

An Economic Analysis of Community Safety: Evidence from the City of Portsmouth

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Abstract

This thesis aims to apply economic analysis to the broad concept of community safety, focussing on the city of Portsmouth, England. Detailed data sources include: a residents' survey, police figures and administrative records of community support services.

Assorted statistical techniques are used to uncover: who blames parents, what drives perceptions of drug problems, who is most effected by fear of crime, what factors determine a successful and timely outcome for substance misusers, potential offenders and victims.

It is found that lower income households and those with children, are more likely to consider parental responsibility a problem. Most notably, a tendency to blame the parents very strongly associates with a perception that people in the area do not treat each other with respect.

The findings indicate the importance of dissatisfaction with crime prevention efforts (control signals) and perceptions of anti-social behaviour and drug problems in influencing the fear of crime. However, perceptions of quality of life and neighbourhood cohesion do not have a significant influence.

There is strong evidence to support the proposition that perceptions and neighbourhood characteristics more strongly inform perceptions of drug use and dealing than personal characteristics. High perceptions in areas of low measurable drug use are less influenced by observations and neighbourhood characteristics, and more so by softer feelings of dissatisfaction, fears and attitudes. Informal social control strongly influences all perceptions of drug problems.

Interaction between substance misuse and offending behaviour reduces the chance, and delays the timing, of successfully managing either. Residing in prison significantly reduced successful outcomes, but sped up success for offenders. Direct access support and identifying specific needs, led to successful outcomes faster, albeit countered by delays if provided by voluntary agencies. Floating

support consistently reduced success. Demographic information was found not to be significant in determining a successful or timely outcome; action towards seeking work, or attempting to achieve economic wellbeing were more important.

Declaration

'Whilst registered as a candidate for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of the named candidate and have not been submitted for any other academic award.'

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Acronyms and Abbreviations

ASB	Anti-social behaviour
BCS	British Crime Survey (now known as the Crime Survey for England and Wales)
BME	Black and Minority Ethnic
CCTV	Closed Circuit Television
CPTED	Crime Prevention Through Environmental Design
DCLG	Department for Communities and Local Government
DV	Domestic violence
HDA	High Drug Areas
HO	Home Office
HOSB	Home Office Statistical Bulletin
IMD	Index of Multiple Deprivation
LDA	Low Drug Area
LSD	Lysergic acid diethylamide
LSOA	Lower layer super output area
MAPPA	Multi-agency public protection agency
MDMA	Methylenedioxy-methamphetamine a.k.a. Ecstasy
MSOA	Middle layer super output area
ONS	Office for National Statistics
PCC	Portsmouth City Council
PO1-PO6	The six postcode districts in Portsmouth
PSA	Public Service Agreement
RSL	Registered Social Landlord
SP	Supporting People

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Papers in submission:

'Fear of Crime and Out-of-home Evening Leisure Participation: Evidence from an English City'. Based on Study 2.

Deal or no Deal? Perception and Reality: Analysing Multiple Indicators of Illegal Drug Activity in an English city. Based on Study 3.

Ethics

Ethical approval (E142) for this study was granted in October 2010. This can be found in Appendix 1 alongside the Form UPR166 declaring the ethical conduct of the research

The majority of this research uses secondary data (Residents Survey 2007 and Supporting People data), so the primary data collection has already been carried out. Therefore, it could be argued that there are limited ethical issues in data collection. However, the residents that agreed to take part in the original survey were guaranteed anonymity in their responses and this has been respected. All data used has remained anonymous, and individuals or households cannot be identified by the data being used or the results.

Research Approach

I was directly employed by Portsmouth City Council's Community Safety Team and the Safer Portsmouth Partnership for part of the time it has taken to complete this PhD (01/02/2010 to 31/10/2011). I have addressed this by ensuring that none of my time spent on this research project has been funded by Portsmouth City Council. The intended audience of this research is academia and not my former employer. To remain objective, it was agreed that if any results of the analysis could harm the reputation of the city/my former employer, then Portsmouth would not be named (for example, the research would say "city in the south of England"). This caveat has allowed me to remain objective throughout and present any findings honestly and credibly.

The data has been used for analysis rather than primarily description. The research has been conducted with researcher detachment (Denscombe, 2007). Despite the research encompassing perceptions, an area generally covered by the phenomenological approach, the underpinning research philosophy taken used a positivist approach, as the research assumed that reality is there, and what people say, is their reality. This approach influenced the research method in this collection of studies. For example, the second study, which attempts to measure residents' perceptions of drug use and dealing, initially involved taking and treating those answers from the 2007 Resident's Survey as fact. However, by comparing these perceptions with the actual evidence of observed drug use and dealing, these facts and perceptions were still challenged.

The research followed deductive reasoning, by testing hypotheses drawn from theory on the data, rather than exploring the data and allowing that to lead to a theory. Therefore, this is not grounded theory.

1. Introduction

This thesis aims to apply and expand economic analysis to incorporate the broad concept of community safety. This is achieved through a number of supporting studies, to provide a high resolution empirical (micro-econometric) analysis of community safety intervention at the individual level. These studies sit under the umbrella of community safety and address the issue from different angles using rich data sources specific to the City of Portsmouth.

Community safety, commonly described as “fluffy” crime prevention (Wiles and Pease, 2000, p. 25), is primarily concerned with reducing crime, anti-social behaviour (ASB) and the fear of crime in a particular area. This incorporates activities with the intention of reducing crime and the fear of crime, for example: drug treatment, neighbourhood watch and education schemes. A common theme running through this thesis is the idea of formal and informal social control that is provided, supported and enhanced by the practice of community safety.

This thesis uses evidence from a UK city that has been controversially described as “one of the most depressed towns in southern England, a place that is arguably too full of drugs, obesity, underachievement and Labour MPs” (Johnson, 2007, p.42).

This piece of research will contribute to academic knowledge and takes a cross-disciplinary approach by combining economics and criminology.

Along the way to applying economic analysis to community safety concepts, this thesis: provides a brief theoretical sketch of the relationship between parental responsibility and the potential offending behaviour of their offspring, offers an extensive review of the influences on community safety, reviews support for blaming parents, clarifies the relevance of fear of crime, estimates the drivers of perceptions of drug use and dealing and examines the support offered to vulnerable adults.

All four studies are linked under the umbrella of community safety. The recurring role of control signals, collective efficacy, and formal or informal social control – concepts that are addressed by community safety interventions and activities - throughout the studies demonstrates how these studies are tied together. The studies are all also inter-related with a strong thread of connection running through them:

Perceptions of anti-social behaviour, particularly of drug use and dealing, are important in the local community. In particular, when comparing the perceptions of residents to actual observations of the activity in their area. If perceptions are not based on observations then there can only ever be a limited impact of the more traditional crime prevention techniques and there is therefore more scope for community safety type activities. The third study evaluates this area.

Perceptions of anti-social behaviour are deemed to be important because of their relationship with fear of crime. This is of particular interest when fear of crime has tangible effects, such as restricting out-of-home evening leisure activities. The justification and drivers for this debilitating fear of crime are evaluated in the second study.

If perceptions of anti-social behaviour are deemed to be a problem and of concern to the local community, then it is beneficial to look specifically at youth anti-social behaviour. Asking residents whether they think parents are to blame for the behaviour of their children taps into formal and informal social control, the policy space that community safety attempts to straddle. If there is general support that parents are responsible, then this also provides some justification for community safety activities to target parents (or the lack of them) with support and possibly sanctions.

Community safety attempts to address the underlying reasons and root causes of crime and the fear of crime, be they social or environmental, rather than just preventing or displacing specific crimes in a situational context. Therefore, the support services offered to victims, offenders and the cross-

cutting issue of substance misuse are deemed to be of equal importance to reducing crime, anti-social behaviour and the fear of crime, as enforcement and punishment activities. The fourth study evaluates the efficacy of such housing-related support that can be offered to vulnerable adults.

The background to the study area is discussed in Section 2, incorporating a socio-demographic profile of the population and a review of the level of crime and anti-social behaviour during the study period.

Following on from this, each of the data sources used is described in detail in Section 3. This includes: the Residents' Survey 2007, Neighbourhood Characteristics by postcode district and the Supporting People dataset.

Data is obtained from the Portsmouth Residents' Survey 2007, a rich data source of 1,005 residents interviewed face-to-face in their own homes, conducted by Ipsos-MORI, on behalf of Portsmouth City Council. This household survey covers a wide range of topics: from perceptions of the local area to experience of crime, as well as a host of demographic information including household income. The first three studies are based on this Residents' Survey. The third study is enhanced with data relating to observable or measurable drug use and dealing in the area – such as drug litter finds and police records.

The fourth study is based on over 3,000 client records from the 'Supporting People' programme. These follow vulnerable adults in Portsmouth in receipt of short-term support between 2007 and 2009. Supporting People client records are a rich data source, including: demographic information, the initial needs of the client, outcomes, reasons for leaving and duration of community support. They are completed for every new client and again as they depart from the community support.

There is a brief explanation and justification of the statistical techniques employed in Section 4.

Logistic regression, imputation and principal component analysis are used to answer the research questions in the first three studies. The final study utilises logistic regression, but adds value through the use of the Cox proportional hazard survival analysis technique.

The idea that community safety has been influenced by political parties, interest groups and theoretical concepts is developed through a wide-ranging review of the grey and academic literature in Section 5.

Section 6 covers *Study One: Analysing popular support for the deficient household social capital transmission thesis*

This study explores belief in parental deficiency as a causal factor of youth anti-social behaviour and crime. Empirical interrogation considers whether there is widespread support for blaming parents.

Study One Results: Somewhat surprisingly, lower income households and those with children, are found to be more likely to consider parental responsibility a problem. Most notably, a tendency to blame the parents very strongly associates with a perception that people in the area do not treat each other with respect.

As a theoretical aside, Becker's (1968) supply of offences function is expanded to incorporate the effects of parental responsibility on youth crime in Section 6.4. Specifically, parental monitoring and punishment are modelled as non-mutually exclusive to the conviction probability and punishment variables.

Section 7 covers *Study Two: Fear of crime and out-of-home evening leisure participation*

This study empirically considers the factors influencing fear of crime and its impact on constraining evening out-of-home leisure participation in a city through analysis of detailed household interviews.

Limitations of similar studies are addressed by making an explicit association between fear of crime (rather than darkness) and the decision to limit evening leisure activities that would otherwise occur.

Study Two Results: Alongside the standard range of economic and demographic factors typically considered, the findings indicate the importance of dissatisfaction with crime prevention efforts (control signals) and perceptions of problems with anti-social behaviour and drugs in the area of residency. The findings also suggest that the perception of quality of life and neighbourhood cohesion do not have a significant influence on the fear of crime. Therefore, this implies that Crime Prevention Through Environmental Design (CPTED) has potentially less of a role to play in reducing perceptions of crime and ASB than community safety activities that more directly address control signals.

Section 8 covers Study Three: *Analysing multiple indicators of illegal drug activity*

This study assesses the extent of perceptions about the level of drug use and/or dealing in an area against the observed or measurable drug problem, recorded by the police as well as drug litter finds. Therefore, the significant characteristics of those people with the highest perception (in areas of low measurable drug problems) are uncovered.

Many previous studies (Wood, 2004; Moon, Walker, Murphy, Flatley, Parfremment-Hopkins & Hall, 2009; Flatley, Moley and Hoare, 2008; Taylor, Twigg & Mohan, 2010) have identified the significant factors for perceiving anti-social behaviour or drug problems in an area. However, these studies have not been able to accurately ascertain whether these perceptions are supported by measurable observations of the problem. The perception measures are recorded at a local level (post code district) but remain comparable to those collected nationally. The local level of the data allows for far more accurate matching of the perception of drug problems in an area to the observed and measurable problem, making this study unique.

Study Three Results: Strong evidence is found to support the proposition that perceptions and characteristics of an area are more likely to have an impact on perceptions of drug use and dealing than the respondent's personal and household characteristics. There is evidence to propose that those with high perceptions of drugs in areas with low observed and measurable recording of drugs, are less influenced by experience, observations or visual and stereotype cues provided by neighbourhood characteristics, and more powerfully influenced by softer feelings of dissatisfaction, beliefs, fears and attitudes. All perceptions of drugs are strongly influenced by a feeling that informal social control is lacking. Therefore, this implies that Crime Prevention Through Environmental Design has potentially less of a role to play in reducing perceptions of crime and ASB than community safety activities that more directly address informal social control, fears and attitudes.

Section 9 covers Study Four: *'Supporting vulnerable people': Effectiveness of support offered to vulnerable adults*

The Supporting People programme enables vulnerable people to live more independently in their own accommodation. It provides housing-related services and support, which can include advice, guidance and counseling on issues such as debt, benefits, home improvements or housing, and arranging home visits or safety checks to manage physical and mental health. Vulnerable people are identified as meeting one of the following criteria: being homeless, an older person, a teenage parent, an ex-offender or fleeing domestic violence, or having learning or physical disability, mental health or a drug or alcohol related problem.

The focus of this study is on the outcomes of short-term community support provided. These are services provided free, lasting for up to two years with the intention of moving an individual on to independent living or increasing the ability to live independently. Supporting People client record forms are completed by support providers whenever a new support user enters a service and again when a user departs from or ceases to use community support, regardless of whether this departure

is planned or unplanned. This therefore provides a rich data source and a valuable way of assessing the socio-demographic characteristics that make a positive programme outcome more likely.

This study focuses on those clients attempting to achieve outcomes of reducing offending, reducing harm from others (victims) and those with drug and alcohol problems. Logistic regression is utilised to assess the factors most likely to lead to a positive outcome. Survival analysis, harnessing the Cox Proportional Hazard technique, is utilised to investigate specific problems and the effectiveness of pathways to positive outcomes.

Study Four Results: The initial part of this study empirically considers the factors influencing success or failure of Supporting People outcomes. The definition of success varies with each outcome. For those clients requiring support to better: manage their substance misuse, avoid causing harm to others or minimise harm/risk of harm from others, success reflects the views of the user and provider as to whether that support was met. Whereas, success for the 'statutory order' outcomes is less ambiguous, defined as complying with all their statutory orders in place.

