody whose presence or proximity would discourage crime from happening; and 'targets' which are subject to the risk of criminal attack (Felson and Clarke, 1998). To highlight the importance of guardianship in correlation with crime rates, Cohen and Felson (1979) showed that as daytime occupancy of homes decreased as a result of factors such as the increased employment of women outside the home, there was a substantial increase in daytime residential burglaries. In relation to targets, according to Armitage (2013), opportunities include an increase in easily accessible, lightweight, and high value consumer products and the dispersal of individuals into more households, thus increasing the number of possible crimes. Felson and Clarke (1998) identify four main elements that influence a target's risk of criminal attack: as summed up with the acronym VIVA: value, inertia, visibility and accessibility.

According to Clarke (1999), VIVA was never intended to be a definitive model of 'hot products', rather it was a first attempt to summarize the attributes of the broader class of targets of predatory crime. As a result, the acronym CRAVED (Clarke, 1999) was designed to identify six important features of 'hot products', the key targets for acquisitive crime: Concealable, Removable, Available, Valuable, Enjoyable and Disposable. In relation to crimes the current study is interested in, such as residential burglary, 'hot products' may drive potential burglars to break into a house as they are unaware what is inside before entering. In terms of desirable objects, Cohen and Felson (1979) found that unless small, attractive items are carefully protected, theft rates will increase as these items become more common, however less suitable targets such as refrigerators and washing machines are less frequently stolen. Therefore in terms of crime prevention for such desirable hot products, an intervention which removes/demotivates the offender, makes the target unsuitable or introduces a capable guardian or discourages crime, is likely to successfully prevent crime taking place (Armitage, 2013).

A primary tenet of RAT is space, and in particular the places in which crime occur. As Chainey and Ratcliffe (2005) claim, a key component of tackling crime problems involves the analysis of where crimes take place and recognizing that crime has an inherent geographical quality. Crime does not occur randomly (Chainey et al., 2008) and tends to concentrate at particular places; RAT explains this

in relation to victim and offender interaction (Cohen and Felson, 1979) and how a convergence of both increases the opportunity for crime.

Rational Choice Perspective

The 'choice' model, touched upon earlier in the review, formulated to guide SCP efforts has been developed into a RCP on crime (Clarke and Cornish, 1985; Cornish and Clarke, 1986). RCP implies a notion of rationality and weighing up of costs and benefits that dates back to classicism and work by Bentham and the 'felicific calculus' (Hopkins-Burke, 2009). From this perspective offenders are conceived as being "amoral calculators of profit and loss" (Shapland, 1995; Hughes, 1998:64).This assumption of RCP is reiterated by Clarke:

Crime is purposive behaviour designed to meet the offender's commonplace needs for such things as money, sex, status, and excitement, and that meeting these needs involves a decision making process by weighing up opportunities, costs, and benefits (1995:98).

RCP borrows concepts from economic theories of crime (Becker, 1968; Clarke, 1995) but relationships between concepts were expressed, not in mathematical terms as was the case in Becker's normative model, but in forms of 'decision' diagrams (Clarke and Cornish, 1985; Cornish and Clarke, 1986). Decision making or 'rationality' is crucial to the premise of RCT, and a key component is that presuming rationality is not the same as presuming perfect rationality (Cornish and Clarke, 2009). From Clarke and Cornish's perspective offenders invariably act in terms of a 'limited' or 'bounded' form of rationality, and will not always obtain all the facts needed to make a wise decision and the information available will not necessarily be weighed carefully (Clarke, 1987).Bennet (1986) observes that an offense rarely happens because of a single decision to act. A series of decisions will be made, starting with the original choice to offend, somewhere at some time, and ending with the final decision to act against a particular target.

According to Ekblom (2001), RCP suggests making specific changes to influence the offender's decision or ability to commit crimes at given places and times. Armitage (2013) states that preventative suggestions seek to influence an offender's decision or choice to commit a crime through (1) increasing what they perceive to be the risks involved in committing that offense, and (2) reducing the rewards should that crime occur. This can also be achieved by focusing on offenders' motivation(s) to commit crime. Clarke (1987, 1999) claims that offenders choose to act in a certain way because these actions appear *to them* to be rational in the circumstances in which they find themselves and in terms of their knowledge base and cognitive processes. This notion is backed up by studies that interviewed residential burglars (Brantingham and Brantingham, 1975; Reppetto 1974; Waller and Okihiro 1978) who found that offenders admitted they selected targets based on their perception of risk and reward, highlighting that avoidance of risk and effort plays a large part in target selection decisions (Clarke, 1997).Armitage (2013) concludes that the aim of RCT is to ensure that for the offender the perceived costs outweigh the perceived benefits of offending.

Crime Pattern Theory

CPT has antecedents in environmental criminology and environmental psychology. It considers how individuals involved in crime move about in space and time and seeks to explain the observation that crime is not randomly distributed in time and space, or uniformly across neighbourhoods or social groups, or during an individual's daily activities or their lifetime (Hirschfield, 2011). According to Spelman and Eck (1989), the concentration of crime in repeat places is more intensive than it is among repeat offenders. Crime is concentrated in clusters or 'hotspots' (Chainey and Ratcliffe, 2005) and the shape of the clustering is greatly influenced by where people live, how and why they travel or move about, and how networks of people who know each other spend their time. These crime-prone locations emerge from a dynamic urban 'backcloth' formed through the interplay of roads, land use and economic structures, varying through time as people's activities around them change (Beavon et al. 1994; Brantingham and Brantingham 1981; 1993; 2008). As a result, hotspot mapping (Hirschfield, 2001) has become a popular analytical technique used by law enforcement, police and crime reduction agencies to visually identify where crime tends to be highest, aiding decision-making that determines where to target and deploy resources (Chainey and Ratcliffe, 2005). According to Ratcliffe (2004) with the development of planning solutions such as CPTED and SCP, there have been greater claims on the crime prevention budgets of local authorities and city planners. Hotspots allow local councillors to determine the areas of greatest need (Ratcliffe, 2004). A study by Tabangin et al., (2008) observed that with the use of Geographic Information Systems (GIS) (Hirschfield et al., 2001) some characteristics of the hotspot places' physical design and milieu may play an important role in creating opportunities for crime.

CPT also has antecedents in environmental psychology in the form of mental or cognitive mapping, which is a representation of our environment used to guide the ways in which we move through that environment (Kitchin, 1994). Brantingham and Brantingham (1981) used a very similar concept and theorised about our awareness and activity spaces; awareness space consists of the places about which we have spatial knowledge and activity space consists of the places we move through and spend our time. According to CPT, like anyone else, offenders have patterns of routine activities, they go to jobs, visit friends, and carry out other daily activities (Taylor, 2002). The theory suggests that during the course of these daily activities, criminals seek out or happen across opportunities to commit particular criminal acts (Beavon et al., 1994). Journey to crime research suggests on average offenders reside within two miles of the areas where they commit their crimes(Costello and Wiles, cited in Hirschfield and Bowers, 2001; Groff & McEwen, 2006) as a result of the unwillingness of offenders to travel to areas they are unfamiliar with (Brantingham & Brantingham, 1981) because it increases both the odds of apprehension and the effort they have to put into the commission of the crime. Scholars have termed this pattern distance decay (Pizarro et al., 2007).

Brantingham and Brantingham (1995) outline CPT in terms of three main concepts: firstly, 'nodes' is a term from transportation and refers to where people travel to and from with the emphasis on movement. Opportunities to offend are more likely to occur around personal activity nodes, such as home, school, and work, i.e. places where offenders feel comfortable and that they know well. Secondly, 'paths' are the routes between nodes, and these routes are vulnerable to crime with the

convergence of potential victims/targets and offenders. Finally, 'edges' refer to boundaries of areas where people live, work, shop, and spend their leisure time. According to (Brantingham and Brantingham, 1981), some crimes are more likely to occur at edges – such as racial attacks or robberies - because people from different neighbourhoods who do not know each other come together at edges. According to this theory, high crime areas will tend to be those where lots of nodes and/or paths of potential victims/targets and offenders overlap.

A study by Beavon et al. (1994) investigated the influence of street networks on patterns of property crime in British Columbia, and found property crimes are more likely to occur on street segments that are readily accessible, and have high flows of traffic or people. Further study of this is prevalent in the UK today, under the SBD scheme, a key finding of which is that permeable housing estates experience more crime (Cozens et al., 2007). This will be discussed in greater detail in the 'Implementation' section of the review.

The theories underpinning SCP however, are not without criticism and most notably its ignorance of the root causes of crime (Laycock and Tilley, 2005) which forms the vast body of criminological research. Critics of SCP outline that the root causes of crime lie in deprivation resulting from genetic inheritance, personality and upbringing, or from social, cultural, racial and economic disparities (Clarke, 2005). According to Clarke (2005) many of the same critics who believe that SCP diverts attention from the root causes of crime also accuse it of being a fundamentally conservative approach to crime developed within the civil service, content to manage the problem and keep it from overwhelming the forces of law and order. Hayward (2007) criticises the SCP assumption that offenders are rational beings, and claims it cannot explain emotive, expressive or 'spur of the moment' crimes (Hayward, 2007). This is built upon by the argument that SCP theory does not seek to explore, nor are they interested in, questions of aetiology and therefore ignore important factors such as drug taking, psychological abnormalities and the notion that some offenders see risk as an attraction (Maguire et al, 2007). Research that provides an important critique of SCP theory assumption is that of 'criminal careers' and specifically highly active offenders or habitual offenders (Svensson, 2011) who commit crime on a day-to-day basis. Wolfgang et al. (1972) found that 18 per cent of offenders, or six per cent of the birth cohort of Philadelphia males, were responsible for 52 per cent of the total number of offences committed by the cohort to age 18. This suggests that opportunity theories are defenceless against such findings, however, this reiterates the vital importance of perceptions and how individuals with different dispositions, see opportunities for crime differently, or even at all.

Social and Political Policy

The initial rise of SCP in government, as discussed in the previous section, was related to the crisis of the Criminal Justice System (CJS) during the 1970s which revolved around rising crime rates, and the collapse of faith in the rehabilitative ideal. As well as this, as Hughes et al. (2002:16) suggest, "where cure appears unavailable, and containment is very expensive, prevention looks very attractive", particularly in the face of a high-profile problem like crime. According to Crawford (1998), the crisis of

the CJS combined with and fuelled the increased politicisation of crime after the 1979 election – the incoming Thatcher government had made crime a high-profile element in its campaign. In 1979, the emphasis of the Conservative government was on "fighting crime" and the focus on those already involved in criminal behaviour (Koch, 1998). The Thatcher government believed crime prevention should not be a task for the police alone and is instead a task for the whole community. The conservative 'responsibilisation' strategy, or critical 'arm's length but hands on' (Taylor, 1997), was to appeal to community for private citizens to take more responsibility for their own security (through partnerships), therefore alleviating the pressure of rising crime rates, as well as reducing public spending and thus cutting taxes.

SCP's emergence to political policy through the Thatcher government has resulted in critics accusing SCP of being a fundamentally conservative approach to crime, but according to Knepper (2009), this is more a case of guilt by association than premeditation. Consistent with Crawford (2000), who suggests that the reception of SCP strategies is a product of its time, and also reflects and echoes a wider political transformation in modes of governance. Clarke (2005) claims there is scant evidence that SCP appeals to conservative values and states there is a 'superficial fit' between SCP and conservative ideas of 'small government', value for money and individual responsibility (2005:57-58). However, conservatives are more likely to see SCP as an inadequate response to crime because it neglects the punishment of those who have broken the law and caused harm to society (Clarke, 2005).

Compared to other approaches, successful SCP tends to produce rapid benefits; which is attractive to political appointees who tend to have short time horizons (Tonry and Farrington, 1995). According to Clarke (1997), the left might have welcomed its focus upon local problems and local decision-making, and liberals might have been attracted to its essentially non-punitive philosophy. Despite this, SCP has suffered a lack of political support (Clarke, 1997). Clarke states:

> SCP lacks a natural consistency among politicians… It is too easily represented as being soft on crime; demands new resources in addition to those already allocated to the CJS; and is easily characterised as demonstrating a failure of political will in dealing with the severe social and economic problems that confront society (1997:40).

Clarke explains: "While its role in policy now seems assured, SCP still lacks a strong professional constituency. Since it can be used by such a wide range of public and private organisations, SCP will never be of more than marginal interest to any particular group of managers" (1997:41).Despite this, SCP is attractive to a range of politics and is also the dominant approach to crime prevention.

SCP continues to have a key rolein crime prevention policy through multi-agency partnerships. The Morgan Report (Home Office, 1991) explored ways in which multi-agency crime prevention could make crime prevention normal business, and recommended that leadership should be placed in the hands of local authorities. It also introduced the concept of 'community safety', which requires both situational and social methods of crime prevention (Joyce, 2009). In the course of the 1980s, community safety focus shifted towards fear of crime (FOC) and fear reduction as a prevention measure following the discovery of an apparentlydisproportionate level of fear to the actual incidence

and patterns of crime in the British Crime Surveys (Gilling, 1999) now Crime Survey for England and Wales. FOC is relevant to the current study and is investigated in more detail later in the review. According to Joyce (2009), the multi-agency (or what we now term 'partnership') approach is based upon a belief that crime can be most effectively prevented by various bodies working together rather than leaving the entire burden of crime-fighting in the hands of the police. In particular, local authorities and local authority organisations saw that community safety was a matter of public concern in which they had a key interest and significant role (Tilley, 2002), which is of particular interest to the current study.

Though Morgan's main recommendation was rejected by the government at the time, developments initiated by post-1997 Labour governments sought to build the approach proposed in the Morgan Report. An important piece of legislation that resulted was the Crime and Disorder Act 1998, which put partnership crime prevention on a statutory footing (Tilley, 2002) and gave local government a major role in this area of work through the establishment of Crime and Disorder Reduction Partnerships (Joyce, 2009). This role was re-enforced by Section 17 of the legislation, which imposed a statutory duty on agencies that included local government and police authorities to "do all that it reasonably can do to prevent crime and disorder in its area" (Joyce, 2009:41). Examples that relate to SCP and the current study can be found in terms of CPTED, such as local authority planning departments and the design of the local environment to promote territoriality and a 'sense of ownership'(Cozens, 2008b).Further emphasis on multi-agency cooperation was evident in Home Officecrime reduction programmes such as the 'Reducing Burglary Initiative' in the north of England (Hirschfield, 2004).According to Hirschfield (2004), findings from the Northern Consortium on the Impact of the Reducing Burglary Initiative (RBI) showed success is possible, but there are many elements of success, and implementation is a key driver of this. Implementation of SCP is discussed in more detail further in the review.

It is clear that all crime prevention strategies have their strengths and weaknesses, however, SCP is now arguably the most powerful and hegemonic discourse of crime prevention in the twenty-first century, excluding mass incarceration through imprisonment (Hughes, 1998).

Implementation

As previously discussed, Clarke (1983) proposed that SCP strategies are characterized as being directed at specific crimes, including manipulations of the environment, and are focused on reducing the opportunities and rewards for crime (Lee, 2010). In order for SCP strategies to be successful Clarke (1997) developed a framework that included four components:

Firstly, a theoretical foundation drawing principally upon routine activity and rational choice approaches, as outlined in section two of the literature review. Secondly, a standard methodology based on the action research paradigm in which researchers and practitioners work together, as discussed in section three of the review. Thirdly, the framework suggests a set of opportunity-reducing techniques when implementing SCP, which this section of the review will focus on. Within

SCP there are now five main mechanisms (five techniques for each) that are used. The classification of opportunity-reducing techniques is constantly undergoing change. This has been increased from eight, to12, to 16, to now 25. Clarke states: "This is made necessary by developments (i) in theory, which suggests new ways of reducing opportunities, (ii) in practice, as new forms of crime are addressed by situational prevention and (iii) in technology, which opens up new vistas for prevention, just as it does for crime (1997:15). Another reason for such change is the effect of criticism, which has led to further conceptualisation and more precise specifications (Lee, 2010). Such critical contributions are that of Wortley (1996) who argued there were sound (sociological and psychological) reasons for disentangling the internal and social components of shame. He further suggested that SCP be framed with the recognition that offenders' perceptions of costs and benefits are important contextual elements but that additional identifiable factors precipitate crime and work to induce or provoke criminal behaviours (Wortley, 2001). As a result, the most recent iteration of SCP (Cornish and Clarke, 2003) incorporates some of Wortley's (2001) sentiments. Thus the 5 mechanisms are currently: increasing the effort required to commit a crime; increasing the risks; reducing the rewards; reducing provocations; and removing excuses (Cornish and Clarke, 2003). The final part of the SCP framework requires a body of evaluated practice including studies of displacement, which is to be discussed in greater detail in the next section of the review.

Based on this framework for SCP, many strategies for crime prevention have been proposed, developed, and implemented (Lee, 2010). Despite the array of studies on the successful implementation of SCP techniques, the current study is focused on residential settings for crime and, for reasons of brevity, will therefore only outline relevant research studies. There are a whole host of studies showing the impact, mostly successful, of SCP interventions (e.g. Clarke's 2 volumes on SCP Successful Case Studies). Specific relevant examples include the success of alley-gating and reducing crime through both physical access control and improved community cohesion (Bowers et al., 2004) references) and the impact of street lighting, particularly on reducing fear of crime (Painter and Farrington, 2001). Results from such studies strengthen SCP's underpinning theory and specifically the notion of discouraging crime and increasing capable guardianship (Felson, 1995) within the crime pattern theory.

An area of SCP that has received a lot of attention and study is the use of closed circuit television (CCTV) which refers to 'formal' (Armitage, 2013) surveillance and observing suspicious behaviour. However, much of the research has been carried out on town/city centres (Short and Ditton, 1996; Tilley, 1993) and the current study is only concerned with residential areas and therefore CCTV is not really applicable. Despite this, questions on CCTV have been included in the studies survey, as CCTV is so ubiquitous in the UK and more and more people recognise it as a form of crime prevention.

Knowing where to implement crime prevention strategies and to what types of crime is of huge importance. This is especially important in high crime areas outlined by Wilson and Kelling's (1982)

'broken windows' theory which suggests that police could more effectively fight crime by targeting minor offenses, such as anti-social behaviour. They hypothesized that untended disorder increases fear of crime in a community, starting a chain of events that eventually leads to heightened levels of crime. According to Cozens and Hillier (2008) Wilson and Kelling's 'Broken Windows' thesis (1982) stressed the vital importance of maintaining the built environment as a physical indicator that influences levels of social cohesion, informal social control and reduces fear of crime, which are key premises of CPTED.

Crowe defines CPTED as:

> The proper design and effective use of the built environment, that can lead to a reduction in the fear of incidence of crime…The goal of CPTED is to reduce opportunities for crime that may be inherent in the design of structures or in the design of neighbourhoods (2000:46).

According to Cozens and Hillier (2008), CPTED, frequently referred to as "designing out crime" (DOC) (Cozens, 2008b), is increasingly being used worldwide as a planning tool for crime prevention and is being practiced and refined as part of local, state and national government policy (Cozens et al., 2008; Schneider and Kitchen, 2002, 2007). Cozens et al's (2005) review of CPTED components intimates that they have all individually contributed to reducing crime and the FOC in a broad range of studies, which is beyond the scope of this review to discuss in any detail. As with most crime prevention strategies, there are limitations to CPTED. For example, Merry (1981) cited in Cozens et al., (2005) identified undefended space where cultural and social factors influence the propensity for resident action and self-policing. Such criticism led to 2nd generation CPTED (Saville and Cleveland, 1997) which extends beyond physical design to include social factors, as well as active community participation (Cozens et al., 2005). According to Cozens et al, (2005) such developments in CPTED and SCP in Britain have popularised, refined and advanced the design-affects-crime debate.

Cozens et al. (2005) claim CPTED in the UK is arguably operationally best represented by the SBD which is based upon the key principles of CPTED, and aims to encourage the building industry to design out crime at the planning stage (Armitage and Monchuk, 2011). Pascoe and Topping (1997) suggest that the scheme was influenced by both environmental criminology (including SCP and defensible space) as well as theories which focused upon offenders as decision makers (including RCP). The scheme is managed by the Association of Chief Police Officers Crime Reduction Initiatives (ACPO CPI) whilst the day-to-day delivery of the scheme is conducted by Architectural Liaison Officers (ALOs) or Crime Prevention Design Advisors (CPDAs) working for individual police forces throughout the United Kingdom (Armitage, 2014). The principles of SBD are: SBD sets standards of physical security for each property and its boundaries; SBD estates are designed to achieve maximum natural surveillance without compromising the need for privacy; SBD estates are designed to include a minimum number of access/egress points in an attempt to avoid unnecessary entry onto the estate by non-residents and potential offenders; SBD estates should have a programmed management system in place to maintain the area, which includes the removal of litter and graffiti;

and territoriality: in an attempt to achieve maximum informal social control, if space has a clearly defined ownership, purpose and role, it is evident to residents within the neighbourhood who should, and more importantly who should not be in a given area (Armitage and Monchuk, 2011).

Armitage and Monchuck (2011) highlight four published evaluations of the effectiveness of the SBD scheme (Armitage, 2000; Brown, 1999; Pascoe, 1999;, Teedon and Reid, 2009), which each conclude that SBD confers a crime reduction advantage. Relative to the current study, Pascoe (1999), using residents' surveys alongside police recorded crime data and focus groups with local residents, found that both the residents' perceived levels of crime and the actual levels of crime had been reduced following modernisation to SBD standards on ten estates within the UK (Armitage and Monchuk, 2011). As well as evaluations of the SBD scheme as a whole, there has been an abundance of studies demonstrating that the principles upon which SBD is based each work to reduce crime, disorder and the FOC (Armitage and Monchuck, 2011).

As Cozens (2008b) argues, the potential impact of crime and the FOC on our neighbourhoods therefore deserve the full attention of planners. The use of SCP initiatives worldwide is undeniable; such as CPTED and SBD in the UK. On a global level, the United Nations Human Settlements Programme lists changing environments that [are] conducive to crime by using CPTED as one of its implementation tools (Cozens, 2008b). Even the studies which do not support CPTED (of which there are many) tend to report that design factors were less effective than other variables, rather than reporting no effectiveness whatsoever (Cozens et al. 2005). However, SCP is not without assessment and the following section of the review will analyse the evidence that critiques SCP as a crime prevention initiative.

<u>Critiques</u>

As with everything in research, there are studies and evidence to support, as well as studies and evidence that criticise. Within the scope of this review it is only possible to discuss, in any detail, the critiques of SCP that relate to a residential setting, with a number of concepts being outlined including; displacement, the notion of a 'security market', and the view that SCP can lead to a fortress society. Also in this section of the review, the array of studies and evidence that support SCP will be discussed, such as the early crucial findings of the British Gas Suicide story, the indication that displacement may be exaggerated and in fact a diffusion of benefits takes place, and a review of the costs and benefits of SCP. The section will then conclude with a number of studies that have assessed the effectiveness of SCP as a crime prevention initiative as a whole.

Like all research there are many criticisms of SCP, as discussed throughout the review, however, the criticism that has received arguably the most attention is the idea of '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).Repetto (1976) outlined five types of crime displacement: committing the intended crime at a different time (temporal); committing the intended

crime in a different way (tactical); committing the intended crime type on a different target (target); committing the intended crime type to the same target in a different place (spatial); and committing a different type of crime (functional). Barr and Pease (1990) identified a sixth type: where a crime opportunity is so compelling that the offense will continue to be committed by a succession of different offenders filling the 'opportunity' vacuum (perpetrator). As well as these forms of displacement, 'malign' displacement can also take place, in which displaced crime shifts to a more serious offense or results in more harmful consequences (Barr and Pease, 1990). As Maguire et al. (2007) claim, displacement constitutes a major challenge for situational approaches and presents considerable difficulties for evaluating their effectiveness.

However, a study by Hesseling (1994) found no evidence of displacement in 22 out of 55 SCP projects, and only partial displacement was found in the remainder. A key study that highlights a lack of displacement is the British Gas Suicide Story in 1988 (Grove, 2011). This pivotal piece of research examined the marked decline of the suicide rate in England and Wales following the detoxification of the domestic gas supply during the 1960s and 1970s (Clarke and Mayhew, 1989). In 1963, gas was used as the technique for killing oneself in more than 40% of suicide cases. Carbon monoxide was reduced in the gas supply in Britain during a search for a cheaper form of gas, thus rendering it relatively harmless. Displacement to another suicide method was expected. However, Clarke and Mayhew (1988) instead found that the suicide rate fell dramatically and few of the people prevented from poisoning themselves with gas killed themselves in some other way. This study demonstrated that even with such a deeply motivated issue as suicide, the expected displacement did not occur (Grove, 2011) and provided a catalyst for the notion that crime could be greatly affected by reducing opportunities (Clarke and Mayhew, 1989).A more recent study by Guerette and Bowers (2009) examined 102 evaluations of SCP projects in an effort to determine the extent to which crime displacement was observed and found that 'spatial displacement' was observed in 26 percent of those observations and 'diffusion of benefit' in 27 percent of the observations.

Further, recent researchsuggests that displacement fears may be exaggerated and that under some circumstances the opposite effect occurs: instead of crime displacing, the benefitsofthe prevention efforts diffuse to unprotected locations (Eck and Weisburd, 1995). Diffusion of benefits refers to an unintended reduction in crime caused by a crime prevention initiative – for example, reduction may occur in nearby areas. Clarke and Weisburd define this 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 (1994:169)

Beyond displacement, SCP has faced further criticisms. It is claimed that it encourages a 'security market' (Messenger, 2007), which is consistent with findings from Krahmann (2011) who states the turnover of private security companies in the UK increased by 330% between 1991 and 2005. As a result, researchers are increasingly highlighting the idea that security companies inflate risks in order to sell their products and expertise, known as the commodification of security (Whattam, 2011).It can

therefore be argued that it is in the interests of the private security companies, motivated by profit, to cultivate a fear of others in order to maximise sales. In order to create a continuing, and increasing, demand for security products, private security companies must devise new situations and threats to market to consumers; the FOC is an economic opportunity to be exploited (Lyon, 2003).It can be argued that in the UK successive governments since the 1970s have utilised this fear (Bottoms, 1995), which in turn has provided the political legitimation for the increased use of SCP (McLaughlin and Muncie, 2000). Asking the public to protect themselves in a time of global economic decline causes significant problems, and has led to arguments that SCP only protects the rich who have the greater ability to prevent crime occurring, whilst the poor are limited to the after-the-fact services of the public police (Brodeur and Shearing, 2005). As a result, it is also said that SCP blames victims for not protecting themselves (Clarke, 2000).

Another criticism of SCP is it has been associated with the rise of 'fortress societies' in which the logic of target-hardening is taken to its extreme in the form of gated communities where people live secured behind walls, gates, and other security paraphernalia (Bottoms, 1990; Maguire et al., 2007) which results in the growing alienation of the population and the destruction of communities (Clarke, 2005). As Sampson et al., (1997) claims, past research has consistently reported links between neighbourhood social composition and increases in crime, through a lack of both informal social control and cohesion among residents. The number of these communities is increasing rapidly, highlighted in a study by Blakely and Snydr (1998) who estimated the number of American families then living in some form of gated community at about 2.5 million. Barberet and Fisher (2009) have posed the question 'can security beget insecurity?' and the notion that an increase in security awareness can result in an increase in FOC.

SCP also raises significant ethical issues with regard to civil liberties and human rights. Mechanisms can be intrusive, most notably CCTV and the idea of 'big brother' (Clarke, 2005; Newman et al. 1997). However, it is argued that the democratic process protects society from these dangers. People are willing to endure inconvenience and small infringements of liberty when these protect them from crime (Clarke, 2005).

An important criticism of crime prevention and SCP is implementation failure versus theory failure, and the notion that in order to successfully tackle crime in specific areas, it requires in depth consideration of the crime problem as well as acknowledgement of available crime prevention strategies. As Hirschfield states: "Knowing how, where and when to intervene requires both an understanding of the nature of the crime problem and an appreciation of what is available in terms of interventions and crime prevention strategies for tackling crime" (2005:629). The inter-relationships between theory and implementation is crucial to the relevance and effectiveness of crime prevention measures (Hirschfield, 2005). Crucially, as Hirschfield (2004) states, implementation failure (i.e. the inability to carry out the intended interventions) and/or theory failure (i.e. the misdiagnosis of the crime problem and perceived solutions) may raise the FOC, which is discussed in more depth in the following section of the review.

However, the economic benefits of SCP strategies have been shown to be substantial (Welsh and Farrington, 1998). In most industrialised countries, particularly England and Wales, situational prevention dominates governmental crime prevention policy and local practice. A study by Welsh and Farrington (1999) investigated 13 SCP studies that permitted the calculation of benefit to cost ratios, enabling an assessment of programme efficiency, and found that SCP can be an economically efficient strategy for the reduction of crime.

A recent study by Guerette (2009) looked at the current body of SCP evaluations by examining 206 evaluations of SCP efforts conducted from 1970 to 2007. Of the 206 SCP evaluations reviewed, 75 percent concluded that the intervention was effective overall (Guerette, 2009).

An important point, raised by Crawford (2000), is that RCT does not presuppose that interventions are effective on their own terms merely that they are perceived as such by potential offenders. Hence SCP mechanisms can be effective without being effective – and 'diffusion of benefits' will often be explained by offenders not knowing the limitations of the SCP interventions (Clarke and Weisburd, 1994; Felson and Clarke, 1998). However, the evidence provided above supports the effectiveness of SCP, as well as the development of SBD practices on somehousing estates, and the worldwide implementation of SCP as a crime prevention toolshows that there have been significant successes within SCP (Grove, 2011). However, effective crime prevention programs require widespread community support, and an informed public whose perceptions about crime prevention are based on the best available evidence (Solicitor General Canada, 1984).

Public Opinion

Firstly, it is important to point out the concept of attitude formation and change (Bohner and Wanke, 2002). Attitude formation is a complicated entity and is affected by a multitude of factors such as genetic influences (Tesser, 1993); mood; subjective experiences; heuristic processing; and behaviour (Bohner and Wanke, 2002). According to Bohner and Wanke (2002) attitudes are not directly observable, so if one wants to know a person's attitude one has to find some other way of assessing it. The way in which the current study measures attitudes and opinions is set out in the following chapter.

To the public, crime is everywhere, in their homes and on their television screens (Roberts and Stalans, 1997). Maguire and Pastore (1994) found that 37 per cent of the public believed crime was the number one problem confronting America, a much higher percentage than any other social problem, including employment and the economy. However, the literature on public perceptions of crime indicates that despite interest in crime being high, their knowledge is poor (Chapman et al., 2002; Roberts and Hough, 2002).

This becomes problematic when measuring public perception of crime trends across many countries, in that the general public believe that crime is increasing when in fact it is falling (Chaplin et al., 2011; Roberts and Hough, 2005). Despite the misconception that the crime rate is increasing at a national level, respondent perceptions of relative levels of crime in their local area vary in close alignment with

crime as measured by statistical sources, such as the Crime domain of the English Indices of Deprivation (Hall and Innes, 2011), which is utilised in this study. Hall and Innes (2011) found evidence that perceptions of crime in the local area were related to personal experiences, such as those who had been victims of crime in their local area, those living in areas of high physical disorder and those who experienced problems with anti-social behaviour in their local area. A further explanation for the general misconception of crime is that of high profile or "signal crimes" (Duffy et al., 2008) being consistently used in the media, which is influential to public opinion about crime (Jewkes, 2011; Roberts and Hough, 2002).

Further misconceptions are apparent amongst politicians who believe the public prefer punishment to preventative methods, so as not to appear "soft on crime" (Welsh and Farrington, 2012:129). Politicians who support "get tough" responses to crime (and rebuke prevention) have long claimed to have the full backing of the general public. According to Welsh and Farrington (2012) there is public support for "get tough" responses to crime, especially for violent acts but this support does not reach the levels often claimed and, more importantly, is not as high when punishment is compared to alternatives such as prevention programs (Cullen et al., 2007). This exaggeration of the 'punitiveness' of the general public on the part of politicians and others has become known as the "mythical punitive public" (Roberts, 2004 cited by Welsh and Farrington, 2012:130). Indeed, new research provides evidence to substantiate that citizens are highly supportive of crime prevention and are even willing to pay more in taxes to support these programs compared to other responses (Roberts and Hastings, 2012). Maguire and Pastore (2004) found that when respondents of a national poll were given a choice of four ways the government should spend its money to reduce crime; 41 percent chose prevention initiatives, compared to only 25 percent for punishment. Findings such as these are striking since crime prevention policies and programmes do not generate the kind of material considered newsworthy by the media (Jewkes, 2011; Roberts and Hastings, 2007). Since the media constitute the primary source of information for the public, it would be unreasonable to expect people to be as familiar with prevention initiatives as punishment policies (Roberts and Hastings, 2007). Despite this lack of profile, the public around the world remains supportive of crime prevention strategies. According to the Solicitor General of Canada in 1984 (Roberts and Hastings, 2007), the effectiveness of crime prevention programs depends upon the support of the general public, which provides an important justification for the current research in looking at the extent to which the public support and engage in SCP techniques and measures.

Fear of Crime

It is widely suggested that SCP not only neglects FOC, but contributes to it. It can be argued that in the UK successive governments since the 1970s have utilised this fear (Bottoms, 1995) to produce an 'anxiety market' (Lee, 2007), which in turn has provided the political legitimation for the increased use of SCP security measures (McLaughlin and Muncie, 2000). Paradoxically, visible signs of security hardware may make some people more fearful, sensing that high security must indicate high risk (Halliwell, 2010).

FOC has been found to have a detrimental effect on an individual's health (Hirschfield, 2004) and shown to impact upon health through 'symptoms' such as stress, depression, and health harming 'coping mechanisms'. Dolan and Peasgood (2007) found that FOC was the third most frequently identified factor affecting quality of life, only following money and health. Results from the BCS have suggested that the public tend to be more fearful of crime at certain times (i.e. at night) and research has shown that a well-lit area is perceived to be less dangerous than one that is dark (Nasar and Fisher, 1993). A meta-analysis of street lighting evaluations in both the United Kingdom and United States, found that lighting reduced both crime and fear (Farrington and Welsh, 2002). More recent research highlights the need for a continued examination of the influence of specific levels and types of lighting, on crime and fear (Cozens et al, 2003). Despite the obvious negative impacts FOC can have on individuals, a study by Jackson and Gray (2010) showed that one-quarter of those individuals who said they were worried about crime took precautions; these precautions made them feel safer. FOC can therefore be helpful as well as harmful: some people are both able and willing to convert their concerns into constructive action (Jackson and Gray, 2010).

This study relies on measuring FOC, so how this is defined and operationalised is of importance. According to Farrall et al (1997), the results of FOC surveys seem to be a function of the way the topic has been researched, rather than actual amounts of 'fear', thus FOC may be nothing more than a social construct (Lee, 2007). Yet, it is an important notion, so efforts continue to be made to quantify the concept. When measuring FOC, Lee (2007) highlights the link between FOC and victimisation surveys as seen in publications by the British Crime Survey (BCS). This is reiterated by Hale (1996) who suggests FOC has 3 separate and distinct components: *cognitive*: measure FOC by establishing respondents' beliefs regarding the extent and likelihood of crime victimisation; *affective*: the emotional component, feelings associated with anticipated victimisation; and *behavioural*: what people do (or say they do) because of FOC. As a result, questions within the current research survey have been designed to reflect the three components (Hale 1996) as well as questions derived from the BCS and other research; which suggests time of day affects FOC on at least one of the two FOC measures (Miller, 2007). There are, however, limitations of these types of questions as a measure of fear of crime. Such as, they may conceal the true extent of fear among men who may be wary of expressing fear (Maxfield, 1984).

According to Grove (2011) the concept of repeat victimisation is one of the most important tools we have in our SCP arsenal – the ability to predict where a crime is likely to happen, and therefore where the most effective pinch point is for (usually limited) crime prevention resources. Researchers have also examined the direct victimization model, which establishes a link between crime victimization and fear of crime (Skogan and Maxfield, 1981). Overwhelmingly, findings suggest that crime victims are significantly more likely to fear crime than non-victims. Rather than examining this notion, the current study will aim to investigate whether not victims of crime engage, and support SCP more as well as believe it to be more or less effective than non-victims. Fear is often a healthy and normal response to thinking about, becoming exposed to, or being victimized by crime (Fox et al., 2009). However, fear of crime may also be unwarranted and overly exaggerated, producing high levels of stress and anxiety,

which may lead to debilitating and constrained behaviour (Warr, 2000). As Moon et al. (2011) claim, respondent perceptions of crime will be influenced by their own experience of crime, and this study hopes to see whether these experiences also affect public engagement with, support for, and opinions on the effectiveness of SCP techniques and measures. Further to this, research has looked at the differences between gender and FOC (Fisher, 1995) as well as demographic variables often associated with victimization including age and ethnicity (Fox et al., 2009). The current research is not interested in these factors and their effects on FOC and victimisation, but rather to utilise FOC, victimisation and socio-demographic features as possible elements that could affect engagement with, support for, and opinions on SCP techniques and measures.

An example of how crime prevention initiatives, relative to this study, can reduce FOC is that of Cozens et al. (2004) who looked at passengers' FOC while waiting at railway stations. Cozens et al. (2004) found that visibility at stations was identified as a crucial factor in determining levels of FOC and the design of the station shelter was analysed as an example of CPTED. Results showed that the new high visibility shelters not only reduced FOC but appeared to have also produced higher levels of consumer confidence, and in the short term, higher levels of patronage.

In conclusion to the review, it appears then, that SCP is a dominant force in crime prevention today and that public opinion is an important factor in backing government policies of crime prevention initiatives. Studies such as Cozens et al. (2001; see also Cozens and Davies, 2013) have provided a framework for the current study in assessing public perception of SCP, as well as assessing other factors such as their FOC. It is this notion that formed the backbone of the current study in its aim to explore whether the public engage in, and support, SCP techniques and measures within a residential setting, and whether or not they believe them to be effective.

Research Questions

The literature suggests location plays a big part in crime and therefore crime prevention should also look at place as a significant factor. Also, large bodies of research have explored the phenomenon of FOC and the notion that issues such as gender, age and victimisation have a conclusive impact on people's day-to-day lives. As a result of the above literature, the current project aims to further our understanding of public perceptions of SCP techniques and measures, and to explore whether the public engage in them, support them, and if they believe them to be effective.

It is noted here that from now on, when discussing all these three features together, the research will refer to them as 'opinions of SCP'. These opinions will be tested against: area of residence, socio-demographic features, victimisation, and fear of crime. The study's aims will be achieved through the use of the following research questions.

1) To what extent do the public engage with SCP?

2) Do the public support a variety of SCP measures?

3) Do the public believe a variety of SCP measures are effective?

4) Do those opinions vary by:

    a. Their area of residence?

    b. Socio-demographic features (e.g. age, gender, employment status)

    c. Victimisation

    d. Fear of crime

Chapter Two:

Methodology

This section will discuss in detail the research strategy and design of the current study, the chosen methodology, the method of data collection, the various ethical considerations, reliability and validity of the study, the pilot, participant sample, and finally the data analysis of the research.

Research Strategy and Design

Having designed set research questions from the literature that the study needs to test, the study will naturally adopt a deductive process or hypothetico-deductive method. In the hypothetico-deductive method, hypotheses are deduced from theory and evidence is gathered in order to test these hypotheses (Lehmann and Romano, 2008). Methods that rely on deductive reasoning start with a theory, which is narrowed to deduce specific propositions or testable hypotheses. Data are then collected and analysed in order to see if the hypothesis can be confirmed and the theory, substantiated (Babbie, 2001). The current study began with an overall theory of SCP; this was then narrowed to public opinion of SCP within residential settings which resulted in research questions. This research has no intentions of formulating new theory which is the underpinning premise of the opposing approach, inductive reasoning.

Social researchers tend to see hypothesis testing/deductive reasoning, as the core of proper scientific method and this leads the research into a positivist epistemology. As Krauss (2005) claims, it is epistemology that tells us how to go about understanding the world, what we want to know, discover, uncover, understand, and what rules there might be for the production of knowledge.

There are a number of different epistemologies, such as interpretivism and realism, however this research will apply a positivist approach which in relation to knowledge, believes true knowledge is gathered through rigorous, unbiased, scientific, and generally empirical methods rather than subjective understanding (Steinmetz 2005) . Positivist approaches to knowing have quite a stronghold in social science research which often relies on a scientific method based on hypothesis testing and empirical fact-gathering (Schick, 1999). Based on the review of the literature, the current research seeks to answer a number of possible relationships in a scientific way that are expected to emerge from the analysis section. Such possible relationships include; those who fall victim to crime are more supportive of SCP measures and techniques than those who do not fall victim to crime, and those who live in areas of higher crime believe SCP is less effective than those who live in lower crime areas. As a result this scientific/positivist method fits perfectly with the intentions of the current study, as the method commonly seeks to 'search' for relationships which the researcher thinks might exist based on knowledge of similar or related areas within the literature (Denscombe, 2002).

The main critique of the positivist approach is the use of a scientific model for the study of the social world, and the subject matter of the social sciences is fundamentally different from that of the natural sciences (Bryman, 2012). Von Wright (1971) highlights a clash between positivism and 'hermeneutics', a term drawn from theology and that, when imported into the social sciences, is

concerned with the theory and method of the interpretation of human action. According to Bryman (2012) this clash reflects a division between an emphasis on the 'explanation' of human behaviour that is the premise of the positivist approach to social sciences, and the 'understanding' of human behaviour that is the premise of interpretivism. Despite the highlighted limitations of a positivist epistemology to social science research, in order to effectively investigate the research questions of the current study, a positivist approach has been adopted.

The current study's research questions revolve around the publics' opinions of SCP within their area. Therefore, the research design needs to take into consideration that a large data set is required to compare many different variables; such as socio-demographic features, and test relationships between those variables. As a result, the research undertook cross-sectional study, which as Hagan (2012) states, involves the study and collection of data from one group at one specific point in time, and includes within its research participants, groups of people or cases that can be compared. In the current study, groups that have been compared include: different genders, various ethnicities, and people from two diverse residential settings.

Quantitative

According to Matthews and Ross (2010), the positivist approach typically means quantitative data are collected; aspects of the social world are measured and large data sets and statistical analysis are often used to find relationships within the data. Despite this, the initial proposal for the current study intended to implement a mixed methods approach or "triangulation" (Jick, 1979) which is broadly defined by Denzin (1978:291) as the combination of methodologies in the study of the same phenomenon. According to Jick (1979) given basic principles of geometry, multiple viewpoints allow for greater accuracy. The current study proposed to utilise a self-survey questionnaire administered to a sample of the general public from a selected geographical location, which would then be followed by a number of follow-up interviews involving a small number of the same sample. Using interviews would have allowed the research to develop an understanding that is based on the respondents' opinions and attitudes (David & Sutton, 2011), further to the responses from the survey. However, it became apparent that this would not be feasible given the time constraints of the current study.

The past quarter-century has seen a dramatic increase in the use of quantitative methodologies in the social sciences (de Vaus, 2001).On the other hand, qualitative tends to focus on exploring, in as much detail as possible, smaller numbers of instances and aims to achieve `depth' rather than `breadth' (Blaxter et al., 1996: 61). In social science, quantitative orientations are given more respect, and this may reflect the tendency of the general public to regard science as relating to numbers and implying precision (Berg, 2009). The advantages of using a quantitative methodology are that, as Punch (1998) highlights, the measurement process in quantitative research turns large amounts of data into numbers, and its function is to make comparisons through the use of statistical methods. This is crucial to the current project and allows the study to analyse the data and seek relationships (Creswell, 1994) such as do those with a burglar alarm believe SCP measures and techniques are more effective than those who do not. In order to effectively study perceptions, the research has

gathered a large data set that only a quantitative methodology can achieve in such a time frame (Bryman, 2008).

Qualitative methodologies on the other hand are time consuming and can be overly subjective and reliant on the researcher's often unsystematic views about what is significant (Bryman, 2008). Another shortcoming of qualitative research according to Bryman (2008) is a lack of transparency in the research and in terms of what the researcher actually did and how they arrived at the study's conclusions. However, there are also limitations of quantitative methodologies. Most notable in concurrence with this study, is the analysis of relationships between variables. Blumer (1956) argued that studies that aim to bring out the relationships between variables omit the process of interpretation or definition that goes on in human groups. The meaning of events to individuals is ignored and we do not know how such relationships connect to everyday contexts. Bryman concludes that: "it creates a sense of a static social world that is separate from the individuals who make it up" (2008:160).

Despite these shortcomings, an important consideration of a quantitative methodology is its ability in theory testing and that it results in hard, reliable data (Bernard, 2000). In terms of similar studies (i.e. those which measure public opinion in some way), Hough and Roberts (2002) claim that quantitative research accounts for the vast majority of studies conducted. They further argue that if the aim of the study is to investigate where the public stands with respect to crime and/or criminal justice, there is no substitute for a representative survey, from which inferences about the population response can be reasonably drawn from the response of a small sample (Hough and Roberts, 2005). As such, a quantitative methodology is apt for the current research study.

Whatever procedure for collecting data is used, Bell (2010) claims, it should always be examined critically to assess to what extent it is likely to be reliable and valid. The reliability of a measure refers to its consistency and whether or not the results of a study are repeatable (Bryman and Cramer, 2005; Bryman, 2012). In other words, if you measured something today, you would get the same results on another day (Hagan, 2012). The notion of reliability is often taken to entail two separate aspects – external and internal reliability (Bryman and Cramer, 2005). External reliability is the more common of the two meanings and refers to the degree of consistency of a measure over time (David & Sutton, 2011). According to Bell (2010), there are a number of devices for checking external reliability such as 'test-retest', which involves administering a test on two separate occasions to the same group of subjects (Byman and Cramer, 2005). The problem with such a procedure is that intervening events between the test and the retest such as becoming a victim of crime, or watching a particular violent programme on television the night before, may account for any discrepancy between the two sets of results. In any case, for a year-long research project such as this with the financial resources and timeframe, it was not possible to carry out a retest to test for external reliability. Kraska and Neuman (2008) point out that theoretically it is impossible to have perfect external reliability but it can be improved by using certain measures, such as pilot testing which the current research utilised. If an item is unreliable, then it must also lack validity, but a reliable item is not necessarily also valid (Bell, 2010). This is reiterated by Brener et al. (1995) who claim, although reliability is a necessary characteristic of a valid measure, it does not ensure validity.

Internal reliability applies to multiple indicator measures or 'likert-scale' questions, and whether the indicators that make up the scale are consistent. In other words, do respondents' scores on any one indicator tend to be related to their scores on the other indicators (such as engagement with SCP techniques and measures) (Bryman, 2008; Bryman & Cramer, 2005). There a number of procedures for estimating internal reliability, including the currently widely used Cronbach's alpha which essentially calculates the average of all possible split-half reliability coefficients (Bryman, 2008). A computed alpha coefficient will vary between 1 (denoting perfect internal reliability) and 0 (denoting no internal reliability). Measures with an alpha of 0.70 or more are considered to be internally consistent (Cramer and Howitt, 2004). The Cronbach's Alpha results are presented in the reliability and validity section later in the chapter.

Validity is concerned with the integrity of the conclusions that are generated from a piece of research and how far a measure really measures the concept that it purports to (Bryman, 2008). According to the main types of validity that are typically distinguished are: external validity and measurement/internal validity (David & Sutton, 2011). External validity is concerned with generalisation and with the question of whether the results of a study can be generalised beyond the specific research context (Bryman, 2008). The current research sample came from two separate locations, one of which suffered a much higher crime rate on the crime domain of the indices of multiple deprivations than the other. If the study was externally valid, we would expect and think it is likely that results would be similar across other locations suffering from the same level of crime.

Measurement/internal validity, also known as 'construct' validity (Bryman, 2008), essentially is to do with the question of whether a measure that is devised of a concept really does reflect the concept that it is supposed to be denoting. 'Face' validity is; does the measure apparently reflect the content of the concept in question. This can be achieved partly through piloting the questionnaire which the current study did. Finally, 'content' validity; does the questionnaire ask a sufficient amount and range of questions to assess what the researcher wants to assess. The procedures that the current study took to attempt to achieve validity are discussed later in the chapter.

Method

The main aim of the research was to evaluate the public's opinions of and attitudes towards SCP techniques and measures within a residential setting. Initially the study's research questions focused on whether or not the public believed SCP techniques and measures to be: 1) Effective, 2) Acceptable, and 3) Do those opinions vary by crime rate in the area they live and other socio-demographic features. These were then adapted during the first few months of the study to incorporate the public's support and engagement for SCP within their areas, as well as to test these against their fear of crime and experience of victimisation.

As a result, self-completion postal questionnaires were used as the method of data collection, which fits the aims of the current study, as Black states: "Questionnaires for quantitative research in the social sciences are designed with the intention of reflecting attitudes, perceptions, views and

opinions" (1999:215). Attitudinal surveys, as Curtis and Curtis (2011) explain, are considered important for two reasons. First, because they are seen as shaping, prefiguring or anticipating behaviour, this is key in crime prevention policy changes. Second, attitudes are important to researchers because attitudes are regarded as changeable. Much of attitudinal surveying is about testing the impact of certain programmes, in this case, SCP techniques and measures. As well as this, in order to get a solid range of responses for the analysis stage of the project, a large sample must be obtained and self-administered questionnaires allow for data to be collected on large samples. This method of data collection, as Oppenheim (1992) states, ensures a minimum of interviewer bias or response effects, based on features of the interviewer. Also, the current research questionnaire utilised numerous likert-scale type questions or "battery" (Bernard, 2013), which would be difficult to ask a respondent face-to-face. However, with all aspects of social science research, self-survey questionnaires are not without criticism and alternative methods of data collection are available. Gray states:

> Few people greet receiving a questionnaire with unbound enthusiasm, particularly long ones. Respondents may give flippant, inaccurate or misleading answers, but the researcher is not in a position to detect this. In contrast, the interview might reveal problems through observing body language or the verbal tones (2004:189).

Further criticism is pointed out by Bryman (2008) who claims that respondents are more likely to not fill them in at all or become more tired of answering questions on questionnaires (than in interviews) that they feel are not very salient to them, and they perceive as boring. As well as this, partially answered questionnaires are more likely as it is easier for respondents to decide not to answer a question when on their own than when being asked by an interviewer. Despite these criticisms, however, a study by Tourangeau and Smith (1996) cited in Bryman (2008), strongly suggests that respondents give more honest opinions and beliefs in questionnaires than in interviews.

The questionnaire itself was broken down into three main sections: 1) Socio-demographic features, 2) Fear of crime, 3) SCP features (engagement, support, effectiveness). Firstly questions on respondents' age, gender, ethnicity, employment status, living arrangements, children living at home, and household income were asked to ease them into the survey, as well questions on respondents own security rating for their property and questions on whether or not participants had been a victim of crime in the last 12 months the period after which the risk of victimisation drops. Twelve months is probably the most commonly used and "understood measurement period" (Farrell, 2002:19), since crime rates are typically annual, whether from victim surveys or other sources.

The second section was split in two but both involved looking at respondents' fear of crime. The first set of questions were adapted from the British Crime Survey, whereas the second set were made up of six questions (two for each element) investigating the affective, cognitive, and behavioural (Hale, 1996) facets of respondents' fear/concern of crime. No more questions were included on FOC to keep the length of the questionnaire manageable.

The third and final section was where the independent variables were administered, and participants were asked about their opinions on SCP, as relevant to a residential setting.

Within the questionnaire, different types of question were used, which is vital and allows for a variety of variables that can be analysed. Closed questions were used for socio-demographic questions in section A as well as asking participants which security measures they have in place on their property, in section C. In order to obtain more information about respondents' opinions on SCP, 'Likert scales' were used as well as '10-point' numerical scales in section A to look at how respondents rated their own residence's security.

To prevent potential respondents ignoring the survey once it hits their doormat, the survey was made more eye-catching with use of pictures and a cover page to encourage participants to show interest and engage in the study. The current study also encountered some setbacks when adopting the survey method. Ten respondents failed to tick and/or sign the consent form which resulted in their responses being unused in the study. Most notably was the length of time taken to design and distribute the survey itself: stamping the eight hundred envelopes, gluing on all the return address, folding each questionnaire into an envelope, and then delivering them personally.

A copy of the questionnaire used in the current research project is included in Appendix B on page 87.

Ethics

Professional associations, such as the British Society of Criminology, and the Social Research Association have formulated codes of ethics for conducting research (Bryman, 2008). Elements of these codes, set out in Social Research Association (2003), include the obligations to society, employers, and to subjects. The obligation to subjects means that social researchers must strive to protect subjects from undue harm arising as a consequence of their participation in research (Social Research Association, 2003).

Before the research instrument was allowed to be distributed to the two locations for participants to fill in, an outline proposal form had to be completed and then reviewed by two members of the Schools Research Ethics Panel. Within the proposal, sections on; anonymity, confidentiality, and psychological support for participants, had to be filled in highlighting the necessary precautions taken to ensure the various codes of ethics were fully complied with.

People conduct surveys in unethical ways (Diener and Crandall, 1978). This includes causing harm (e.g. emotional or psychological) to participants, failing to attain informed consent, invading privacy, and even deceiving participants. These important issues were prevented in the current research study with the use of a front cover showing firstly; the title of the project, it contained a short introduction to who the researcher was and what University the researcher came from. As well as this, there was an explanation of what the current research aimed to achieve and a statement informing the participant that the research had been approved by the School Research Ethics Panel at the University.

At the beginning of the questionnaire there was a research brief explaining that the survey is completely voluntary, responses would be kept strictly confidential and anonymous throughout the

entirety of the study. The brief also informed the participant they had the choice to not take part, not answer any questions, or to withdraw at any stage during the study. It was stated that responses would be kept in a secure drawer in a locked office within the University that only the researcher has access to. A date to return the questionnaire was provided, as well as a cut-off date where responses could no longer be withdrawn because the results section of the study will be completed. Each participant was provided with a unique ID number on their questionnaire to prevent any possible identification, and was informed that they could contact the researcher at any time prior to this cut-off date, via the email address provided, to have their data fully removed from the study. Also, participants were given the police website if they wanted any further information on crime prevention, as well as the contact details of the Victim Support line if they were to ever fall victim to crime. Finally, participants were instructed to tear off the front page of the questionnaire for their own reference, this included contact details of the researcher, as well as the research supervisors at the bottom of the page. Participants were then informed that they were welcome to contact the researcher via the email address given if they would like their data to be withdrawn from the study.

Finally, before taking part in the questionnaire the respondents were asked to tick a number of consent boxes, confirming that they understood and consented to all the above key points, as well as a space to provide their signature as an indication of their consent to taking part in the study.

Once data were collected it was stored, handled and analysed ethically in line with university SREP guidelines. Responses were stored in a locked draw in a locked office inside a secure building within the University. The data itself was kept on a University log-in (password protected) on the University computers that only the researcher had access to, and on a removable data stick which was locked away when not in use. Whilst data were being entered into a statistical analysis database, it was completed without bias and carried out in an ethical manner and no names or addresses were recorded.

Reliability and Validity

The study aimed to assess participants' opinions on their engagement with SCP, support for SCP, and their belief on the effectiveness of SCP. As a result, 5 questions were asked on their engagement, 10 questions on support, and 11 questions on the effectiveness. As well as this, the survey wanted to investigate if these opinions were affected by their fear of crime. Consequently the questionnaire included 4 questions derived from the British Crime Survey's study on fear of crime, and 6 questions created to test participants' behavioural, cognitive, and affective levels of their fear of crime (Hale, 1996). The results table below provides the Cronbach's Alpha results for each set of questions used in the study to test for internal reliability.

Table 1. A table to show Cronbach's Alpha results for each set of questions used in the research study survey

	FOC – Area of Residence	FOC – Behavioural, Cognitive, Affective	Engagement Questions	Support Questions	Effectiveness Questions
Cronbach's Alpha Result	.864	.864	.672	.596	.634

As Christmann and Van Aelst (2005) point out, the values 0.7 or 0.75 are often used as cut-off value for Cronbach's alpha and thus for the reliability of the test. The results show that for both sets of questions assessing FOC, the result was .864 which suggests they are reliable. However, engagement, support, and effectiveness questions all fall below the 0.7 value which shows they are not reliable. Despite this, the use of these measures is still justified in that different types of measure were asked about which could show variation in attitudes to different types of SCP, but as the research is looking at participants prevailing attitude it is warranted to include some variation in opinion in an overall test score. Also, as well as using the overall scores as the main measures, tests and correlations were also ran on their constituent questions, thus identifying if and where patterns and opinions varied.

In order for the questionnaire to attain internal validity, the wording and presentation of the questions is important. Even if individual questions are valid, a poor sequencing of questions or confusing structure or design can all threaten its validity (Gray, 2004). Validity can be affected by low response rates, therefore measures, as Dillman (1983) claims, such as an attractive layout as well as clear presentation enhance response rates. Therefore the current study started the questionnaire with the use of "classification questions" such as gender; age etc., to ease the respondent into the questionnaire (Gray, 2004). As well as that, the questionnaire covered the research in terms of content and detail, and avoided questions that were irrelevant to the study, known as 'Zone of Invalidity' (Gray, 2004). According to Gray (2004), further invalidity can be caused by respondents answering inaccurately, which can be rectified by follow up interviews. However, the time constraints of the current study unfortunately cannot allow this.

Pilot

A pilot was carried out amongst a small number of family and friends from different residential settings who are not part of the target group, as Gillham (2000) advises. According to Gray (2004), piloting a questionnaire helps to eliminate or reduce questions that are likely to mislead participants. As a result of participant responses in the pilot study, certain areas of the questionnaire were amended and rectified to improve it. The participants noted that the questionnaire was in fact a good length and did not take too long to complete, it asked a number of different types of question that made filling it out more enjoyable and interesting. However, there were various comments on recommended alterations and amendments.

Table 2. A table to show the feedback from the pilot and the action taken

	Pilot Feedback	Action Taken
Section A	Question 3 asked respondents to specify their ethnicity or race, it was said there were too many options to choose from	The options 'white other' and 'Bangladeshi' were removed
	Question 4 requested respondents' current employment status, but the order of the choices was thought to be confusing	The option 'self-employed' was followed by 'full-time' and then 'part-time' to give the responses a clearer order
	Question 5 asked what the living arrangements of respondents are, and was noted to be a "mess" with possible responses mixed up and in no logical order. Respondents also asked for the option 'rented' to be added	Responses were put in a more logical order, and the option 'rented' was added as a possible response
	Question 7 asked what your total household income is. Observations were made on the lack of options for higher wage earners, and clarification was also asked for on whether total household income referred to the whole family or just parents.	Options '£110,000-£130,000' and 'more than £130,000' were added to the possible responses. The question was made clearer in asking for the "**total** household income (**all wage earners**)"
Section B	Respondents were puzzled when answering questions involving the terms 'area of residence' and 'area you live'	It was explained at the beginning of each group of questions, in a very short brief, that the terms used such as 'area of residence' referred to their house and neighbouring streets/estates as the setting.
Section C	Respondents noted that they kept having to turn to the beginning of the section to see the headings for the scale questions 'Strongly agree' etc.	The headings of 'Strongly agree, agree, slightly agree' etc., were placed at the top of each page so they did not have to keep turning back over the page to see the scale at the beginning of the section
	Question 6 asked if respondents were a member of a neighbourhood watch scheme, this was construed to be confusing in the form of a scale type question	The question was changed to a dichotomous 'Yes' or 'No' question
	There was an overuse of likert-scale type questions within section C and there was a need to mix up the type of questions used	Different types of questions were implemented to break up the scale questions
	A number of criticisms were made of slightly ambiguous wording in certain questions which led to responses being filled in incorrectly	These questions were for that reason made clearer and more comprehensible to the reader enabling them to fill in the questionnaire correctly

Sample

The current research project utilised elements from a number of different sampling methods, described by Black (1999) as 'modified probability sampling'. This usually involves stratified random or cluster sampling up to the point of selecting individuals, which is then left to the questionnaire administrator. Firstly, however, as Baker states:

> Where resources are limited, as is the case with much studentresearch, probabilistic methods may be unrealistic. The need for simpler andless expensive sampling procedures is largely met by judgementalapproaches in which a sample is selected for a particular purpose (2002:111).

In this study, purposive sampling was utilised in that the samples were taken from two separate geographic locations, and were heterogeneous in that one location suffered from a high crime rate and the other location a low crime rate. By selecting specific geographical areas first, this can also be seen as a cluster sample (geographically). This involves random samples of identified smaller groups

by, in this case, geography (Black, 1999) and requires the researcher to sub-divide a population into a set of mutually exclusive and exhaustive sub-groups (two locations with different crime rates). The advantages of the cluster sample are that one does not require a precise sampling frame and that it can be used where the population is widely distributed geographically (Baker, 2002). Finally, the research attempted to gain 50% of responses from Location A (low crime rate) and 50% from Location B (high crime rate), known as stratified sampling. An advantage of a stratified sample is that when conducted properly, each stratum represents a subset or segment of the population, each different from the other (Baker, 2002). In this case the stratums represent members of the public who live in an area with a high crime rate and those who live in low crime rate. As well as this, when posting the questionnaires to each location, it was decided to deliver to every other house.

Having pointed out earlier, the questions within the survey were based around SCP techniques and measures around a residential setting within Kirklees; this was chosen to narrow down and specify the sample size and sample itself, instead of administering the survey to wide geographical area. However, when making the decision of location and where to distribute the questionnaires for data collection, there were a number of different options available. Two options were created, both of which used the indices of multiple deprivation within the Kirklees region, and more specifically the 'crime domain'. It was decided to use locations from within the Kirklees region for reasons of researcher proximity. Option A was to break the residential settings into area A (suburb), area B (rural), and area C (town/city centre), that all scored similarly in the crime domain. It was discussed that option A would give a distinction between responses from different residential settings; however it was thought that responses could be too similar as the areas will all score similarly in the crime domain. Option B, on the other hand, would focus on two separate locations that scored at opposite ends of the crime scale on the indices of multiple deprivations within Kirklees. One of the locations would come from the top ten per cent for crime, whereas the other location would come from the bottom ten per cent for crime. This would give the research a distinction between two residential settings that suffer from very diverse levels of crime. As a result, option B was preferred as the best approach for what the research aimed to test, it was an advantage that it also saved a lot of financial cost to the researcher, and also time doing fieldwork and data analysis, which was important in such a short study time period.

It was initially hoped that the locations in both options would be distinct by further features such as SCP measures but constraints within a year-long project and writing up stage wouldn't allow this and it would be too difficult to complete in the allotted timeframe. However, during the questionnaire distribution, it became apparent that certain aspects of the contrasting neighbourhoods differed in features and design. Location A had more trees and greenery surrounding its properties and had a number of residences with long driveways, as well as being almost entirely made up of semi-detached housing. Location B on the other hand appeared much more open and without greenery, and had a lot of terraced houses as well as semi-detached. Similarities of both neighbourhoods included having a main road running either through or adjacent to it. As well as this, both locations were situated on or near steep hills, which resulted in stairs leading to the property in a number of streets.

Sample size is crucial in maintaining confidence and rigour in the findings, as Davies et al. (2011) states. In terms of the sample itself, the research aimed to receive 100 responses from each area of residence and therefore sent 800 questionnaires (400 to each location) out in total (based on an estimated response rate of 25-35%). The study managed to collect data from one hundred and ninety five respondents, one-hundred and nine from Location A, and eighty-six from Location B. Initially, the study only received sixty three responses from Location B compared to one hundred and nine from Location A. In order to get a more even spread of results from both locations, 20-30 more questionnaires were needed from Location B and therefore 80 more surveys had to be printed off, labelled with the return address, and finally stamped. The 80 questionnaires were then distributed to residences from Location B, different to those that had already received a survey from the previous earlier distribution session.

Analysing Data

The questionnaire data were analysed using Statistical Package for the Social Sciences or SPSS (Cramer and Howitt, 2004). SPSS, as Davies et al (2011) claim, is the most widely used package for statistical analysis in criminological research. SPSS can be used to conduct a wide range of statistical tests on data, outputting results in both tabular and chart form, and is most useful when dealing with quantitative data (Davies et al., 2011). The software is crucial to the current project as it allows for descriptive and inferential analyses, which summarize large quantities of data with a few numbers, in a way that highlights the most important numerical features of the data (Agresti and Finlay, 2004). The various types of question asked in the questionnaire generated different variable data and this is key, as Kinnear (2010) states, because research questions are more comprehensively addressed through a range of different variables.

Once data is entered into SPSS it is referred to as 'raw' data (Shannon and Davenport, 2001), as they have not been changed in any way. Sometimes it is necessary to change the data before you begin analyses, known as recoding (Hardy & Bryman, 2004). For example respondents were presented with a series of statements and asked to indicate, on a rating scale, the extent to which they agreed or disagreed with the statements (with 1 being strongly agree and 6 being strongly disagree). Once the data were inputted into SPSS, in order to carry out certain tests, the variable was then 'recoded into different variables' (Gerber & Finn, 2005) and into grouped data, to either disagree or agree. This allowed for both grouped and scale data to be used in the analysis. Also, as Gerber and Finn (2005) claim, there may be occasions when you need to select a subset of cases from your data file for a particular analysis. This was particularly relevant for the variable concerning whether or not participants had lived at their current residence for at least 12 months, if they had not then their responses for the 'victimisation' section of the questionnaire were not used for analyses relating to victimisation. An important part of the study was to identify the overall scores and consequently the mean scores of participants' opinions on SCP. However, in order to do this, the variables that belonged to each of those three main headings had to be added together, or combined, to give an overall score. This was achieved by using the 'transform> compute' procedure (Kinnear &Gray, 2008; Foster, 1998), where new combined values of variables were created. High scores were generally

used to indicate a greater level of disagreement but some variables were worded so that high scores represented a greater level of agreement, so these items were recoded (Cramer &Howitt, 2004).

The first step to understanding a data set is to look at each variable, one at a time, using univariate statistics (Fielding and Gilbert, 2000). The current study used frequency tables to familiarise the sample in terms of participants from the two separate locations, as well as socio-demographic features. Next, the study presented statistical results of central tendency, which according to Fielding and Gilbert (2000), is useful to summarise the distribution of data with a single number. The study achieved this by showing the lowest and highest scores, the mean and standard deviation of responses for participants from both locations on a graph.

Before going on to carry out any inferential or comparative statistics to examine the links between the variables in the study, it was important to know whether or not the data were normally distributed in order to establish whether or not to use parametric or non-parametric tests (Diamond and Jefferies, 2001). Parametric tests assume that the distribution of the sample values are bell shaped which is usually a normal distribution (that is, similar to the general population) (Cramer and Howitt, 2004). Many samples are not normally distributed, however, and a range of tests, referred to as non-parametric tests, have been developed which can be used in these situations (Black, 1999; Cramer, 1998).The normality of distribution is ascertained by exploring the data in the form of histograms (with bell-curves) and tests of normality. A histogram is similar to a bar chart, according to Bryman and Cramer (1996), except that the bars are in contact with each other to reflect the continuous nature of the categories of the variable in question. Having carried out tests of normality on all of the necessary variables, it became apparent that all of the variables were non-normally distributed. As a result, non-parametric tests such as Spearman's rho and the Mann-Whitney test were used during the inferential statistics section of the study.