This study found some connection to offending reduced the chances of successfully managing substance misuse, and having an identified drug problem reduced the chances of abiding by a statutory order. However, having an identified drug problem actually helped increase the chances of 'victims' having a successful outcome, possibly due to the additional support this opened up. Demographic information was generally found not to be significant, with the exception of ethnicity which was found to negatively (weakly) reduce chances of managing substance abuse, and to positively affect offenders' chances of success. Of more importance across the outcome types was a client's attitude and action towards seeking work, or achieving some other form of economic wellbeing outcome. This links back to the multi-agency cross-cutting ethos of community safety.

Accommodation type was found to be important, with those residing in prison, living with family and friends or accommodation being unknown having large negative effects. Similarly, receiving 'floating

support', as opposed to supported housing services consistently reduced the likelihood of a successful outcome. Unsurprisingly, leaving the community support in a planned way was strongly related to a positive outcome, as was the length of community support for most of the outcomes.

The second part of the study, evaluating the factors that reduced the length of community support for successful outcomes, found most demographic information was not significant – with the exception of age which reduced the hazard ratio by a small amount and therefore elongated the length of community support. Actively seeking work, or attempting to achieve some other economic wellbeing outcome was generally found to reduce the length of community support required for a success. Being in prison was found to have a large positive impact on the hazard ratio of offender types, and actually reduce the time to a successful outcome.

There was an inter-relation between substance misuse and offending behaviour, where having both delayed a successful outcome. Those with specific needs, such as domestic violence or being young people, tended to cut the length of community support – possibly due to the more specialist and intense support offered. This is somewhat reflected in the positive effect of accessing women's refuge services. Those experiencing direct access support were more likely to achieve successful outcomes faster than those in supported housing services, although this was countered by consistent delays for those accessing voluntary services.

Finally, the conclusions are set out in Section 10, pulling together the key findings and conclusions from the thesis and directly answering the research questions and hypotheses expressed below.

1.1 Research Questions and Hypotheses

In order to apply economic analysis to the concepts of community safety, the key research questions and hypotheses evaluated in this thesis are presented below and directly answered in the conclusions of Section 10.

The research questions have been informed by the relevant literature review presented within each study. These include a review of the literature: surrounding the relationship between parenting and the (anti-social) behaviour of their children, whilst exploring the question of who blames parents; supporting the fear of crime, particularly at night, and then specifically the manifestation of behavioural change because of the fear of crime; underpinning the perceptions of anti-social behaviour, specifically around drug use and dealing, including how perceptions are formed, what they may represent and whether they are supported by observations.

Q1. Is there a role or a need for community safety in addressing: debilitating fear of crime, perceptions of anti-social behaviour – particularly drug use and dealing, perceptions of poor parenting and support for substance misusers, offenders and those at risk?

Q2. To what extent has community safety been influenced, and if so how, by whom and why?

Q3. Is there scope to include parental responsibility within Becker's (1968) supply of offences function?

Q4. Is there widespread support across society for channelling blame (and sanctions) via the parents of youth offenders?

Q5. Is it 'troubled families' and the so-called 'underclass' that survey respondents are thinking of when they blame the parents?

H1.1: The extent to which households blame parents for the behaviour of their children increases for childless households.

H1.2: The extent to which households blame parents for the behaviour of their children increases for wealthier households who can afford more childrearing support.

H1.3: The extent to which households blame parents for the behaviour of their children increases for older respondents who may consider youth anti-social behaviour to be a relatively new phenomenon.

H1.4: The extent to which households blame parents for the behaviour of their children increases for those who experience crime or anti-social behaviour.

H1.5: The extent to which households blame parents for the behaviour of their children increases for those who feel there is little community cohesion or informal social control.

Q6. Can community safety initiatives have an impact on the level of fear of crime?

H2.1: Socio-demographic factors significantly influence the extent to which fear of crime prevents the respondent from going out in the evening.

H2.2: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who perceive a low quality of life and/or lack of neighbourhood cohesion in their area of residency

H2.3: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who do not have confidence in local crime prevention efforts.

H2.4: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who perceive greater levels of exposure to offending in the area of residency

H2.5: The extent to which fear of crime prevents the respondent from going out in the evening decreases for those who perceive there to be lower risk of victimisation.

Q7. What are the characteristics of respondents with high perception of drug use &/or dealing? How do they compare with previous studies?

Q8. Are residents' perceptions of drug use and dealing in their area supported by the observed and measurable evidence?

Q9. Is there a difference between those that perceive a problem which is supported by the observed and measurable drug evidence and those that perceive a problem when there is a lower observed and measurable drug problem?

H3.1: The extent to which perceptions of drug use or dealing in their area increases for respondents in neighbourhoods with 'undesirable' characteristics.

H3.2: The extent to which perceptions of drug use or dealing in their area increases for respondents in neighbourhoods with a poor perception of their area.

H3.3: The extent to which perceptions of drug use or dealing in area increases for respondents that have experienced crime and anti social behaviour

H3.4: Socio-demographic factors (personal and household) significantly influence the extent that respondents perceive drug use and dealing problems in their area.

Q10. Do the characteristics of an individual, or the community support they are provided with, effect the successful achievement of Supporting People outcomes (Better manage substance misuse; Abide by statutory orders; Avoid harm to others; Avoid harm from others)?

H4.1: The extent to which socio demographic characteristics (age, gender, ethnicity, disability, economic status, accommodation) contribute to the success or failure of Supporting People outcomes.

H4.2: The extent to which community support provision (support type, support provider, planned exit, length of support) contributes to the success or failure of Supporting People outcomes.

H4.3: The extent to which support needs (other outcomes and identified support needs) contributes to the success or failure of Supporting People outcomes.

Q11. What characteristics determine the length of time to a successful outcome (as measured by the Cox proportional hazard ratio)?

H4.4: The extent to which socio demographic characteristics (age, gender, ethnicity, disability, economic status, accommodation) effect the length of community support to achieve a successful outcome.

H4.5: The extent to which service provision (service type, service provider, planned exit) effect the length of community support to achieve a successful outcome.

H4.6: The extent to which support needs (other outcomes and identified support needs) effect the length of community support to achieve a successful outcome.

2. Background to the Study Area

This section begins with a broad population profile of the study area, outlining the socio-demographic and household make-up of the area.¹ This is followed by an overview of the nature and extent of crime and anti-social behaviour in the study area during the period of interest. Particular emphasis is placed on measures of drug use and dealing.

2.1. Population Profile

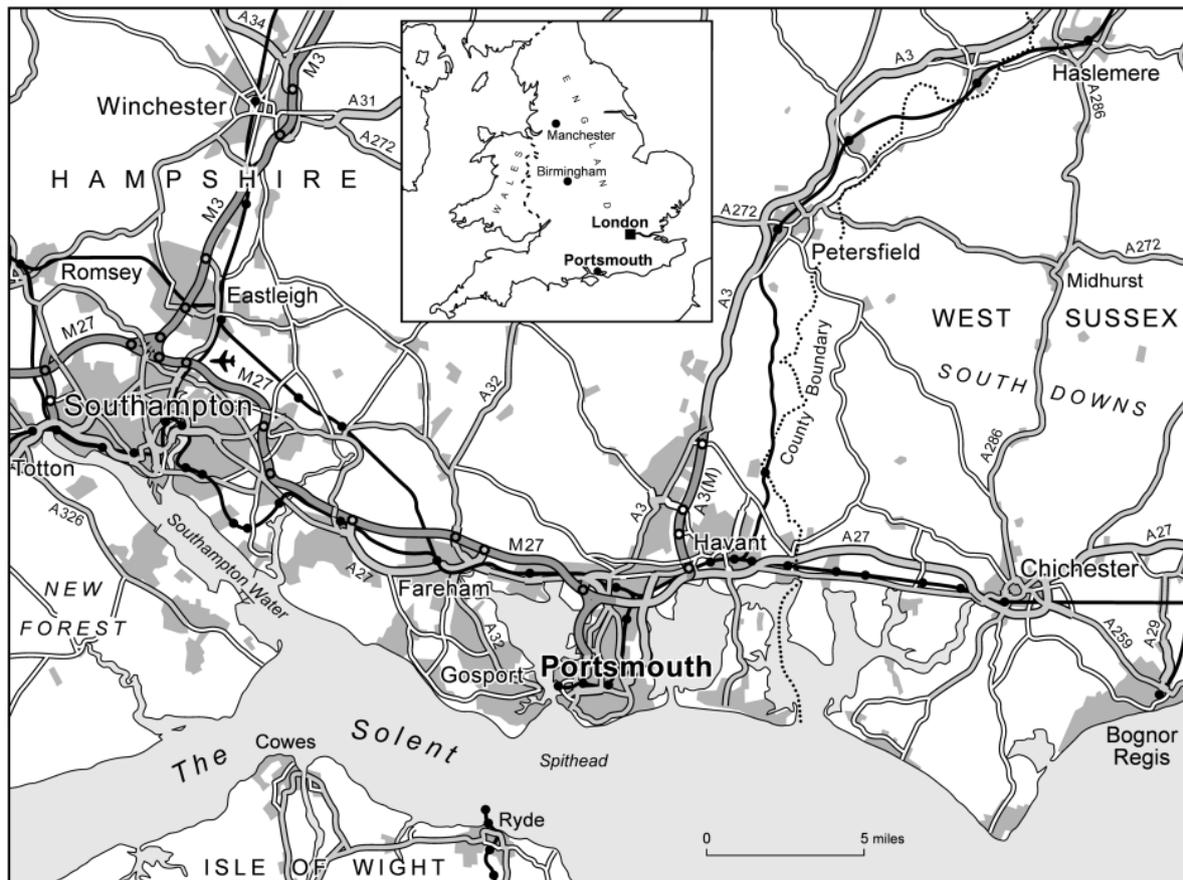
This study is focussed on a single large UK city beset with the typical range of ASB problems confronting many other such cities - Portsmouth, England. This city has a socially diverse population and features a typical range of other urban, labour market and social problems that might be expected in contemporary urban Britain.

Portsmouth is located in the centre of the south coast of England in Hampshire, approximately 70 miles south west of London. It is a relatively small city (15.5 square miles) but one that is densely populated, with a large proportion of the city located on Portsea island (see Figure 1). Despite containing pockets of high deprivation, Portsmouth remains a regional visitor destination with plenty of naval heritage, strong links to the armed forces and a large, successful University.

By looking at a specific area, Portsmouth, rather than analysis of aggregate data at the national level, this research is similar to a case study that can take account of the particular peculiarities of an area. This is opposed to national level analysis where important differences in perceptions, and actual evidence of crimes, may tend to be averaged out and therefore lost. This is the area where both the interviews for the 2007 Residents' Survey were undertaken (used in studies 1-3) and the Supporting People services were provided (used in study 4).

¹ More detailed information is presented at postcode district level in Section 3.2.

Figure 1 Location of the City of Portsmouth



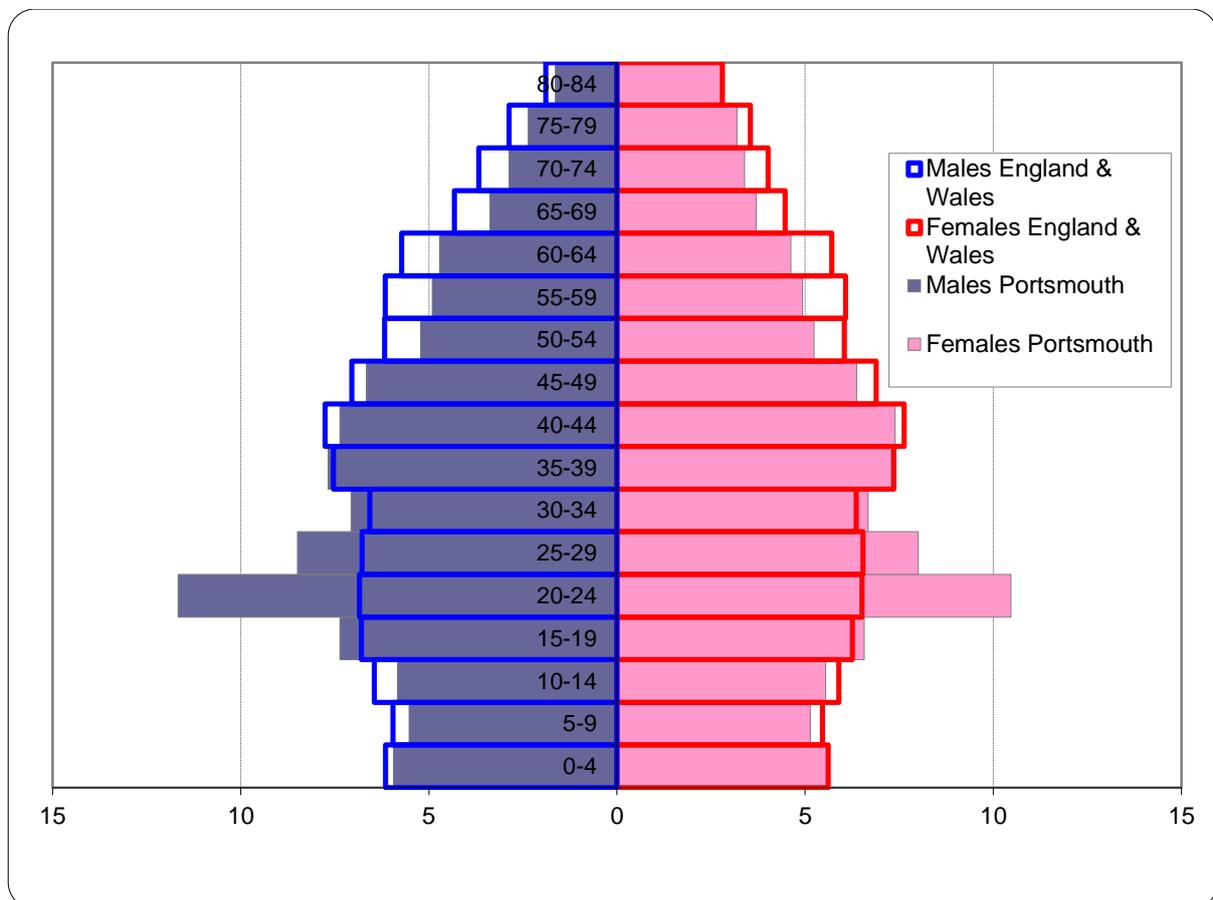
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The majority of other studies tend to be based on national cohorts, such as the British Crime Survey, that do not easily allow direct comparison of a local area's perceptions with locally recorded observations. Even where they are conducted at a local level, they tend to be based on interviewer observations conducted at one point in time, rather than over a significant period of time. By basing this study in one city, it is possible to observe the level of drug use and dealing levels in each area based on the collection of police data and other sources over the previous 12 months. Therefore, the emphasis on one small area – that still encompasses a range of neighbourhood types - is an important aspect of this research. This research is unique and important in that it does allow this comparison, with the additional benefit of the study area being uniquely situated as (practically) an island. Furthermore, the perception question used and the responses are still comparable to the British Crime Survey (BCS).