For the bivariate analyses a series of inferential tests were carried out. Firstly, tests of correlation were carried out, which express the extent to which two variables vary together. As stated earlier, data were not normally distributed and therefore the non-parametric equivalent of Pearson's correlation must be used, known as Spearman's rank order correlation coefficient or rho (Cramer & Howitt, 2004). This statistic, as Yates (2004) explains, measures the size of the correlation coefficient for two sets of scores by taking into account the differences between the ranked scores. A positive correlation means that as one variable increases so does the other (Morgan et al, 2001; Foster, 2008) whereas a negative correlation indicates a relationship in which as one variable increases the other variable has a tendency to decrease (George & Mallery, 2010). In terms of the strength of the correlation, as a general guideline, a value ranging from 0.1-0.4 would be classed as a weak correlation, and anything above 0.5 would be regarded as a strong correlation (Cohen, 1988). A value approaching zero indicates the absence of any relationship between two variables, in other words no correlation (Greasley, 2008; Cramer, 1998). This test is vital to the current study and enabled it to investigate whether or not there was a significant correlation between the three main research questions: engagement, support, and effectiveness, and then with age and fear of crime scores. As

well as carrying out Spearman's rho tests, the current study also ran 'Kendall tau' tests, sometimes used for small sample analysis (Field, 2009). However, there was little difference in the results, thus only the Spearman's Rho are presented.

Secondly, Mann-Whitney U tests were utilised, which are a non-parametric test used to determine whether scores from two unrelated samples differ significantly from one another (Cramer & Howitt, 2004; Cramer, 1998). Cramer and Howitt (2004) go on to explain that, it tests whether the number of times scores from one sample are ranked higher than scores from the other sample when the scores for both samples have been ranked in a single variable.

The level of significance used in the study was .05, Cramer and Howitt (2004) claim this level was historically an arbitrary choice but has been acceptable as a reasonable choice in most circumstances. Significance implies that it is not plausible that the research findings are due to chance (Cramer and Howitt, 2004). The significance refers to a probability which would normally occur about 1 time in 20 under the null hypothesis (.05 or 5%), rare enough to suggest a statistically significant difference in ranked distributions between groups. It can thus be inferred that both groups are different (Sheskin, 2007). The results of all tests carried out in the study are shown below.

Findings & Results

Firstly, it is to be stated that not all the outputs of the analysis could be shown in this section, and therefore only the outputs (or summaries of outputs) relating to the results discussed have been identified and presented. The additional tables and figures can be found in appendix D on page112.

This chapter proceeds as follows, firstly, frequency tables have been used to contextualise and summarise the sample. Secondly, respondents' attitudes toward their opinions on SCP were explored utilizing descriptive statistics such as; the mean, range, and standard deviation.

Finally, inferential statistics were used to investigate significant differences and relationships between those who support, engage, and believe SCP is effective with area of residence, socio-demographic features, victimisation, and their fear of crime. In order to test these relationships, tests of difference (Mann-Whitney) and of correlation (Spearman's rho) were utilized and are presented below.

The Sample

First of all it is useful to contextualise the sample from both areas of residence. The sample was made up of 196 participants; the slight majority came from Location A with 56.1% of respondents (N=110) and 43.9% from Location B (N=86).The largest proportion of the sample was made up of females with 58.2% (N=114) and males with 41.8% (N=82). 'White British' dominated the sample with 95.4% of respondents (N=187), the next most frequent ethnicity was 'Mixed Race' with 1.5% (N=3). The sample was mostly made up of participants living with their partner/spouse 45.9% (N=90), 34.7% live with their families (N=68) and 15.3% live alone (N=30).The number of respondents who had no children under the age of sixteen living at the residence was 69.4% (N=136), 29.1% (N=57) did have, whilst 1.5% of respondents (N=3) preferred not to say.The mean age of the sample was 50.90 (Std. Deviation=15.698) with the largest proportion of respondents between the age of 47-51 and equated to 10.7% (N=27) of the sample.

Table 3. A frequency table showing the employment status of the respondents

Employment Status	Frequency	Percent
Full-time employment	73	37.2
Retired	50	25.5
Part-time employment	44	22.4
Self-employed	20	10.2
Unemployed	4	2.0
Prefer not to say	3	1.5
Student	1	0.5
Military	1	0.5
Unable to work	0	0.0
Total	196	100.0

Table 3 shows the highest category of employment status within the sample was 'Full-time employment' with 37.2% (N=73), 'Retired' were next with 25.2% (N=50), 'Part-time employment' followed with 22.4% (N=44).

Table 4.A frequency table showing the household incomes of the sample

Household Income	Frequency	Percent
£10,000-£30,000	63	32.1
£50,000-£70,000	38	19.4
£30,000-£50,000	37	18.9
Prefer not to say	33	16.8
£70,000-£90,000	7	3.6
£90,000-£110,000	7	3.6
Less than £10,000	6	3.1
More than £130,000	4	2.0
£110,000-£130,000	1	0.5
Total	196	100.0

Table 4 shows the largest proportion of household income amongst the sample was between £10,000 and £30,000 with 32.1% (N=63), next was between £50,000 and £70,000 with 19.4% (N=38) and closely followed by earnings between £30,000 and £50,000 with 18.9% (N=37).

It was important to see if any differences existed between the sample by Location. Results showed that Location A was made up of 50.9% (N=56) females whereas Location B had 67.4% (N=58) highlighting a gender profile difference between locations. Further to this, the age profile was also different, with Location A having a mean age of 55.75 whereas Location B was 44.69. It is important to note here that these particular differences could be the reason for any area difference found within the study, rather than the area itself.

Table 5. A frequency table showing the percentages of participants from location A and location B who were victims of burglary, theft from property, vandalism, and vehicle crime in the last 12 months whilst living at their current residence

	Location A	Location B	Total
	Percent	Percent	Percent
Burglary	1.8	2.7	2.2
Theft from property	3.7	8.0	5.4
Vandalism	2.7	4.0	3.2
Vehicle crime	2.8	12.0	6.5

Table 5shows that the largest difference between Location A and Location B in terms of the type of crime they were victim of were theft from property and vehicle crime. In Location B, 8.0 percent of respondents (N=6) were victims of theft from property on one or more occasion compared to 3.7 percent (N=4) from Location A. Location B had 12.0 percent of respondents (N=9) who fell victim to vehicle crime on one or more occasion compared to 2.8 percent (N=3) from Location A. The table also highlights that Location B had a higher percentage of respondents who suffered from the various crimes than those from Location A. However, despite a high crime rate in Location B, the total

percentages of crime participants were victims of is low, and below 10% on all 4 types of crime when results were combined.

Table 6. A frequency table showing if participants from Location A and Location B, thought any of the following anti-social behaviours were visible in their area in the last 12 months whilst living at their current residence

		Location A		Location B		Total	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Excessive Noise	No	89	81.7	40	53.3	129	70.1
	Yes	20	18.3	35	46.7	55	29.9
	Total	109	100.0	75	100.0	184	100.0
Litter	No	92	84.4	48	64.0	140	76.1
	Yes	17	15.6	27	36.0	44	23.9
	Total	109	100.0	75	100.0	184	100.0
Drunk or Rowdy	No	97	89.0	55	73.3	152	82.6
	Yes	12	11.0	20	26.7	32	17.4
	Total	109	100.0	75	100.0	184	100.0
Vandalism	No	95	87.2	59	78.7	154	83.7
	Yes	14	12.8	16	21.3	30	16.3
	Total	109	100.0	75	100.0	184	100.0

Table 6 shows 29.9% of respondents (N=55) stated that excessive noise was visible in their area of residence. 23.9% of the sample (N=44) said rubbish or litter was visible in the street, whereas 17.4% (N=32) responded there was drunk or rowdy behaviour, and finally 16.3% (N=30) cold visibly see vandalism in their area of residence. Results show that Location B suffered from a much higher percentage of anti-social behaviours than Location A.

Table 7. A frequency table to show the number of participants who have each of the security measures implemented on their residence

		Total	
		Frequency	Percent
Neighbourhood Watch	Yes	25	12.8
	No	171	87.2
Burglar Alarm	Yes	132	67.3
	No	64	32.7
Car kept in garage	Yes	42	21.4
	No	154	78.6
CCTV	Yes	14	7.1
	No	182	92.9
Security Lighting	Yes	131	66.8
	No	65	33.2
End gates	Yes	27	13.8
	No	169	86.2
Side gate	Yes	123	62.8
	No	73	37.2
Private sign	Yes	2	1.0
	No	194	99.0
Dog	Yes	40	20.4
	No	156	79.6

Table 7 shows that only 12.8% of respondents are members of a neighbourhood watch scheme (N=25), 63.7% of respondents (N=132) have a burglar alarm, 66.8% (N=131) have security lighting, 62.8% (N=123) have a side gate, 21.4% (N=42) keep their car in their garage, and 20.4% (N=40)

have a dog. Only 13.8% of respondents have a gate at the end of their property (N27), 7.1% (N=14) have CCTV, and 1.0% (N=2) have a private sign on their property.

Exploring the Data

Before going on to carry out any inferential or comparative statistics, it was important to know whether or not the data are normally distributed (Diamond and Jefferies, 2001).
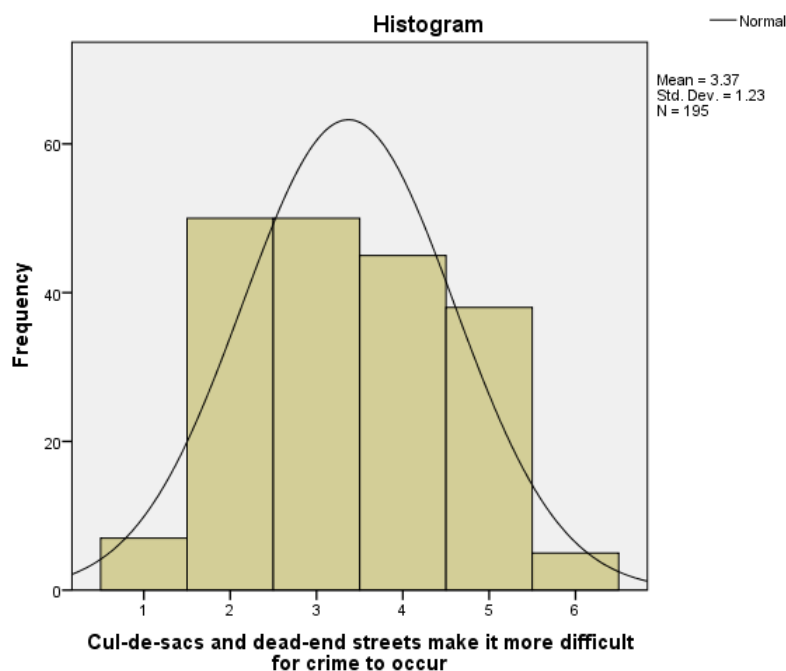
Figure 1.A histogram to show the responses to whether respondents agreed or disagreed that cul-de-sacs and dead-end streets make it more difficult for crime to occur

Figure 1 shows that the data for the variable "Cul-de-sacs and dead-end streets make it more difficult for crime to occur" was not normally distributed as the bell curve suggests. It is noted here that rather than showing histogram results for every test of distribution, all of the histograms indicated that none of the variables included in the research were normally distributed.

Table 8. A Kolmogorov-Smirnov test to show if the variable 'Cul-de-sacs and dead-end streets make it more difficult for crime to occur', is normally distributed

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Cul-de-sacs and dead-end streets make it more difficult for crime to occur	.167	195	.000

Using the same variable as the histogram test above, table 8shows that the data are not normally distributed, we can therefore reject the null hypothesis that the distribution was normally distributed as the probability was 0.00, which is below the normally used alpha of 0.05 (Foster, 1998). As a result, non-parametric tests were applied to the data in this research.

Public's Engagement with SCP Techniques and Measures
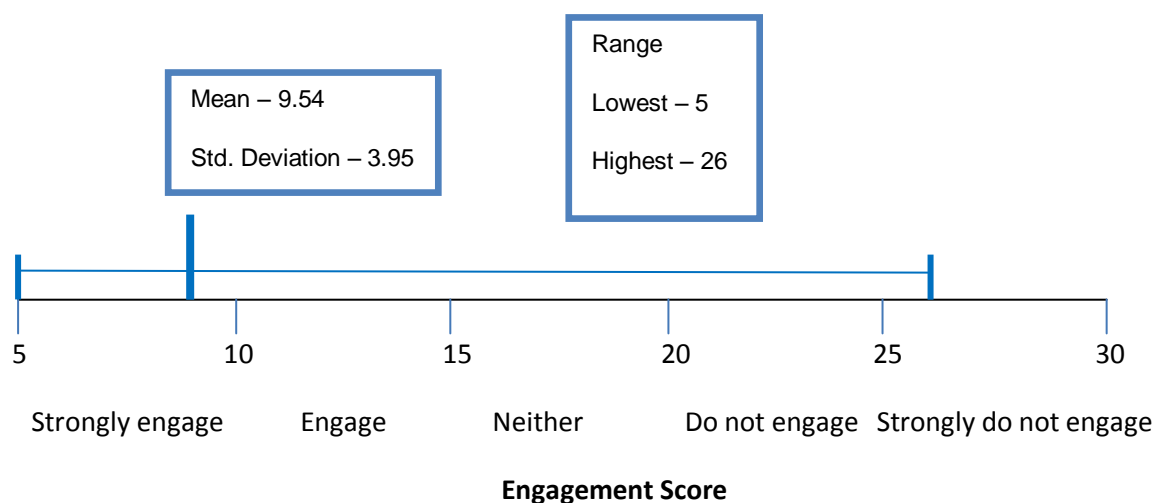
Figure 2.A chart showing the mean, standard deviation, and range of scores from the sample on their engagement with situational crime prevention techniques and measures

Figure 2 shows that the mean for participants' overall engagement score falls under the 'strongly engage' score boundary, with a mean score of 9.54 (Std. Deviation = 3.95) and the scores ranged from five to twenty six.

Public's Support for SCP Techniques and Measures
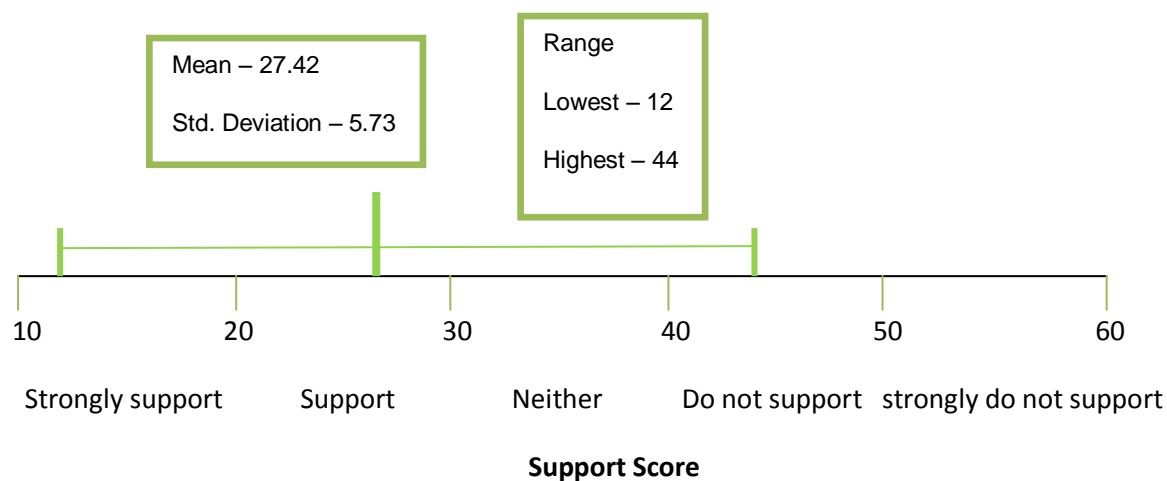
Figure 3.A chart showing the mean, standard deviation, and range of scores from the sample on their support for situational crime prevention techniques and measures

Figure 3 highlights that the mean for participants overall support score falls under the 'support' score boundary, with a mean score of 27.42 (Std. Deviation = 5.73) and the scores ranged from 12 to 44.

Public Opinion on the Effectiveness of SCP Techniques and Measures

Effectiveness Score
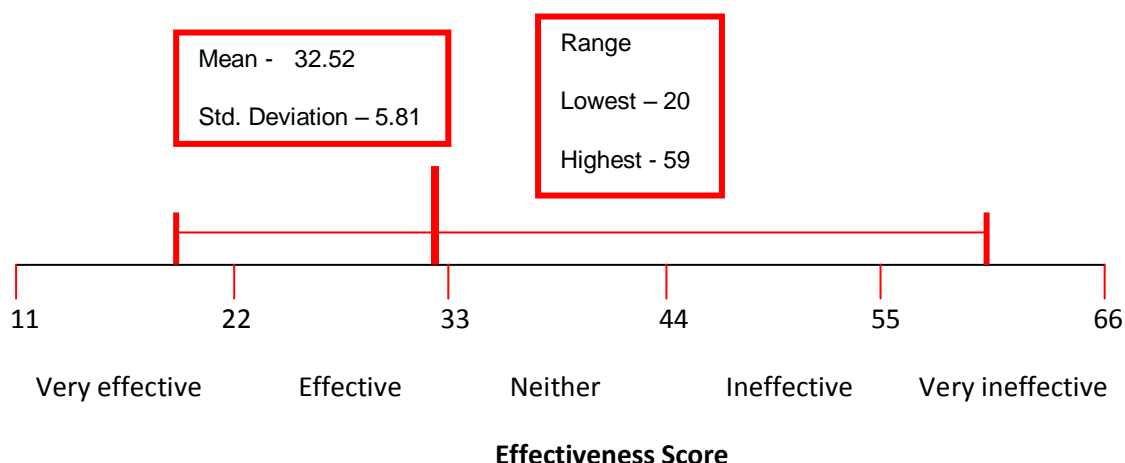
Figure 4.A chart showing the mean, standard deviation, and range of scores from the samples opinion on the effectiveness of situational crime prevention techniques and measures

Figure 4 shows that the mean for participants' effectiveness score falls under the 'effective' score boundary, with a score of 32.52 (Std. Deviation = 5.81) and a range of scores from 20-59.

Engagement, Support and Effectiveness – Inferential Statistics

Table 9. A table to show the test of correlation results between engagement, support, and effectiveness scores for participants

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
The overall 'Engagement' score for participants	The overall 'Support' score for participants	.285**	195	.000	Significant	Positive	Weak
The overall 'Engagement' score for participants	The overall 'Effectiveness' score for participants	.278**	195	.000	Significant	Positive	Weak
The overall 'Support' score for participants	The overall 'Effectiveness' score for participants	.179*	195	.012	Significant	Positive	Weak

The table highlights crucial findings and shows statistically significant positive correlations between all three variables: engagement score, support score, and effectiveness score suggesting the more participants engage in SCP techniques and measures the more they support them and believe them to be effective.

Table 10. A Mann-Whitney results table to show the differences between those who are a member of a neighbourhood watch scheme, have a burglar alarm, and have CCTV and participants overall support, and effectiveness score

Variable		Mann-Whitney		Mean Rank	
		Sig. Value	Significance	Yes	No
Neighbourhood watch scheme	Support score	.004	Significant	67.28	102.52
	Effectiveness score	.032	Significant	75.48	101.31
Burglar alarm	Support score	.013	Significant	91.06	112.53
	Effectiveness score	.011	Significant	90.90	112.87
CCTV	Support score	.003	Significant	54.64	101.35
	Effectiveness score	.100	Not significant	74.14	99.85

Table 10 shows that respondents who are a member of a neighbourhood watch scheme support SCP more, and believe SCP to be more effective than respondents who are not members of a neighbourhood watch scheme. The results show the same for participants with a burglar alarm, as well as participants with CCTV. However, there was no significant difference between participants with CCTV and participants without and their effectiveness score.

Table 11.A table to show the test of correlation results between various CCTV variables and engagement score, support score, and effectiveness score

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
The idea of my property being watched by CCTV makes me feel safer	Engagement score	.184*	195	.010	Significant	Positive	Weak
	Effectiveness score	.159*	195	.026	Significant	Positive	Weak
Crime prevention interventions such as CCTV, are too intrusive on my privacy	Offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours	.181*	195	.011	Significant	Positive	Weak
CCTV in my area of residence is likely to reduce crime	Engagement score	.187**	196	.009	Significant	Positive	Weak
	Support score	.516**	195	.000	Significant	Positive	Strong

The table shows a number of significant correlations between variables involving CCTV and opinions on SCP. A particularly strong statistically significant correlation was between 'CCTV in my area of residence is likely to reduce crime' and the 'overall support scores' for SCP techniques and measures. Results that the table does not show are that all the results between the list of variables

and 'Crime prevention interventions such as CCTV are too intrusive on my privacy' were negative correlations, all except for 'Offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours'. This shows that respondents agreed that CCTV intruded on their privacy but they also thought this would make it more difficult for potential offenders to roam freely within their neighbourhood. The table also shows that those who believe CCTV is likely to reduce crime support and engage in SCP techniques and measures more than those that disagree with the statement.

Table 12. A table to show the test of correlation results between participants that believe the police and other local public agencies are successfully dealing with crime prevention in my local area and participants FOC scores, their engagement, support, and effectiveness scores

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
The police and other local public agencies are successfully dealing with crime prevention in my local area	Overall 'Engagement' score	.056	196	.438	Not significant	Positive	No correlation
	Overall 'Support' score	.031	195	.665	Not significant	Positive	No correlation
	Enough is being done to prevent crime in my area	.606**	196	.000	Significant	Positive	Strong
Overall 'Engagement' score	Enough is being done to prevent crime in my area	.105	196	.144	Not significant	Positive	No correlation

Table 12 shows a strong statistically significant correlation between 'The police and other local public agencies are successfully dealing with crime prevention in my local area' and 'enough is being done to prevent crime in my area'. Results show no correlation between 'enough is being done' and engagement' which suggests that the public gage crime prevention effectiveness on the police.

Table13. A Mann-Whitney results table to show the differences between those who are always happy to help police and other local agencies when it comes to crime prevention in their area and their overall support, and effectiveness score, as well as if they would prefer their house to be designed specifically with crime prevention in mind

Variable		Mann-Whitney			
				Mean Rank	
		Sig. Value	Significance	Agree	Disagree
I am always happy to help police and other local agencies when it comes to crime prevention in my area	Overall 'Support' score	.045	Significant	96.44	140.00
	Overall 'Effectiveness' score	.028	Significant	96.29	144.00
	I would prefer my house to be designed specifically with crime prevention in mind	.049	Significant	96.54	137.14

The table shows those who agree that they are always happy to help police and other local agencies when it comes to crime prevention in their area significantly support for SCP more than those that disagree, as well as believing it to be significantly more effective. The table also highlights that respondents who are who would prefer their house to be designed specifically with crime prevention in mind are significantly happier to help police and other local agencies when it comes to crime prevention in their area.

Results on Area of Residence
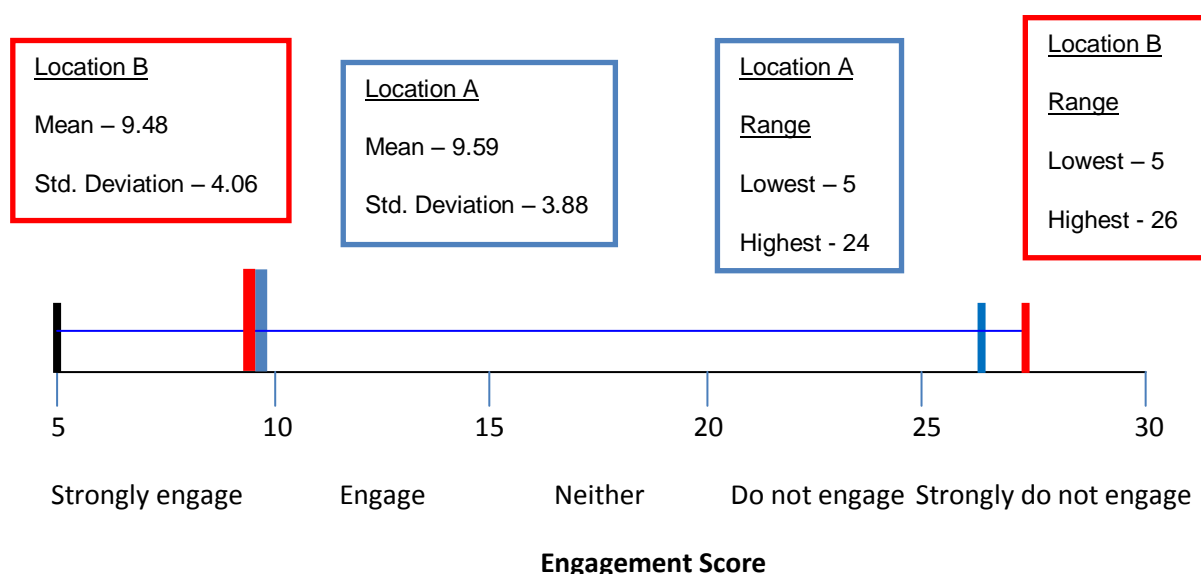
Figure 5. A chart showing the mean, standard deviation, and range of scores from the participants from both locations and their engagement with situational crime prevention techniques and measures

Figure 5 shows that mean engagement score for Location B (Mean=9.48, Std. Deviation=4.06) was slightly lower than the score for Location A (Mean=9.59, Std. Deviation=3.88), highlighting that

Location B engages in situational crime prevention techniques and measures marginally more than Location A.
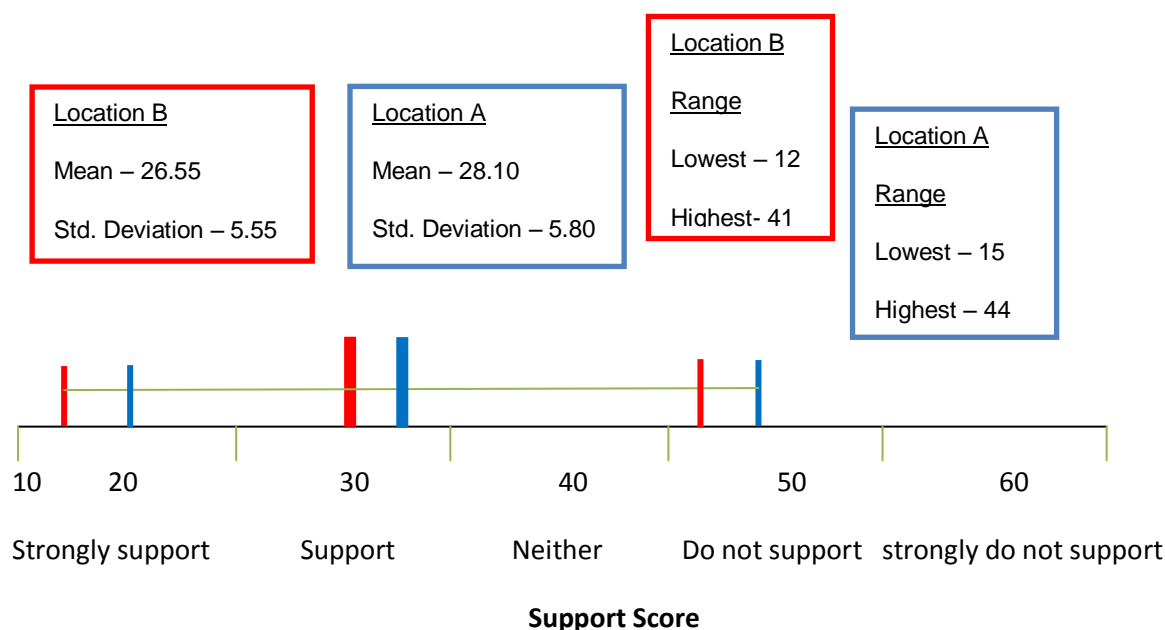
Figure 6.A chart showing the mean, standard deviation, and range of scores from the participants from both locations and their support for situational crime prevention techniques and measures

Figure 6 shows the mean support score for Location B (Mean=26.55, Std. Deviation=5.55) was lower than the score for Location A (Mean=28.10, Std. Deviation=5.80), indicating Location B support situational crime prevention techniques and measures more than Location A.
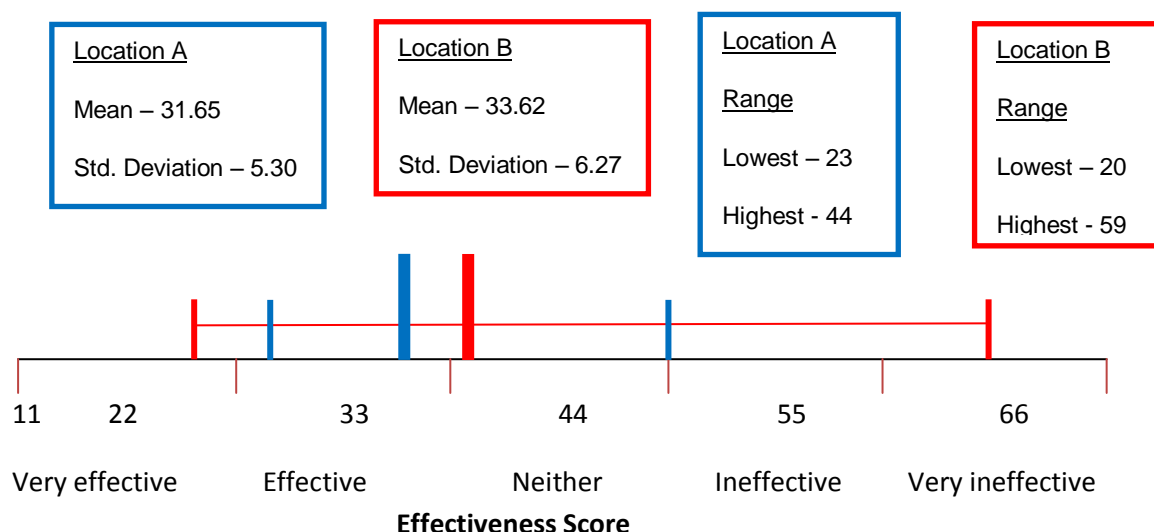
Figure 7.A chart showing the mean, standard deviation, and range of scores from the participants from both locations and their opinions on the effectiveness of situational crime prevention techniques and measures

Figure 7 highlights the mean effectiveness score for Location A (Mean=31.65, Std. Deviation=5.30) was lower than the score for Location B (Mean=33.62, Std. Deviation=6.27), suggesting that Location A believe situational crime prevention techniques and measures are more effective than Location B.

To summarise, the above results show that respondents in Location B tend to support and engage with SCP more than those in Location A, but respondents in Location A tend to feel SCP is more effective, than do respondents in Location B.

Table 14.A Mann-Whitney results table to show the differences in results for area of residence and the participants overall engagement, support, and effectiveness score

Variable		Mann-Whitney		Descriptive Mean	
		Sig. Value	Significance	Location A	Location B
Area of residence	The overall 'Engagement' score for participants	.743	Not significant	9.59	9.48
	The overall 'Support' score for participants	.056	Not significant	28.10	26.55
	The overall 'Effectiveness' score for participants	.035	Significant	31.65	33.62

The table shows that the only statistically significant difference was between 'Area of residence' and the overall 'Effectiveness' score for the participants. Location A had a mean rank of 31.65, whereas Location B had a mean rank of 33.62. This shows that Location A felt that situational crime prevention techniques are more effective than Location B.

Table 15. A frequency table showing security measures taken by the sample from both locations

		Location A		Location B	
		Frequency	Percent	Frequency	Percent
Neighbourhood watch	Yes	13	11.8	12	14.0
	No	97	88.2	74	86.0
Burglar alarm	Yes	77	70.0	55	64.0
	No	33	30.0	31	36.0
Car kept in garage	Yes	29	26.4	13	15.1
	No	81	73.6	73	84.9
CCTV	Yes	4	3.6	10	11.6
	No	106	96.4	76	88.4
Security lighting	Yes	78	70.9	53	61.6
	No	32	29.1	33	38.4
End gates	Yes	18	16.4	9	10.5
	No	92	83.6	77	89.5
Side gate	Yes	66	60.0	57	66.3
	No	44	40.0	29	33.7
Private sign	Yes	1	0.9	1	1.2
	No	109	99.1	85	98.8
Dog	Yes	19	17.3	21	24.4
	No	91	82.7	65	75.6

Table 15 shows that both locations have similar percentages when it comes to security measures taken. The biggest difference was found with keeping the car in the garage, with 26.4% (N=29) of participants from Location A and 15.1% (N=13) from Location B.

Table 16. A Mann-Whitney results table to show the differences in results from both locations and their opinions on whether 'Enough is being done to prevent crime in my area' and 'The police and other local public agencies are successfully dealing with crime prevention in my local area'

Variable		Mann-Whitney		Mean Rank	
		Sig. Value	Significance	Location A	Location B
Area of Residence	Enough is being done to prevent crime in my area	.000	Significant	85.51	115.12
	The police and other local public agencies are successfully dealing with crime prevention in my local area	.000	Significant	83.67	117.47

Table 16 shows a statistically significant difference between Location A and Location B in their opinions on how successful the police are at preventing crime in their area, and enough is being done to prevent crime in their area. The results indicate Location A are much happier than Location B with crime prevention in their area.