Socio-Demographic Makeup of the Study Area

As can be seen in Figure 2, Portsmouth's population of 195,000 had an over-representation of young adults (20-24 and 25-29 year olds represented 11.1% and 8.3% of the population respectively) than the average for Great Britain (6.7% for each age band) in 2007 (Office for National Statistics 2010; 2011a). This is in large part a reflection of the student and post-graduate population of Portsmouth, due primarily to the position of the University of Portsmouth (Office for National Statistics 2007c).

Figure 2 Resident Population, by Gender and 5 year age bands in 2007



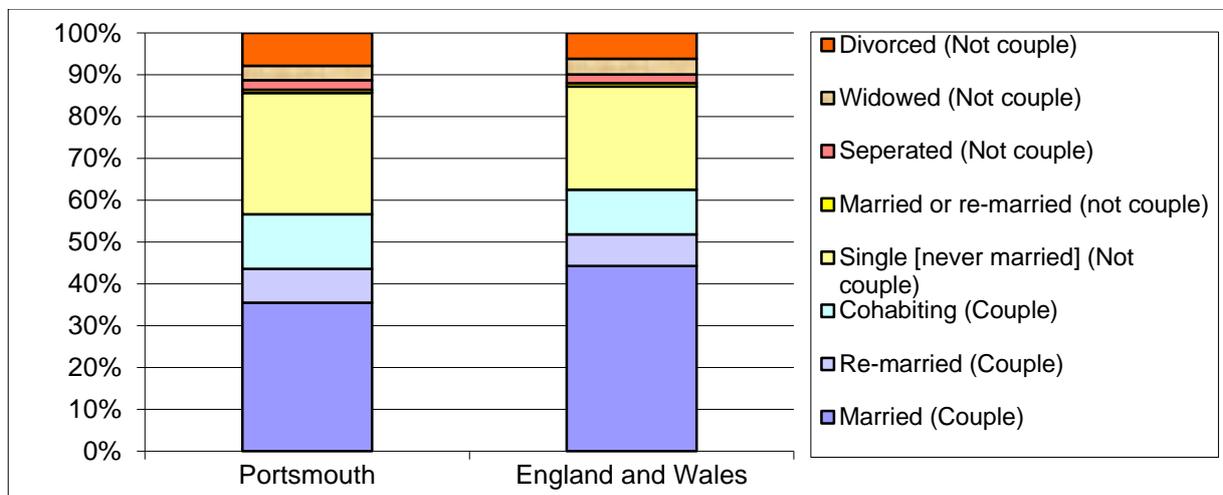
Source: ONS Mid-2007 population estimates

A lower percentage of residents described themselves as 'non-white' (11.6%) than the average for England and Wales (14%). This was reflected across all ethnic groups except those that described themselves as 'mixed', who represented a slightly higher proportion (2.7%) of Portsmouth residents than the England and Wales average (2.2%). Of those who describe themselves as 'non-white' -

there are proportionately less residents that describe themselves as 'black' (15.8% vs. 23.7% in England & Wales) and a higher proportion of "mixed" (22.9% vs. 15.6%) (Office for National Statistics 2011c).

As shown in Figure 3, Portsmouth residents' living arrangements differed from the England and Wales average. There are a smaller proportion of married couples and a higher proportion of divorced and single (never married) living arrangements.

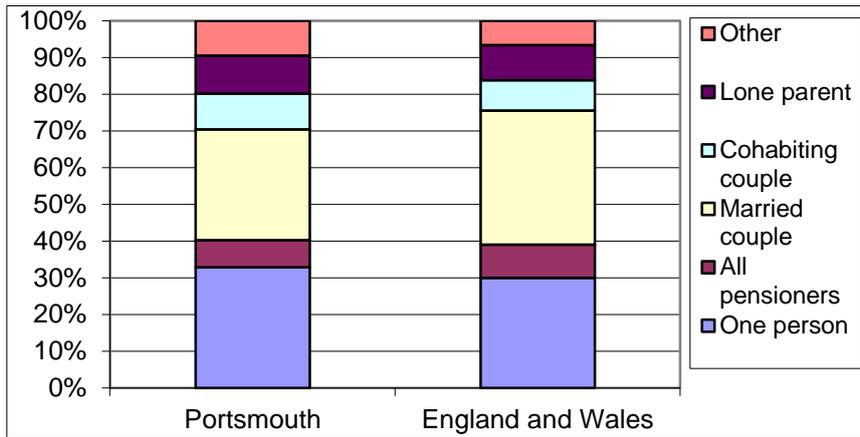
Figure 3 Living Arrangements (living as a couple or not), 2001 Census



Source: ONS, 2001 Census

Figure 4 shows the household composition of Portsmouth residents' compared to England and Wales, using data from the 2001 Census. Lone parent households represented a slightly larger proportion of households (7.4%) than the England and Wales average (6.5%). There were also slightly more one-person households and a larger percentage of 'all student' households (2% compared to 0.4%), which is reflected in the spread of the age bands of the population.

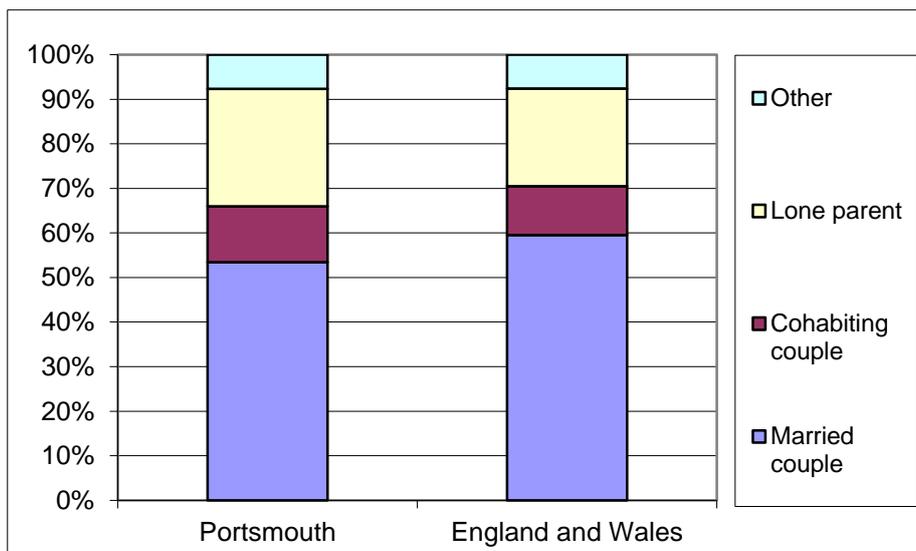
Figure 4 Household Composition, 2001 Census



Source: ONS, 2001 Census

Upon further scrutiny, by examining only those with dependent children (see Figure 5), families with dependent children in Portsmouth were less likely to be married couples (53.4%) than in the rest of England and Wales (59.5%), and more likely to be lone parent households (26.4% compared to 21.9%) (Office for National Statistics 2001). This is further highlighted by the proportion of the resident working age population that claimed lone parent income, as this was consistently 20% higher in Portsmouth (2.4%) than the average of Great Britain (1.9%) (representative figures from November 2007), (Office for National Statistics 2013a).

Figure 5 Households Containing Dependent Children, 2001 Census



Source: ONS, 2001 Census

At the time of the 2007 Resident's Survey, Portsmouth's unemployment rate (6%) was slightly higher than the national and South East average (5.3% and 4% respectively) (Office for National Statistics 2013b). However, Portsmouth had a similar economic activity rate and proportion of Job Seekers Allowance claimants to the national average (Office for National Statistics 2007a).

Those in work were more likely than the national average to be employed in elementary occupations, and sales and customer service occupations than in managerial/senior or skilled trades occupations. Gross weekly pay in Portsmouth was between 10-14% lower than the average in Great Britain (Office for National Statistics 2007b). This may reflect the slightly lower proportion of the population who have education qualifications equivalent to NVQ4 or above; 24.9% in Portsmouth compared to an average 28.5% across Great Britain.

Overall, Portsmouth is close to the national average with respect to many economic indicators although does compare somewhat unfavourably to the South-East region. Therefore the study area is highly likely to include a share of what Murray (1990) describes as the 'underclass'.

2.2. Crime and Anti-Social Behaviour Problems in the Study Area

During the time period this survey was undertaken, 2007-2008, the study area experienced large reductions in police recorded crime of close to 12% on the previous year, slightly larger reductions than those seen nationally (BCS down 10%, all police recorded crime down 9%). The reduction in crime is reflected across the majority of crime types, with the exception of shop-theft and drug offences. As shown in Table 1, this reduction follows a period of stability and minor increase of recorded crime in Portsmouth (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009).

To put this trend in context, there were 128 crimes per 1,000 residents in Portsmouth in 2007/08, which is below the average of its most similar group² of 15 ‘Crime and Disorder Reduction Partnerships’, but still well above the England average of 91 crimes per 1,000 people during the same time period.

Table 1 All Recorded Crime in Portsmouth, 2003/04 to 2007/08

	2003/4	2004/5	2005/6	2006/7	2007/8
All Recorded Crime	27,554	28,861	28,531	28,559	25,161

Source: (Hampshire Constabulary, 2008)

According to Tseloni, Mailley, Farrell and Tilley (2010), these trends broadly mirror those observed for the rest of the UK and internationally, partly due to changes in economic conditions from the mid-1990s (Rosenfeld & Messner, 2009). In the UK in 2007/08, crime was at its lowest recorded BCS level after a sustained reduction in all offending types over the preceding decade. However, this sustained reduction in crime largely went unnoticed or unacknowledged by the general public, with a majority of BCS respondents reporting a perception that crime rates had actually increased over the same period (Mooney & Young, 2006). Against this backdrop of public misconceptions over falling crime rates, the fear of crime (specifically burglary and violent offences) and concerns over anti-social behaviour increased significantly in the UK over the same period (Kara & Upson, 2006).

There were 20,974 incidents of ASB recorded by Hampshire Constabulary in Portsmouth in 2007/08; three-quarters of these were for rowdy and nuisance behaviour. In March 2007, there were 56 Anti-Social Behaviour Orders (ASBOs) and 52 Acceptable Behaviour Contracts in place in Portsmouth (Hampshire Constabulary, 2008). Within the Hampshire Criminal Justice System area, 43 of the ASBOs issued in 2007 were to persons aged ten to seventeen years (Home Office, 2009).

² Portsmouth’s Most Similar Group of Crime and Disorder Reduction Partnerships: Exeter (Devon & Cornwall), Rushmoor, Southampton (Hampshire), Weymouth & Portland (Dorset), Plymouth (Devon & Cornwall), Stevenage, Watford (Hertfordshire), Hounslow (Metropolitan Police), Harlow (Essex), Crawley (Sussex), Lincoln (Lincolnshire), Blackpool (Lancashire), Cardiff (South Wales) and City of Bristol Unitary Authority (Avon & Somerset).

'Criminal damage offences (incorporating arson)', as recorded by Hampshire Constabulary, account for 23% of all crime during this period and was the highest recorded crime type in Portsmouth. The peak area for criminal damage offences was the police beat which encompasses the city centre area of Portsmouth. Large proportions (40%) of known offenders were male and aged between eleven and twenty years (Safer Portsmouth Partnership, 2007a).

There were 670 young offenders in Portsmouth in 2006/07 (where 'young offenders' refers to anyone aged ten to seventeen who received a reprimand, final warning or a court sentence), known to be responsible for 2,046 offences. 369 of these young offenders were already known to the police for offences committed in previous years. The peak age was sixteen and the majority (80%) were male. The most common offence committed by young people was 'theft and handling', followed by 'violence against the person'. The Charles Dickens Ward, encompassing the city centre area, (within postcode district PO1) had the highest proportion of young offenders in the city (Safer Portsmouth Partnership, 2007a).

Crime and Anti-Social Behaviour Problems in the Study Area: Drug Use and Dealing

Drug offences only account for a small proportion (2%, 627 offences) of all crime in Portsmouth (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009). There was a 77% annual increase in recorded 'possession of drugs' crime figure in 2006/07 – but this is likely to just reflect increased police activity. This was still below the average of Portsmouth's 'most similar group' of comparator areas (Safer Portsmouth Partnership, 2007a, p. 10).

Table 2 shows that in 2007/08, the majority of the 165 police recorded Class A drug crimes in Portsmouth were for the offence of possession, with cocaine being the most popular commodity. This is dealt with in greater detail, including a breakdown by postcode district, in Section 8.2.1.

Table 2 Police Recorded Class A Drug Crimes: Offence Type by Commodity 2007/8

	Supply	Possession	Possession with intent to supply	Total
Cocaine	2	59	6	67
Heroin	4	12	12	28
MDMA		16		16
Crack	4	1	3	8
LSD, methadone & other	2	37	7	46
Total	12	125	28	165

Source: Hampshire Constabulary

However, the number of seizures shown in Table 3 does not necessarily reflect the impact on the drugs market, or the relative size of the remaining drug market/problem, as each seizure can be of a different size, weight and potency.

Table 3 Seizures of Class A Drugs

	2005/06	2006/07	2007/08 ^a
Heroin	115	53	28
Crack	18	18	12
Cocaine	31	51	87
Other Class A	Not available		19
Other Class B/C			400
Total			546

Source: 2005/05 and 2006/07 data from: 2006/07 Strategic Assessment, 2007/08^a data from Hampshire Constabulary (2008).

^a data refers to April 2007-February 2008

Police intelligence reports describe the characteristics of the illicit drug dealers in Portsmouth as incorporating a large proportion of young males from other disadvantaged areas, such as London and Liverpool, sent by gangs to Portsmouth. They are transient in nature, spending only a few days

before moving on. If caught then they are easily replaced. Whereas drug dealing by local users is described as erratic in nature, due to their chaotic lifestyle (Safer Portsmouth Partnership, 2007b).

However, it is well recognised that drug offences are the drivers behind a range of other crimes. Goldstein (1985) specifies a typology of three possible ways that drugs and crime can be seen as related: the economically compulsive, the psychopharmacological and systemic crime.

The economically compulsive relationship refers to the need for drug users to fund their habit. This can include acquisitive crime such as burglary and shop theft in order for the offender to fund their habit. It can often be these activities that can have the largest, or most visible, impact on neighbourhoods and communities as opposed to the act of using drugs. In Portsmouth, close to a fifth of clients in drug treatment reported spending more than £500 per week on their habit, with the highest proportion (42%) spending between £101- £500 per week (South East Public Health Observatory, 2008). A survey of 79 drug users conducted by the Safer Portsmouth Partnership in 2008 asked respondents to list the top three ways they funded their drug use. While there are some legitimate funding sources, (benefits 21%, borrowing from friends and family 7%, and employment 6%), they are often used in combination with the more common illegal or anti-social funding sources (shoplifting 24%, burglary 7% and begging 7%, selling drugs 5% and sex work 5%). It is worth noting that at the time of this survey, reductions had been seen in most crime types; overall recorded crime was down 12% on the previous year, to 24,245 in 2007/08, with the notable exception of shop theft and drug offences (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009, p. 5).

Psychopharmacological crime occurs because the drug is used, and could refer to violence, as noticed by the increase in cocaine use and violence in Portsmouth's night time economy (Safer Portsmouth Partnership, 2007b, p. 6). Systemic crime relates to the interactions of those operating the drug markets, and includes activity identified in Portsmouth such as: drug dealer versus drug

dealer violence and competition, robbing of dealers and associated reprisals, and the enforcement of drugs debts (Safer Portsmouth Partnership, 2007b, p. 6).

The importance of wider community effects of illegal drugs in the UK, including fear of crime and environmental aspects of drug markets (needles, impact of dealing in the neighbourhood), is evident by their consideration in the methodology used for calculating the economic and social costs of drugs to the UK (Godfrey, Eaton, McDougall, & Culyer, 2002).

Users of so called 'recreational' drugs (cannabis, ecstasy and cocaine) do not tend to access drug treatments described elsewhere. Fortunately, the BCS provides estimates on the proportion of 16-59 year olds who use drugs across England and Wales. Hoare and Flatley's (2008) analysis of the 2007/08 BCS found that 35.8% of people have used illicit drugs at some point; 9.3% in the last year, and 5.3% in the last month. This would equate to approximately 18,000 people in Portsmouth using an illicit drug in the last year and 10,000 in the last month. Consistent with previous findings, cannabis is the type of drug most likely to be used; 7.4% of respondents used cannabis in the last year. A smaller proportion of people had used a Class A drug at least once in their lifetime (13.9%); 3% in the last year, and 1.3% in the last month. In Portsmouth this equates to approximately 5,800 people in the last year and 2,500 in the last month (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009).

Long-term trend analysis found use of any illicit drug 'in the last year' had decreased from 11.1% in 1996 to 9.3% in 2007/08 for 16-59 year olds. This was in large part due to successive declines in the use of cannabis, as reported use of Class A drugs in the previous year has remained generally stable. There have been decreases in other non Class A drug use; including amphetamines, anabolic steroids and glues. Whilst overall Class A drug use has remained stable, cocaine usage has increased. Cocaine has become the most commonly used Class A drug, with use of other drugs such as LSD declining. This is reflected in Portsmouth to a certain extent, with increased occurrences of 'snowballing' (using

heroin and crack together) and increased use of crack cocaine reported by the Safer Portsmouth Partnership (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009).

There are an estimated 1,381 Problematic Drug Users in Portsmouth (based on 2006/7 data, 95% Confidence Interval range of 1,195 to 1,633) of which 968 were crack cocaine users and 1,118 opiate users. This represents a slight increase on the previous year, with the most notable increase in the estimate of crack cocaine users (968) (Hay et al., 2008).

In 2007/08, 806 individuals in Portsmouth accessed structured treatment for drug problems. This was slightly higher than previous years (approximately 700 per year from 2003/4 to 2006/7) but had been the target. Of those in treatment, opiates were the primary drug of choice, with an increased proportion disclosing secondary use of crack cocaine. The majority of clients were male (68%), white British (92%) and 25-45 years old (80%) (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009).

This includes 317 new entrants to drug treatment services. A third of these reported housing problems (half of which were 'urgent housing need' and the majority (80%) were recorded as receiving a general healthcare assessment. There was a fairly equal split between those reporting they were currently injecting (39%), had previously (32%) or never had (29%) (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009). The additional significance of Portsmouth having addiction treatment centres, as highlighted by police intelligence briefings (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009, p. 44), is that they draw in addicts from outside of Portsmouth, some of whom drop out of treatment, remain in the area and get involved in drug dealing and related activities.

The South East Public Health Observatory (2008) regarded Portsmouth as comparable to the South East, when viewed across a wide range of indicators. However, the main exception being that Portsmouth had the highest hospital admissions for 'drug related poisoning' in the South East (37

per 100,000, compared to a median of 12 per 100,000 for the region). Interestingly, this is usually correlated with the high rate of drug related deaths – but this is not the case for Portsmouth.

The Probation Service recorded that 54% of offenders seen in the year to September 2008 had reported some drug related problem. Specifically, 125 individuals with a Class A drug habit, 204 referrals for Drug Rehabilitation Requirements assessment (drug treatment as part of a court order) and an additional 121 were identified as having some problem with drugs, that did not require a referral for Drug Rehabilitation Requirement (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009).

The Drug Intervention Partnership made contact with 549 drug users in 2007/8 through Arrest Referral (where offenders are offered access to treatment when they are seen in the cell) (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009).

Results from the 'TellUs2' (Safer Portsmouth Partnership, 2007a, p. 43) and 'TellUs3' (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009) survey show that children in Portsmouth are more likely to have used illegal drugs (and alcohol), and more regularly, than the national average.

A substance misuse service for under 19s, 'E's Up', had contact with 83 young people in Portsmouth in 2007/8. In September 2008 there were 29 young people currently receiving treatment, most commonly for alcohol and cannabis. Other drugs misused to a lesser extent are amphetamines, ecstasy and cocaine with some evidence of increased use of ketamine (Safer Portsmouth Partnership & Portsmouth Police Operational Command Unit, 2009).

While the city is not necessarily representative of a typical city in England, it does share features of many other cities in that it has a mixture of extremes; for example densely populated, high crime areas that sit alongside more affluent areas.

3. Data description

This chapter describes the data used in this study and is taken from the following main sources:

- Residents' Survey 2007: Ipsos-MORI
- Neighbourhood Characteristics by Postcode District
- Supporting People: Short Term Outcome Forms, Q1 2007-Q3 2009

3.1. Residents' Survey 2007

The collection of data for the Residents' Survey 2007 was conducted by Ipsos-MORI (a professional survey organisation) on behalf of Portsmouth City Council (PCC). This dataset is able to offer a contemporary insight into attitudes and behaviours of residents of a typical UK city. 1,005 Portsmouth residents were interviewed face-to-face in their own homes between 6 October and 14 December 2007. Respondents were randomly selected from sampling points across the city, using a stratified sampling method based on the 2001 census (gender, age, and work status). Only households within the Portsmouth boundary where the respondent was aged sixteen or over were included.

The survey consisted of fifty-four questions on a range of topics from satisfaction with the council, to fear of crime. The majority of questions related to existing measures used in previous surveys, while others were one-off questions to gauge public opinion on a specific topic of interest at that particular time, such as climate change and flooding. The majority of questions enabled quantitative data to be gathered, by requiring yes or no answers, or level of agreement with statements measured on a five point Likert scale. Detailed demographic information on the respondents (including gross household income) was also collected. The Residents Survey 2007 questionnaire can be found in Appendix 2 with those questions used as part of this research highlighted.

The Residents' Survey data was collected through a qualitative method; face-to-face survey interviews, albeit with a structured survey that has produced mostly quantitative results. The data will be treated quantitatively throughout the analysis, in that perception scores will be treated as the units of measurement.

Background to the Residents' Survey

The survey was completed to address a particular business need: as part of PCC's 'customer insight process' to assess performance against certain indicators, to allow for a tracking of changes in perceptions over time and to highlight any areas that required improvement. There was no statutory duty to collect certain performance indicators, although there had been previously. All departments in PCC had the option to contribute questions that they thought relevant. However, funding for each question also had to be identified by individual services which may influence the order of questions asked and the inclusion or exclusion of certain topics. These questions were collated and processed by PCC's central Communications team. Some of the questions were existing measures (local and/or national) that had appeared in previous surveys.

This survey was commissioned before the plans for an England-wide Place Survey in 2008 were announced. The Place Survey questionnaire was conducted in every local authority in England, using the same method, at the same time, therefore allowing for comparison between local authorities and against the national average. Other relevant local surveys, using varying methods, include the: Residents' Surveys 2005, 2007, 2009; Community Safety Survey by Ipsos-MORI 2003/4, 2004/5, 2006; Best Value Performance Indicator Survey / Local Government User Satisfaction Survey 2006, 2003/4.

Ipsos-MORI conducted the survey on behalf of PCC. This was the ninth survey since 1991 in which PCC had collaborated with Ipsos-MORI.

The 'topline' results of the survey had been used in service business plans throughout PCC. Results were compared with previous surveys, where applicable, and were reported as part of PCC's performance management. Five key issues were raised and reported at PCC's 2008 Performance and Audit Review:

- i) Keep the public better informed,
- ii) Increase people's awareness of the work PCC do to reduce the fear of crime, violent crime and anti-social behaviour,
- iii) Raising awareness of PCC's actions to improve child well being,
- iv) Providing parking provisions and tackling traffic congestion are areas where residents do not feel we are being very successful,
- v) Continuing to promote opportunities through council services to volunteer.

The second key issue raised is most pertinent to this research.

Survey Content

The unique features of the Residents' Survey 2007 include the broad range of questions covered in this one survey that allows for some interesting correlations to be made, and the asking of respondents to report their gross household income band.

Fifty-four questions covering the topics:

- Perceptions of Portsmouth as a place to live;
 - Community cohesion;
 - Priorities for the city and the area more generally;
 - Corporate image and perceptions of value for money;
 - Environmental concerns, including flooding;
 - Financial exclusion details;
 - Participation/volunteering in the community;
 - Skills and adult/children education;
 - Contact and communication with the council;
 - Feelings of safety
 - Perceptions and experience of crime and anti-social behaviour (including drug use/dealing);
- and

- Satisfaction with the Council and the way it is running the city.

The majority of the responses were limited to options on a Likert scale. However, showcards were used for some questions. For example, the independent variables chosen in each of the three research studies using this survey data use a five point Likert scale. In these cases, the survey data is ordinal, being an ordered ranked relationship, ranging from 'a very big problem' to 'not a very big problem'. There is no option for respondents to provide any other answer (except 'don't know', 'can't remember' and 'no answer') or more qualitative open-ended answers. This is opposed to more qualitative methods, such as unstructured interviews or case studies, which have the potential to explore the deeper reasons why, for example, residents had high perceptions of drug use and dealing.

Specific details of response options are provided in the main text for those measures directly used in the research, with the response options for all questions covered in Appendix 2.

For certain questions, the findings can be directly compared to previous, and more recent, surveys at a local level (Portsmouth). Others may only be compared indirectly, in terms of trends or ranking of preference. Some findings can be compared with all other local authorities in England (e.g. through National Indicators collected from the 2008 Place Survey). The consistency of the measure, and the ability to compare results over time and to other areas, greatly improves the reliability of the research, as if it is measured consistently then "any variation in the results obtained through using the instrument is due entirely to variations in the thing being measured" (Denscombe, 2007, p. 334).

Demographic information collected:

By individual respondent:

- Gender,
- Age,
- Working status,

- Parent/Guardian of children attending school in the city,
- Use of technology,
- Highest educational qualification and age of qualification.

By household:

- Occupation of chief income earner,
- Class,
- Number and age group of young people in the household,
- Number in full-time education,
- Tenure,
- Gross income (from all sources) of respondent and partner/spouses banded into 11 groups, (missing in 33% of cases).
- Cars or vans,
- Long-term illness or disability,
- Ethnicity.

Sampling method

Respondents were randomly selected from sampling points across the city, using a stratified sampling method (every member of the population has an equal chance of being selected in relation to their population within the total population) based on the 2001 census characteristics of gender, age and work status. However, quotas to meet these characteristics were set within each sampling point (where category blocks are simply filled by searching out the first people who fit them). There are advantages to the stratified random sampling approach; if properly constructed they can be “more statistically efficient in probabilistic terms than simple random samples and pose no problems for statistical inference” (Byrne, 2002, p. 74). Whereas the quota sampling technique is a more pragmatic, but less credible, approach to take when time and resources are limited.

This was a cross-sectional survey, providing descriptive data at one point in time. This was so that the results for the year could be compared to the results from previous years, allowing for the creation of longer term trends.

Council tax records, provided by PCC, were used for the sampling frame (the objective list of the population from which the researcher can make their selections). This was up-to-date and fairly accurate, with data applying to all domestic households located within the Portsmouth Unitary Authority boundary.³ However, there is a potential bias in this sampling frame as it systematically excludes certain addresses (such as nursing homes and business addresses), and therefore some residents, from the sample. The selection of households, rather than population, adds bias as those households with more than one address/property are more likely to be chosen in the sample. Conversely, residents living in one household with many other people are less likely to be specifically chosen and given the opportunity to express their views, compared to a single resident living by themselves. Additionally, only residents aged 16 years or over were interviewed which systematically excludes the views of those younger than this.

In 2007, there were 85,577 households in Portsmouth Unitary Authority eligible to participate in this survey (Department for Communities and Local Government, 2008a). A sample size of 1,005 households was chosen by Ipsos-Mori to achieve a certain power of statistical tests and provide some comparability with previous surveys (Ipsos-MORI, 2008).

The survey instrument chosen was a face-to-face interview going through a set questionnaire. Advantages of conducting surveys face-to-face (rather than postal or online) include offering some immediate means of validating the data, ensuring adequate response rates and quality of responses and the potential to reduce missing or incorrect data. However, this approach could also lead to respondents withholding or not fully disclosing information that they may be embarrassed or uncomfortable sharing (in particular income) (Denscombe, 2007). Therefore, the effect may have been to ensure valid responses for income bands, at the cost of limiting the size of the sample that answered this question. Even the ONS, in their Census collection, have reported that response rates for questionnaires with income questionnaires are smaller (by a statistically significant amount) than

³ Place Survey 2008 used the small-user Postcode Address File as a sampling frame.

those with no income questions (Office for National Statistics, 2000). This issue was partially addressed by the use of showcards for some questions, so that the interviewer could not know what the interviewee's real response was.