Results on Socio-demographic Features

Gender

Table 17. A Mann-Whitney results table to show the differences between 'gender' and participants overall engagement, support, and effectiveness score

Variable		Mann-Whitney		Descriptive Mean	
		Sig. Value	Significance	Male	Female
Gender	The overall 'Engagement' score for participants	.992	Not significant	9.34	9.68
	The overall 'Support' score for participants	.079	Not significant	28.36	26.75
	The overall 'Effectiveness' score for participants	.007	Significant	31.37	33.33

This table shows that the mean scores for males and females were similar for engagement, support and effectiveness scores. The only significant result showed that males believe situational crime prevention techniques and measures to be more effective than females, with males having a mean of 31.37 compared to the female mean of 33.33.

Table 18. A table to show correlation results between age and engagement, support, and effectiveness scores

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
Age	The overall 'Engagement' score for participants	-.247**	196	.000	Significant	Negative	Weak
	The overall 'Support' score for participants	-.001	195	.987	Not significant	Negative	No correlation
	The overall 'Effectiveness' score for participants	-.221**	195	.002	Significant	Negative	Weak

These results show a significant negative correlation between age and engagement, as well as age and effectiveness. This shows the older the respondent the less they engage in SCP techniques and measures, there was no statistically significant correlation between age and supporting SCP, but the older the respondent the less effective they believe SCP techniques and measures to be.

Employment Status

Table 19. A Mann-Whitney results table to show the differences between 'employment status' and participants overall engagement, support, and effectiveness score

Variable		Mann-Whitney						
		Sig. Value	Significance	Full time employment		Not in full time employment		
				Mean	Mean Rank	Mean	Mean Rank	
Employment Status	The overall 'Engagement' score for participants	.002	Significant	10.34	109.42	8.79	85.21	
	The overall 'Support' score for participants	.024	Significant	28.27	105.75	26.43	87.63	
	The overall 'Effectiveness' score for participants	.801	Not Significant	32.50	95.47	32.47	97.49	

The table shows that participant's not in full time employment significantly engage in and support SCP techniques and measures significantly more than those in full time employment.

Children living at residence

Table 20. A Mann-Whitney results table to show the differences between those who have children under the age of 16 living at home and those that do not and their overall engagement, support, and effectiveness score

Variable		Mann-Whitney						
		Sig. Value	Significance	Yes		No		
				Mean	Mean Rank	Mean	Mean Rank	
Are there any children under the age of 16 living at the residence	The overall 'Engagement' score for participants	.018	Significant	10.65	111.61	9.14	90.88	
	The overall 'Support' score for participants	.955	Not significant	27.22	96.15	27.54	96.65	
	The overall 'Effectiveness' score for participants	.063	Not Significant	34.04	107.95	31.93	91.67	

Table 20 shows the only significant difference between those who have children under the age of 16 living at home and those that do not is the latter significantly engage in SCP techniques and measures more.

In summary, the above results show that males tend to believe SCP is more effective than females, the older the participant the less they engage in SCP and the more then believe it to be ineffective. Also, those not in full time employment engage in and support SCP techniques more than those in full time employment. Finally, participants who do not have a child under the age of 16 living at the residence engage in SCP techniques and measures more than those that do.

Results on Victimisation

When using victimisation data, the research has excluded responses from those who have not lived at their current residence for at least 12 months. From the sample, 93.9% of respondents (N=184) have lived at the current residence for at least twelve months and 6.1% had not (N=12).

Firstly, in terms of victimisation, in the last 12 months 10.1% of respondents from Location A (N=11) and 21.3% of respondents from Location B (N=16) had been a victim of crime.

Engagement
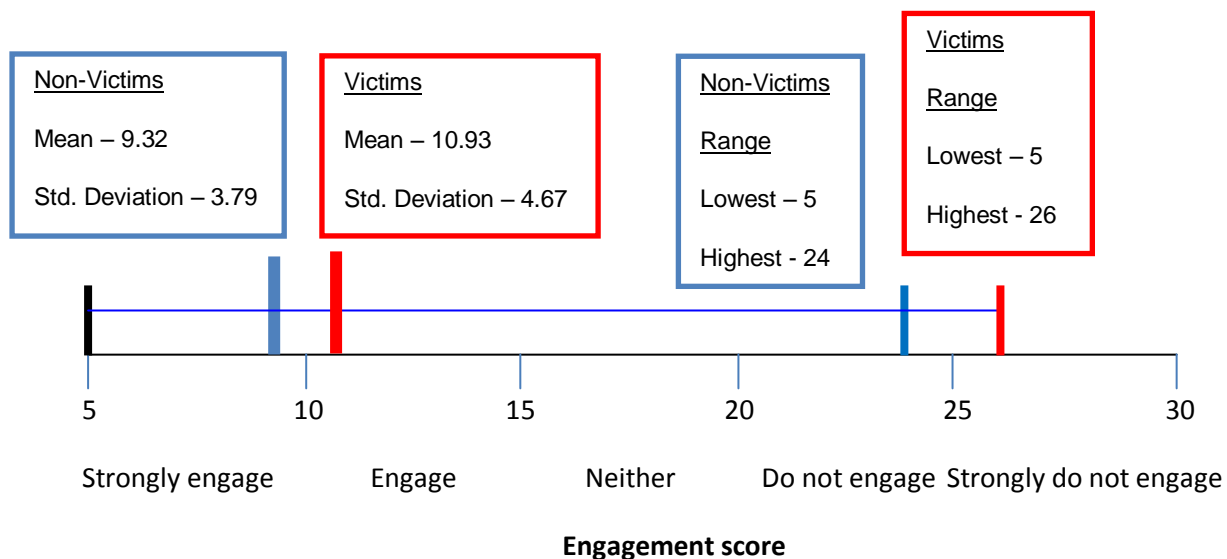
Figure 8.A chart showing the mean, standard deviation, and range of scores from those who have been a victim of crime and those who have not and their engagement with situational crime prevention techniques and measures

The chart shows that non-victims (Mean = 9.32, Std. deviation= 3.79) engage in SCP techniques and measures more than victims (Mean =10.93, Std. deviation=4.67).

Support

Victims
Mean – 26.89
Std. Deviation – 5.91

Non-Victims
Mean – 27.50
Std. Deviation – 5.71

Non-Victims
Range
Lowest – 12
Highest – 44

Victims
Range
Lowest – 15
Highest- 39

| 10 | 20 | 30 | 40 | 50 | 60 |

Strongly support Support Neither Do not support strongly do not support
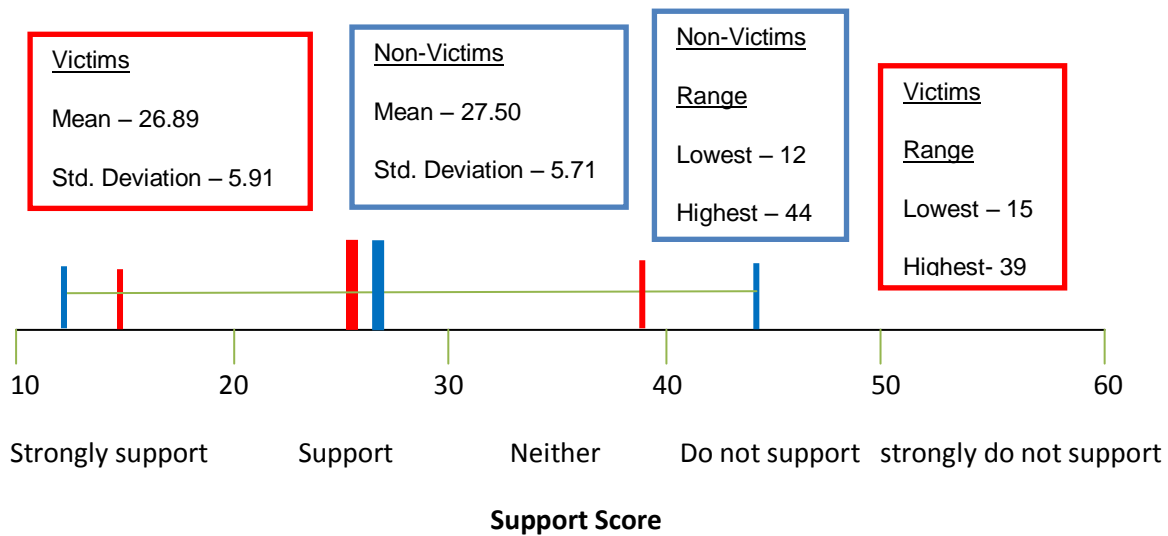
Support Score

Figure 9.A chart showing the mean, standard deviation, and range of scores from those who have been a victim of crime and those who have not and their support for situational crime prevention techniques and measures

Figure 9 shows that victims (Mean = 26.89, Std. deviation= 5.91) support SCP techniques and measures more than non-victims (Mean =27.50, Std. deviation=5.71).

Effectiveness

Non-Victims
Mean – 32.10
Std. Deviation – 5.76

Victims
Mean – 35.15
Std. Deviation – 5.58

Non-Victims
Range
Lowest – 20
Highest - 66

Victims
Range
Lowest – 26
Highest - 45

| 11 | 22 | 33 | 44 | 55 | 66 |

Very effective Effective Neither Ineffective Very ineffective

Effectiveness Score

Figure 10.A chart showing the mean, standard deviation, and range of scores from those who have been a victim of crime and those who have not and their opinions on the effectiveness of situational crime prevention techniques and measures

The chart shows that non-victims (Mean = 32.10, Std. deviation= 5.76) believe SCP techniques and measures are more effective than victims (Mean =35.15, Std. deviation=5.58).

Table 21. A Mann-Whitney results table to show the difference between those who have been a victim of crime and those that have not, with participants overall engagement, support, and effectiveness score

Variable		Mann-Whitney		Descriptive Mean	
		Sig. Value	Significance	Victim	Non-Victim
In the last 12 months (whilst) living at this property) have you been the victim of any type of crime	The overall 'Engagement' score for participants	.075	Not significant	10.93	9.41
	The overall 'Support' score for participants	.593	Not significant	26.89	27.52
	The overall 'Effectiveness' score for participants	.013	Significant	35.15	32.15
				Mean Rank	Mean Rank
	The Police and other local public agencies are successfully dealing with crime prevention in my local area	.039	Significant	118.22	95.35

The only statistically significant difference in the table was between victimisation and the overall effectiveness score. This unsurprisingly indicates that non-victims believe SCP techniques and measures to be significantly more effective than victims. The table also shows that those who have not been a victim of crime in the last 12 months significantly believe the police and other local agencies are more successful in dealing with crime prevention than those who have been a victim of crime.

Table 22. A table to show the test of correlation results between those who think it is likely that I will be the victim of crime in the next 12 months and their overall engagement, support, and effectiveness score

Variables		Result			Significance	Positive/Negative	Strength of correlation
		rho	n	p			
I think it is likely that I will be the victim of crime in the next 12 months	Engagement score	-.059	196	.409	Not significant	Negative	No correlation
	Support score	.154*	195	.031	Significant	Positive	Weak
	Effectiveness score	-.186*	195	.009	Significant	Negative	Weak

Table 22 shows that respondents, despite thinking it was likely that they will be the victim of crime in the next 12 months there was no significant correlation with the overall engagement score. There was a significant correlation with the overall support score and effectiveness score; however, the effectiveness score has significant negative correlation, suggesting the more participantsbelievethey will be the victim of crime in the next 12 months, the more they believe SCP techniques and measures to be ineffective.

Results on Fear of crime

Table 23. A frequency table showing crimes the sample were most worried about

Crime most worried about	Location A		Location B		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Burglary	68	61.8	58	67.4	126	64.3
Anti-social behaviour	12	10.9	17	19.7	29	14.8
Vehicle Crime	12	10.9	4	4.6	16	8.2
Vandalism	1	1.0	0	0.0	1	0.5
Theft	1	1.0	2	2.4	3	1.5
None of these crimes	16	14.5	5	5.8	21	10.7
Total	110	100.0	86	100.0	196	100.0

Table 23 presents that 64.3% of respondents worried about 'burglary 'the most (N=126), next most frequent was 'anti-social behaviour' with 14.8% (N=29). Notably, 10.7% of the sample worried about 'none of the crimes' (N=21).Table 16 also shows that respondents from Location A worried about 'burglary' the most (61.8%, N=68), as did respondents from Location B (67.4%, N=58). The next most frequent crime that participants from Location B worried about was 'anti-social behaviour' (19.7%, N=17), whereas 14.5% of respondents from Location A worried about 'none of these crimes' (N=16).

Table 24. A table showing the mean, standard deviation, and range scores of respondents on their fear of crime for questions on the area of residence and their behavioural, cognitive, and affective aspects

		Range		Mean	Std. Deviation
		Lowest	Highest		
FOC – Area of residence	Location A	10	16	14.55	1.68
	Location B	6	16	13.52	2.15
FOC – Behavioural, Cognitive, Affective	Location A	17	36	31.78	3.78
	Location B	6	36	27.71	5.48

Table 24 suggests that participants from Location B (Mean=13.52, Std. Deviation=2.15) fear crime more than those who live in Location A (Mean=14.55, Std. Deviation=1.68) for their responses to area of residences questions. The table also indicates that Location B fear crime (Mean=27.71, Std. Deviation=5.48) more than participants from Location A (Mean=31.78, Std. Deviation=3.78) for their responses to behavioural, cognitive, and affective questions.

Table 25. A table to show the test of correlation results between FOC – area of residence questions and participants overall engagement, support, and effectiveness score

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
Fear of crime – Area of residence	The overall 'Engagement' score for participants	-.034	196	.635	Not significant	Negative	No correlation
	The overall 'Support' score for participants	.120	195	.096	Not significant	Positive	No correlation
	The overall 'Effectiveness' score for participants	-.024	195	.741	Not significant	Negative	No correlation

The table shows no significance between 'Fear of crime – Area of residence' and any of the variables: engagement, support, and effectiveness suggesting FOC has no effect on participant's engagement with, support for, and opinions on the effectiveness of SCP techniques and measures.

Table 26. A table to show the test of correlation results between FOC – behavioural, cognitive, affective questions and participants overall engagement, support, and effectiveness score

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
Fear of crime – Behavioural, cognitive, affective	The overall 'Engagement' score for participants	-.017	196	.809	Not significant	Negative	No correlation
	The overall 'Support' score for participants	.198**	195	.006	Significant	Positive	Weak
	The overall 'Effectiveness' score for participants	-.142*	195	.048	Significant	Negative	Weak

There was a significant correlation between those that fear crime from a behavioural, cognitive, and affective element, and supporting SCP techniques and measures. The other statistically significant correlation result was: those who fear crime believe SCP techniques and measures are not effective. The results (not shown in the table) showed that there were no statistical significant correlations between both sets of 'Fear of crime' questions and any of the 'Engagement' variables within the survey.

Table 27. A Mann-Whitney results table showing the difference between participants who agree and disagree with 'the Police and other local public agencies are successfully dealing with crime prevention in their local area' and their overall FOC score for both sets of FOC questions

Variable		Mann-Whitney			
		Sig. Value	Significance	Mean Rank	
				Agree	Disagree
FOC – Area of residence	The Police and other local public agencies are successfully dealing with crime prevention in my local area	.061	Not significant	102.28	84.21
Fear of crime – Behavioural, cognitive, affective	The Police and other local public agencies are successfully dealing with crime prevention in my local area	.000	Significant	107.15	65.78

Table 27 shows thatthose who disagree that the police and other local public agencies are successfully dealing with crime prevention in their local area significantly fear crime more than those who agree.

Table 28. A table to show the test of correlation results between various CCTV variables and both sets of FOC scores

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
The idea of my property being watched by CCTV makes me feel safer	FOC – Area of residence	.206**	195	.004	Significant	Positive	Weak
	FOC – Behavioural, cognitive & affective	.294**	195	.000	Significant	Positive	Weak
CCTV in my area of residence is likely to reduce crime	FOC – Area of residence	.239**	196	.001	Significant	Positive	Weak
	FOC – Behavioural, cognitive & affective	.251**	196	.000	Significant	Positive	Weak

This table shows significant positive correlations between both CCTV variables and the FOC scores for participants. This suggests the more respondents agree that CCTV makes them feel safer and the more it is likely that CCTV will reduce crime, the more they fear crime.

Table 29. A table to show the test of correlation results between the displacement variable and the FOC scores, as well as participant's opinions on whether they would prefer to have their house designed with crime prevention in mind

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
Preventing crime in one area merely causes that crime to be committed elsewhere	FOC – Area of residence	.186**	195	.009	Significant	Positive	Weak
	FOC – Behavioural, cognitive & affective	.254**	195	.000	Significant	Positive	Weak
	I would prefer my house to be designed specifically with crime prevention in mind	.142*	195	.048	Significant	Positive	Weak

Table 29 shows statistical significant correlations between respondents who believe 'preventing crime in one area merely causes that crime to be committed elsewhere' (Displacement) and their fear of crime scores. This result suggests that the idea of displacement increases fear of crime. The table also shows that those who agree displacement is possible would prefer their house to be designed specifically with crime prevention in mind.

Public Opinion on Crime Prevention through Environmental Design

Table 30. A frequency results table on whether or not participants agree or disagree with the CPTED variables

Section	CPTED Variable	Agree		Disagree	
		Frequency	Percent	Frequency	Percent
Engagement	I regularly maintain and look after my property	188	**95.9**	8	4.1
Engagement	I sometimes check to make sure crime isn't taking place at my neighbours property	151	**77.0**	45	23.0
Support	I would prefer my house to be designed specifically with crime prevention in mind	162	**83.1**	33	16.9
Support	I think the use of gates and fencing make areas look less friendly and less welcoming (Reversed)	126	**64.6**	69	35.4
Support	I would prefer my property to be surrounded by a high fence or hedge	69	35.4	126	**64.6**
Support	Close communities where neighbours get on are safer than communities that do not get on	186	**94.9**	10	5.1
Effectiveness	Improved street lighting reduces the opportunity for crime	180	**91.8**	16	8.2
Effectiveness	Cul-de-sacs and dead-end streets make it more difficult for crime to occur	107	**54.9**	88	45.1
Effectiveness	Reducing the number of short cuts through areas of residence such as alleyways will make crime less likely	160	**82.1**	35	17.9
Effectiveness	The likelihood of crime is reduced when areas of residence are well maintained and looked after	133	**67.9**	63	32.1
Effectiveness	Offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours	144	**73.8**	51	26.2
Effectiveness	Crime is less likely to happen in neighbourhoods that are free from litter, graffiti, and vandalism	119	**60.7**	77	39.3

The results show that respondents agree with the majority of CPTED variables, the only variable they did not agree with was 'I would prefer my property to be surrounded by a high fence or hedge'. The variables 'I regularly maintain and look after my property'; 'Close communities where neighbours get on are safer than communities that do not get on'; 'Improved street lighting reduces the opportunity for crime' had over 90% agreement amongst the sample.

Table 31. A Mann-Whitney results table to show the difference between those who would prefer their house to be designed specifically with crime prevention in mind and those who would not, with their overall engagement, support, and effectiveness score

Variable		Mann-Whitney			
		Sig. Value	Significance	Mean Rank	
				Agree	Disagree
I would prefer my house to be designed specifically with crime prevention in mind	FOC score – Area of residence	.004	Significant	92.84	122.83
	FOC score – Behavioural, Cognitive, Affective	.000	Significant	89.97	137.41
	The overall 'Engagement' score for participants	.007	Significant	93.12	121.97
	The overall 'Support' score for participants	.000	Significant	86.53	154.29
	The overall 'Effectiveness' score for participants	.860	Not significant	97.68	99.58

Table 31 shows a significant difference in results between those who would prefer their house to be designed specifically with crime prevention in mind (CPTED) engaging with and supporting SCP techniques and measures within their residential settings more than those who would not. The table also shows, however, that those who agree with designing their house with crime prevention in mind also feared crime more than those who disagreed.

Table 32. A Mann-Whitney results table showing the difference between those who agreed and disagreed with various CPTED variables and the overall effectiveness score of participants

Variable		Mann-Whitney			
	CPTED variable	Sig. Value	Significance	Mean Rank	
				Agree	Disagree
Effectiveness score	I regularly maintain and look after my property	.001	Significant	95.33	160.38
	I sometimes check to make sure crime isn't taking place at my neighbours property	.005	Significant	91.83	118.58
	Reducing the number of shortcuts through areas of residence such as alleyways will make crime less likely	.001	Significant	91.81	126.29
	Crime is less likely to happen in neighbourhoods that free from litter, graffiti, and vandalism	.000	Significant	72.92	136.43

The table shows that for a number of CPTED variables, participants who agreed with them believed SCP techniques and measures to be more effective than those who disagreed.

Table 33. A table to show the test of correlation results between the variable assessing 'close communities' and participants overall engagement, support, effectiveness scores, as well as whether they agree the police and other local public agencies are successfully dealing with crime prevention in their area

Variables		Result			Significance	Positive/ Negative	Strength of correlation
		rho	n	p			
Close communities where neighbours get on are safer than communities that do not get on	Engagement score	.275**	196	.000	Significant	Positive	Weak
	Support Score	.237**	195	.001	Significant	Positive	Weak
	Effectiveness score	.257**	195	.000	Significant	Positive	Weak
	The police and other local public agencies are successfully dealing with crime prevention in my local area	.207**	195	.004	Significant	Positive	Weak

What the table does not show was that the variable 'Close communities where neighbours get on are safer than communities that do not get on' had a number of significant correlations with other variables used in the study, but the table shows only a few. Table 33 shows statistically significant positive correlations between 'Close communities where neighbours get on are safer than communities that do not get on' and the overall engagement, support and effectiveness scores. This suggests that participants believe having positive relationships with neighbours increasing their engagement and support for SCP techniques and measures, as well as believing them to be more effective.

Public Opinion on Improving Crime Prevention within their own Neighbourhoods

Table 34. A frequency table to show the suggestions from participants when asked how to improve crime prevention within their own neighbourhoods

	Frequency	Percent
More police patrols and presence on the street	55	63.2
Education	16	18.4
More CCTV	9	10.3
Neighbourhood Watch Scheme	5	5.7
Facilities for young people	2	2.3
Total	87	100.0

Table 34 shows that from the sample, 87 participants (44.3 percent) responded with a suggestion of how to improve crime prevention within their neighbourhood. Of those respondents, 63.2% (N=55) responded that they wanted to see more of a police presence in their area of residence through patrols, particularly on foot. The next most popular response was the belief that education is the key to crime prevention, 18.4% (N=16).

Chapter Four:

Discussion

The results presented above indicate that plainly, participants do engage in SCP techniques and measures, they support them, and also believe them to be effective. As such, a number of the aims of the project and the first three research questions have been addressed. However, when exploring whether or not area of residence; socio-demographic features; victimisation and fear of crime affect participants' opinions on SCP, results were more complex. The results of the study are discussed below, followed by the various limitations of the research, suggestions for policy and implications for future research.

Firstly, it was found that differences existed between the sample by Location, specifically in a higher number of females participating in the survey from Location B, as well as the mean age of Location A being a lot higher than those from Location B. As a result, it must therefore be taken into account that any significant findings from the study in relation to gender and age, as well as findings in relation to area, could be affected by these differences. For example, it might not be the area that causes the difference on opinions of SCP, rather other socio-demographic features.

As expected the frequency analyses showed that a higher percentage of respondents had been a victim of crime from location B than location A, this was apparent in all forms of crime used in the study, as well as the visibility of anti-social behaviour. A noticeable point from the table 5 showed that percentages of crimes suffered by both locations were not too dissimilar; however the difference between percentages was more noticeable for anti-social behaviour, shown in table 6. As a result, this could provide a possible explanation for any differences by location on the opinions of SCP, and could be a matter for follow-up research to explore.

Public engagement with, support for, and opinion on the effectiveness of SCP Techniques and Measures

The analysis illustrated that the sample 'strongly engage' in SCP, 'support' it, and tenuously believe it to be 'effective'. The indication that participants support SCP techniques and measures is consistent with findings that the public support preventative measures rather than punitive sanctions (Roberts, 2004; Roberts and Hastings, 2012; Maguire and Pastore, 2004).This research provides evidence that citizens are highly supportive of SCP in particular as a crime prevention approach. The analysis outlined that respondents believe SCP techniques and measures to be 'effective', however the mean score was very close to the edge of the 'neither' boundary suggesting respondents are not totally convinced. A possible explanation for this result could be the influence of the responses from location B who live in a high crime domain; this is investigated further, later in the discussion. It is noted that the study would have benefited from qualitative research here and specifically in relation to how it adds depth, description and meaning to responses (Berg, 2007).

Crucial findings from the study were found in the correlation results which demonstrate that the more the public engages in SCP techniques and measures the more they support them and importantly the more they believe them to be effective. Table 10 of the analysis showed that there was a statistically significant difference between those who engage in SCP, such as being a member of a neighbourhood watch scheme, having a burglar alarm and CCTV installed and those who do not, with those who do being more supportive of such techniques and believing them to be more effective. Participation in crime prevention schemes such as neighbourhood watch has multiple benefits such as getting the community involved with police and improving relationships between them. As well as this, it directly relates to SCP theory and specifically to RAT discussed within the literature review, in that community members act as capable guardians (Bennett, 1991). This notion is further backed up in table 13 which indicates those who agree they are happy to help police and other local agencies when it comes to crime prevention in their area significantly support and believe SCP to be more effective than those who disagree.

However, research suggests that neighbourhood watch schemes are more prominent and easier to implement in areas with low levels of crime. A possible research implication could be to examine and find ways to get residents from high crime areas to engage with SCP or other crime prevention strategies. This is also important for future policy, as results show that people who are more supportive of SCP and believe it to be more effective are more likely to then engage with it. The policy implication would be that informing the public of SCPs successes and making it appear more acceptable are likely to increase in public engagement and use.

Interesting findings regarding participants' opinions on CCTV in table 11 showed that the more the sample agreed CCTV makes them feel safer the more they engage in SCP and the more they believe it to be effective. This finding is backed up by findings that highlighted the more participants agreed that CCTV is likely to reduce crime in their area the more they engaged in and supported SCP techniques and measures. A further important finding from the study showed that the more participants agreed that crime prevention interventions such as CCTV are too intrusive on their privacy; the more they agreed that 'offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours'. This result suggests those who agree it is intrusive also believe it makes roaming freely within their neighbourhood more difficult, and highlights a key argument between the negative impacts of a 'big brother' society versus the need for public protection against crime.

When examining public perceptions on the success of the police and other local agencies when dealing with crime prevention in their local area, results showed that opinions did not statistically affect engagement or support. However, when opinions on the success of police and other local agencies were tested against 'Enough is being done to prevent crime in my area' the correlation was strong and statistically significant. Further to this, the variable 'Enough is being done to prevent crime in my area' was then tested with participants overall engagement score and showed no significance. This set of results infer that, with respect to issues asked about in this survey, the public gauge crime prevention success solely on the police and other local agencies rather than on their own

engagement in preventative technique and measures. It is important to state that there may be other factors influencing this that were not included in this survey, which provides a possible research implication discussed later in the chapter.

Area of Residence

Despite results showing that participants from location B engaged slightly more in SCP techniques and measures, and supported it more, the results were not significantly different than those from location A. This highlights a key finding that 'area of residence', and importantly the level of crime in an area, has no significant effect on the engagement with and support for SCP techniques and measures. This is surprising as it could be expected that participants from location A would significantly engage more than those from location B, due to the lower levels of crime. On the other hand, it could be said that because crime is lower and less of an issue for participants from Location A, they may feel they do not have to engage whereas participants from location B would engage more in SCP due to the high level of crime in the area.

Crawford (2000) claims security may be less a 'public good' and more a 'club good' which increasingly derive from wealth and the ability to find sanctuary in secure zones and new technologies (p.200). However, results from the current research challenge this notion; table 15 shows that a higher percentage of participants from location B, which has a much higher crime rate according to the indices of deprivation, had CCTV installed than participants from location A. As well as this, frequency results showed that the percentages of participants who owned costly forms of SCP such as burglar alarms and security lighting were similar for both locations.

A significant result was found however with location A believing SCP techniques and measures to be significantly more effective than those from location B, which did not come as a surprise given the level of crime in each area. A possible explanation for such a result can be found in table 16 showing a significant difference between location A and B in their opinions on 'Enough is being done to prevent crime in my area' and 'The police and other local public agencies are successfully dealing with crime prevention in my local area'. This further reiterates findings discussed above in that the public gauge effectiveness of SCP on the efforts of the police and other local agencies rather than themselves.

Socio-demographic features

The results regarding socio-demographic features showed some interesting and unforeseen results. In terms of gender there were no significant results regarding engagement with and support for SCP techniques and measures, which contradicts the vast amount of research that suggest gender is a key factor in fear of crime and perception of risk (Box et al. 1988). From such research it would be expected that females would engage with and support SCP techniques and measures significantly more than males, but results in the current research show that is not the case. A significant result was found in that males thought SCP was significantly more effective than females. A possible explanation for this could be suggested by research briefly touched on above in that females fear crime more than

males (Box et al. 1988) and therefore have a preconceived pessimistic view of the effectiveness of crime prevention strategies such as SCP.

Age, on the other hand, showed unexpected results. The correlation results in table 18 suggest the older the participant the less they engage in SCP techniques and measures. An explanation for such a result is that participants from Location A had a higher mean age than participants from Location B, and their area of residence has a much lower crime rate than location B so they may feel they do not need to engage in SCP techniques and measures. The results showed no significant correlation between age and support for SCP techniques and measures which contradicts the repeatedly found paradox that the elderly are the most fearful (Hollway and Jefferson, 1997) and would naturally engage more and be more supportive of preventative measures. A possible justification for this result could that older people are from a generation where you did not necessarily have to lock your doors and therefore their lack of support is actually because they don't like SCP, and prefer more traditional responses to crime. A finding that lends support to that premise was found in a significant negative correlation between age and SCP effectiveness, suggesting the older the participant the less effective they believe SCP to be.

Surprising results were apparent when testing 'employment status' and 'children living at home' against opinions on SCP. We would expect those in full-time employment to engage significantly in and support SCP more than those who are not in full-time employment as they are out for most of the day leaving their property open to crime. However, participants not in full-time employment significantly engaged in and supported SCP more than those in full-time employment. An explanation for this could be that participants not in full-time employment could come from an area with a higher crime rate and will therefore engage in and support SCP more. This could also be explained in terms of 'eyes on the street' (Jacobs, 1971) in that those who are at home during the day engage in natural surveillance of their property and surrounding properties more than those who are at work during the day. A surprising result from the study was that those who have a child under the age of 16 living at the residence engage significantly less than those who do not. It would be expected that parents would engage in extra safety precautions and measures to protect their property with the presence of a child in the residence. However, a simple explanation for such a result could be that a parent is more likely to be at home looking after a child below the age of 16, as well as having less disposable income to spend on security measures than someone might have who does not have children.

As a result of the above findings it has become clear that socio-demographic features have produced a number of thought-provoking findings on opinions of SCP techniques and measures. As a result, further research could look more deeply into such findings.

Victimisation

The inferential statistics on victimisation displayed no significant difference between those who have been a victim of crime and those who had not in the last 12 months (whilst living at the current property) and their engagement, and support score, suggesting victimisation has no effect on

engagement with and support for SCP techniques and measures. However, figure 8 and 9 showed that both non-victims and victims do engage in and support SCP techniques, indicating that engagement and support of SCP is not increased by fear of victimisation, or vice versa. An expected significant result was those who had not been a victim of crime in the last 12 months at their current property did significantly believe SCP to be more effective than those who had been a victim. Naturally, victims of crime are not going to believe that preventative measures are successful, however results highlighted that non-victims agreed that the police and other local agencies were successfully dealing with crime prevention statistically more than those who disagreed. This result, along with the lack of significance between victims and engagement with SCP, reiterates earlier findings that the public gauge successful crime prevention on the police.

An unforeseen result from table 22 showed that even though participants believe it is likely they will become a victim in the next 12 months, there is no significant statistical correlation with engagement with SCP techniques and measures. A potential explanation for the lack of correlation is simply human nature and the reality that the public do not always think about taking safety precautions against crime until it has already happened. Further to this, the result could be down to a lack of knowledge of how to protect themselves or a lack of finances to pay for certain measures such as CCTV; however this is unclear and could be an area for future research to explore.

Fear of Crime

Table 23 shows that burglary was the most worried about crime, which reiterates findings from previous BCS research (Jansson, 2006); this was the case for both locations. However, the next most popular response for Location B was anti-social behaviour whereas Location A's next most frequent response was none of these crimes.

Descriptive statistics showed, unsurprisingly, that participants from location B feared crime more than those from location A, on both sets of FOC questions. Importantly, the FOC 'area of residence' questions, adopted from the BCS, showed no significant correlations with opinions of SCP. Further to this, the FOC behavioural, cognitive and affective questions also showed no significant correlations with engagement. This highlights a key finding that FOC has no significant effect on engagement with SCP techniques and measures. There was however a weak positive correlation between FOC (behavioural, cognitive, affective) and support for SCP, but a negative correlation for effectiveness. This suggests that the more participants believe SCP to be ineffective, the more they fear crime, and begs the question would providing the public with information on the effectiveness and successes of SCP as well as other crime prevention strategies improve public FOC. This is a matter for future policy and research.