Therefore, the effect of the face-to-face technique may have been to ensure better validity and 'honest' responses for income bands, at the cost of limiting the size of the sample that actually answered this question. Using the methodology of a face-to-face interview also allowed easy comparison of the results with similar previous surveys, which aided the process of validation.

However, there are some reservations about the honesty of respondents' answers, particularly where respondents were asked to state their income band. This will be addressed by imputing the missing income values, and comparing the results that include the imputed values to the results when those 'missing income' cases are excluded.

Ipsos-MORI are signed up to recognised standards and have relevant external accreditations (Ipsos-MORI, 2011). For this particular survey, the interviewer had to sign a declaration on the survey stating that they undertook and recorded the interview in accordance with the Market Research Society Code of Conduct and the Data Protection Act 1998. The professional standards and quality assurance methods adhered to by Ipsos-MORI go some way to ensuring that the survey is administered and interpreted in a uniform way by everyone who administers it.

There is no description of whether provisions were made by Ipsos-MORI to contact those who could not speak English, where English was not a first language, or those residents with learning difficulties or a communication disability. Apart from the ethical concerns this raises, this issue has the potential to limit the validity of the results if the sample does not accurately reflect the population. This is of particular concern when studying perceptions of drug use, and fear of crime, as these vulnerable groups have been shown to have different perceptions to the rest of the population.

Further Limitations of the Survey

One of the limitations imposed by the scope and focus of the survey is that the secondary data was not collected with the specific aims and use that it has been subjected to in this research. For example, this research is only interested in a few of the questions asked in the survey and it is possible that the order these questions were asked, relative to other questions, may have unintentionally biased the responses. For example, the questions on drug use and dealing were preceded by a range of questions about fear of crime and experience of crime that may have led the respondent to be more aware of generally thinking about and recalling specific incidents of drug use and dealing.

As this research is using secondary data, it could be argued that there are limited ethical issues in data collection. However, the residents that agreed to take part in the original survey were guaranteed anonymity in their responses and this has been respected by aggregating responses to postcode district level.

The collection of the data was commissioned by the local authority, PCC. As such, it is the 'owner' of the data and one of the key stakeholders in its use and any output from analysis. PCC has its own priorities, and a political element (due to the elected members), that would not welcome any report that could potentially harm the reputation of the city. Therefore, there are ethical issues to be taken into account in the presentation of the analysis and results. Permission has been requested and granted from PCC's Corporate Information Governance Officer and their Communications team to use the data. There are two caveats to this agreement: that the data remains anonymous, and that a senior member of the Communications team has the chance to comment on any findings before they are more widely circulated or published.

The initial sampling was designed to match the 2001 census in terms of age, gender and work status. However, the sample collected was further weighted to ensure the sample more closely matched

the 2001 census (in terms of age, gender and work status) (Ipsos-MORI, 2008, p. 2). The reasons for the requirement to further weight the data are unknown. For example, possible reasons include: the stratified sampling method was inadequate, there was a time restriction that meant the required respondents were not interviewed or whether researchers adopted a quota sampling method. However, this thesis uses unweighted data.

Due to the survey being conducted by a third party only responsible for presenting a final report, there are some elements of the data collection that are not known, such as the number of respondents who refused, dropped out or were lost to follow-up before completing the survey. There are also administrative and logistical elements of the process that are unknown, including the characteristics of survey administrators, length of time to complete each survey. While these may impact the robustness of the survey, any effect is likely to be minor.

There are a few issues of data quality, where records are missing that one would not expect. For example, five of the 1,005 results did not have the relevant postcode district information (the first three digits of the postcode). This is surprising as the interviews took place in resident's homes, so the interviewer would have literally had to travel to the destination and presumably sent them some written correspondence that required their full postcode. Although this raises some concerns over the quality of the other records, these concerns are relatively small as they represent less than half a percent error rate. The data collection could have been improved by: making a distinction between household income and individual income, the number of people living at an address and the disclosure of the full postcode.

3.2. Neighbourhood Characteristics by Postcode District

This section can be read as a more detailed supplement to the Background to the study area (section 2), but the intention is to introduce a range of neighbourhood characteristics at the postcode district level that will inform this study.

Portsmouth can be split into six postcode district areas: PO1, PO2, PO3, PO4, PO5 and PO6. The Residents Survey 2007 recorded the location of each respondent's home at this level.⁴ Neighbourhood characteristics by postcode district inform studies 1,2 and 3. This takes the form of justifying the inclusion of an independent variable representing the 'city centre' postcode variable in Studies 1 and 2, and a range of neighbourhood characteristics for each postcode district in Study 3.

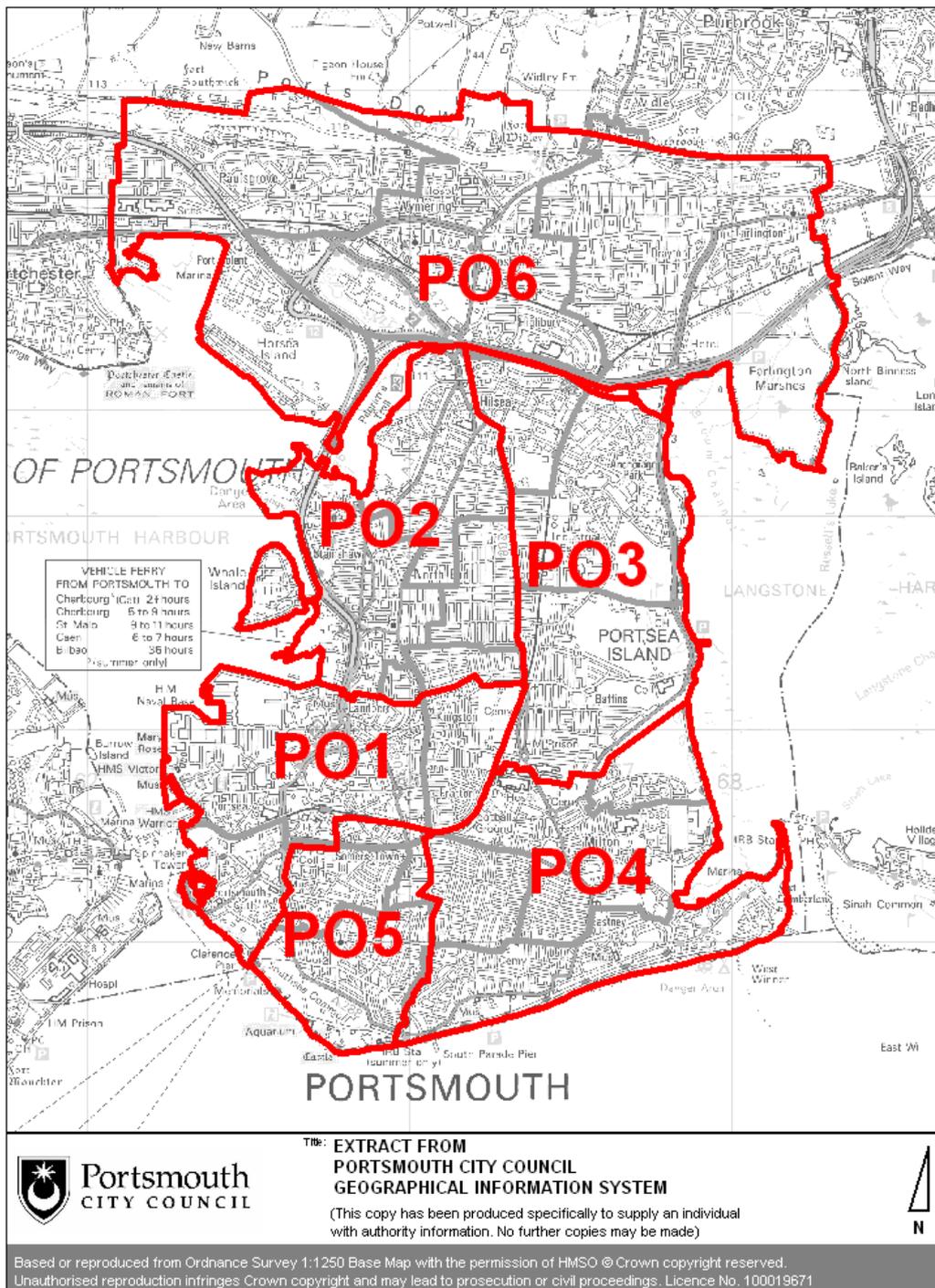
See Appendix 3 for further details on the definition of postcode districts and the matching of LSOA and MSOA level data.

The application of the Office for National Statistics' (ONS) Output Area Classifications, developed by (Vickers & Rees, 2007), to these postcode areas allows us to profile the population of Portsmouth by where they live. This profiling information is based on the 2001 census and categorises areas into one of several super-groups with particular traits.

For example, almost half of Portsmouth's population fall into the 'typical traits' category. They are more likely to live in terraced housing, less likely to rent from the public sector and tend to work in a broad range of industries. 'Typical traits' are most commonly found in the postcode district PO3, so PO3 has been used as the reference group. Further information and classification of Portsmouth's areas can be found in the Portsmouth Population Profile (Portsmouth City Council, 2010a). However, of particular importance is the postcode district PO1, as this represents the highly urbanised 'city centre'. As such there is a section dedicated to this area below.

⁴ Although the 'postcode unit' was collected for each survey respondent, it was deemed by the owners of the survey data that sharing this detailed level of data would breach confidentiality agreements – especially as the postcode unit can be combined with other demographic characteristics to potentially identify a respondent. Therefore, it was agreed that the data could only be used at the 'postcode district' level.

Figure 6 Map of Portsmouth Postcode District



Source: Portsmouth City Council

Data from the 2001 census has been used to account for the characteristics of each postcode district area. The option to use 2011 census data was considered, but while 2011 data is closer to the research period of 2007, there could have been changes between 2007-2011 that may not create an accurate profile of the areas.

Table 4 Household numbers, Population and Area by Postcode District

Postcode district	Households		Population		Area (Hectares)	
	Count	%	Count	%	Count	%
PO1	10,303	13%	24,084	13%	458	11%
PO2	16,124	20%	39,803	21%	564	14%
PO3	7,865	10%	19,690	11%	564	14%
PO4	16,450	21%	38,400	21%	617	15%
PO5	12,039	15%	25,094	13%	284	7%
PO6	15,928	20%	39,622	21%	1,537	38%
Portsmouth Total	78,710	100%	186,693	100%	4,025	100%

Source: ONS 2001 census, by Super Output Area Lower Layer.

As each postcode district has a different number of households and population (see Table 4), great care has been taken to ensure that statistics for each postcode district are expressed as a rate per household, population or size of area, as relevant.

Table 5 Neighbourhood Characteristics by Postcode District (Per cent of population)

	Economically active ^a	Non-white ^b	Non-White-British ^b	Density of area (people per hectare) ^c	Aged 10-24 (June 2007) ^d
PO1	63%	7.3%	10.2%	52.5	30%
PO2	73%	4.3%	6.1%	70.6	22%
PO3	72%	3.0%	4.5%	34.9	22%
PO4	67%	5.8%	10.2%	62.3	26%
PO5	62%	10.3%	15.7%	88.3	30%
PO6	68%	2.4%	4.0%	25.8	21%
Portsmouth Total	68%	5.3%	8.1%	46.4	25%
England and Wales ^e	67%	8.7%	12.5%		19%

Source:

^a Based on calculations using: ONS 2001 Census, Economic Activity (UV28), All People; Economically Active, Persons, Count, by Super Output Area Lower Layer.

^b Based on calculations using: ONS 2001 Census, Ethnic Group (UV09) All People; White; White:British, Persons, Count, by Super Output Area Lower Layer.

^c Based on calculations using: ONS 2001 Census, Population Density (UV02), All People, Persons, Count; Area (Hectares), by Super Output Area Lower Layer.

^d Based on calculations using: ONS Resident Population Estimates, All Persons: All Ages; Aged 10-14; Aged 15-19; Aged 20-24, June 2007, by Super Output Area Middle Layer.

^e England and Wales totals derived from Super Output Area Middle Layer level data.

Table 6 Proportion of Households within an area that are Couples with Children by Postcode District

Postcode district	All households	Couple Households - with dependent child(ren) ⁵	Percent of households that are couples with children
PO1	10,303	1,511	15%
PO2	16,124	3,656	23%
PO3	7,865	1,969	25%
PO4	16,450	2,698	16%
PO5	12,039	1,175	10%
PO6	15,928	3,642	23%
Portsmouth Total	78,710	14,651	19%

Source: ONS 2001 Census – Census area statistics, based on Super Output Area Lower Layer.

Economically active populations

The proportion of the population that were economically active was lowest in the postcode districts: PO5 and PO1; the South-West of the city, incorporating the city-centre. At 62%, both are below the England and Wales average of 67% for this time period. The proportion of the population that were economically active in PO6 and PO4 was close to the England and Wales average, and highest in the ‘middle’ of the city, PO2 and PO3.

Proportion of population aged 10-24

Overall, Portsmouth had a consistently higher proportion of young people (10-24 year olds) in every postcode district than the England and Wales average (19%). However, it is considerably higher in the South-West (PO1 and PO5) of the city (29% and 30% respectively).

Proportion of population non White:British

Although the average for the city is well below the England and Wales average of 12.5% non White:British, there are still some areas where it is higher. The PO5 postcode district has the highest rate of 15% for non White:British residents. However, this is the exception in Portsmouth with most areas much lower; 10% in the surrounding PO1 and PO4 districts, and even lower (4-6%) in the rest of the city.

⁵A dependent child is a person in a household aged 0 to 15 (whether or not in a family) or a person aged 16 to 18 who is a full-time student in a family with parent(s).

Density of area.

Portsmouth is clearly densely populated. In part this is due to its geographic location as an island, with no more land available on most sides for housing to 'spill out' onto. Using the LSOA area classifications, PO5 and PO2 are the most densely populated postcode districts. It is worth noting that PO5 is also the smallest geographic area, but this result is still surprising as this area includes a large open space area (Southsea Common). PO1 and PO4 (which surround PO5 in the South of the city) also have an above average density.

PO3 and PO6, towards the North-East and North of the city have the lowest density populations. It is unsurprising that PO6 has the lowest density, as it is both the largest geographical area (including a part of the Farlington marshes that cannot be built upon) and the only postcode district on the mainland (to allow for spill-over into adjacent areas).

Index of Multiple Deprivation, 2007

The Index of Multiple Deprivation (IMD) 2007 combines several indicators, representing a range of economic, social and housing issues, into a single deprivation score for every LSOA in England (Department for Communities and Local Government, 2007). These scores are then ranked out of all 32,482 LSOAs in England.

The IMD 2007 was constructed by combining the seven transformed domain scores, using the following weights: Income (22.5%), Employment (22.5%), Health Deprivation and Disability (13.5%), Education, Skills and Training (13.5%), Barriers to Housing and Services (9.3%), Crime (9.3%), and Living Environment (9.3%).

The higher the IMD score, then the more deprived the area. The LSOA with a rank of 1 is the most deprived, and 32,482 the least deprived. Portsmouth has an average score of 24.21, and an average rank of 18,953. To put this in context, out of 354 local authorities, these averages rank Portsmouth 93rd/92nd respectively (Department for Communities and Local Government, 2007).

Table 7 Index of Multiple Deprivation 2007 Overall Score and Rank (LSOA) by Postcode District

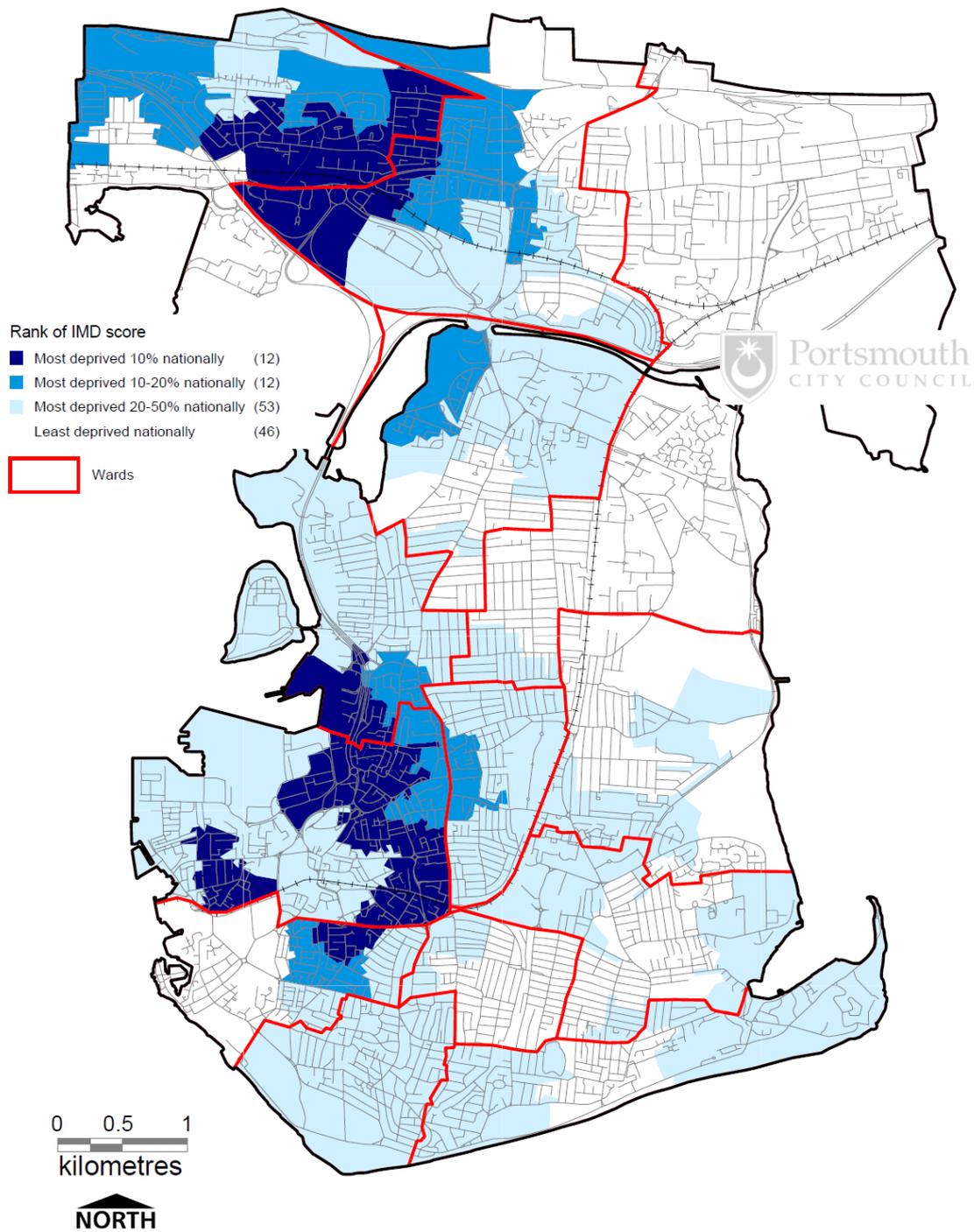
	Average weighted score	Average rank (of 32,482)	Percentile of average rank
PO1	38.1	7,341	23%
PO2	23.7	12758	39%
PO3	15.8	18,205	56%
PO4	17.3	16,645	51%
PO5	28.9	9,986	31%
PO6	23.8	15,385	47%

Source: IMD 2007, DCLG

It is clear that the general ranking of postcode districts remains the same, no matter which way you attempt to aggregate the individual LSOA scores and ranks. With the exception of PO2 and PO6 which alternate between 3rd and 4th most deprived area when looking at the mean / median IMD score. This broad pattern is also reflected in

Figure 7 showing the LSOAs by 10% decile, of least to most deprived.

Figure 7 Map of Rank Index of Multiple Deprivation 2007, Portsmouth (LSOAs)



Source: IMD 2007, DCLG. 2001 Census, Super Output Area Boundaries. Crown copyright 2004.
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Source: IMD 2007, DCLG

Table 8 Net Population Outflow Statistics by Postcode District

Postcode district	Total turnover number	Per 1,000 residents			Standard Deviation
		Total Turnover	Mean	Median	
P01	13	0.48	1.25	1.5	15.33
P02	-381	-9.31	-8.6	-10	8.02
P03	-62	-3.04	-2.5	-2.5	0.71
P04	-109	-2.73	-2	-1	4.24
P05	-76	-2.67	-1.8	-8	13.72
P06	112	2.80	3	1.5	10.70

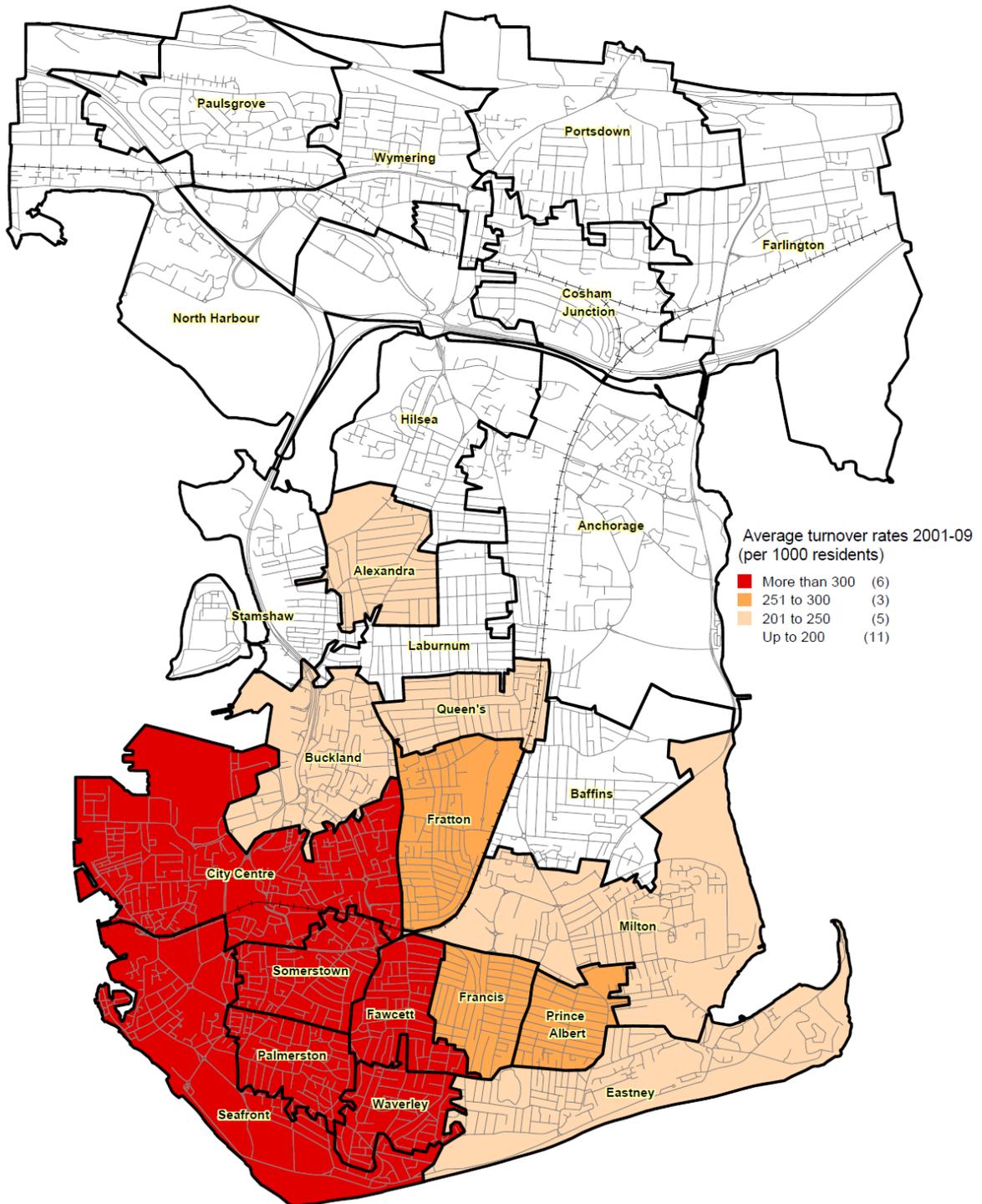
Source: ONS, Turnover Rates, net change, all ages, persons, rate per 1000, July 2007 – June 2008, by Super Output Areas Middle Layer.

The Population Turnover Rate is calculated as the rate of in- or out-migratory moves within England and Wales per 1,000 resident population. A migrant in this context is a person whose postcode of address on June 30 is different from their postcode one year previously. These Population Turnover Rates do not include international in- or out-migrants, or persons who had a GP registered address outside England and Wales. A negative sign indicates a net population outflow. Some caution needs to be taken in interpreting the net population outflow data; they are only available at MSOA and cannot be aggregated to derive rates for larger geographies, as migratory moves between adjacent MSOAs may not constitute moves. Therefore, it is included here for illustrative purposes but is not used as an independent variable in any of the studies.

While P01 is one of the few postcode districts that does not show a net population outflow, this masks the high net outflow in half of its MSOAs, and the high net inflow in the other half. Therefore, there may be a large flux of movement, both in and out migration that cancel each other out. Hence the relatively high standard deviation for P01. Alternatively, and less reliably, this could be interpreted as large movements within the postcode district.

The P02 postcode district shows the highest net population outflow, with smaller net population outflows seen in P03, P05 and P04. However, as noted above the mean hides the mix of MSOAs within each postcode district. For example, similar to P01, the MSOAs comprising the P05 postcode district are equally split between those with a high net outflow and inflow.

Figure 8 Average Population Turnover Rate per 1,000 Residents, 2001-2009, All Persons (MSOAs)



Source: ONS Resident Population Estimates (Revised September 2010)

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Source: ONS Resident Population Estimates (Revised September 2010)

3.2.1 The City Centre (Postcode District: PO1)

The 'city centre', represented by postcode district PO1, deserves particular attention and explanation. This area has continually been flagged up by the data as having the highest deprivation, crime rates, proportion of young people and lowest economically active population. The most common super group is 'constrained by circumstances', characterised by residents being more likely to live in flats rented from the public sector and rarely having more than one car per household. Other common super groups within this postcode district include 'city living', where residents typically live alone in flats, and 'blue collar communities', characterised by areas of terraced housing with a high proportion of children. The Charles Dickens Ward, encompassing the city centre area, (within postcode district PO1) had the highest proportion of young offenders in the city (Safer Portsmouth Partnership, 2007a).

The city centre also has an extremely high net population outflow in half of its MSOAs, and a high net inflow in the other. Theoretically, the 'city centre' area can be thought of as similar to the 'zone in transition', or 'zone 2', first described by Burgess (in Park, Burgess, & McKenzie, 1925) in a series of Chicago based studies. This zone is characterised by neglected housing, rapid immigration, and high rates of poverty. On the one hand, residents in zone 2 seek to leave to more prosperous areas, resulting in great flux and restlessness in the resident population. On the other, the area is also subject to 'invasion' from expansion of 'zone 1: business districts'. Property speculators tend to keep rents low and buildings unrepaired in anticipation of this. Similarly, Shaw and McKay (1931, 1942) find evidence of increased crime and delinquency in these types of areas. The social disorganisation present in these areas, stemming in part from unstructured and fluid communities, allows for higher rates of crime.

Accordingly, in the empirical phase of this thesis the importance of city centre residential location is considered, with residence in this neighbourhood been singled out as a potential explanatory variable in two of the studies (Study 1 and 2).

3.3. Supporting People Dataset

The Supporting People (SP) dataset consists of 3,317 Short Term Outcome Form records from one English City (Portsmouth) collected between Q1 2007 and Q3 2009. Logistic regression is used to predict the outcomes (whether the support offered was successful or not) for different vulnerable people. Due to the importance of the length of time support was offered, Cox's proportional hazard methodology is then used to determine the significance and impact of explanatory variables in estimating the length of time required for a successful outcome.

Individual client records, representing information collected from all 3,317 Short Term Outcome Forms recorded between Q1 2007 to Q3 2009 in Portsmouth are used in this study. During this time, there were 14 deaths. The following data draws from this dataset in a bid to represent all clients for whom a Short Term Outcome Form was completed over this period in Portsmouth. However, there may be occurrences of repeat clients during this period which may skew the population characteristics. The "Outcome form for short term services" used to collect the following information is provided in Appendix 5.