Table 27 highlighted an important finding which showed those who agreed the police and other local public agencies are successfully dealing with crime prevention in their local area, significantly feared crime (for behavioural, cognitive, affective questions) less than those who disagreed with the statement. This suggests the more the public believe the police are successfully dealing with crime

prevention in their area the less they fear crime. A means of achieving this could be to improve police and community relationships through 'community-orientated' policing, discussed further in the policy implications section.

As well as this, table 28 showed that the more the public fear crime the more they believe interventions such as CCTV make them feel safer as well as more likely to reduce crime. Further results, available in appendix D on page (…), showed that FOC significance is prevalent throughout the study, and provides evidence to suggest that the more participants fear crime the more they agree with certain SCP techniques and measures. This is possibly a matter for future policy implications, specifically in terms of SCP interventions aimed at reducing public FOC which is at the forefront of crime prevention.

However, the opposite view of such findings could be that the more participants agree with SCP techniques and measures the more they fear crime. This relates to a study by Bennett (1989) who investigated the factors that differentiate participants and non-participants in two Neighbourhood Watch scheme areas in London. The research showed that participants are both more fearful and more involved in their community than non-participants and concluded that a synthesis of the two perspectives might be appropriate (Bennett, 1989). This suggests that security can beget insecurity as suggested by Barberet and Fisher (2009) and as Halliwell (2010) claims, paradoxically, visible signs of security hardware can increase people's FOC, sensing that high security must indicate high risk. This is reiterated by Wortley who states: "SCP engenders public fear and distrust, and encourages the development of a siege mentality" (1996:128).This provides a potential niche for DOC implementation which uses less visible signs of security and looks to subtly design environments so that they are less likely to suffer from crime. DOC will be discussed further in the policy implications section.

The final results table from the FOC section showed that participants who agree displacement exists significantly fear crime, which indicates that the idea of crime displacement increases participants FOC. However, table 29 also showed that the more participants agreed displacement exists the more they preferred their house to be designed specifically with crime prevention in mind. This suggests participants are in favour of CPTED, discussed further in the next section of the discussion.

Public Opinion on Crime Prevention through Environmental Design

The frequency results prove that the sample agrees with the majority of CPTED features within the survey, as well as disagreeing with having high fences or hedges surrounding their property, which is seen as reducing 'natural surveillance', a premise CPTED discourages. As well as this, interesting findings from table 31 indicated participants who agreed that they preferred their property to be designed specifically with crime prevention in mind significantly engaged in and supported SCP techniques and measures more than those who disagreed. These results suggest implementing approaches such as CPTED also known as 'Designing out crime' and SBD initiatives in the UK, can have a significant effect on public engagement with and support for crime prevention. Further to this,

reiterating the findings in the FOC section, participants who feared crime significantly agreed that they would prefer their house to be designed specifically with crime prevention in mind. Exploring whether or not DOC or SBD implementation on residences positively affect public FOC could be a possible future research implication, discussed further in the policy section.

Table 31 however, showed an absence of significant findings between participants agreeing to have their houses designed specifically with crime prevention in mind and effectiveness of SCP. Despite this, table 32 showed that those who agreed with individual CPTED variables within the survey believed SCP techniques and measures to be significantly more effective than those who disagreed with the CPTED variables. Those who agreed that regularly maintaining property, checking up on neighbours property, reducing the number of shortcuts through areas of residence, and keeping areas free from litter and vandalism, thought SCP was significantly more effective than those who disagreed with the above elements of CPTED. This indicates public opinion backs findings from studies such as Hirschfield (2004) who produced strong evidence to support the use of alley-gating as an effective crime prevention tactic, as well as strengthening dimensions of CPTED such as the effective and continuous maintenance and management of space (Cozens and Hillier, 2008).

Additional to these findings, the study showed significant positive correlations between those who agree that 'close communities where neighbours get on are safer than communities that do not get on' and opinions of SCP. Further to this, those who agree with the statement also have a positive significant correlation with 'the police and other local agencies are successfully dealing with crime prevention in my area'. These findings provide public backing for elements of 2nd generation CPTED, discussed in the literature review, and in particular the need for greater community cohesion. As a result possible implications, discussed in more detail later, could include suggestions by Hirschfield (2004) who claims that interventions whose implementation requires greater participation of communities (e.g. 'alley-gating') may foster and encourage social interaction, neighbourliness and build social cohesion. As discovered earlier, the more the public engage in SCP techniques and measures the more they support it and believe it to be effective. Further results on the significant correlations with 'close communities' can be found in Appendix D on page 112.

Public Opinion on Improving Crime Prevention within their own Neighbourhoods

Table 34 highlighted interesting findings that specified the majority of respondents believe 'more police patrols and presence on the street' would improve crime prevention within their area. More police patrols is a key element of community orientated policing, discussed earlier, and have shown success in improving public opinion of the police. For example Newark, New Jersey, Boston, and Flint Michigan all had foot patrol demanded by the citizens, and an evaluation in Newark found that citizen's level of satisfaction with police increased due to foot patrol (Peak &Glensor 1996). Such a strategy links well to theoretical underpinnings of SCP, in particular RAT and the notion of increased guardianship and an increase in informal surveillance, also a component of CPTED.

Interestingly, the next most popular response for improving crime prevention was 'Education'. Although it is not clear whether or not the public intended 'education' to come at an early age in schools, for example, the study suggests implementing proposals by Cozens (2009) on embedding DOC in planning education. Cozens (2009) expresses the importance of education to crime prevention designers and planners. According to Cozens (2009) one of the five goals of the DOC strategy is to increase/disseminate understanding of DOC. The idea of improving crime prevention knowledge amongst those in charge of designing and planning environments to reduce crime and the fear of crime can only be beneficial. These suggested implications are discussed further in the policy and research implications sections.

Limitations of the Study

Before moving on to the implications for future research and policy implications resulting from the study, it is important to point out its limitations. As with any research conducted there are certain limitations, and this current project is no exception. Firstly, limitations lay in the chosen methodology and the lack of in-depth meaning of the research findings with the use of an exclusively quantitative methodology. According to Roberts and Hough (2005), public attitude toward issues as complex as crime, can only be understood by considering findings from a variety of methodologies. Roberts and Hough (2005) claim that the ideal approach is to combine different methods within the same research project. The method of combining a variety of research methods in order to improve reliability is known as 'triangulation' (Cohen and Manion, 2000). Cohen and Manion (2000) state that triangulation is an attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint. As a result, future research could carry out the initial plan of the current research to incorporate interviews with a number of the sample in order to gather more detailed findings.

Further criticisms can be found in the use of a questionnaire, and in particular the validity and reliability of the results. The use of standardised questionnaires can produce certain difficulties (Moser and Kalton, 1979). The problem with utilizing a standardised questionnaire is self-explanatory, in that it is 'standardised' and therefore not possible to explain any questions or statements that participants might misinterpret. The current research received a number of returned surveys that had been completed with mistakes and therefore could not be used in the study. A further limitation of the study was the results that showed a lack of validity in reference to the engagement, support and effectiveness sets of questions.

Finally, there is an issue around how diversity of public opinion is ever-changing and that this issue is made even more difficult when there is no such thing as a single entity as the British public. Instead, there multitude of publics, broken down by gender, age, race, ethnicity, all of which are linked in important ways to opinions about crime (Wood and Viki, 2004). The research findings are in no way a criticism of the public but they do suggest that more needs to be known about what the public think about issues surrounding SCP. Ultimately, if given the opportunity to do the research again, with more time and resources available, the above limitations would be addressed.

Policy Implications

As a result of the above findings, the research suggests four possible policy implications: 'broken windows' policing; improve community cohesion through community-orientated policing and CPTED; increase in DOC and SBD initiatives; and education of both the public and crime prevention planners and architects.

The results showed that the frequency of crimes such as burglary and vandalism between the two locations were not too dissimilar, however the difference in visibility of anti-social behaviour was much more apparent and occurred much more frequently in the higher crime rate location. As a result, the study suggests an increased effort by police to crack down on anti-social behaviour in high crime areas through 'broken windows' policing to improve neighbourhood development. This also has strong links to elements of CPTED which is concerned with the effective and continuous maintenance and management of urban space that is actively being used and discouraging the under-use of space (Cozens and Hillier, 2008). It is important to note that these policy recommendations are costly, however research does suggests that citizens are highly supportive of crime prevention and are even willing to pay more in taxes to support these programs compared to other responses such as incapacitation (Roberts & Hastings, 2012).

Prominent results within the study showed significant increases in the levels of opinions of SCP the more participants agreed with good levels of community cohesion. This provides public support for initiatives such as communities helping to implement crime prevention measures such as alley-gating, put forward by Hirschfield (2004) discussed in the literature review. The study suggests policy makers should consider adopting key features of 2nd generation CPTED, which as Cozens et al. (2005) point out extends beyond mere physical design to include social factors and active community participation. As Sampson and Raudenbush (2004) argue, it is very difficult for the government to create or facilitate social efficacy and local Government should try to identify ways to encourage social networks to evolve more organically. The importance of improving social and community cohesion can also have positive effects on public health. Hirschfield (2004) notes, a common vein running through projects that have generated the greatest positive health impacts seem to be the committed involvement of the community. Crime prevention strategies such as CPTED that work with the residents rather than for them maximise their health benefits through the empowerment of the community (Hirschfield, 2004).

Further to this, findings showed that respondents wanted to see more visible police patrols within their area of residence. Previous research indicates that fear of crime and previous victimization can have a strong effect on public levels of satisfaction with the police (Cao et al., 2005). This finding is backed up by results from the current research, which indicates the public believe the police are responsible for the effectiveness of SCP techniques and measures rather than themselves. As a result, improving public opinion on the police and building relationships is of huge importance, this is highlighted in the finding that public FOC is significantly different for those that perceive the police to be successful in preventing crime. The study suggests policy makers consider an increase in community-orientated

policing which aims to improve the relations between the police and citizenry, who work together on safety involving the public in the community (Burns and Thomas, 2005).

Findings from the study also showed that a possible synthesis may exist between the visibility of security measures and increases in the level of public FOC. As a result, the study suggests policy makers contemplate further implementation of DOC and SBD schemes which have shown to be hugely successful in reducing both crime and FOC, as discussed in the literature review. SBD promotes quite subtle changes in the physical environment, such as changing the frequency of maintenance operations, which may influence community perceptions and interaction to a significant extent (Armitage, 2005). This notion is backed up by results that indicated, on a small scale, that the more participants feared crime the more they preferred their house to be designed specifically with crime prevention in mind. DOC also has links with the above policy suggestions as it advocates the notion of strengthening communities and revitalising neighbourhoods (Office of Crime Prevention, 2004).

Finally, when respondents were asked about what could improve crime prevention within their area, a popular response was 'education'. Further findings within the study showed that location had no significance with engagement with SCP techniques and measures despite Location B suffering from a higher crime rate. A possible explanation for this is the lack of knowledge about crime prevention, how to implement it and what features are effective. As a result, the study suggests policy makers look to improving public knowledge of the effectiveness of SCP and other crime prevention initiatives in order to get the public to engage, as results showed that the more participants engage the more they support and believe SCP to be effective. As well as improving knowledge of crime prevention amongst the public, the study also recommends implementing proposals put forward by Cozens (2009) who advocates the development of teaching programs for designing out crime being utilised as a Special Projects Unit, representing an elective unit for undergraduate students in Urban and Regional Planning. Implementing designing out crime units into UK university degrees and improving the knowledge of the benefits as well as limitations of CPTED for future crime prevention planners and architects can only have a positive effect on the future of crime prevention. Hirschfield et al., (2013) points out that the new College of Policing should recognise the importance of crime prevention training and give it a sufficiently high priority, as well as providing a repository of knowledge about effective crime prevention, and lessons learned from what does not work.

Implications for Future Research

Having carried out the current research project a number of possible research implications have become apparent. Firstly, a finding that was prominent throughout the results was the potential notion that the public gauge the success of crime prevention on the police and other local agencies rather than on implementing their own security measures. As a result, research could explore this indication through the use of qualitative methods to gain more in-depth understanding of what it is the public feel affects the success of crime prevention.

Secondly, factors that were expected to affect opinions of SCP such as area of residence, socio-demographic features, victimisation, and FOC proved to be misjudged. This was clear throughout the results in that the public did not significantly engage in SCP techniques and measures despite coming from a high crime rate, being a victim of crime, and fearing crime. A surprising result in particular, was the lack of engagement with SCP despite having been a victim of crime within the last 12 months. The study suggested that research could investigate whether or not this was down to factors such as lack of finances or proper knowledge of crime prevention and how to effectively protect themselves from crime. The study suggested a number of explanations for such findings on area of residence; socio-demographic features; victimisation; and FOC, but these are by no means a certainty and therefore further research could assess what it is that causes the public to engage in crime prevention techniques, or not.

A further potential future research implication involves a thorough assessment of what causes the public to fear crime. The current study highlighted a possible synthesis may exist between security features and measures may increase the public's FOC. Therefore future research could investigate firstly if security measures in fact increase FOC, and then what it is about security measures that cause the public to have a heightened sense of fear. Further to this, results from the study highlighted that despite fearing crime, the public did not engage with security measures, this also is an area for future research to consider. However, it is accepted that to find out what causes individual people from individual locations at individual points in time to fear individual crimes would cost money and time. Despite this, future research, as Cozens and Hillier (2008) put forward, would be to execute local fear of crime mapping for analysis in conjunction with the mapping of recorded crime statistics. As stated throughout the study, crime problems are complex and ever-changing (Hughes, 1998) and replication failure does exist (Tilley, 1993) therefore research needs to continue to assess what works in particular environments rather than an overall solution.

Next, the results and literature regarding improved community cohesion suggest it would be prudent for local government to provide funds for neighbourhood events where residents comingle together, allowing friendship networks to be cultivated. Research may need to examine these phenomena more closely, and further examine the effectiveness of policies that encourage local social networking and cohesion such as Hirschfield (2004) who claims community participation in constructing security measures such as alley-gates can improve community relationships. There is already strong evidence

of CPTED and SBD effectiveness in terms of both reducing crime and the FOC (Armitage, 2000; Brown, 1999; Pascoe, 1999) and future research should continue to assess such initiatives.

Finally, it must be noted that there was a certain lack of conclusive evidence as to public opinion on the effectiveness of SCP techniques and measures. As with the rest of the suggestions for future research, this is in no way a criticism of the public but it does indicate that knowledge on crime prevention is somewhat limited and therefore this provides an opportunity for research to investigate further.

Conclusion

The literature review highlighted how SCP is arguably the most powerful discourse of crime prevention in the twenty-first century (Hughes, 1998) and offers a different approach to crime prevention than other strategies. By focusing on the settings for crime and trying to reduce opportunities for crime drawing on theories such as: RAT, RCP, and CPT which see crime as a product of an interaction between the person and the setting (Felson and Clarke, 1998). The review also underlined a number of important SCP initiatives such as SBD and DOC which are manifestations of CPTED, as well as outlining evidence that critiques SCP. Finally the importance of public opinion was discussed and in particular the impact fear of crime can have on such opinions of crime prevention strategies such as SCP.

The study initially intended to use a mixed methods approach but time constraints resulted in a quantitative methodology being utilised which collected survey data from 196 participants from two separate locations of opposing crime rates within Kirklees, West Yorkshire. SPSS was then used to statistically analyse the data, which allowed for descriptive and inferential analyses, summarising large quantities of data with a few numbers, highlighting the most important numerical features of the data (Agresti and Finlay, 2004).

Firstly, it was found that differences were apparent between both locations in terms of gender and age and this was pointed out as a potential explanation for any difference in results. Collectively, the results showed that respondents strongly engage in SCP techniques and measures, they support them, as well as believing them to be effective however the latter not so convincingly. A key finding of the study was that the three factors testing public opinion of SCP all significantly correlated with each other, suggesting that an increase in one factor can result in an increase of the other two factors. Despite this, overall it was found that the four factors tested against opinions of SCP generally had no significant effect on engagement with and support for SCP. It was suggested that a possible explanation for such a finding was that participants already strongly engaged with and supported SCP and as a result the four factors merely didn't increase their opinions. Significant findings were however found between the four testable factors in relation to public opinions on effectiveness of SCP. A finding that was unclear was that SCP techniques and measures reduced participants' fear of crime; or that a synthesis exists between SCP techniques and measures and increased fear of crime. Importantly, results were noticeable in relation to public backing of CPTED elements, especially on the design of residences with crime prevention in mind and the notion that improved community cohesion positively affects opinions of SCP as well as reducing fear of crime.

In conclusion, the aims of the study to explore public opinions of SCP within a residential setting have been met. However, limitations of the study were pointed as being: a lack of in-depth meaning of results with an absence of a qualitative element, and the Cronbach's alpha results showed a lack of validity in reference to the engagement, support and effectiveness sets of questions. Finally, an issue around how diversity of public opinion is ever-changing was highlighted and that this issue is made

even more difficult when there is no such thing as a single entity as the British public, but rather a multitude of publics, broken down by gender, age, and ethnicity.

As a result of the above findings, the study suggested four possible policy implications: 'broken windows' policing; improve community cohesion through community-orientated policing and CPTED; increase in DOC and SBD initiatives; and education of both the public and crime prevention planners and architects. The study finally suggested that future research look to investigate what causes the public to fear crime and if improving the knowledge of crime prevention successes could improve public opinion of SCP and other crime preventions strategies.

Appendix - A

Ethics Form

THE UNIVERSITY OF HUDDERSFIELD

THE UNIVERSITY OF HUDDERSFIELD
School of Human and Health Sciences – School Research Ethics Panel

OUTLINE OF PROPOSAL
Please complete and return via email to:
Kirsty Thomson SREP Administrator: hhs_srep@hud.ac.uk

Name of applicant: Edward Walmsley

Title of study: Situational Crime Prevention: Public opinion on the effectiveness of, and their engagement and support for SCP techniques and measures

Department: Criminology MRes   Date sent:

Issue	Please provide sufficient detail for SREP to assess strategies used to address ethical issues in the research proposal
Researcher(s) details	Edward Walmsley MRes Student U0962905@hud.ac.uk
Supervisor details	Melanie Wellsmith, Senior Lecturer at the University of Huddersfield M.Wellsmith@hud.ac.uk Dr. Rachel Armitage, Deputy Director Applied Criminology Centre R.A.Armitage@hud.ac.uk

Aim / objectives	The aim of the project is to test self-reported public engagement and support for situational crime prevention (SCP) techniques and measures. SCP is the name given to crime prevention strategies that are aimed at reducing the criminal opportunities which arise from the routines of everyday life. Strategies include 'hardening' of potential targets, improving surveillance of areas that might attract crime (e.g. CCTV), and deflecting potential offenders from settings in which crimes might occur.
	The public responses will be compared based on demographic variables such as age, gender, fear of crime and location of residence. Other demographic variables will also be tested such as employment, marital status and income.
	To that end the following research questions/hypothesis have been formulated:
	
	5) Do the public believe a variety of SCP measures are acceptable and/or effective?
	6) Do the public support a variety of SCP measures?
	7) To what extent do the public engage in SCP?
	8) Do those opinions vary by:
	    e. Their area of residence?
	    f. Socio-demographic features (e.g. age, gender, ethnicity, employment status etc)
	    g. Victimisation
	    h. Fear of crime
	SCP is a relatively new field and therefore research and literature on public opinion on more specific crime prevention techniques is rather scarce. The British Crime Survey, as Moon et al (2011) points out, measure mostly respondents perceptions of sentencing measures, the crime rate and change in the levels of crime over the last few years (both nationally and locally), rather than on specific crime prevention techniques. This is an important justification for the current research as the effectiveness of crime prevention programs depends upon the support of the general public (Solicitor General Canada, 1984). Another justification for the research is that of recent political policy in the shape of the Police and crime commissioner elections that took place across the UK in November 2012. The job of the PCC, importantly to this research, is to give the public a voice at the highest level (Police.co.uk). This research can provide answers to what it is the public find effective and acceptable in terms of SCP in their local areas.

Brief overview of research methodology	The chosen methodology for the research will be primarily quantitative analysis. The method of data collection adopted by the study will be broken down into a mixed methods approach with firstly a self-completion questionnaire/survey for the general public within a selected geographic area. The use of a mixed methods approach allows the research to collect a large data set as well as responses with more substance and understanding with the follow-up interviews. Data will be collected on socio-demographic variables as well as respondents' views and opinions on relevant issues. The justification for this approach is that in order to get enough data, questionnaire/surveys are the most efficient way (in the time scale available) of collecting a large amount of responses from a large sample size. The questionnaire will be broken down into three sections: 1) Socio-demographic features, 2) Fear of crime, 3) SCP features. The socio-demographic questions will ask participants about their gender, household income, ethnicity, as well as questions on whether or not participants have been a victim of crime in the last 12 months. The time period was eventually decided upon, despite wanting to know more over a longer timescale, because of the risk of victimisation dropping after 12 months. The second section will include questions based on the fear of crime questions from the British Crime Survey and will ask participants about their affective, cognitive, and behavioural aspects of their fear/concern of crime. The research would have liked to have extended this section to find out more but due to constraints on time and more relevantly the length of the questionnaire the questions had to be kept to a succinct amount. The third and final section will take up the questions where the independent variables will be administered, and participants will be asked on their opinions on their acceptance, support and engagement with SCP. Questions will be based around SCP techniques and measures around a residential setting, this was chosen to narrow down and specify the sample size and sample itself, instead of administering the survey to wide and almost random geographical area. The residential settings will be broken down into area A (suburb), area B (rural), and area C (town/city centre), in order to get a distinction between the responses of those that live in different residential settings. When the questionnaires are sent out to the public, those that are sent to area A will have a Unique ID number ending in 'A', and area B ending in 'B' etc; so that I can easily identify which questionnaires have come from what area of residence without asking them in the questionnaire itself. It was hoped the areas would be distinct by further features such as crime rates and SCP measures etc, but constraints within a yearlong project and writing up stage wouldn't allow this and would be too difficult to complete in the timeframe. In terms of the sample itself, the research will aim to receive 100 responses from each area of residence and will therefore need to send close to 1000 questionnaires out in total (bases on an estimated response rate of 25-35%). The questionnaires will then be followed by face-to-face interviews with a selection of participants from the same sample as the survey, and those who wish to take part can contact me on my email address given to arrange this. The sample for the follow-up interviews will be taken from the questionnaire sample, and the study will aim to undertake a minimum of 5 from each residential area. The interviews will be semi-structured in order to gain information the research needs but also allows a more conversational style so that the participant can talk freely about their opinions on SCP. Questions will range from asking if participants are happy/unhappy with SCP measures, exploring their fear of crime, and their previous victimisation whilst living in the current residence as well as their feelings towards their likelihood of being victimised. Most importantly, participants will be asked about their views and opinions of SCP measures and whether or not they believe they are supportive of them and how much they engage in the techniques. The interview will be broken down into initial questions, followed by picture questions of numerous houses with different levels of SCP measures visible on the residence. The question will ask the participants which picture they believe the most/least likely to be the victim of crime and why.
Permissions for study	Not Applicable

Access to participants	The geographical location will play a key part in the identification of the participants. Once the two separate locations are chosen, the survey/questionnaires will be posted to that area for participants to 'opt in' to the study if they wish. It will be stated on the questionnaire that in order to take part in the survey, participants must be over the age of 18 or the responses will not be used in the research. In terms of the follow-up interviews, participants of the questionnaire will self-identify their interest and email me on the address provided. An email will then be sent from my university email address to arrange the interview at the participants' convenience.

Confidentiality	This section will be broken down into two: Firstly, the survey/questionnaires; and secondly, the Interviews.
	   1) Survey
	At the very start of the questionnaire it will be explained to all participants what the purpose of the study is and what the research aims to achieve. On the information sheet attached to all questionnaires, it will inform the participants that their confidentially will be protected, and that they and their responses will remain anonymous throughout the entirety of the study. Participants will not be asked for their names at any point during the study and will instead be given a unique ID number which can in no way be traced back to them. With regards to the geographic areas chosen, they will be described but not named.
	Once the hard copy responses have been received, they will be stored in a locked draw in a locked office inside a secure building within the University. The data itself will be kept on a University log-in (password protected) on the University computers. Further, once the research is completed and has been examined, all data will be destroyed.
	   1) Interviews
	When conducting the interviews, a tape-recorder will be used with permission of the participants and this will be kept in the same locked draw as the questionnaires before being stored on a password protected PC. This equipment will only be handled and accessed by the research team (researcher and supervisors). I will inform participants on the consent form that direct quotes will be used in the write up stage of the research; however the use of pseudonyms will be implemented so that responses can in no way be traceable to individuals.

Anonymity	1) Survey The survey will maintain anonymity in a number of ways: It will be completely voluntary, and the answers given will be kept completely anonymous through the use of Unique ID numbers. Participants have the choice to not take part, avoid answering certain questions or to withdraw their data from the research (to the point where the write-up of the study has begun). Participants will be instructed to tear off the front page of the questionnaire for their reference, which will include my contact details at the bottom of the page, and participants will be told that they are welcome to email me if they would like their data to be withdrawn from the study. 2) Interviews In terms of the follow-up interviews, when writing up the responses from the tape recorder anonymity will be kept with the use pseudonyms.
Psychological support for participants	The research is in no way intended to collect any data that would cause participants to suffer any psychological and or/ emotional harm in any way; however I recognise that there is a responsibility on my part for the well-being of the participants involved in the study. Therefore the wording of each question during the research has been carefully designed as to prevent participants feeling uncomfortable or suffer any psychological distress. However, in the unlikely nature any of the participants require psychological support as a result of the questionnaire or have any crime concerns, at the bottom of the debrief page the contact number for Victim support will be clearly stated.
Researcher safety / support (attach complete University Risk Analysis and Management form)	Safety precautions are only necessary for the possible follow-up interviews with participants who have contacted me and wish to take part. The interviews will have to be held at the residence of the participant at their convenience and therefore safety precautions will be taken such as; making sure interviews are carried out at the door and not inside the property. Further, I will be contactable by mobile phone and will make contact with one of my supervisors once I have left the premises.
Identify any potential conflicts of interest	Not applicable
Please supply copies of all relevant supporting documentation electronically. If this is not available electronically, please provide explanation and supply hard copy	

Information sheet	Attached
Consent form	Attached
Letters	Not Applicable (See Information sheet)
Questionnaire	Attached along with cover and debrief sheets
Interview schedule	Attached
Dissemination of results	The results and findings from the study will be made available to all participants, those who wish to see the findings can contact me on the email address provided, and details of where to find the results will be stated.
Other issues	Not Applicable
Where application is to be made to NHS Research Ethics Committee / External Agencies	Not Applicable
All documentation has been read by supervisor (where applicable)	Please confirm. This proposal will not be considered unless the supervisor has submitted a report confirming that (s)he has read all documents and supports their submission to SREP

All documentation must be submitted to the SREP administrator. All proposals will be reviewed by two members of SREP. If it is considered necessary to discuss the proposal with the full SREP, the applicant (and their supervisor if the applicant is a student) will be invited to attend the next SREP meeting.

If you have any queries relating to the completion of this form or any other queries relating to SREP's consideration of this proposal, please do not hesitate to contact either of the co-chairs of SREP: Professor Eric Blyth e.d.blyth@hud.ac.uk; ☎ [47] 2457 or Professor Nigel King n.king@hud.ac.uk ; ☎ [47] 2812

Crime Prevention Survey

A Questionnaire about your opinions on crime prevention in your area.

My name is Eddie Walmsley and I am a student at the University of Huddersfield currently studying a Criminology Masters degree as a graduate researcher. This research aims to examine people's opinions on crime prevention and security measures and whether these are affected by a number of factors. The research has been considered and approved by the School Research Ethics Panel at the University.

Unique ID:

Research Brief

➢ The survey is completely voluntary and will only take up a few minutes of your time

➢ The responses you give are completely confidential and can in no way be traced back to you. To that end, each questionnaire has been numbered with a unique ID number (as opposed to using names)

➢ You have the choice to not take part, not answer specific questions, or to withdraw at any point during the research. My email address is stated below if you wish to withdraw your responses, just email me with your Unique ID number

➢ Responses will be kept secure in a locked drawer in a locked office within the University of Huddersfield that only I have access to

➢ So that your response can be included in the study, please could responses be sent back to the return address on the envelope by **1ˢᵗ October 2013**

➢ If you wish to have your responses removed from the study you can contact me at any time before the 1ˢᵗ December 2013, after this date the analysis stage of the research will be complete

➢ **Please tear off this front page for your reference!!!**

Instructions of how to complete each question will be visible throughout the survey, please read these carefully. To return the filled out questionnaire please use the pre-paid stamped addressed envelope provided, this is completely **FREE.**

As part of the research, I will be conducting short follow-up interviews to discuss the matters involved in this questionnaire further. The interviews will be held solely at your convenience, I will come to you at a date and time you wish (before 1ˢᵗ November 2013), and your involvement would be greatly appreciated. If you are interested in taking part in this there will be a separate page at the end of the questionnaire to leave your preferred contact details (this will then be torn off **by me**from the questionnaire to keep your responses anonymous).

If you have any questions or queries regarding the questionnaire/follow-up interviews or research, please contact me or my supervisors, our email addresses are stated below. If you want any advice or information on crime prevention or if the questions raise any worries or concerns for you then please contact Crime stoppers or your local police force, further information can be found at www.Police.co.uk. The Victim Support supportline is: 0845 30 30 900

Researcher   Supervisors

Eddie Walmsley - u0962905@hud.ac.uk   Melanie Wellsmith-M.Wellsmith@hud.ac.uk

                                                   Rachel Armitage -R.A.Armitage@hud.ac.uk

Unique ID:

Consent Form

Please tick the boxes to confirm the following:

	TICK
I have been fully informed of the nature and aims of this research and consent to taking part in it.	
I understand that I have the right to withdraw from the interview at any time without giving any reason, and a right to withdraw my data if I wish before the **1st December 2013**.	
I understand that responses will be kept in secure conditions at the University of Huddersfield.	
I understand that my identity will be impossible to find out and will be protected through the use of a Unique ID number.	
I understand that no information that could lead to my being identified will be included in any report or publication resulting from this research.	

Signature:

The completion and return of the questionnaire to me will indicate further proof of your consent to participate in the study.

_____

Section A – About You

1. What is your gender? (Please tick)

   Male ☐   Female ☐   Transgender ☐   Prefer not to say ☐

2. What is your age? ……………………………..

3. Please specify your ethnicity or Race (please tick)

White British	☐	Indian	☐	Asian British	☐
White Other	☐	Pakistani	☐	Black Caribbean	☐
Mixed Race	☐	Other Asian	☐	Black African	☐
Chinese	☐	Other	☐	Prefer not to say	☐

4. How would you describe your current employment status? (Please tick)

Self-employed	☐	Retired	☐	Unable to work	☐
Full-Time Employment	☐	Military	☐	Unemployed	☐
Part-Time Employment	☐	Student	☐	Prefer not to say	☐

5. What are your living arrangements?

Live alone ☐ Live with partner/spouse ☐ Rent ☐

Live with family ☐ Live with friends ☐ Prefer not to say ☐

6. Are there any children living at home under the age of 16?

YES ☐ NO ☐ Prefer not to say ☐

7. What is your **total** Household income (**all wage earners**)?

Less than £10,000 ☐ £10,000-£30,000 ☐ £30,000-£50,000 ☐

£50,000-£70,000 ☐ £70,000-£90,000 ☐ £90,000-£110,000 ☐

£110,000-£130,000 ☐ More than £130,000 ☐ Prefer not to say ☐

8. How would you rate your home security?(1-being extremely secure, 10-being extremely unsecure)

1   2   3   4   5   6   7   8   9   10

9. In the table below please tick either 'yes' or 'no' to each of the statements

Security Measure	Yes	No
My residence can be seen from the road		
Some of the doors and/or windows are obscured from the road by trees or shrubbery		
A person calling at my main door can be seen from the road		
The front of my residence has a garden		
My residence has a driveway		
My residence has a garage		
There is a street lamp outside my residence		
My rear garden is overlooked by neighbouring residences		
Entrances to my home are well lit		
It is easily identifiable when moving from public space (pavement) into my private space (property)		

About Crime

10. Have you lived at this residence for at least 12 months?

YES ☐ NO ☐

11. In the last 12 months (whilst living at this property) have you been the victim of any type of crime? (Please tick)

YES ☐ NO ☐ Prefer not to say ☐

12. Please tick the crime type you have been a victim of whilst living at your **current residence in the last 12 months**, and the amount of times you have been a victim of that crime.

Crime Type	None	Once	Twice	Three times	Four+
Burglary					
Theft from property					
Vandalism					
Vehicle Crime					

13. Whilst living in your current residence, please tick if any of the following **Anti-Social Behaviours** have been visible in the area you live.

	Yes	No
Individuals or groups of people making excessive noise		
Rubbish or litter visibly in the street		
People being drunk or rowdy		
Vandalism, graffiti and other damage		

Section B – About your 'concerns about crime'

1. Which of the following crimes are you most worried about? (Please tick **ONE**)

Burglary ☐   Anti-Social Behaviour ☐   Vehicle Crime ☐

Vandalism ☐   Theft ☐   None of these crimes ☐

2. The phrase 'Area of residence' in the following statements refers to your house and neighbouring streets/estate. With the following statements please tick your response:

	Strongly agree	Agree	Disagree	Strongly disagree
a. I'm worried to be in my area of residence after dark				
b. I'm worried to be in my area of residence during the day				
c. I'm worried to be at home during the day				
d. I'm worried to be at home at night				

3. Please note that the following statements refer to your estate/neighbourhood as the setting. Please state the extent to which you agree with the following statements. Please circle your answer:

	Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly Disagree
a. I worry about being a victim of crime	1	2	3	4	5	6
b. I'm afraid to go out at certain times and to certain places in my area for the worry of being a victim of crime	1	2	3	4	5	6
c. My quality of life is affected by what I feel to be my risk of becoming a victim of crime	1	2	3	4	5	6
d. I think it is likely that I will be the victim of crime in the next 12 months	1	2	3	4	5	6
e. In my area there are things I would like to do, and places I would like to go, but I don't as to avoid becoming a victim of crime	1	2	3	4	5	6
f. My feeling about being a victim of crime has hindered my freedom of movement and activity throughout the area I live	1	2	3	4	5	6

Section C - About Crime Prevention

Engagement– The following statements will investigate the amount you engage in crime prevention techniques.