Definition

SP is the UK government programme for funding, strategically planning and monitoring housing related support and services ("Supporting People Programme", 2011; Department for Communities and Local Government, 2008c). Housing related support and services can be provided in clients own homes, in hostels, sheltered housing or other specialised supported housing ("Supporting People Programme", 2011). Importantly, support services are not conditional on specific accommodation or tenure, with the objective being to tailor a range of services and activities to respond directly to the individual needs of vulnerable people (Centre for Housing Research, 2008, p. 9). While SP only funds housing support, this can be part of a package of differently funded, but co-ordinated, support which meets the needs of vulnerable individuals. Often it provides complementary support for people who may also need personal or medical care ("Supporting People Programme", 2011).

Housing related support can include: enabling clients to access their correct benefit entitlement, “ensuring they have the correct skills to maintain a tenancy, advising on home improvements and accessing a community service alarm” (Office of the Deputy Prime Minister, 2004a, p. 2). Examples of arranged support can include “completing forms, support when visiting the doctor or dentist, counselling and support through a crisis, housing advice, guidance on household matters, health and hygiene, and checks on your safety and wellbeing.” (Portsmouth City Council, 2010b). Alternatively it could be a short home visit each week or a full-time support worker allocated for a sustained period of time (Office of the Deputy Prime Minister, 2004a, p. 2).

Objective

SP services are provided to vulnerable people, with the primary goal of improving their quality of life by providing a stable environment to sustain an individual’s capacity to live more independently in their own accommodation (Department for Communities and Local Government, 2008c; Office of the Deputy Prime Minister, 2004). Enabling vulnerable people to live independently, both in their own home and within their community, corresponds with SP’s other aims of helping to end social exclusion and preventing crisis and more costly service intervention (Department for Communities and Local Government, 2010). The ambition is to offer assistance now to help prevent future problems that can often lead to hospitalisation, institutional care or homelessness in the future (Office of the Deputy Prime Minister, 2004). The SP programme is also intended to help smooth the transition to independent living for those departing hospital or institutions such as prisons (Department for Communities and Local Government, 2008b, p. 9). Social exclusion is also directly tackled, as it was the original intention to develop community support to ensure those less likely to access support were able to access more mainstream services. In particular, those less likely to access support included offenders, young people at risk, those at risk of domestic violence (DV) and black and ethnic minority communities (Centre for Housing Research, 2008, p. 9).

History

The SP programme was launched on 1 April 2003,⁶ drawing together a range of existing funding streams and services (Department for Communities and Local Government, 2008c). Originally, The Office of the Deputy Prime Minister (now the Department for Communities and Local Government) had the main responsibility for the SP programme, allocating a grant to Administering Authorities and monitoring their performances (Office of the Deputy Prime Minister, 2004). The SP programme is now wholly decentralised and administered through 152 top-tier authorities (unitary authorities and counties in two tier areas) who have complete discretion over where to direct their funds to best meet local needs (Department for Communities and Local Government, 2012). Housing related support is delivered by 6,000 providers through approximately 37,000 individual contracts (Office of the Deputy Prime Minister, 2004). Portsmouth is one of those Administering Authorities.

Link to Community Safety

In order to be able to provide the breadth and depth of support to such a wide range of clientele, one of the underlying principles of the SP programme is to maintain: “a working partnership of local government, probation, health, voluntary sector organisations, housing associations, support agencies and service users” (Office of the Deputy Prime Minister, 2004, p. 1). There is a strong requirement for multi-agency working to both develop and maintain the successful delivery of the SP programme (Office of the Deputy Prime Minister, 2004, p. 6). Therefore, there is clearly a strong theoretical link and crossover with the underlying principles of Community Safety (as envisioned by the Morgan Report 1991). As such, the SP programme forms a vital partner of local Community Safety Partnerships. Portsmouth is no exception, with the local SP director sitting on the Safer Portsmouth Partnership Board.

⁶ However, comparable ‘outcomes’ information was not formally collected until May 2007, and the Department for Communities and Local Government ceased collection of this data from April 2011.

Provision

The support may be provided by the public, private or third sector. The majority of the housing related support tends to be delivered by the third sector (comprising of the voluntary and community sector, and Housing Associations) (Department for Communities and Local Government, 2010). This pattern of community support provision has remained fairly constant over time with voluntary organisations accounting for the largest share followed by Housing Associations/Registered Social Landlords and housing authorities. Nationally, clients most commonly access three main community support types: floating support services, supported housing and direct access hostels. This was reflected in the Portsmouth data (Table 9). The most common community support type was some kind of floating support (discussed below). Close to a quarter of clients were accessing supported housing or lodging services, and half as many were using direct access or resettlement services.

However, there has been a noticeable increase in clients accessing floating support services, with a comparable decrease in the proportion accessing direct access hostels (Centre for Housing Research, 2008, p. 12).

Table 9 Supporting People Service Type, Q1 2007-Q3 2009, Portsmouth⁷

Service Type	Total	
Adult placement	1	0%
Direct access	454	14%
Floating support	1407	42%
Foyer	66	2%
Outreach service	3	0%
Resettlement services	387	12%
Supported housing	799	24%
Supported lodgings	1	0%
Teenage parent accommodation	7	0%
Womens' refuge	192	6%
Grand Total	3317	

Source: Short Term Outcomes Forms, Supporting People

⁷ Where a service encompasses more than one of the definitions shown below, the predominant service type should be shown on the form.

Floating Support

Floating support generally refers to services which are not specifically tied to accommodation (Department for Communities and Local Government, 2008b). However, floating support can also refer to support that either 'floats off' when the support is no longer required, (usually crisis intervention or short term work); or 'floats with' (follows) the individual as the service user moves through different types of accommodation (usually long term support) (Department for Communities and Local Government, 2008b).

A Department for Communities and Local Government review (2008b) into floating support services also grouped floating support under the broad headings of generic or specialist services. They also found a "specific type of generic floating support service which solely focuses on crisis intervention work and then moves away" (p. 6). Specialist floating support services tend to have staff with specialist skills and knowledge (usually related to a client group⁸) and are inclined to offer a high intensity of support (although this is in no way ubiquitous or universal) (p. 21).

Some of the reported benefits of floating support include (Department for Communities and Local Government, 2008b, p. 5):

- Can be provided to anyone who requires the support irrespective of the type of accommodation in which they live,
- Support offered is separate from housing provision, allowing floating support workers to be advocates for the service user and not representatives of the landlord,
- Flexible services can respond rapidly to crises or emergencies,
- Clients living in isolated or rural areas can be provided with support in their own homes, thereby services can have a greater 'reach' than accommodation-based services,
- Tailored provision to meet the needs of individuals and the hours for individuals can be moved around,
- Focused to meet strategic objectives, such as tackling homelessness, crime, anti-social behaviour and wider social inclusion issues.

⁸ Women escaping domestic violence, Travellers, Older people, Young people, Learning disabilities, Offenders, HIV, Refugees, Mental health, Substance misuse

Access and Referral Routes

SP community support can be accessed via referral or direct access. Referrals can be made by a number of agencies including housing, health, probation, social services, and local advice services. Direct access can be made through hostels, for example, in Portsmouth there were three hostels for specific client groups: single adults 18+, young people aged 16-25 and women fleeing DV. While these were open 7 days a week for 24 hours a day, they had limited capacity and so were recommended only for emergency use (Portsmouth City Council, 2012).

Specific information on referral routes is not available for the local dataset used in this thesis. However, national data and trends are reported here to help put the data in context. Nationally, self-referral is the most common access route, followed by local authority housing department and voluntary agency referrals, with very little change over time (Centre for Housing Research, 2008). It is worth noting, that the Centre for Housing Research (2008) found that young people referred to community support services by their local authority who had been living with family prior to accessing support were more likely to leave community support in less than the median time. Those young people who left early were less likely to achieve a high level of outcomes than clients who remained with community support for longer (Centre for Housing Research, 2008, p. 8).

Indicators

Local and national government collect performance measures relating to the delivery of housing-related support. Previously known as Key Performance Indicators 2 and 1, they are now known as national indicators 141 (the percentage of vulnerable people achieving independent living) and 142 (the percentage of vulnerable people who are supported to maintain independent living). According to the Centre for Housing Research (2008, p. 5) close to two thirds of authorities have chosen to include one or both of these indicators in their Local Area Agreements. According to the Department for Communities and Local Government Data Interchange Hub, Portsmouth's performance against

these measures is fairly representative of the average for Unitary Authorities over the time period of this study.

National Indicator values at the end of the data period:

- National Indicator 141: Percentage of vulnerable people achieving independent living (Q2 2009/10) 72.69%
- National Indicator 142: Percentage of vulnerable people who are supported to maintain independent living (Q2 2009/10) 97.74%
- Total expenditure in 2008/09 on housing welfare and SP £8,821,000.

Source: Department for Communities and Local Government Data Interchange Hub

More broadly, the work of SP relates to a number of wider government priorities relating to vulnerable people, as defined by Public Service Agreements (PSAs), for example:

- PSA 16: Increase the proportion of socially excluded adults in settled accommodation and employment, education or training
- PSA 17: Tackle poverty and promote greater independence and wellbeing in later life
- PSA 23: Make communities safer
- PSA 25: Reduce the harm caused by alcohol and drugs

(Centre for Housing Research, 2008, p. 26).

Clients

The SP programme deals with a wide range of vulnerable client groups. Some may have longer term support needs, such as older people, while others may require a shorter-term intervention normally defined as up to two-years. This shorter-term involvement could be support for those experiencing or at risk of social exclusion, or to build skills and confidence towards independence or to support vulnerable people through a crisis (Department for Communities and Local Government, 2008c, p. 7). This thesis will be focusing on these short-term interventions and their related outcomes.

Nationally, over 1.2 million vulnerable people receive housing related support services at any one time through the SP programme (Office of the Deputy Prime Minister, 2004, p. 1). This includes over: 835,000 older people with support needs, 40,000 single homeless people, 37,000 people with

mental health problems and 10,000 women at risk of DV (Department for Communities and Local Government, 2010).

People are entitled to get help if they are at least 18⁹ years old and meet one of the following criteria (Portsmouth City Council, 2010b):

- are homeless, either single or family
- are an older person
- have a learning or physical disability
- are blind, partially-sighted or hard of hearing
- have a drug or alcohol related problem
- are fleeing DV
- are an ex-offender or leaving/recently left prison
- are a teenage parent
- have a mental health problem

Table 10 Supporting People Employment Status, Q1 2007-Q3 2009, Portsmouth

Employment Status	Total	
Full-time student	130	4%
Full-time work (24 hrs or more/week)	210	6%
Govt training/New Deal	127	4%
Job seeker	894	27%
Long-term sick and disabled	523	16%
Long-term sick/disabled	195	6%
Missing	1	0%
Not seeking work	811	24%
Other adult	65	2%
Part-time work (less than 24 hrs/week)	160	5%
Retired	201	6%
Grand Total	3317	

Source: Short Term Outcomes Forms, Supporting People

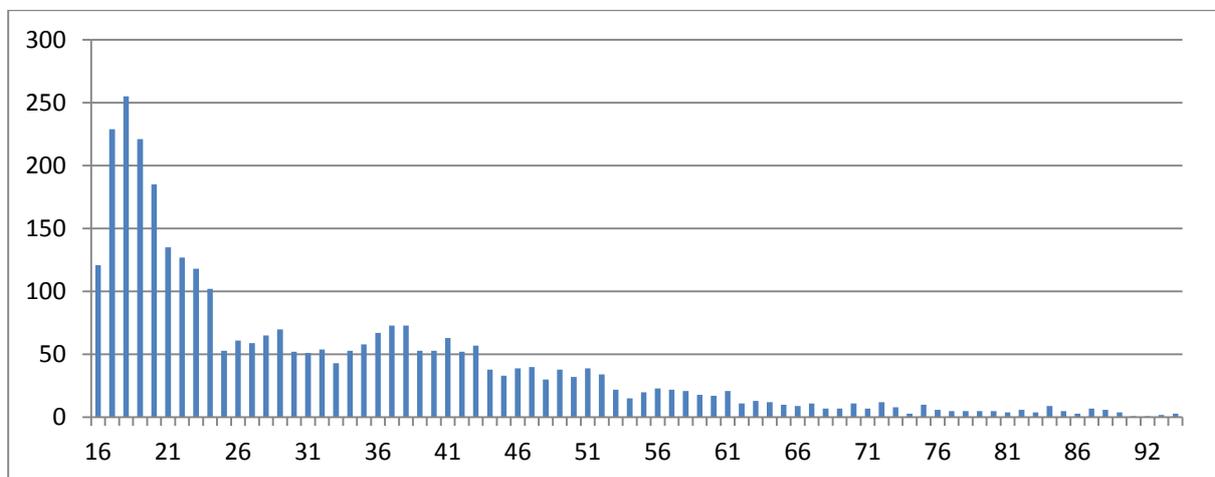
Table 10 shows the minority of SP clients were in some form of work (11%) or education and training (8%) although just over a quarter were recorded as seeking a job. Again, this reflects the national profile of SP service users observed over time (Centre for Housing Research, 2008, p. 7). A large proportion of those not in work were long term sick and/or disabled, or were simply described as

⁹16 and 17 year olds can access some specific services funded by SP

not seeking work. However, a fifth (19%) of SP clients were recorded as having a disability (Table 12).¹⁰

There are a fairly equal split of males (1,708) to females (1,609). Client ages ranged from 16 to 94 years old (Figure 9), with a mean age of 32.6 years. This reflects the national profile of SP service users, where the most common age range has consistently been 18-24 years (Centre for Housing Research, 2008, p. 7). The majority (89%) were White British, which is broadly representative of Portsmouth’s population.

Figure 9 Age of Supporting People Clients, Q1 2007-Q3 2009, Portsmouth



Source: Short Term Outcomes Forms, Supporting People

¹⁰ Compared to 16% of working age adults and 45% of adults over State Pension age. Source: Department for Work and Pensions (2014), Official Statistics, Disability Facts and Figures.