Please state the extent to which you agree with the following statements. Please **circle** your answer:

	Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly Disagree
1.I always lock my car door when it is left outside my house	1	2	3	4	5	6
2.I regularly maintain and look after my property (cut the grass, paint fences etc)	1	2	3	4	5	6
3. I leave lights on inside my house when I'm not in at night	1	2	3	4	5	6

	Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly Disagree
4. I sometimes check to make sure crime isn't taking place at my neighbours property	1	2	3	4	5	6
5.I am always happy to help police and other local agencies when it comes to crime prevention in my area	1	2	3	4	5	6

6. Are you a member of a 'neighbourhood watch' scheme?

YES ☐   NO ☐

7. Which of the following security measure do you have implemented on your residence (Please tick **all** the measures you have)

Security Measure	Implemented (Tick)
Burglar alarm	
Car kept in garage	
CCTV	
Security Lighting	
Gates at the end of the drive blocking entrance to the front of the house	
Side gate blocking entrance to the rear of the house or back garden	
Sign on the front gate or door stating the property is 'Private'	
Dog	

Support– This group of statements will investigate your support for crime prevention techniques and initiatives.

Please state the extent to which you agree with the following statements. Please **circle** your answer:

	Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly Disagree
1. The idea of my property being watched by CCTV makes me feel safer	1	2	3	4	5	6
2. I would prefer my house to be designed specifically with crime prevention in mind	1	2	3	4	5	6
3. Enough is being done to prevent crime in my area	1	2	3	4	5	6

	Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly Disagree
4.I think having security measures (such as a house burglar alarm) is a good idea	1	2	3	4	5	6
5. I think people are too ready to blame victims of crime for not protecting themselves	1	2	3	4	5	6
6. I think the use of gates and fencing make areas look less friendly and less welcoming	1	2	3	4	5	6
7. Crime prevention interventions such as CCTV, are too intrusive on my privacy	1	2	3	4	5	6
8. I would prefer my property to be surrounded by a high fence or hedge	1	2	3	4	5	6
9. Close communities where neighbours get on are safer than communities that do not get on	1	2	3	4	5	6
10. Security measures (alarms, bolts & locks etc) make neighbourhoods look unfriendly	1	2	3	4	5	6
11.There is too much light pollution from street lighting	1	2	3	4	5	6

Effective– This group of statements will focus on the extent to which you feel crime prevention initiatives in your neighbourhood are effective.

Please state the extent to which you agree with the following statements. Please **circle** your answer:

	Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly Disagree
1.The police and other local public agencies are successfully dealing with crime prevention in my local area	1	2	3	4	5	6
2. Improved street lighting reduces the opportunity for crime	1	2	3	4	5	6
3. CCTV in my area of residence is likely to reduce crime	1	2	3	4	5	6

	Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly Disagree
4. Cul-de-sacs and dead-end streets make it more difficult for crime to occur	1	2	3	4	5	6
5. Preventing crime in one area merely causes that crime to be committed elsewhere	1	2	3	4	5	6
6. Interventions (burglar alarms etc) make it harder for criminals to commit property crime	1	2	3	4	5	6
7. Reducing the number of short cuts through areas of residence such as alleyways will make crime less likely	1	2	3	4	5	6
8. The likelihood of crime is reduced when areas of residence are well maintained and looked after	1	2	3	4	5	6
9. Offenders would find it tough to commit crime in my neighbourhood with the security measures currently in place	1	2	3	4	5	6
10. Offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours	1	2	3	4	5	6
11. Crime is less likely to happen in neighbourhoods that are free from litter, graffiti, and vandalism	1	2	3	4	5	6

12. Is there anything you feel could improve crime prevention in your neighbourhood?

....

....

....

Thank you for taking the time to fill out the survey

****If you are interested in taking part in a follow-up interview, please leave your preferred contact details on the following page. If there is a large amount of interest in the follow up interviews, a sample will be taken completely at random from those who wish to take part. All of those who wish to participate will be contacted immediately (if selected or not) ****

<u>Interest in a follow-up interview</u>

Your preferred contact details: ....

Appendix – C

Correlation Results Table

Key

Significant to .050 = *

Significant to .010 = **

No correlation results = X

	What is your age	I'm worried to be in my area of residence after dark	I'm worried to be in my area of residence during the day	I'm worried to be at home during the day	I'm worried to be at home at night	FOC score – Area of residence	I worry about being a victim of crime	I'm afraid to go out at certain times and to certain places in my area for the worry of being a victim of crime	My quality of life is affected by what I feel to be my risk of becoming a victim of crime
What is your age	X	.199** .005 196	.066 .358 196	.113 .144 196	.085 .236 196	.087 .223 196	.118 .100 196	.133 .063 196	-.023 .753 196
I'm worried to be in my area of residence after dark	X	X	X	X	X	X	X	X	X
I'm worried to be in my area of residence during the day	X	X	X	X	X	X	X	X	X
I'm worried to be at home during the day	X	X	X	X	X	X	X	X	X
I'm worried to be at home at night	X	X	X	X	X	X	X	X	X
FOC score – Area of residence	X	X	X	X	X	X	X	X	X
I worry about being a victim of crime	X	X	X	X	X	X	X	X	X
I'm afraid to go out at certain times and to certain places in my area for the worry of being a victim of crime	X	X	X	X	X	X	X	X	X

	I think it is likely that I will be the victim of crime in the next 12 months	In my area there are things I would like to do, and places I would like to go, but I don't as to avoid becoming a victim of crime	My feeling about being a victim of crime has hindered my freedom of movement and activity throughout the area I live	FOC score – Behavioural, Cognitive, Affective	I always lock my car door when it is left outside my house	I regularly maintain and look after my property (cut the grass, paint fences etc.)	I leave li... on inside... house w... I'm not i... night
What is your age	.232** .001 196	-.067 .348 196	-.029 .691 196	.119 .098 196	.174* .015 196	-.128 .074 196	-.208 .003 196
I'm worried to be in my area of residence after dark	X	X	X	X	-.070 .330 196	-.091 .204 196	-.08... .231 196
I'm worried to be in my area of residence during the day	X	X	X	X	-.203** .004 196	-.025 .723 196	.045 .527 196
I'm worried to be at home during the day	X	X	X	X	-.173* .015 196	-.049 .491 196	-.02... .774 196
I'm worried to be at home at night	X	X	X	X	-.029 .683 196	-.125 .081 196	.101 .159 196
FOC score – Area of residence	X	X	X	X	.111 .120 196	-.101 .160 196	.085 .234 196
I worry about being a victim of crime	X	X	X	X	.082 .252 196	.095 .183 196	.106 .138 196
I'm afraid to go out at certain times and places in my area for worry of being a victim of crime	X	X	X	X	-.112 .119 196	.090 .211 196	.044 .540 196

	Overall 'Engagement' score	The idea of my property being watched by CCTV makes me feel safer	I would prefer my house to be designed specifically with crime prevention in mind	Enough is being done to prevent crime in my area	I think having security measures (such as a house burglar alarm) is a good idea	I think people are too ready to blame victims of crime for not protecting themselves	I think th... gates an... fencing... areas lo... friendly welcom...
What is your age	-.247** .000 196	-.075 .296 195	-.084 .245 195	-.106 .138 196	.025 .726 196	-.019 .790 191	.0 .5 1
I'm worried to be in my area of residence after dark	-.054 .451 196	.232** .001 195	.228** .001 195	-.276** .000 196	.069 .334 196	.119 .101 191	.0 .9 1
I'm worried to be in my area of residence during the day	-.039 .585 196	.122 .091 195	.135 .060 195	-.157* .028 196	.000 .997 196	.128 .079 191	.0 .7 1
I'm worried to be at home during the day	-.027 .709 196	.082 .256 195	.086 .230 195	-.096 .183 196	-.075 .299 196	.094 .194 191	.0 .7 1
I'm worried to be at home at night	-.004 .955 196	.249** .000 195	.201** .005 195	-.209** .003 196	.118 .098 196	.088 .244 191	-. .8 1
FOC score – Area of residence	-.034 .635 196	.206** .004 195	.204** .004 195	-.254** .000 196	.053 .464 196	.125 .085 191	.0 .8 1
I worry about being a victim of crime	.063 .382 196	.370** .000 195	.330** .000 195	-.290** .000 196	.233** .001 196	.084 .248 191	-. .8 1
I'm afraid to go out at certain times and places in my area for worry of being a victim of crime	-.039 .583 196	.176* .014 195	.228** .001 195	-.279** .000 196	.093 .194 196	.134 .064 191	.0 .4 1

	Close communities where neighbours get on are safer than communities that do not get on	Security measures (alarms, bolts & locks etc.) make neighbourhoods look unfriendly	There is too much light pollution from street lighting	Overall 'Support' score	The police and other local public agencies are successfully dealing with crime prevention in my local area	Improved street lighting reduces the opportunity for crime	CCTV in my area of residence is likely to reduce crime	Cul-de-sacs and dead-end streets make it more difficult for crime to occur	Preventing crime in one area merely causes that crime to be committed elsewhere
What is your age	-.110 .125 196	-.007 .920 195	-.123 .086 195	-.001 .987 195	-.084 .241 196	-.161* .024 196	-.076 .288 196	-.183* .010 195	-.123 .086 195
I'm worried to be in my area of residence after dark	.026 .719 196	-.037 .606 195	-.081 .263 195	.151* .035 195	-.181* .011 196	.026 .718 196	.244** .002 196	-.037 .610 195	.185** .010 195
I'm worried to be in my area of residence during the day	.067 .348 196	-.003 .964 195	.007 .927 195	.069 .340 195	-.159* .026 196	.013 .858 196	.182* .011 196	.168* .019 195	.156* .030 195
I'm worried to be at home during the day	-.064 .373 196	-.011 .880 195	.032 .648 195	.032 .661 195	-.069 .335 196	-.037 .605 196	.156* .028 196	.120 .094 195	.097 .176 195
I'm worried to be at home at night	-.000 .999 196	-.013 .860 195	-.038 .602 195	.166* .021 195	-.163* .023 196	-.044 .338 196	.227** .001 196	-.074 .303 195	.154* .032 195
FOC score – Area of residence	-.023 .750 196	-.007 .923 195	-.030 .672 195	.120 .096 195	-.185** .009 196	-.021 .767 196	.239** .001 196	-.001 .989 195	.186** .009 195
I worry about being a victim of crime	-.012 .865 196	-.053 .463 195	-.111 .124 195	.231** .001 195	-.257** .000 196	.046 .524 196	.296** .000 196	-.011 .882 195	.152* .034 195
I'm afraid to go out at certain times and places in my area for worry of being a victim of crime	-.052 .471 196	-.006 .928 195	-.098 .172 195	.184* .010 195	-.288** .000 196	.071 .332 196	.173* .015 196	-.044 .546 195	.191** .008 195

	Interventions (burglar alarms etc.) make it harder for criminals to commit property crime	Reducing the number of short cuts through areas of residence such as alleyways will make crime less likely	The likelihood of crime is reduced when areas of residence are well maintained and looked after	Offenders would find it tough to commit crime in my neighbourhood with the security measures currently in place	Offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours	Crime is less likely to happen in neighbourhoods that are free from litter, graffiti, and vandalism	Overall 'Effectiveness' score
What is your age	-.045 .527 196	-.157* .028 195	-.244** .001 196	-.181* .011 195	-.040 .582 195	-.218** .002 196	-.221** .002 195
I'm worried to be in my area of residence after dark	.014 .844 196	.164* .022 195	-.032 .659 196	-.150* .037 195	-.155* .030 195	-.135 .060 196	-.083 .250 195
I'm worried to be in my area of residence during the day	-.019 .791 196	.257** .000 195	.106 .140 196	.106 .410 195	.041 .569 195	.040 .575 196	.114 .112 195
I'm worried to be at home during the day	-.009 .897 196	.209** .003 195	.108 .133 196	.114 .111 195	.099 .171 195	.059 .408 196	.129 .072 195
I'm worried to be at home at night	.054 .454 196	.107 .137 195	-.024 .743 196	-.101 .160 195	-.071 .324 195	-.108 .130 196	-.059 .412 195
FOC score – Area of residence	.009 .897 196	.192** .007 195	.009 .895 196	-.055 .447 195	-.075 .294 195	-.081 .257 196	-.024 .741 195
I worry about being a victim of crime	.077 .285 196	.082 .254 195	-.112 .118 196	-.160* .026 195	-.121 .091 195	-.218** .002 196	-.116 .107 195
I'm afraid to go out at certain times and places in my area for worry of being a victim of crime	-.031 .676 196	.093 .194 195	-.041 .571 196	-.152* .034 195	-.145* .043 195	-.091 .204 196	-.104 .146 195

	I always lock my car door when it is left outside my house	I regularly maintain and look after my property (cut the grass, paint fences etc.)	I leave lights on inside my house when I'm not in at night	I sometimes check to make sure crime isn't taking place at my neighbours property	I am always happy to help police and other local agencies when it comes to crime prevention in my area	Overall 'Engagement' score	The idea of my property being watched by CCTV makes me feel safer	I would prefer my house to be designed specifically with crime prevention in mind
My quality of life is affected by what I feel to be my risk of becoming a victim of crime	-.134 .061 196	.008 .909 196	.009 .895 196	.003 .969 196	-.029 .689 196	.015 .836 196	.129 .072 195	.167* .020 195
I think it is likely that I will be the victim of crime in the next 12 months	.038 .597 196	-.039 .584 196	.020 .785 196	-.149* .038 196	-.086 .232 196	-.059 .409 196	.237** .001 195	.233* .001 195
In my area there are things I would like to do, and places I would like to go, but I don't as to avoid becoming a victim of crime	.160* .025 196	-.103 .150 196	.001 .992 196	-.054 .453 196	-.101 .158 196	-.057 .427 196	.235** .001 195	.221** .002 195
My feeling about being a victim of crime has hindered my freedom of movement and activity throughout the area I live	-.113 .114 196	-.025 .731 196	.007 .923 196	-.053 .459 196	-.665 .367 196	-.036 .617 196	.207** .004 195	.171* .017 195
FOC score – Behavioural, Cognitive, Affective	-.037 .603 196	-.013 .858 196	.054 .454 196	-.099 .166 196	-.079 .272 196	-.017 .809 196	.294** .000 195	.294** .000 195
I always lock my car door when it is left outside my house	X	X	X	X	X	X	.222** .002 195	.080 .268 195
I regularly maintain and look after my property (cut the grass, paint fences etc.)	X	X	X	X	X	X	.106 .141 195	.080 .264 195

	Enough is being done to prevent crime in my area	I think having security measures (such as a house burglar alarm) is a good idea	I think people are too ready to blame victims of crime for not protecting themselves	I think the use of gates and fencing make areas look less friendly and less welcoming	Crime prevention interventions such as CCTV, are too intrusive on my privacy	I would prefer my property to be surrounded by a high fence or hedge	Close communities where neighbours get on are safer than communities that do not get on	Security measures (alarms, bolts & locks etc.) make neighbourhoods look unfriendly
My quality of life is affected by what I feel to be my risk of becoming a victim of crime	-.271** .000 196	.092 .198 196	.102 .160 191	.046 .521 195	.011 .882 196	.156* .029 195	.000 .995 196	.151* .035 195
I think it is likely that I will be the victim of crime in the next 12 months	-.378** .000 196	.082 .252 196	.010 .891 191	.058 .420 195	-.164* .022 196	167* .020 195	-.052 .469 196	.042 .562 195
In my area there are things I would like to do, and places I would like to go, but I don't as to avoid becoming a victim of crime	-.294** .000 196	.046 .518 196	.102 .162 191	.006 .933 195	-.121 .090 196	.156* .030 195	-.025 .732 196	.051 .476 195
My feeling about being a victim of crime has hindered my freedom of movement and activity throughout the area I live	-.328** .000 196	.048 .505 196	.125 .085 191	.018 .803 195	-.045 .533 196	.146* .042 195	-.032 .652 196	.057 .425 195
FOC score – Behavioural, Cognitive, Affective	-.390** .000 196	.159* .026 196	.111 .126 191	-.003 .970 195	-.135 .059 196	.215** .003 195	-.049 .459 196	.027 .703 195
I always lock my car door when it is left outside my house	.056 .432 196	.236** .001 196	-.003 .972 191	-.041 .565 195	-.151* .035 196	-.005 .942 195	.054 .454 196	-.131 .067 195
I regularly maintain and look after my property (cut the grass, paint fences etc.)	.009 .899 196	.410** .000 196	-.028 .699 191.	-.053 .466 195	-.070 .327 196	-.007 .925 195	.198** .005 196	-.092 .199 195

	There is too much light pollution from street lighting	Overall 'Support' score	The police and other local public agencies are successfully dealing with crime prevention in my local area	Improved street lighting reduces the opportunity for crime	CCTV in my area of residence is likely to reduce crime	Cul-de-sacs and dead-end streets make it more difficult for crime to occur	Preventing crime in one area merely causes that crime to be committed elsewhere	Interventions (burglar alarms etc.) make it harder for criminals to commit property crime
My quality of life is affected by what I feel to be my risk of becoming a victim of crime	-.015 .839 195	.047 .516 195	-.188** .008 195	.004 .955 196	.171* .017 196	.063 .381 195	.203** .004 195	-.027 .711 196
I think it is likely that I will be the victim of crime in the next 12 months	-.108 .132 195	.154* .031 195	-.394** .000 195	-.102 .157 196	.198** .005 196	-.045 .534 195	.254** .000 195	-.003 .967 196
In my area there are things I would like to do, and places I would like to go, but I don't as to avoid becoming a victim of crime	-.007 .925 195	.176* .014 195	-.279** .000 195	.031 .664 196	.184* .010 196	.019 .797 195	.258** .000 195	-.005 .944 196
My feeling about being a victim of crime has hindered my freedom of movement and activity throughout the area I live	.013 .857 195	.115 .110 195	-.309** .000 196	-.055 .442 196	.159* .026 196	-.003 .970 195	.236** .001 195	.027 .709 196
FOC score – Behavioural, Cognitive, Affective	-.098 .173 195	.198** .006 195	-.358** .000 196	.000 .995 196	.251** .000 196	-.038 .599 195	.254** .000 195	.033 .644 196
I always lock my car door when it is left outside my house	-.143* .043 195	.231** .001 195	.057 .425 196	-.001 .992 196	.121 .090 196	-.103 .150 195	.017 .809 195	.123 .086 196
I regularly maintain and look after my property (cut the grass, paint fences etc.)	-.066 .358 195	.132 .066 195	.129 .071 195	.234** .001 196	.159* .026 196	.155* .031 195	.015 .838 195	.264** .000 196

	Reducing the number of short cuts through areas of residence such as alleyways will make crime less likely	The likelihood of crime is reduced when areas of residence are well maintained and looked after	Offenders would find it tough to commit crime in my neighbourhood with the security measures currently in place	Offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours	Crime is less likely to happen in neighbourhoods that are free from litter, graffiti, and vandalism	Overall 'Effectiveness' score
My quality of life is affected by what I feel to be my risk of becoming a victim of crime	.029 .691 195	.096 .181 196	-.001 .994 195	-.014 .848 195	.002 .983 196	.000 .996 195
I think it is likely that I will be the victim of crime in the next 12 months	.028 .700 195	-.059 .409 196	-.207** .004 195	-.184** .010 195	-.118 .100 196	-.186** .009 195
In my area there are things I would like to do, and places I would like to go, but I don't as to avoid becoming a victim of crime	.038 .602 195	.008 .907 196	-.009 .897 195	-.105 .144 195	-.069 .334 196	-.067 .351 195
My feeling about being a victim of crime has hindered my freedom of movement and activity throughout the area I live	.020 .778 195	.054 .452 196	-.001 .994 195	-.038 .598 195	-.027 .706 196	-.052 .473 195
FOC score – Behavioural, Cognitive, Affective	.057 .433 195	-.054 .452 196	-.146* .042 195	-.152* .034 195	-.146* .041 196	-.142* .018 195
I always lock my car door when it is left outside my house	.054 .430 195	.015 .834 196	-.070 .333 195	.010 .887 195	-.033 .648 196	.005 .940 195
I regularly maintain and look after my property (cut the grass, paint fences etc.)	.156* .030 195	141* .049 196	.080 .266 195	.159* .026 195	.045 .528 196	.250** .000 195

	The idea of my property being watched by CCTV makes me feel safer	I would prefer my house to be designed specifically with crime prevention in mind	Enough is being done to prevent crime in my area	I think having security measures (such as a house burglar alarm) is a good idea	I think people are too ready to blame victims of crime for not protecting themselves	I think the use of gates and fencing make areas look less friendly and less welcoming	Crime prevention interventions such as CCTV, are too intrusive on my privacy	I would prefer my property to be surrounded by a high fence or hedge
I leave lights on inside my house when I'm not in at night	.149* .037 195	.290** .000 195	.026 .723 196	.267** .000 196	-.001 .988 191	-.170* .018 195	.-.064 .373 196	.015 .830 195
I sometimes check to make sure crime isn't taking place at my neighbours property	.082 .254 195	.110 .125 195	.123 .087 196	.201** .005 195	.071 .331 191	-.161* .024 195	.049 .491 196	.017 .809 195
I am always happy to help police and other local agencies when it comes to crime prevention in my area	.231** .001 195	.227** .000 195	.112 .119 196	.223** .002 196	.017 .811 191	-.141* .049 195	-.138 .054 196	.003 .963 195
Overall 'Engagement' score	.184** .010 195	.261** .000 195	.105 .144 195	.342** .000 196	.042 .567 191	-.188** .009 195	-.074 .300 196	.033 .644 195
The idea of my property being watched by CCTV makes me feel safer	X	X	X	X	X	X	X	X
I would prefer my house to be designed specifically with crime prevention in mind	X	X	X	X	X	X	X	X
Enough is being done to prevent crime in my area	X	X	X	X	X	X	X	X
I think having security measures (such as a house burglar alarm) is a good idea	X	X	X	X	X	X	X	X

	Close communities where neighbours get on are safer than communities that do not get on	Security measures (alarms, bolts & locks etc.) make neighbourhoods look unfriendly	There is too much light pollution from street lighting	Overall 'Support' score	The police and other local public agencies are successfully dealing with crime prevention in my local area	Improved street lighting reduces the opportunity for crime	CCTV in my area of residence is likely to reduce crime	Cul-de-sacs and dead-end streets make it more difficult for crime to occur
I leave lights on inside my house when I'm not in at night	.255** .001 196	-.161* .024 195	-.016 .822 195	.248** .000 195	-.011 .894 196	.262** .000 196	.157* .028 196	.038 .596 195
I sometimes check to make sure crime isn't taking place at my neighbours property	.233** .001 196	-.070 .330 195	.102 .154 195	.126 .080 195	.057 .430 196	.161* .024 196	.064 .373 196	-.064 .377 195
I am always happy to help police and other local agencies when it comes to crime prevention in my area	.249** .000 196	-.119 .096 195	-.068 .347 195	.275** .000 195	.081 .262 196	.251** .000 196	.254** .000 196	.114 .112 195
Overall 'Engagement' score	.275** .000 196	-.144* .045 195	-.005 .950 195	.285** .000 195	.056 .438 196	.262** .000 196	.187** .009 196	.018 .806 195
The idea of my property being watched by CCTV makes me feel safer	X	X	X	X	-.018 .800 196	.275** .000 196	.545** .000 196	.094 .191 195
I would prefer my house to be designed specifically with crime prevention in mind	X	X	X	X	-.070 .328 196	.290** .000 196	.460** .000 196	0.72 .318 195
Enough is being done to prevent crime in my area	X	X	X	X	.606** .000 196	-.116 .106 196	-.148* .038 196	-.020 .777 195
I think having security measures is a good idea	X	X	X	X	.046 .519 196	.323** .000 196	.297** .000 196	.078 .280 195

	Preventing crime in one area merely causes that crime to be committed elsewhere	Interventions (burglar alarms etc.) make it harder for criminals to commit property crime	Reducing the number of short cuts through areas of residence such as alleyways will make crime less likely	The likelihood of crime is reduced when areas of residence are well maintained and looked after	Offenders would find it tough to commit crime in my neighbourhood with the security measures currently in place	Offenders would find it difficult to roam freely within my neighbourhood without being observed by	Crime is less likely to happen in neighbourhoods that are free from litter, graffiti, and vandalism	Overall 'Effectiveness' score
I leave lights on inside my house when I'm not in at night	.067 .352 195	.125 .081 196	.245** .001 195	.111 .121 196	.044 .538 195	.060 .403 195	.068 .344 196	.200** .005 195
I sometimes check to make sure crime isn't taking place at my neighbours property	-.033 .645 195	.055 .440 196	.138 .054 195	.205** .004 196	.167* .019 195	.220** .002 195	.101 .160 196	.186** .009 195
I am always happy to help police and other local agencies when it comes to crime prevention in my area	-.010 .891 195	.189** .008 196	.144* .044 195	.097 .176 196	.110 .127 195	.049 .496 195	.074 .304 196	.241** .001 195
Overall 'Engagement' score	.007 .922 195	.166* .020 196	.235** .001 195	.200** .005 196	.158* .027 195	.188** .008 195	.111 .122 196	.278** .000 195
The idea of my property being watched by CCTV makes me feel safer	.127 .077 195	.252** .000 195	.114 .113 195	.089 .217 195	-.052 .466 195	-.085 .239 195	-.014 .843 195	.159* .026 195
I would prefer my house to be designed specifically with crime prevention in mind	.142* .048 195	.173* .016 195	.185** .009 195	-.065 .368 195	-.076 .290 195	-.038 .600 195	-.089 .217 195	.080 .268 195
Enough is being done to prevent crime in my area	-.083 .249 195	.082 .253 196	.034 .637 195	.028 .701 196	.355** .000 195	.258** .000 195	.119 .097 196	.265** .000 195
I think having security measures (such as a house burglar alarm) is a	-.029 .690 195	.444** .000 196	.142* .048 195	.065 .365 196	.004 .954 195	-.044 .538 195	-.066 .932 196	.234** .001 195

	The police and other local public agencies are successfully dealing with crime prevention in my local area	Improved street lighting reduces the opportunity for crime	CCTV in my area of residence is likely to reduce crime	Cul-de-sacs and dead-end streets make it more difficult for crime to occur	Preventing crime in one area merely causes that crime to be committed elsewhere	Interventions (burglar alarms etc.) make it harder for criminals to commit property crime	Reducing the number of short cuts through areas of residence such as alleyways will make crime less likely	The likelihood of crime is reduced when areas of residence are well maintained and looked after
I think people are too ready to blame victims of crime for not protecting themselves	.018 .808 191	.013 .855 191	.021 .771 191	.045 .533 191	.053 .469 191	.038 .603 191	.098 .176 191	-.104 .853 191
I think the use of gates and fencing make areas look less friendly and less welcoming	.105 .146 195	-.054 .451 195	-.169* .018 195	.105 .142 195	.025 .733 195	-.012 .864 195	-.013 .854 195	.059 .413 195
Crime prevention interventions such as CCTV, are too intrusive on my privacy	.134 .061 195	-.224** .002 196	-.450** .000 196	.126 .080 195	-.061 .394 195	-.254** .000 196	-.127 .078 195	.086 .228 196
I would prefer my property to be surrounded by a high fence or hedge	-.028 .699 195	-.078 .281 195	.077 .284 195	.095 .188 195	.068 .346 195	.015 .831 195	.074 .302 195	.036 .614 195
Close communities where neighbours get on are safer than communities that do not get on	.207** .004 195	.265** .000 195	.031 .671 196	.171* .017 195	.133 .063 195	.304** .000 196	.064 .373 195	.270** .000 196
Security measures (alarms, bolts & locks etc.) make neighbourhoods look unfriendly	.047 .513 195	-.241** .001 195	-.297** .000 195	.080 .267 195	.087 .228 195	-.158* .027 195	-.096 .184 195	.107 .135 195
There is too much light pollution from street lighting	-.041 .567 195	-.358** .000 195	-.282** .000 195	-.008 .912 195	.018 .806 195	-.246** .001 195	-.093 .198 195	.111 .123 195
Overall 'Support' score	.031 .665 195	.381** .000 195	.516** .000 195	.041 .571 195	.105 .145 195	.337** .000 195	.174* .015 195	-.002 .981 195

|	Offenders would find it tough to commit crime in my neighbourhood with the security measures currently in place	Offenders would find it difficult to roam freely within my neighbourhood without being observed by myself or by my neighbours	Crime is less likely to happen in neighbourhoods that are free from litter, graffiti, and vandalism	Overall 'Effectiveness' score
I think people are too ready to blame victims of crime for not protecting themselves	.020 .782 191	.104 .152 191	-.046 .805 191	.049 .504 191
I think the use of gates and fencing make areas look less friendly and less welcoming	.021 .770 195	-.006 .937 195	.129 .072 195	.062 .386 195
Crime prevention interventions such as CCTV, are too intrusive on my privacy	.050 .491 195	.181* .011 195	.089 .216 196	-.069 .341 195
I would prefer my property to be surrounded by a high fence or hedge	.059 .414 195	.039 .591 195	.055 .447 195	.026 .715 195
Close communities where neighbours get on are safer than communities that do not get on	.060 .401 195	.098 .172 195	.241** .001 196	.257** .000 195
Security measures (alarms, bolts & locks etc.) make neighbourhoods look unfriendly	.103 .151 195	-.002 .978 195	.002 .957 195	-.024 .744 195
There is too much light pollution from street lighting	.215** .003 195	.082 .253 195	.151 .035 195	-.014 .847 195
Overall 'Support' score	-.039 .585 195	-.052 .470 195	-.046 .519 195	.179* .012 195

Additional Results
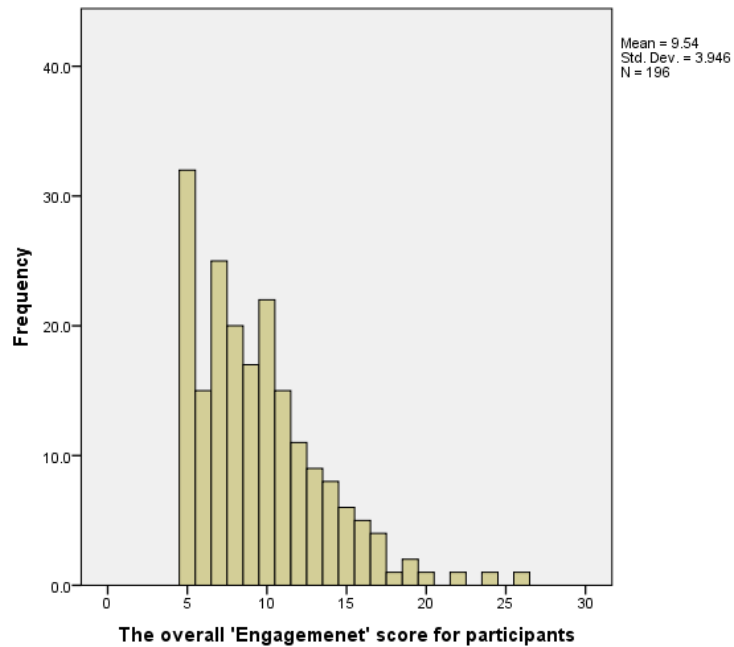
Figure i. A bar chart to show the overall engagement scores for participants as well as the mean and standard deviation

The figure shows that the most frequent overall score for participants' engagement with SCP techniques and measures was 5 which showed they strongly agreed with all the questions asked within the survey on engagement. The mean of results was 9.54 (Std. Deviation = 3.95).
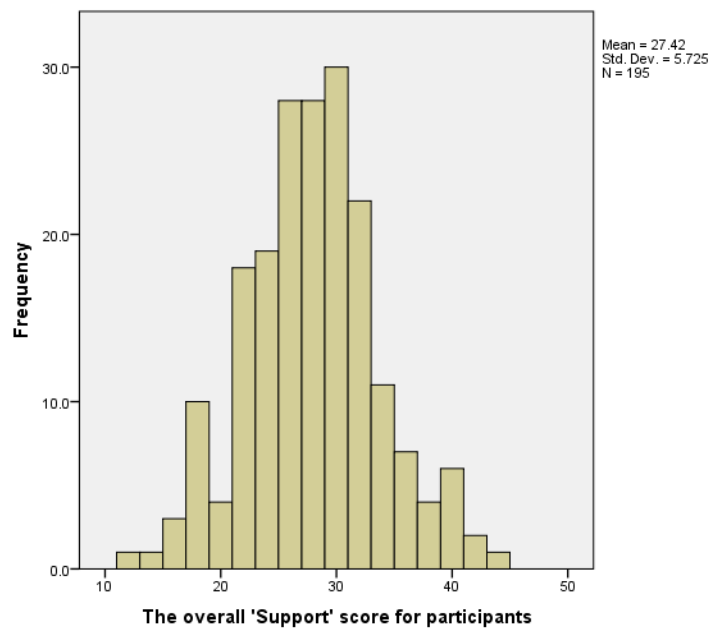

Figure ii. A bar chart to show the overall support scores for participants as well as the mean and standard deviation

The figure showed that the result for participants' overall support for SCP techniques and measures was more evenly spread with the most frequent result being 30. The mean score was 27.42 (Std. Deviation = 5.73).
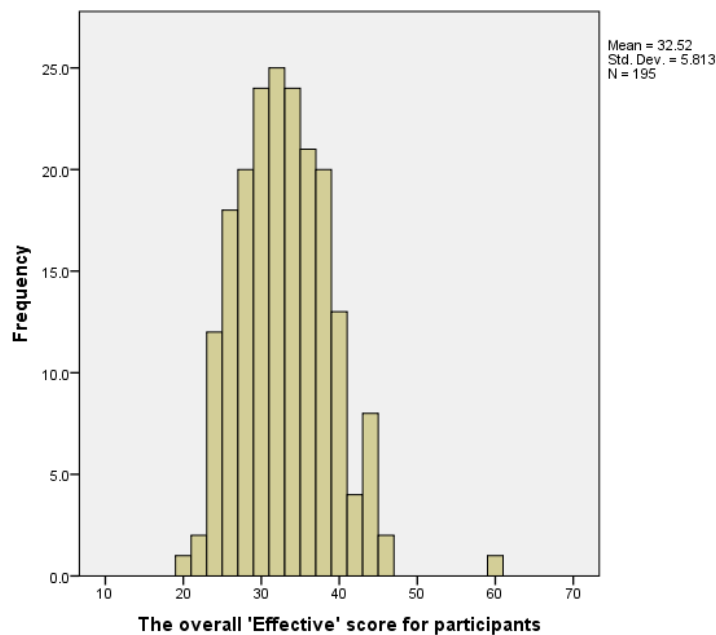

Figure iii. A bar chart to show the overall effectiveness scores for participants as well as the mean and standard deviation

Figure iii showed that the mean for participants' overall effectiveness score for SCP techniques and measures was 32.52 (Std. Deviation = 5.81).

Home security rating score & researcher overall security score
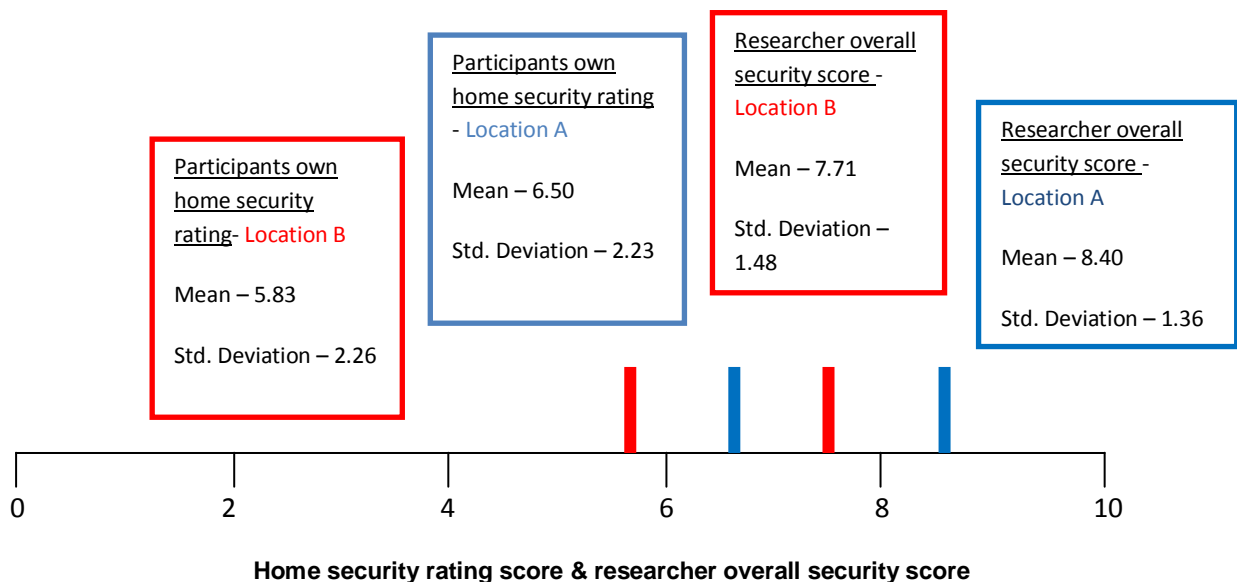
Figure iv. A chart to show the mean and standard deviation from both locations on their own home security rating score and the researchers overall security score

The graph in figure iv shows that participants from Location A have a higher mean score (Mean=6.50, Std. Deviation=2.23) for 'participants own home security rating score' than those from Location B (Mean=5.83, St Deviation=2.26). The graph also shows Location A (Mean=8.40, Std. Deviation=1.36)

has a higher mean score for 'Researcher overall security score' than Location B (Mean=7.71. Std Deviation=1.48). The participants' own home security rating score suggest that participants from Location A believe their residences to be better protected from potential crimes than those from Location B, as well as having a higher 'researcher overall security score'.

Table i. A frequency table showing the results from both locations and whether they agree or disagree that the police and other local public agencies are successfully dealing with crime prevention in their local area

Variable	Location A				Location B			
	Agree		Disagree		Agree		Disagree	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
The police and other local public agencies are successfully dealing with crime prevention in my local area	99	90.0	11	10.0	56	65.1	30	34.9

Results from table i show that the majority of participants from Location A (N=99, 90 percent) agree that the police and other local public agencies are successfully dealing with crime prevention in their local area, whereas the results from Location B (N=56, 65.1 percent) are not as emphatic.

Table ii.A table showing the samples responses to whether or not 'displacement' exists.

	Location A			Location B			Combined		
	Agree	Disagree	Total	Agree	Disagree	Total	Agree	Disagree	Total
Frequency	67	43	110	55	31	86	122	74	196
Percent	60.9	39.1	100.0	64.0	36.0	100.0	62.1	37.9	100.0

Table ii shows that 60.9 per cent (N=67) of participants from Location A agree that crime in one area merely cause that crime to be committed elsewhere (displacement) and 64.0 per cent (N=55) agree with it from Location B. In total 62.1 per cent (N=122) agree that displacement of crime exists.

Table iii. A table to show the test of correlation results between participants that believeclose communities where neighbours get on are safer than communities that do not get onand a number of variables with section C of the questionnaire

Variables		Result			Significance	Positive/Negative	Strength of correlation
		rho	n	p			
Close communities where neighbours get on are safer than communities that do not get on	I regularly maintain and look after my property (cut the grass, paint fences etc.)	.198**	196	.005	Significant	Positive	Weak
	I leave lights on inside my house when I'm not in at night	.255**	196	.001	Significant	Positive	Weak
	I sometimes check to make sure crime isn't taking place at my neighbours property	.233**	196	.001	Significant	Positive	Weak
	I am always happy to help police and other local agencies when it comes to crime	.249**	196	.000	Significant	Positive	Weak

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	prevention in my area					
	Improved street lighting reduces the opportunity for crime	.265**	195	.000	Significant	Positive	Weak
	Cul-de-sacs and dead-end streets make it more difficult for crime to occur	.171*	195	.017	Significant	Positive	Weak
	Interventions (burglar alarms etc.) make it harder for criminals to commit property crime	.304**	196	.000	Significant	Positive	Weak
	The likelihood of crime is reduced when areas of residence are well maintained and looked after	.270**	196	.000	Significant	Positive	Weak
	Crime is less likely to happen in neighbourhoods that are free from litter, graffiti, and vandalism	.241**	196	.001	Significant	Positive	Weak

Table iii showed that the more participants agreed that close communities where neighbours get on are safer than communities that do not get on, the more participants agreed with a number of SCP techniques and measures. The strongest correlations were with 'Interventions (burglar alarms etc.) make it harder for criminals to commit property crime' (.304**), and 'the likelihood of crime is reduced when areas of residence are well maintained and looked after' (.270**).

Table iv. A Mann-Whitney results table to show the differences between those who in the last 12 months (whilst) living at this property) have been the victim of any type of crime and whether they agree or disagree that the police and other local public agencies are successfully dealing with crime prevention in their local area

		Sig. Value	Significance	Mean Rank	
				Yes	No
In the last 12 months (whilst) living at this property) have you been the victim of any type of crime	The Police and other local public agencies are successfully dealing with crime prevention in my local area	.039	Significant	118.22	95.35

The results table shows that participants who have not been a victim of crime in the last 12 months whilst living at their current property significantly believe the police and other local agencies to be more successfully dealing with crime prevention in their local area than those who have been a victim of crime.

Table v. A Mann-Whitney results table to show the differences between those who fear crime (Area of residence) and a number of variables assessing opinions of SCP

Variable		Mann-Whitney			
		Sig. Value	Significance	Mean Rank	
				Agree	Disagree
Fear of crime – Area of residence	I leave lights on inside my house when I am not in at night	.034	Significant	94.35	115.22

	CCTV in my area of residence is likely to reduce crime	.004	Significant	93.11	122.44
	Reducing the number of short cuts through areas of residence such as alleyways will make crime less likely	.023	Significant	93.85	116.99

Table v shows that the participants who agreed with certain SCP techniques and measures significantly feared crime for area of residence questions less than those who disagreed.

Table vi. A Mann-Whitney results table to show the differences between those who fear crime (Behavioural, cognitive, affective) and a number of variables assessing opinions of SCP

Variable		Mann-Whitney			
		Sig. Value	Significance	Mean Rank	
				Agree	Disagree
Fear of crime – Behavioural, cognitive, affective	I leave lights on inside my house when I am not in at night	.013	Significant	93.50	118.63
	The idea of my property being watched by CCTV makes me feel safer	.000	Significant	89.12	123.74
	I would prefer my property to be surrounded by a high fence or hedge	.002	Significant	81.48	107.05
	CCTV in my area of residence is likely to reduce crime	.000	Significant	91.31	130.46

Results show that participants who agreed with a number of SCP techniques and measures significantly feared crime for behavioural, cognitive, and affective questions less than those who disagreed. Results from table v and vi suggests that SCP techniques and measures can reduce public fear of crime.

Reference List

Adams, R.E. and Serpe, R.T. (2000).Social integration, fear of crime, and life satisfaction. Sociological Perspectives, 43(4): 605-629 [Online] Available at: http://cel.webofknowledge.com/InboundService.do?product=CEL&SID=T2q9qfFx374M7Yetjob&UT=0 00168533300004&SrcApp=Highwire&action=retrieve&Init=Yes&Func=Frame&SrcAuth=Highwire&cus tomersID=Highwire&IsProductCode=Yes&mode=FullRecord [Accessed 2nd February 2013]

Amerio, P. and Roccato, M. (2007). Psychological reactions to crime in Italy: 2002-2004. Journal of Community Psychology, 35(1): 91-102 [Online] Available at: http://onlinelibrary.wiley.com/doi/10.1002/jcop.20136/abstract [Accessed 2nd February 2013]

Armitage, R. (2005) Secured By Design – An Investigation of its History, Development and Future Role in Crime Reduction. Unpublished PhD Thesis, University of Huddersfield, Huddersfield.

Armitage, R. (2013) Crime Prevention Through Housing Design: Policy and Practice. Palgrave MacMillan.

Armitage, R. (2014) Crime Prevention through Environmental Design. In Bruinsma, G.J. & Weisburd, D.L. (Eds.) Encyclopedia of Criminology and Criminal Justice. New York: Springer

Armitage, R. & Monchuck, (2011) "Sustaining the crime reduction impact of designing out crime: Re-evaluating the Secured by Design scheme 10 years on", *Security Journal*, 24 (4). pp.320-343 [Online] Available at: http://eprints.hud.ac.uk/10575/1/Sustaining_Crime_Reduction_Impact.pdf [Accessed 26th November 2013]

Babbie, E. (2001). The Practice of Social Research: 9th Edition. Belmont, CA: Wadsworth Thomson

Bachman, R. and Schutt, R.K. (2011) The Practice of Research in Criminology and Criminal Justice. 4th ed. London: Sage

Baker, M.J. (2002) 'Sampling', Marketing Review, 3, (1), pp.103-120. [Online] Available at: http://rc4ht3qs8p.search.serialssolutions.com.libaccess.hud.ac.uk/?ctx_ver=Z39.88-2004&ctx_enc=info%3Aofi%2Fenc%3AUTF-8&rfr_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=artic le&rft.atitle=Sampling&rft.jtitle=The+Marketing+Review&rft.au=Baker%2C+Michael+J&rft.date=2002-09-01&rft.issn=1469-347X&rft.volume=3&rft.issue=1&rft.spage=103&rft.epage=120&rft_id=info:doi/10.1362%2F14693470 2321477253&rft.externalDBID=n%2Fa&rft.externalDocID=10_1362_146934702321477253&paramdic t=en-US [Accessed 14th October 2013]

Barberet, R. & Fisher, B. (2009) "Can security beget insecurity? Security and crime prevention awareness and fear of burglary among university students in the East Midlands", *Security Journal,* 22, pp.3-23.

Barr, R. & Pease, K. (1990) 'Crime, Displacement and Placement' In Tonry, M. & Morris, N. (eds.) Crime and Justice. Chicago: University of Chicago Press.

Beavon, D., Brantingham, P.J. & Brantingham, P.L. (1994) The Influence of Street Networks on the Patterning of Property Offenses. In Clarke, R. (ed.) Crime Prevention Studies. New York: Criminal Justice Press

Bell, J. (2010) Doing Your Research Project. 5th edition. Berkshire: Open University Press

Bennett, T. (1986) 'Situational Crime Prevention from the Offender's Perspective' In Heal, K. & Laycock, G. (eds.) Situational Crime Prevention: From Theory into Practice. London: HMSO

Bennett, T. (1989) 'Factors Related to Participation in Neighbourhood Watch Schemes', *British Journal of Criminology,* 29, (3), pp.207-218 [Online] Available at: http://bjc.oxfordjournals.org/content/29/3/207.full.pdf+html?sid=951035f8-ec4d-4c86-99ef-4c99ef3a00dd [Accessed 21st January 2013]

Bennett, R. R. (1991) "Routine Activities: A Cross National Assessment of a Criminological Perspective". The University of North Carolina press 70(1): 147-163

Berg, B. (2007) Qualitative Research Methods for the Social Sciences. 6th ed. Boston: Pearson Education

Bernard, H.R. (2013) Social Research Methods: Qualitative and Quantitative Approaches. London: Sage

Blaxter, L., Hughes, C., and Tight, M. (1996) How To Research. Buckingham: Open University Press

Bohner, G. & Wanke, M. (2002) Attitudes and Attitude Change. Psychology Press: Taylor & Francis

Bottoms, A.E. (1990) Crime Prevention Facing the 1990s", Policing and Society, 1 (1), pp.3-22

Bottoms, A.E. (1995) "The Philosophy and Politics of Punishment and Sentencing" In: Clarkson, C.M.V. & Morgan, R. (eds.) The Politics of Sentencing Reform. Oxford: Oxford University Press

Bouchard, T. J., Jr. (1976). Field research methods: Interviewing, questionnaires, participant observation, systematic observation, unobtrusive measures. In Dunnette M. D. (Ed.) Handbook of industrial and organizational psychology. Chicago: Rand McNally.

Bowers, K.J., Johnson, S.D. & Hirschfield, A.F.G (2005) "Closing off Opportunities for Crime: An Evaluation of Alley-Gating", *European Journal on Criminal Policy and Research,* 10, (4), pp.285-308 [Online] Available at: http://download.springer.com/static/pdf/879/art%253A10.1007%252Fs10610-005-5502-0.pdf?auth66=1392980889_5eec3493b9c4aa1aef17bcbf3c96a917&ext=.pdf [Accessed 20th January 2013]

Box, S., Hale, C. & Andrews, G. (1988) 'Explaining Fear of Crime', *British Journal of Criminology,* 28, (3), pp.340-356 [Online] Available at: http://bjc.oxfordjournals.org/content/28/3/340.full.pdf+html [Accessed 21st June 2013]

Brantingham, P.J. & Brantingham, P.L. (1975) "The Spatial Patterning of Burglary", *Howard Journal of Criminal Justice,* 14, pp.11-23

Brantingham, P.L. & Brantingham, P.J. (1981) Environmental Criminology. Beverley Hill: Sage

Brantingham, P. L. and Brantingham, P. J. (1993), 'Nodes, Paths and Edges: Considerations on the Complexity of Crime and Physical Environment', *Journal of Environmental Criminology*, 13, pp.3–28 [Online] Available at: http://ac.els-cdn.com/S0272494405802129/1-s2.0-S0272494405802129-main.pdf?_tid=f586d2ec-c168-11e3-9be0-00000aab0f6b&acdnat=1397214409_03107ebc488f64382183509189dc5a48 [Accessed 21st January 2013]

Brantingham, P.L. & Brantingham, P.J. (1995) 'Criminality of Place: Crime Generators and Crime Attractors', *European Journal of Criminal Policy and Research,* 3, pp.5-26

Brantingham, P.L., Brantingham, P.J. & Taylor, W. (1995) "Situational Crime Prevention as a Key Component in Embedded Crime Prevention", *Canadian Journal of Criminology and Criminal Justice*, 47 (2), pp.271-292

Brantingham, P. L. and Brantingham, P. J. (2008), 'Crime Pattern Theory', in Wortley, R. & and Mazarolle, L. (eds.) Environmental Criminology and Crime Analysis. Cullompton: Willan

Brener, N.D., Collins, J.L., Kann, L., Warren, C.W., & Williams, B.I. (1995) 'Reliability of the Youth Risk Behaviour Survey Questionnaire', American Journal of Epidemiology, 141, (6), pp.575-580 [Online] Available at: http://aje.oxfordjournals.org.libaccess.hud.ac.uk/content/141/6/575.full.pdf+html [Accessed on 17th August 2013]

Brener, N.D., Kann, L., McManus, T., Kinchen, S.A., Sundberg, E.C., & Ross, J.G. (2002) 'Reliability of the 1999 Youth Risk Behaviour Survey Questionnaire', Journal of Adolescent Health, 31, pp.336-342 [Online[Available at: http://ac.els-cdn.com.libaccess.hud.ac.uk/S1054139X02003397/1-s2.0-

S1054139X02003397-main.pdf?_tid=4f409fe2-8e98-11e3-a91f-00000aacb362&acdnat=1391627236_e35a5d10e813b47f7cce8ae0a7cfdb57 [Accessed on 21 August 2013]

Briar, S. & Piliavin, I. (1965) "Delinquency, Situational Inducements and Commitment to Conformity", *Social Problems*, 13, PP.35-45

Brodeur, J-P and Shearing, C. (2005) "Configuring Security and Justice", *European Journal of Criminology*, 2 (4), pp.379-406 [Online] Available at: http://euc.sagepub.com/content/2/4/379.short [Accessed 26th January 2013]

Bryman, A. (2008) Social Research Methods. 3rd ed. Oxford: Oxford University Press

Bryman, A. (2012) Social Research Methods. 4th ed. Oxford: Oxford University Press

Bryman, A. & Cramer, D. (2005) Quantitative Data Analysis With SPSS 12 and 13: A Guide for Social Scientists. Hove: Routldege

Burns, P. F. & Thomas, M. O. (2005) "Repairing the Divide: An Investigation of Community Policing and Citizen Attitudes Toward the Police by Race and Ethnicity." *Journal of Ethnicity in Criminal Justice,* 3, pp.71-85

Burt, C. (1925) The Young Delinquent. London: University of London press

Chainey, S. & Ratcliffe, J. (2005) GIS and Crime Mapping. West Sussex: Wiley

Chainey, S., Thompson, L. &Uhlig, S. (2008) 'The Utility of Hotspot Mapping for Predicting Spatial Patterns of Crime', *Security Journal,* 21, pp.4-28 [Online] Available at: http://www.palgrave-journals.com/sj/journal/v21/n1/pdf/8350066a.pdf [Accessed 21st January 2013]

Chaplin, R., Flatley, J. & Smith, K. (2011) Crime in England and Wales 2010/11 Home Office Statistical Bulletin 10/11 London: Home Office [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/116417/hosb1011.pdf [Accessed 23rd January 2013]

Chapman, B., Mirrlees-Black, C., and Brown, C. (2002) 'Improving Public Attitudes to the Criminal Justice System: The Impact of Information.' Home Office Research, Development and Statistics Directorate.No. 245. London: Home Office

Christmann, A. & Van Aelst, S. (2005) 'Robust Estimation of Cronbach's Alpha', Journal of Multivariate Analysis. 97, (7), pp.1660-1674 [Online] Available at: http://www.sciencedirect.com.libaccess.hud.ac.uk/science/article/pii/S0047259X05000898# [Accessed 30th March 2013]

Clarke, R.V. (1977) "Psychology and Crime".*Bulletin of the British Psychological Society,* 30, pp.280-283

Clarke, R.V. (1980) "Situational Crime Prevention: Theory and Practice." *British Journal of Criminology,* 20, (2), pp.136-147

Clarke, R. V. (1983) "Situational Crime Prevention: Its Theoretical Basis and Practical Scope" In Tonry, M. & Morris, N. (eds.) *Crime and Justice: An Annual Review of Research,* 4, Chicago: University of Chicago Press [Online] Available at: http://www.jstor.org/discover/10.2307/1147510?uid=25894&uid=3738032&uid=2&uid=3&uid=5910784&uid=67&uid=25892&uid=62&sid=21103378748601 [Accessed 12th March 2013]

Clarke, R.V. (1987) 'Rational Choice Theory and Prison Psychology' In McGurk, B.J., Thornton, D. & Williams, M. (eds.) Applying Psychology to Imprisonment: Theory and Practice. London: HMSO

Clarke, R.V. (1992) Situational Crime Prevention: Successful Case Studies, 2nd ed, Albany, NY: Harrow & Heston

Clarke, R.V. (1995) 'Situational Crime Prevention' In Tonry, M. & Farrington, D.P. (eds.) Building a Safer Society: Strategic Approaches to Crime Prevention. Chicago: University of Chicago Press.

Clarke, R.V. (1997) Situational Crime Prevention: Successful Case Studies. 2nded. New York: Harrow and Heston

Clarke, R.V. (1999) "Hot Products: Understanding, Anticipating and Reducing Demand for Stolen Goods", Policing & Reducing Crime, Police Research Series Paper 112 [Online] Available at :http://s1.downloadmienphi.net/file/downloadfile6/151/1384339.pdf [Accessed 19th January 2013]

Clarke, R.V. (2000) Situational Prevention, Criminology, and Social Values In Von Hirsch, A., Garland, D. & Wakefield, A. (Eds.) Ethical and Social Perspectives on Situational Crime Prevention. Oxford: Hart

Clarke, R.V. (2005) 'Seven Misconceptions of Situational Crime Prevention' In Tilley, N (ed) Handbook of Crime Prevention and Community Safety. Cullompton: Willan

Clarke, R.V. (2008). Situational Crime Prevention.In Wortley, R. & Mazerolle, L. (Ed.), Environmental Criminology and Crime Analysis.Cullompton: Willan

Clarke, R.V. & Martin, D.N. (1975) 'A Study of Absconding and Its Implications for the Residential Treatment of Delinquents' in Tizard, J., Sinclair, I.V. & Clarke, R.V. (eds.) Varieties of Residential Experience. London: Routledge and Kegan Paul

Clarke, R.V. & Mayhew, P. (1980) Designing out Crime. London: Her Majesty's Stationery Office

Clarke, R.V. and Cornish, D.B. (1983) Editorial Introduction. In Clarke, R.V. and Cornish, D.B. (eds.) Crime Control in Britain. Albany, NY: State University of New York Press.

Clarke, R.V. and Cornish, D.B. (1985) "Modelling Offenders' Decisions: A Framework for Research and Policy', Crime and Justice: An Annual Review of Research, 6, In Tonry, M. & Morris, N. (eds.) Chicago: University of Chicago Press

Clarke, R.V. & Mayhew, P. (1988) "The British Gas Suicide Story and Its Criminological Implications", Crime and Justice, Vol. 10, pp. 79-116

Clarke, R.V. & Mayhew, P. (1989) "Crime as Opportunity: A note On Domestic Gas Suicide in Britain and the Netherlands", British Journal of Criminology, 29, (1), pp.35-46 [Online] Available at: http://www.glendon.org/wp-content/uploads/2012/04/a_note_on_domestic_gas_suicide_in_britain.pdf [Accessed 20th January 2013]

Cohen, L.E. & Felson, M. (1979) 'Social Change and Crime Rate Trends: A Routine Activity Approach', American Sociological Review, 44, pp.588-608 [Online] Available at: http://www.jstor.org/stable/2094589 [Accessed 19th January 2013]

Cohen, L., &Manion, L. (2000) Research Methods in Education. 5th ed. London: Routledge.

Coleman, C. & Moynihan, J. (1996) Understanding Crime Data. Buckingham: Open University Press

Cornish, D.B. (1994) "The Procedural Analysis of Offending and its Relevance for Situational Prevention", In Crime Prevention Studies. Criminal Justice Press

Cornish, D.B & Clarke, R.V. (1975) Residential Treatment and its Effects on Delinquency.Home Office Research Studies 32. London: HMSO

Cornish, D.B & Clarke, R.V. (1986) The Reasoning Criminal. New York: Springer

Cornish, D.B& Clarke, R.V. (1987) "Understanding Crime Displacement: An Application of Rational Choice Theory." Criminology, 25, pp.933-947

Cornish, D.B & Clarke, R.V. (2003). Opportunities, precipitators, and criminal decisions: A reply to Wortley's critique of situational crime prevention. In M. Smith & D. Cornish (Eds.) Theory for practice in situational crime prevention. Monsey, NY: Criminal Justice Press.

Costello, A. & Wiles, P. (2001) 'GIS and the Journey to Crime: An Analysis of Patterns in South Yorkshire' In Hirschfield, A. & Bowers, K. (Eds.) Mapping and Analysing Crime Data: Lessons from Research and Practice. London: Taylor & Francis

Cozens, P. (2005) "Designing out crime – from evidence to action", Delivering Crime Prevention: Making the Evidence Work, Australian Institute of Criminology and the Designing out crime in Western Australia 307 Attorney-General's NSW Department, Carlton Crest Hotel, Sydney,

Cozens, P. (2008a) Crime Prevention through Environmental Design (CPTED); Origins, Concepts, Current Status and Future Directions. In Wortley, R., Mazerolle, L. &Rombouts, S. (eds.) Environmental Criminology and Crime Analysis. Devon: Willan

Cozens, P. (2008b) 'New Urbanism, Crime and the Suburbs: A Review of the Evidence', Urban Policy and Research, 26, (4), pp.429-444 [Online] Available at: http://www.tandfonline.com/doi/pdf/10.1080/08111140802084759 [Accessed 23rd January 2013]

Cozens, P. (2009) "Education in Designing out Crime - A Case Study", In Cooper, T., Cozens, P., Dorest, K., Henry, P. & Love, T. (eds) Designing Places, Products, Systems and Processes to Reduce Crime, Terrorism and Anti-Social Behaviour [Online] Available at: http://espace.library.curtin.edu.au/cgi-bin/espace.pdf?file=/2010/03/01/file_1/133497 [Accessed 25th June 2013]

Cozens, P., Hillier, D. & Prescott,G. (2001) "Defensible Space: Burglars and Police Evaluate Urban Residential Design", *Security Journal,* 14, pp.43-62 [Online] Available at: http://www.palgrave-journals.com/sj/journal/v14/n4/abs/8340097a.html [Accessed 20th January 2013]

Cozens, P., Hillier, D. & Prescott, G. (2001b) "Crime and the design of residential property - exploring the theoretical background Part 1", *Property Management,* 19, (2), pp.136-164 [Online] Available at: http://www.emeraldinsight.com/journals.htm?articleid=845520&show=html [Accessed 20th January 2013]

Cozens, P.M., Neale, R.H., Whitaker, J., Hillier, D. & Graham, M. (2003) „"A critical review of street lighting, crime and fear of crime in the British city", *Crime Prevention and Community Safety: An International Journal*, 5 (2), pp.7-24

Cozens, P., Neale, R., Hillier, D. & Whitaker, J. (2004) "Tackling Crime and Fear of Crime While Waiting at Britain's Railway Stations", *Journal of Public Transportation,* 7, (3), pp.23-41 [Online] Available at: http://www.nctr.usf.edu/jpt/pdf/JPT%207-3%20Cozens.pdf [Accessed 24th February 2013]

Cozens, P., Saville, G. & Hillier, D. (2005) 'Crime Prevention through Environmental Design (CPTED): A Review and Modern Bibliography', Journal of *Property Management,* 23, pp.328-356 [Online] Available at: http://www.emeraldinsight.com/journals.htm?articleid=1529573&show=abstract [Accessed 20th January 2013]

Cozens, P. & Hillier, D. (2008) "The Shape of Things to Come: New Urbanism, the Grid and the Cul-De-Sac", *International Planning Studies,* 13, (1), pp.51-73 [Online] Available at: http://www.tandfonline.com/doi/pdf/10.1080/13563470801969962 [Accessed 20th January 2013]

Cozens, P., Thorn, M. & Hillier, D. (2008) 'Designing out crime in Western Australia: a case study", *Property Management*, 26, (5), pp.295 – 309 [Online] Available at: http://www.emeraldinsight.com/journals.htm?articleid=1752101&show=abstract [Accessed 20th February 2013]

Cozens, P., Hillier, D. & Prescott, G. (2010) "Criminogenic Associations and Characteristic British Housing Designs", *International Planning Studies,* 7, (2) pp.119-136 [Online] Available at: http://www.tandfonline.com/doi/pdf/10.1080/13563470220132218 [Accessed 20th January 2013]

Cozens, P. & Davies, T. (2013) "Crime and residential security shutters in an Australian suburb: Exploring perceptions of 'Eyes on the Street', social interaction and personal safety", *Crime Prevention and Community Safety,* 15, (3), pp.175-191 [Online] Available at: http://www.palgrave-journals.com/cpcs/journal/v15/n3/pdf/cpcs20135a.pdf

Cramer, D. (1998) Fundamental Statistics for Social Research: Step by Step Calculations and Computer Techniques Using SPSS for Windows. London: Routledge.

Cramer, D. &Howitt, D. (2004) The Sage Dictionary of Statistics. London: Sage

Crawford, A. (1998) Crime Prevention & Community Safety: Politics, Policies and Practices. Harlow: Longman

Crawford, A. (2000) "Situational Crime Prevention, Urban Governance and Trust Relations" In Von Hirsch, A., Garland, D. & Wakefield, A. (eds.) Ethical and Social Perspectives on Situational Crime Prevention. Oxford: Hart

Crawford A & Jones M 1996.Kirkholt revisited: some reflections on the transferability of crime prevention initiatives. *Howard Journal of Criminal Justice,* 35, (1), pp.21–39

Crowe, T. (2000) Crime Prevention through Environmental Design: Applications of Architectural Design and Space Management Concepts.2nd edition. Oxford: Butterworth-Heinemann

Cullen, F. T., Vose, B. A., Jonson, C. N. L., &Unnever, J. D. (2007). Public support for early intervention: Is child saving a 'habit of the heart'? *Victims and Offenders*, 2, 109–124 [Online] Available at: http://www.tandfonline.com/doi/pdf/10.1080/15564880701263015 [Accessed 21st January 2013]

Curtis, B. & Curtis, C. (2011) Social Research: A Practical Introduction. London: Sage

David, M. & Sutton, C.D. (2011) Social Research: An Introduction. 2nd edition. London: Sage

Davies, P., Francis, P., and Jupp, V. (2011) Criminological Research. 2nd ed. London: Sage

Denscombe, M. (2002) Ground Rules for Good Research. Buckingham: Open University Press

Denzin, N. K. (1978). The research act: A theoretical introduction to sociological methods.New York: McGraw-Hill.

Diener,E. & Crandall, R. (1978) Ethics in Social and behavioural Research. Chicago: University of Chicago Press InBryman, A. (2008) Social Research Methods. 3rd ed. Oxford: Oxford University Press

Ditton, J. (1998) "Public Support for Town Centre CCTV Schemes: Myth or Reality?" In Norris, Moran & Armstrong

Ditton, J. (1998) Public support for town centre CCTV schemes: myth or reality? In Norris, C., Moran, J. & Armstrong, G. (eds.) Surveillance, Closed Circuit Television and Social Control. Aldershot: Ashgate.

Dolan, P. and Peasgood, T. (2007).Estimating the economic and social costs of the fear of crime. British Journal of Criminology, 47: 121-132 [Online] Available at: http://pauldolan.co.uk/wp-content/uploads/2011/05/Br-J-Criminol-2007-Dolan-121-32.pdf [Accessed 2nd February 2013]

Duffy, B., Wake, R., Burrows, T. &Bremner, P. (2008) "Closing the gaps – crime and public perceptions" *International Review of Law Computers & Technology,* 22, pp.17-44 [Online] Available at: http://rc4ht3qs8p.search.serialssolutions.com.libaccess.hud.ac.uk/?ctx_ver=Z39.88-2004&ctx_enc=info%3Aofi%2Fenc%3AUTF-8&rfr_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=Closing+the+gaps+-+crime+and+public+perceptions.+%28United+Kingdom%29&rft.jtitle=International+Review+of+Law%2C+Computers+%26+Technology&rft.au=Duffy%2C+Bobby&rft.au=Wake%2C+Rhonda&rft.au=Burrows%2C+Tamara&rft.au=Bremmer%2C+Pamela&rft.date=2008-03-01&rft.pub=Taylor+%26+Francis+Ltd&rft.issn=1360-0869&rft.volume=22&rft.issue=1-2&rft.spage=17&rft.externalDBID=n%2Fa&rft.externalDocID=180684692&paramdict=en-US [Accessed 2nd February 2013]

Eck , J. & Rosenbaum , D. (1994) 'The New Police Order: Effectiveness, Equity and Efficiency in Community Policing ', in Rosenbaum , D. (ed.) The Challenge of Community Policing . Thousand Oaks, CA : Sage

Eck, J.E. & Weisburd, D. (1995) 'Crime Places in Crime Theory' In Eck, J.E. & Weisburd, D. (Eds.) Crime and Place.Criminal Justice Press. [Online] Available at: http://www.popcenter.org/library/crimeprevention/volume_04/crime_places_in_crime_theory.pdf [Accessed 6th February 2013]

Ekblom, P. (2001) 'Situational Crime Prevention' In McLaughlin, E. & Muncie, J. (eds.) The Sage Dictionary of Criminology London: Sage

Ekblom, P. (2008) Crime risk assessment/crime impact assessment. Available at

Ekblom, P., Simon, F., &Birdi, S. (1988) Crime and Racial Harassment in Asian-run Small Shops: The Scope for Prevention.Crime Prevention Unit Paper 15. London: Home Office, Crime Prevention Unit.

Engstad, P. (1975) Environmental opportunities and the ecology of crime. In Silverman, R. &Teevan, J. (eds.) Crime in Canadian Society: 193- 211.

Farrall, S., Bannister, J., Ditton, J. & Gilchrist, E. (1997) 'Questioning the Measurement of the Fear of Crime' British Journal of Criminology, 37, (4) pp.658-679.

Farrell, G. (2000) 'Crime Prevention' in Bryant, C (ed.) Encyclopaedia of Criminology and Deviant Behaviour. London: Taylor and Francis

Farrell, G., Sousa, W.H. &Weisel, D.L. (2002) "The Time-Window Effect in the Measurement of Repeat Victimization", Crime Prevention Studies, 13, pp.15-27 [Online] Available at: http://www.popcenter.org/library/crimeprevention/volume_13/02-Farrell.pdf [Accessed 20th February 2013]

Farrington, D.P. & Welsh, B.C. (2002) Effects of Improved Street Lighting on Crime: A Systematic Review, Home Office Research Study No. 251. London: HMSO

Felson, M. (1995) ''Those Who Discourage Crime'', In Crime and Place: Crime Prevention Studies. Vol. 4. Eck, J.E. & Weisburd, D. Monsey, NY: Criminal Justice Press [Online] Available at: http://www.popcenter.org/library/crimeprevention/volume_04/03-felson.pdf [Accessed 21st January 2013]

Felson, M. (1998) Crime and Everyday Life. 2nd ed. California: Pine Forge Press.

Felson, M. & Clarke, R.V. (1998) Opportunity Makes the Thief: Practical Theory for Crime Prevention. Policy Research Series, Paper 98. London: Home Office [Online] Available at: http://webarchive.nationalarchives.gov.uk/20110218135832/rds.homeoffice.gov.uk/rds/prgpdfs/fprs98.pdf [Accessed 13th January 2013]

Ferrero, K. (1995) Fear of Crime: Interpreting Victimization Risk. New York: SUNY Press

Fielding, J. & Gilbert, N. (2000) Understanding Social Statistics. London: Sage

Finney, A. (2004) "Perceptions of Changing Crime Levels" In Nicholas, S. & Walker, A. (eds.) Crime in England and Wales 2002/2003: Supplementary Volume 2: Crime, Disorder and the Criminal Justice System – Public Attitudes and Perceptions. London: Office of National Statistics

Fisher , B . S .(1995) 'Crime and fear on campus', Annals of the American Academy of Political and Social Science, 539: 85 – 101

Foster, J.J. (1998) Data Analysis Using SPSS for Windows. London: Sage

Fox, K.A., Nobles, M.R. &Piquero, A.R. (2009) 'Gender, Crime Victimization and Fear of Crime', Security Journal, 22, pp.24-39 [Online] Available at: http://www.palgrave-journals.com/sj/journal/v22/n1/pdf/sj200813a.pdf [Accessed 2nd April 2013]

Friedman , W. (1994) 'The Community Role in Community Policing ', in Rosenbaum, D. (ed.) The Challenge of Community Policing. Thousand Oaks, CA : Sage .

Gadd, D. & Jefferson, T. (2007) Psychosocial Criminology. London: Sage

Garland, D. (2000) 'The New Criminologies of Everyday Life' In Von Hirsch, A. et al. (eds.) *Ethical and Social Issues in Situational Crime Prevention.*Oxford: Hart

Geason, S. & Wilson, P. (1988) Crime Prevention: Theory and Practice. *Australian Institute of Criminology.*[Online] Available at: http://www.aic.gov.au/documents/E/1/A/%7BE1A7C03E-AE54-4F9D-B89A-B7C815BBDCA3%7Dcptap.pdf [Accessed 20th January 2013]

George, D. &Mallery, P. (2010) SPSS for Windows Step by Step: A Simple Study Guide and Reference, 17.0 Update. 10th edition. Boston: Allyn& Bacon.

Gerber, S.B. & Finn, K.V. (2005) Using SPSS for Windows: Data Analysis and Graphics. 2nd edition. New York: Springer.

Gillham, B. (2000) Developing a Questionnaire. London: Continuum

Gilling, D. (1999) "Community Safety A Critique" *British Society of Criminology,* 2, [Online] Available at: http://britsoccrim.org/volume2/007.pdf [Accessed 20th January 2013]

Glass, G., & Hopkins, K. (1996). Statistical methods in education and psychology (3rd ed.). Boston: Allyn and Bacon.

Glasson, J. & Cozens, P. (2010) 'Making Communities Safer from Crime: An Undervalued Element in Impact Assessment', *Environmental Impact Assessment Review,* 31, (1), pp.25-35 [Online] Available at: http://www.sciencedirect.com/science/article/pii/S0195925510000582 [Accessed 21st January 2013]

Gray, D.E. (2004) Doing Research in the Real World. London: Sage

Greasley, P. (2008) Quantitative Data Analysis Using SPSS: An Introduction for Health and Social Science. New York: McGraw-Hill

Greene, J. &Mastrofski, S. (1988) Community Policing: Rhetoric or Reality. Westport: Praeger

Greene J. and Mastrofski S. (1988) Community Policing: Rhetoric or Reality . Westport, CT: Praeger

Groff, E., & McEwen, T. (2006) Exploring the spatial configuration of places related to homicide events: Final report. Washington, DC: National Institute of Justice.

Grove, L. (2011) Synergies of Syntheses: A Comparison of Systematic Review and Scientific Realist Evaluation Methods for Crime Prevention, *Internet Journal of Criminology,* [Online] Available at: http://www.internetjournalofcriminology.com/Grove_Synergies_of_Syntheses_A_Comparison_of_Systematic_Review_and_Scientific_Realist_Evaluation_Methods_For_Crime_Prevention_March_2011.pdf [Accessed 20th February 2013]

Guerette, R.T. (2004) Toward Safer Borders: Extending the Scope of Situational Crime Prevention. Paper presented at the American Society of Criminology Annual Meeting, Nashville

Guerette, R.T. (2009) "Pull, Push, and Expansion of Situational Crime Prevention Evaluation: An Appraisal of Thirty-Seven Years of Research" In Knutsson, J. & Tilley, N. (Eds.) Evaluating Crime Reduction Initiatives. New York: Criminal Justice Presshttps://www.ncjrs.gov/App/Publications/abstract.aspx?ID=249450

Guerette, R.T. & Bowers, K.J (2009) "Assessing the Extent of Crime Displacement and Diffusion of Benefits: A Review of Situational Crime Prevention Evaluations" *Criminology,* 47, (4), pp.1331-1368 [Online] Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1745-9125.2009.00177.x/pdf [Accessed 19th January 2013]

Hagan, F.E. (2012) Essentials of Research Methods in Criminal Justice and Criminology. 3rd ed. London: Prentice Hall

Hale, C. (1996) "Fear of crime: a review of the literature", *International Review of Victimology*, 4, pp.79-150

Hall, P. & Innes, J. (2011) "Understanding Perceptions of Crime" In Moon, D. (Ed), Flatley, J. (Ed), Parfrement-Hopkins, J., Hall, P., Hoare, J., Lau, I. & Innes, J. (2011) "Perceptions of crime engagement with the police, authorities dealing with antisocial behaviour and Community Payback: Findings from the 2010/11British Crime Survey. [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/116293/hosb1811.pdf [Accessed 24th January 2013]

Halliwell, E. (2010) In the Face of Fear: How fear and anxiety affect our health and society, and what we can do about it. London: Mental Health Foundation

Hardy, M. &Bryman, A. (2004) The Handbook of Data Analysis. London: Sage

Hayward, K. (2007) "Situational Crime Prevention and its Discontents: Rational Choice Theory versus the 'Culture of Now'", Social Policy & Administration, 41, (3), pp.232-250 [Online] Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9515.2007.00550.x/pdf [Accessed 21st January 2013]

Hesseling, R. (2004) 'Displacement: An Empirical Review of the Literature' In Clarke, R.V. (Ed.) Crime Prevention Studies. New York: Criminal Justice Press

Hirschfield, A. (2001) Decision Support in Crime Prevention: Data Analysis, Policy Evaluation and GIS, In Hirschfield, A. & Bowers, K. (Eds.) Mapping and Analysing Crime Data: Lessons from Research and Practice. London: Taylor & Francis

Hirschfield, A. (2004) 'The health impact assessment of crime prevention'. In: Health impact assessment: concepts, theory, techniques, and applications. Oxford: Oxford University Press, pp. 341-349 [Online] Available at: http://eprints.hud.ac.uk/6771/1/HirschfieldHealth.pdf [Accessed 31st March 2013]

Hirschfield, A. (2004) 'The impact of the Reducing Burglary Initiative in the north of England', Home Office Online Report 40, [Online] Available at: http://tna.europarchive.org/20071206133532/homeoffice.gov.uk/rds/pdfs04/rdsolr4004.pdf [Accessed 31st March 2013]

Hirschfield, A. (2005) 'Analysis for Intervention' In Tilley, N (ed.) Handbook of Crime Prevention and Community Safety. Cullompton: Willan

Hirschfield, A. (2011) Reducing Opportunities for Burglary: The Impact of Alley Gates. *Italian Journal of Security*, 1, pp. 19-27 [Online] Available at: http://eprints.hud.ac.uk/14736/1/HirschfieldITALIAN_JOURNAL_OF_SECURITY_PAPER_2011.pdf [Accessed 21st June 2013]

Hirschfield, A. (2011) 'Mapping and Using Crime Data in Criminological Research'. In: Davies, P., Francis, P. &Jupp, V. (Eds.) Doing Criminological Research. 2nd ed. London: Sage

Hirschfield, A., Yarwood, D. & Bowers, K. (2001) 'Crime pattern analysis, spatial targeting and GIS: The development of new approaches for use in evaluating community safety initiatives', In: Regional science in business. Advances in spatial science . Springer-Verlag, London, UK, pp. 323-342 [Online] Available at: http://eprints.hud.ac.uk/6772/ [Accessed 21st January 2013]

Hirschield, A., Armitage, R., Ekblom,P. & Roach, J. (2013) 'Holding the line: The sustainability of police involvement in crime prevention' In Brown, J.M. (ed.) The future of policing. London: Routledge

Holmes, L. (2004) Guidance for Ensuring Confidentiality and The Protection of Data, in Becker, S. &Bryman, A. (eds), Understanding Research for Social Policy and Practice: Themes, Methods, and Approaches. Bristol: Policy Press.

Home Office (1991) Safer Communities: The Local Delivery of Crime Prevention through the Partnership Approach (Morgan Report). London: Home Office

Hopkins-Burke, R. (2009) An Introduction to Criminological Theory. Cullompton: Willan

Hughes, G. (1998) Understanding Crime Prevention: Social Control, Risk and Late Modernity. Buckingham: Open University Press

Hughes, G., McLaughlin, E. & Muncie, J. (2002) Crime Prevention and Community Safety: New Directions. London: Sage

Hutton, N. (2005) Beyond Populist Punitiveness? *Punishment and Society,* 7, pp.243-248 [Online] Available at: http://pun.sagepub.com/content/7/3/243.full.pdf+html [Accessed 27th January 2013]

Jackson, J. &Gray, E. (2010) 'Functional Fear and Public Insecurities about Crime', *British Journal of Criminology,* 50, (1), pp.1-22 [Online] Available at: http://bjc.oxfordjournals.org/content/50/1/1.full.pdf+html?sid=6015c385-ba38-4fef-962a-a233f349b674 [Accessed 21st January 2013]

Jacobs, J. (1961) The Death and Life of Great American Cities. New York: Random House

Jansson, K. (2006) 'British Crime Survey: Measuring Crime for 25 Years. Home Office [Online] Available at: *http://webarchive.nationalarchives.gov.uk/20110218135832/rds.homeoffice.gov.uk/rds/pdfs07/bcs25.pdf* [Accessed 31st March 2013]

Jeffery, C.R. (1971) Crime Prevention through Environmental Design. California: Sage

Jewkes, Y. (2011) Media and Crime. London: Sage

Jick, T.D. (1979)'Mixing Qualitative and Quantitative Methods: Triangulation in Action' Administrative Science Quarterly, 24, (4) pp.602-611

Jones, T. ,Newburn, T. & Smith, D. (1996) 'Policing and the Idea of Democracy', *British Journal of Criminology*, 36, pp.182 – 198 [Online] Available at: http://bjc.oxfordjournals.org/content/36/2/182.full.pdf+html?sid=31c11fc0-4b3b-49b2-b758-68e10f164927 [Accessed 20th June 2013]

Joyce, P. (2009) Criminology and Criminal Justice.Cullompton: Willan

King, M. (1989) "Social crime prevention a` la Thatcher", *Howard Journal of Criminal* Justice, 28: 291–312

King, R.D., and Wincup, E. (2008) Doing Research on Crime and Justice. 2nd ed. Oxford: Oxford University Press

Kinnear, P.R. &Gray, C.D. (2008) SPSS 15: Made Simple. New York: Psychology Press

Kitchin R.M. (1994) 'Cognitive Maps: What are they and Why Study Them?', *Journal of Environmental Psychology,* 14, pp.1-19 [Online] Available at: http://ac.els-cdn.com/S027249440580194X/1-s2.0-S027249440580194X-main.pdf?_tid=634854dc-c168-11e3-901f-00000aacb360&acdnat=1397214163_646c9d7d5fe1599c7181d8a8bcf6224b [Accessed 30th March 2013]

Knepper, P. (2009) "How Situational Crime Prevention Contributes to Social Welfare", *Liverpool Law Review,* 30, pp.57-75 [Online] Available at: http://rc4ht3qs8p.search.serialssolutions.com.libaccess.hud.ac.uk/?ctx_ver=Z39.88-2004&ctx_enc=info%3Aofi%2Fenc%3AUTF-8&rfr_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=How+situational+crime+prevention+contributes+to+social+welfare&rft.jtitle=Liverpool+Law+Review&rft.au=Knepper%2C+Paul&rft.date=2009-07-01&rft.issn=0144-932X&rft.eissn=1572-

8625&rft.volume=30&rft.issue=1&rft.spage=57&rft.epage=75&rft.externalDBID=n%2Fa&rft.externalDo cID=50509464&paramdict=en-US [Accessed 24th January 2013]

Koch, B.C. (1998) The Politics of Crime Prevention. Aldershot: Ashgate

Krahmann, E. (2011) Beck and Beyond: Selling Security in the World Risk Society. *Review of International Studies,* 37, pp.349-372 [Online] Available at: http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=7939095 [Accessed 26th January 2013]

Krauss, S.E. (2005) 'Research Paradigms and Meaning Making: A Primer', The Qualitative Report, 10, (4), pp.758-770. [Online] Available at: http://www.nova.edu/ssss/QR/QR10-4/krauss.pdf [Accessed 24th March 2012]

Lab, S. (2004). Crime Prevention: Approaches, Practices and Evaluations. Anderson Publishing.

Larson, R., & Farber, B. (2002). Elementary statistics: Picturing the world (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Laycock, G. (2003) Launching Crime Science, London: Jill Dando Institute of Crime Science, University College London

Laycock, G. & Heal, K. (1989) Crime Prevention: The British Experience in Evans, D. & Herbert, D. (eds.) The Geography of Crime. London: Routledge

Lee, M. (2007) Inventing Fear of Crime: Criminology and the Politics of Anxiety.Cullompton: Willan

Lee, D.R. (2010) "Understanding and Applying Situational Crime Prevention Strategies", *Criminal Justice Policy Review,* 21, (3), pp.263-268 [Online] Available at: http://cjp.sagepub.com.libaccess.hud.ac.uk/content/21/3/263 [Accessed 20th January 2013]

Lehmann, E.L. & Romano, J.P. (2008) Testing Statistical Hypotheses. 3rd ed. New York: Springer

Linden, R. (2007) 'Situational Crime Prevention: Its Role in Comprehensive Prevention Initiatives', *Revue de l' IPC Review,* 1, PP.139-159 [Online] Available at: http://sciencessociales.uottawa.ca/ipc/pdf/kr6-linden.pdf [Accessed on 15th March 2013]

Lum, C. (2009) 'Community Policing or Zero Tolerence?'*British Journal of Criminology,* 49, (6), pp.788-809 [Online]Available at: http://bjc.oxfordjournals.org/content/49/6/788.full.pdf+html?sid=9d3bedc2-9d47-4168-bfe4-3220c4cb4f74 [Accessed 21st June 2013]

Lyon, D (2003) Surveillance after September 11. Cambridge: Polity Press

McHugh, M.L. & Hudson-Barr, D. (2003) 'Descriptive statistics, Part II: Most Commonly Used Descriptive Statistics', Journal for Specialists in Paediatric Nursing, 8, (3), pp.111-116. [Online] Available at: http://onlinelibrary.wiley.com.libaccess.hud.ac.uk/doi/10.1111/j.1088-145X.2003.00111.x/pdf [Accessed 15th July 2013]

McLaughlin, E. & Muncie, J. (2000) "Walled cities: surveillance, regulation and segregation" In: Pile, S., Brook, C. & Mooney, G. (eds.) Unruly Cities? London: Routledge

Machin, S. & Marie, O. (2005) Crime and Police Resources: The Street Crime Initiative, *IZA Discussion Papers,* [Online] Available at: https://www.econstor.eu/dspace/bitstream/10419/33287/1/508678692.pdf [Accessed 21st June 2013]

Maguire, M., Morgan, R. & Reiner, R. (2007) The Oxford Handbook of Criminology. 4th Ed. Oxford: Oxford University Press

Maguire, K. and Pastore, A. (1994) Sourcebook of Criminal Justice Statistics 1993. Washington, D.C: U.S. Department of Justice, Bureau of Justice Statistics.

Martinson, R. (1974) 'What Works? Questions and Answers about Prison Reform', The Public Interest. 35, pp.22-54. [Online] Available at: http://www.nationalaffairs.com/doclib/20080527_197403502whatworksquestionsandanswersaboutprisonreformrobertmartinson.pdf [Accessed 14th February 2013]

Matthews, B. & Ross, L. (2010) Research Methods: A Practical Guide for the Social Sciences. London: Pearson

Matza, D. (1964) Delinquency and Drift. New York: Wiley

Maxfield, M.G. (1984).Fear of Crime in England and Wales.Home Office Research Study No.78. HMSO: London

Mayhew, P., Clarke, R.V.G., Sturman, A. & Hough, M. (1976) Crime as Opportunity, London: HMSO

Menard, S. (1991) Longitudinal Research. Newbury Park: Sage

Messenger, I. (2007) "Private Security: In the Public Interest?" Internet Journal of Criminology, [Online] Available at: http://www.internetjournalofcriminology.com/Messenger%20-%20Private%20Security.pdf [Accessed 26th January 2013]

Miller, J. (2007) Impact of Situational Factors on Survey Measured Fear of Crime, International Journal of Social Research Methodology, 11, (4), pp.307-325 [Online] Available at: http://www.tandfonline.com/doi/pdf/10.1080/13645570701606093 [Accessed 20th January 2013]

Mischel, W. (1968) Personality and Assessment. New York: Wiley

Monchuck, L. (2006) "The Huntley Case: How far does it tell us that we need to compromise personal liberties for public security" Internet Journal of Criminology, [Online] Available at: http://www.internetjournalofcriminology.com/Monchuk%20-%20The%20Huntley%20Case.pdf [Accessed 26th January 2013]

Moon, D., Flatley, J., Parfrement-Hopkins, J., Hall, P., Hoare, J., Lau, I. & Innes, J. (2011) "Perceptions of crime engagement with the police, authorities dealing with antisocial behaviour and Community Payback: Findings from the 2010/11British Crime Survey. [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/116293/hosb1811.pdf [Accessed 24th January 2013]

Moran-Ellis, J., Alexander, V.D., Cronin, A., Dickinson, M., Fielding, J., Sleney, J., & Thomas, H. (2006) 'Triangulation and Integration: Processes, Claims and Implications', Qualitative Research, 6, (1), pp.45-49

Morgan, G.A., Griego, O.V., &Gloeckner, G.W. (2001) SPSS for Windows: An Introduction to Use and Interpretation in Research. Lawrence Erlbaum

Moser, C. A., and Kalton, G. (1979) Survey Methods in Social Investigation. Aldershot: Gower Publishing

Murray, I. (2002) 'Making Rehabilitation Work'. American Experience of Rehabilitating Prisoners. December 4th. [Online] Available at: http://www.civitas.org.uk/pdf/Rehab.pdf [Accessed 29th March 2013]

Nasar, J.L. & Fisher, B.S. (1993) "Hot spots" of fear and crime: A multi-method investigation", Journal of Environmental Psychology, 13 (3), 187-206

Newman, O. (1973) Defensible Space People and Design in the Violent City. London: Architectural Press.

Newman, G., Clarke, R.V. &Shoham, S.G. (1997) Rational Choice and Situational Crime Prevention. Dartmouth: Ashgate

Newman, G. & Clarke, R. (2003) Superhighway Robbery: Preventing E-Commerce Crime. Cullompton: Willan

Office of Crime Prevention (2004)'Prevention Crime: State Community Safety and Crime Prevention Strategy', Department of Premier and Cabinet, Perth, Western Australia.

Painter, K.A. & Farrington, D.P. (2001) "Evaluating Situational Crime Prevention Using a Young People's Survey", *British Journal of Criminology,* 41, (2) pp.266-284 [Online] Available at: http://bjc.oxfordjournals.org/content/41/2/266.full.pdf [Accessed 21st January 2013]

Pascoe, T. and Topping, P. (1997) Secured by Design: Assessing the Basis of the Scheme.International Journal of Risk, Security and Crime Prevention, 2 (3), pp.161-173.

Peak, K. J., &Glensor, R. W. (1996).Community Policing and Problem Solving. New Jersey: Prentice-Hall, Inc. Simon & Schuster.

Pizarro, J.M., Corsaro, N. & Yu, S. U. (2007) Journey to Crime and Victimization: An Application of Routine Activities Theory and Environmental Criminology to Homicide, *Victims & Offenders: An International Journal of Evidence-based Research, Policy, and Practice*, 2, (4), pp.375-394 [Online] Available at: http://www.tandfonline.com/doi/pdf/10.1080/15564880701568520 [Accessed 30th March 2013]

Poyner, B. & Webb, B. (1991) Crime Free Housing. Oxford: Butterworth- Heinemann.

Ratcliffe, J.H. (2004) 'The Hotspot Matrix: A Framework for the Spatio-Temporal Targeting of Crime Reduction', *Police Practice and Research,* 5, (1), pp.5-23 [Online] Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.104.1375&rep=rep1&type=pdf [Accessed 20th January 2013]

Reppetto, T.A. (1974) Residential Crime. Cambridge: Ballinger

Reynald, D.M. (2010) 'Guardians on Guardianship: Factors Affecting the Willingness to Supervise, the Ability to Detect Potential Offenders, and the Willingness to Intervene', *Journal of Research in Crime and Delinquency,* 47, (3), pp.358-390 [Online] Available at: http://jrc.sagepub.com/content/47/3/358.full.pdf+html [Accessed 22nd January 2013]

Roberts, J. V. (2004). Public opinion and youth justice. In Tonry, M. &Doob, A. (Eds.), Youth crime and youth justice: Comparative and cross-national perspectives. Chicago: University of Chicago Press.

Roberts, J.V., and Stalans, L.J. (1997) Public Opinion, Crime, and Criminal Justice. Boulder: Westview Press

Roberts, J.V. and Hough, M. (2002) Changing Attitudes to Punishment: Public Opinion, Crime and Justice.Cullompton: Willan

Roberts, J.V. & Hough, M. (2005) Understanding Public Attitudes to Criminal Justice. Maidenhead: Open University Press

Roberts, J.V. & Hastings, R. (2007) Public Opinion and Crime Prevention: A Review of International Findings, *Revue De L'IPC Review,* 1, pp.193-218 [Online] Available at: http://sciencessociales.uottawa.ca/ipc/pdf/kr8-roberts-hastings.pdf [Accessed 13th January 2013]

Roberts, J.V. & Hastings, R. (2012) Public opinion and crime prevention: A review of international trends. In Welsh, B.C. & Farrington, D.P. (Eds.), The Oxford handbook of crime prevention. New York: Oxford University Press.

Rock, P. (1989) 'New Directions in Criminological Theory', *Social Studies Review,* 5, (1), pp.2-6

Roth, J., Roehl, J. & Johnson, C. (2004) 'Trends in the Adoption of Community Policing', In Skogan, W. (ed.) Community Policing: Can It Work? Belmont, CA : Wadsworth/ Thomson Learning

Sampson, R.J., Raudenbush, S.W. & Earls, F. (1997) 'Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy', *Science,* 277, pp.918-924 [Online] Available at: http://www.sciencemag.org/content/277/5328/918.full.pdf [Accessed 25th June 2013]

Scarborough, B.K., Like-Haislip, T.Z, Novak, K.J., Lucas, W.L. &Alarid, L.F. (2010) "Assessing the relationship between individual characteristics, neighborhood context, and fear of crime", *Journal of Criminal Justice,* 38, (4), pp.819-826 [Online] Available at: http://www.sciencedirect.com/science/article/pii/S0047235210001224 [Accessed 21 July 2013]

Schick, T (1999) Readings in the Philosophy of Science: From Positivism to Postmodern. New York: McGraw-Hill

Schneider, R. & Kitchen, T. (2002) Planning for Crime Prevention: A Transatlantic Perspective. London: Routledge

Schneider, R.& Kitchen, T. (2007) Crime Prevention and the Built Environment. London: Routledge

Sherman, L.W., P.R. Gartin and M.E. Buerger (1989). "Hot Spots of Predatory Crime: Routine Activities and the Criminology of Place." *Criminology,* 27, pp.27-55

Sheskin, D.J (2007) Handbook of Parametric and Nonparametric Statistical Procedures. 4th ed. London: Taylor & Francis

Skogan, W. G. & Maxfield, M. G. (1981) Coping with Crime: Individual and Neighborhood Differences. BeverlyHills: Sage

Simmons, J. (2002) Crime in England and Wales 2001/2002. London: Crime and Criminal Justice Unit, Home Office.

Sinclair, I.A. (1971) Hostels for Probationers. Home Office Research Studies No. 6. London: HMSO

Social Research Association (2003) 'Ethical Guidelines' Social Research Association. [online] Available at: http://www.the-sra.org.uk/documents/pdfs/ethics03.pdf [Accessed 10th August 2013]

Spelman, W. & Eck, J.E. (1989) 'Sitting Ducks, Ravenous Wolves, and Helping Hands: New Approaches to Urban Policing' *Public Affairs Comment*, 35, pp.1-9

Steinmetz, G. (2005) The Politics of Method in the Human Sciences: Positivism and Its Epistemological Others. Durham:Duke University Press

Sutton, M. (1996) "Implementing Crime Prevention Schemes in a Multi-Agency Setting: Aspects of Process in the Safer Cities Programme", *Home Office Research Study 160.* London: Home Office

Svensson, R. (2002) 'Strategic Offences in the Criminal Career Context', *British Journal of Criminology,* 42, pp.395-411 [Online] Available at: http://bjc.oxfordjournals.org/content/42/2/395.full.pdf+html?sid=89ef9de4-4704-4e38-9da3-61f0d4cf9ea2 [Accessed 23rd January 2013]

Tabangin, D.R., Flores, J.C. &Emperador, N.F. (2008) 'Investigating Crime Hotspot Places and their Implication to Urban Environmental Design: A Geographic Visualization and Data Mining Approach', *World Academy of Science, Engineering and Technology,* 2, pp.12-21 [Online] Available at: http://waset.org/Publications/investigating-crime-hotspot-places-and-their-implication-to-urban-environmental-design-a-geographic-visualization-and-data-mining-approach/3617?p=73 [Accessed 31st March 2013]

Taylor, A. (1997) '"Arm's Length but Hands On". Mapping the New Governance: The Department of National heritage and Cultural Politics in Britain, *Public Administration,* 75, pp.441-466

Tesser, A. (1993) The Importance of Heritability in Psychological Research: The Case of Attitudes. *Psychological Review,* 100, pp.129-142

Tilley, N. (1993) 'After Kirkholt: theory method and results of replication evaluation'. Police Research Group, Crime Prevention Unit series paper no. 47. London: Home Office

Tilley, N. (2002) "Crime Prevention in Britain, 1975-2010: Breaking Out, Breaking In and Breaking Down" In Hughes, G., McLaughlin, E. & Muncie, J. (eds.) Crime Prevention and Community Safety: New Directions. London: Sage

Tilley, N. (2005) Handbook of Crime Prevention and Community Safety. Cullompton: Willan

Tilley, N. (2009) Crime Prevention. Cullompton: Willan

Tonry, M. & Farrington, D.P. (1995) "Strategic Approaches to Crime Prevention", *Crime and Justice:Building a Safer Society: Strategic Approaches to Crime Prevention,* 19, pp.1-20 [Online] Available at: http://jthomasniu.org/class/Stuff/Temp/tonry111.pdf [Accessed 3rd March 2013]

Von Lampe, K. (2011) 'The Application of the Framework of Situational Crime Prevention to 'Organised Crime'', *Criminology and Criminal Justice,* 11, (2) pp.145-163 [Online] Available at: http://www.organized-crime.de/KlausvonLampeSCPandOC-CCJ2011-manuscript.pdf [Accessed 9th January 2013]

Von Wright, G.H (1971) Explanation and Understanding. London: Routledge

Waller, I. & Okihiro, N. (1978) Burglary: The Victim and the Public. Toronto: University of Toronto Press

Warr, M. (2000) Fear of Crime in the United States: Avenues for Research and Policy, In: Duffee, D. (ed.) *Measurementand Analysis of Crime: Criminal Justice 2000.* Washington, DC: US Department of Justice, Office ofJustice Programs

Welsh, B.C. & Farrington, D.P. (1998) "Assessing the Effectiveness and Economic Benefits of an Integrated Developmental and Situational Crime Prevention Programme", *Psychology, Crime & Law,* 4, (4), pp.281-308 [Online] Available at: http://www.tandfonline.com/doi/pdf/10.1080/10683169808401761 [Accessed 26th January 2013]

Welsh, B.C & Farrington, D.P. (1999) "Value for Money? A Review of the Costs and Benefits of Situational Crime Prevention", *The British Journal of Criminology,* 39, (3), pp.345-368 [Online] Available at: http://bjc.oxfordjournals.org/content/39/3/345.full.pdf+html [Accessed 19th January 2013]

Welsh, B.C & Farrington, D.P. (2012) Science, politics, and crime prevention: Toward a new crime policy, *Journal of Criminal Justice,* 40, (2), pp.128-133 [Online] Available at: http://www.sciencedirect.com.libaccess.hud.ac.uk/science/article/pii/S0047235212000232# [Accessed 10th February 2013]

Whattam, S. (2011) Situational Crime Prevention: Modern Society's 'Trojan Horse?'."*Internet Journal of Criminology*, [Online] Available at: http://www.internetjournalofcriminology.com/Whattam_Situational_Crime_Prevention_IJC_Aug_2011.pdf [Accessed 21st January 2013]

Wolfgang, M.E., Figlio, R.M. &Sellin, T. (1972) Delinquency in a Birth Cohort. Illinois: University of Chicago Press

Wood, E. (1961) Housing Design: A Social Theory. New York: Citizens, Housing and Planning Council of New York

Yates, S.J. (2004) Doing Social Science Research. London: Sage

Wood, J., &Viki, G.T. (2004) Public Perceptions of crime and punishment, In Adler, J. (ed) 'Forensic Psycology. Concepts, Debates and Practice.'Cullompton: Willan

Wortley, R. (1996). Guilt, shame and situational crime prevention.In R. Homel (Ed.) The politics and practice of situation crime prevention. Monsey, NY: Criminal Justice Press [Online] Available at: http://www.popcenter.org/library/crimeprevention/volume_05/06_wortley.pdf [Accessed 21 February 2013]

Wortley, R. (2001). A classification of techniques for controlling situational precipitators of crime.*Security Journal*, 14, pp.63-82

Wortley, R. & Mazerolle, L. (2008) Environmental Criminology and Crime Analysis.Cullompton: Willan

Young, J. (1994) 'Incessant Chatter: Recent Paradigms in Criminology, In Maguire, M., Morgan, R. & Reiner, R. (eds.) The Oxford Handbook of Criminology. Oxford: Clarendon Press