Table 11 Supporting People Clients by Ethnicity, Q1 2007-Q3 2009, Portsmouth

Ethnic Origin	Total	
Asian/Asian British: Bangladeshi	14	0.4%
Asian/Asian British: Indian	7	0.2%
Asian/Asian British: Other	36	1.1%
Asian/Asian British: Pakistani	10	0.3%
Black/Black British: African	62	1.9%
Black/Black British: Caribbean	12	0.4%
Black/Black British: Other	13	0.4%
Chinese/Other ethnic group:		
Chinese	21	0.6%
Chinese/Other ethnic group: Other	6	0.2%
Do not wish to disclose	24	0.7%
Mixed: Other	17	0.5%
Mixed: White & Asian	8	0.2%
Mixed: White & Black African	18	0.5%
Mixed: White & Black Caribbean	23	0.7%
Refused	19	0.6%
White: British	2952	89.0%
White: Irish	20	0.6%
White: Other	55	1.7%
Grand Total	3317	

Source: Short Term Outcomes Forms, Supporting People

Table 12 Supporting People Clients by Disability, Q1 2007-Q3 2009, Portsmouth

Disability	Total	
No	2680	81%
Yes	635	19%
Dont Know	2	0%
Grand Total	3317	

Source: Short Term Outcomes Forms, Supporting People

The nature of the community support offered by SP, is reflected in the wide range of accommodation types recorded. It is also unsurprising that a smaller proportion (0.5%) of clients are owner occupiers than those residing in prison (0.9%) or rough-sleeping (0.8%). The most common accommodation types tend to be local authority or housing association general needs tenancy, although there are a considerable number of private sector tenancies.

Table 13 Supporting People by Accommodation Type, Q1 2007-Q3 2009, Portsmouth

Accommodation Type	Total	
Any other temporary accommodation	27	0.8%
Approved probation hostel	2	0.1%
Bed and breakfast	38	1.1%
Direct access hostel	92	2.8%
Foyer	66	2.0%
Hospital	23	0.7%
Housing association general needs tenancy	214	6.5%
Housing association general needs with floating support	79	2.4%
Housing for older people	18	0.5%
Living with family	228	6.9%
Living with friends	129	3.9%
Local authority general needs tenancy	887	26.7%
Local authority general needs with floating support	149	4.5%
Missing	15	0.5%
Mobile home/caravan	2	0.1%
Other	49	1.5%
Owner-occupation	18	0.5%
Prison	30	0.9%
Private sector leasing	39	1.2%
Private sector tenancy	393	11.8%
Residential care home	13	0.4%
Residential rehabilitation service	7	0.2%
Rough sleeping	28	0.8%
Shared ownership	3	0.1%
Short life housing	7	0.2%
Supported housing	293	8.8%
Tied housing or rented with job	1	0.0%
Unknown	425	12.8%
User who has experienced DV returning home with partner	15	0.5%
User who has experienced DV returning home without partner	3	0.1%
Women's refuge	24	0.7%
Grand Total	3317	

Source: Short Term Outcomes Forms, Supporting People

Client Group

The primary client group should accurately describe the predominant needs or circumstances of the client. There are specific guidelines that this question should only be answered in relation to the individual client and should not be a description of the primary purpose of the community support.

Only one primary client group can be selected, however, if this does not accurately or completely define the client's situation and needs then up to three additional categories can be chosen to describe the Secondary client groups by which the client is defined (Centre for Housing Research, 2007, p. 17).

Table 14 shows the primary and secondary needs of the SP clients in Portsmouth at the time of this study. Being 'single homeless with support needs' was the most common primary need (36%), but was also the most common need (43%) across all levels. Similarly, one in five clients were identified as 'young people at risk'. This follows the pattern observed nationally, with 70% of all clients made up of these two client groups alongside women at risk of DV, mental health problems, homeless families, young people at risk, and people with generic needs (Centre for Housing Research, 2008, p. 7).

Alcohol and drug problems were identified as the most common secondary problem. Mental health or 'generic' problems were also common as primary and secondary problems.

Table 14 Supporting People Clients by Primary and Secondary Need, Q1 2007-Q3 2009, Portsmouth

Client groups	Primary		Secondary 1		Secondary 2		Secondary 3		Total client groups	
Alcohol problems	57	2%	305	9%	92	3%	14	0%	468	14%
Complex needs	0	0%	97	3%	20	1%	12	0%	129	4%
Drug problems	31	1%	213	6%	118	4%	18	1%	380	11%
Frail elderly	19	1%	8	0%	1	0%	1	0%	29	1%
Generic	327	10%	46	1%	14	0%	5	0%	392	12%
Generic/Complex needs	188	6%	37	1%	36	1%	9	0%	270	8%
Homeless families with support needs	273	8%	32	1%	6	0%	0	0%	311	9%
Learning disabilities	48	1%	55	2%	15	0%	3	0%	121	4%
Mental health problems	171	5%	177	5%	71	2%	18	1%	437	13%
Mentally disordered offenders	4	0%	9	0%	5	0%	4	0%	22	1%
Offenders at risk of offending	26	1%	76	2%	50	2%	15	0%	167	5%
Offenders/at risk of offending	14	0%	17	1%	24	1%	6	0%	61	2%
Older people mental health	2	0%	9	0%	4	0%	0	0%	15	0%
Older people with support needs	162	5%	16	0%	6	0%	2	0%	186	6%
People at risk of domestic violence	51	2%	5	0%	4	0%	1	0%	61	2%
Physical or sensory disability	51	2%	108	3%	19	1%	6	0%	184	6%
Refugees	41	1%	10	0%	4	0%	0	0%	55	2%
Rough sleeper	12	0%	36	1%	25	1%	10	0%	83	3%
Single homeless with support needs	1190	36%	191	6%	26	1%	3	0%	1410	43%
Teenage parents	14	0%	73	2%	9	0%	3	0%	99	3%
Traveller	0	0%	4	0%	0	0%	0	0%	4	0%
Women at risk of domestic violence	172	5%	22	1%	6	0%	4	0%	204	6%
Young people at risk	448	14%	160	5%	39	1%	7	0%	654	20%
Young people leaving care	16	0%	23	1%	11	0%	6	0%	56	2%
(missing)		0%	1588	48%	2712	82%	3170	96%		
Grand Total	3317		3317		3317		3317		5798	

Source: Short Term Outcomes Forms, Supporting People

Client groups

Older people with support needs – older people with low or medium support needs. This group is described as older people who are vulnerable and who, without support, would be at risk

Older people with mental health problems – older people, defined as above but with additional mental health problems, for example dementia.

Frail elderly – older people, who are physically disabled or frail from the effects of aging (for example experiencing significant pain problems, arthritis, cancer, etc.) and require extra care and support to maintain their lifestyle and home.

Mental health problems – those who fall into any of the following categories, people: with enduring but relatively low level mental health problems that interfere with their ability to cope or function on a day to day basis, whose behaviour is a concern for their own safety or that of others, at risk of suicide or depression or complete loss of everyday reality, who have been diagnosed as mentally ill and who have had, or are having, specialist treatment.

Learning disabilities – people with mild or moderate learning disabilities, as well as those with more severe learning disabilities and/or challenging behaviour, people with deficits in social functioning or adaptive behaviour who are having difficulty in relation to sustaining their accommodation or managing to live independently as a result of their learning difficulties.

Physical or sensory disability – people with mobility difficulties, sensory impairments (for example sight, hearing), suffering any loss or abnormality of an anatomical structure or function, or suffering from a debilitating or long-term illness, for example multiple sclerosis, who are having difficulty in relation to sustaining their accommodation or managing to live independently as a result of their physical or sensory disability

Single homeless with support needs – people who have been accepted as homeless and in priority need and also those who have been turned down for re-housing or have not approached the local authority and who have a range of support needs.

Alcohol problems – people with alcohol problems who are homeless or who are having difficulty in relation to sustaining their accommodation or managing to live independently as a result of their alcohol problems.

Drug problems – people with drug problems who are homeless or who are having difficulty in relation to sustaining their accommodation or managing to live independently as a result of their drug problems.

Offenders or at risk of offending – offenders or people at risk of offending, who are homeless or who are having difficulties in relation to sustaining their accommodation or managing to live independently as a result of their offending behaviour.

Mentally disordered offenders – convicted people with mild to acute mental health needs or with learning difficulties or convicted people with mental health needs whose behaviour has roots in a personality disorder or people convicted for violent offences relating to their mental health who are having difficulty in relation to sustaining their accommodation or managing to live independently as a result of their mental health problems

Young people at risk – young people aged 16 – 25 who are homeless or in insecure accommodation, and those who are unable to take care of themselves or to protect themselves from harm or exploitation who are having difficulty in relation to sustaining their accommodation or managing to live independently

Young people leaving care – young people leaving Local Authority care who have been looked after for a continuous period of at least 13 weeks after the age of 14 who are having difficulty in relation to sustaining their accommodation or managing to live independently

Women at risk of DV – women who are experiencing, or are at risk of experiencing, DV and who have left their home, or who are having difficulties in maintaining their home or their personal safety and security.

People with HIV/AIDS – people with HIV/AIDS who are requiring support to maintain their independence within the community.

Homeless families with support needs – families who have been accepted as statutorily homeless and are placed in temporary accommodation. This group includes homeless single parents with dependent children.

Refugees – people who have been officially accepted as refugees, or who have been given indefinite or exceptional leave to remain who are having difficulty in relation to sustaining their accommodation or managing to live independently

Teenage parents – Young single parents (aged less than 20) needing support and vulnerable young women in this age group who are pregnant who are having difficulty in relation to sustaining their accommodation or managing to live independently.

Rough sleeper – a person bedded down for the night on the street or sleeping out or sleeping in buildings or other places not designed for habitation, for example stations, car parks, sheds.

Traveller – a person with a cultural tradition of nomadism or of living in a caravan and all other persons of a nomadic habit of life, whatever their race or origin, including such persons who, on grounds only of their own or their family's or dependents' educational or health needs or old age, have ceased to travel temporarily or permanently and members of an organised group of traveling show people or circus people (whether traveling together or not).

Generic/Complex needs (Generic and Complex needs were combined in 2009). This group is “for people who have individual or multiple / complex needs needing support to achieve or maintain their independence within the community who cannot be properly described by the other pre-defined client groups or categories.” (Centre for Housing Research, 2012, p. 15). The data prior to 2009 has been recoded to match the combined ‘Generic/Complex needs’ client group.

The definitions used to complete the forms prior to 2009:

- **Generic (only for primary client group)** - select this option only if the client does not fall into any particular client group, but falls into a large number of categories in terms of his/her primary needs. This category is also used for a small number of clients that do not fit into any of the other categories, for example some of those receiving services from debt counseling.
- **Complex needs (only for secondary client groups)** – this option should be selected for people with additional needs such as challenging behaviour or multiple needs or other particularly difficult to define needs not already listed as an option.

Source: Centre for Housing Research (2007, pp. 18-19)

Outcomes

Prior to the introduction of the Department for Communities and Local Government's led implementation of the SP Outcome Framework at a national level on 31 May 2007, there had been no consistent and clear information about the real tangible benefits and outcomes that were being achieved for individual service users (Centre for Housing Research, 2007).

Every client that enters the SP programme has a needs-based support plan in place. Outcomes are only recorded if support needs were previously identified in that particular area (Centre for Housing Research, 2007, p. 51). Outcomes measures are intended to capture the positive changes and benefits experienced by clients as a direct result of the support services they used (Centre for Housing Research, 2007, p. 5). There are no restrictions on the number of outcomes that each client can be helped to achieve, but they must be identified and agreed in a needs-based support plan. Whilst the successful achievement of an outcome may not be solely within the remit of the service provider, where this is an identified support need, then the support service's role should still be one of proactive signposting, liaison and support to the client to achieve the outcome

Specific details of measurable outcomes, and those directly relevant to this thesis, are dealt with in more detail below.

The SP outcomes framework mirrors the five high level outcomes from the Department for Education and Skills' 'Every Child Matters' approach (2003). They also contribute to the Department for Communities and Local Government's Creating Sustainable Communities strategy, as well as linking to a range of other wider government objectives such as National Indicators and PSAs discussed elsewhere (Centre for Housing Research, 2007, p. 4). The detailed outcome indicators that sit under each of the outcome domains are as follows:

<p>Economic Wellbeing</p> <p>1a Maximise income, including receipt of the right benefits</p> <p>1b Reduce overall debt</p> <p>1c Obtain paid work/ Participate in paid work</p> <p>Enjoy and achieve</p> <p>2a Participate in chosen training and/ or education, and where applicable, achieving desired qualifications</p> <p>2b Participate in chosen leisure/ cultural / faith/ informal learning activities</p> <p>2c Participate in chosen work like/ voluntary/ unpaid work activities</p> <p>2d Establish contact with external service/ family/friends</p> <p>Be Healthy</p> <p>3a Better manage physical health</p> <p>3b Better manage mental health</p> <p>3c Better manage substance misuse</p> <p>3d Better manage independent living as a result of assistive technology/ aids and adaptations</p> <p>Stay Safe</p> <p>4a Maintain accommodation and avoid eviction</p> <p>4b Comply with statutory orders and processes (in relation to offending behaviour)</p> <p>4c Better manage self harm, avoid causing harm to others, minimise harm/risk of harm from others</p> <p>Make a Positive Contribution</p> <p>5 Greater choice and/or involvement and/or control at service level and within the wider community.</p> <p style="text-align: right;">Source: Centre for Housing Research (2007, pp. 4-5)</p>

This study will focus on those clients wishing to achieve the outcomes that are most keenly in-line with community safety related objectives, clients and ethos (see Table 15).

Table 15 Supporting People Outcomes – Study Four

Outcome code	Full title	Short title
3c	Better manage substance misuse	Substance misuse
4b	Comply with statutory orders and processes (in relation to offending behaviour)	Statutory order
4cii)	Better avoid causing harm to other	Harm to others
4ciii)	Better minimise harm/risk of harm from others	Harm from others

Table 16 Supporting People Clients by Objective Participation, Q1 2007-Q3 2009, Portsmouth

	# clients	% of clients
Economic Wellbeing		
1a Maximise Income	2,442	74%
1b Managing Debt	1,429	43%
1c Paid Work	568	17%
Enjoy and Achieve		
2a Training	894	27%
2b Learning Activities	669	20%
2c Work Like Activities	426	13%
2d External Contacts	1,642	50%
Be Healthy		
3a Primary Care	991	30%
3b Mental Health	743	22%
3c Substance Misuse	760	23%
3d Aids & Adaptation	2,508	76%
Stay Safe		
4a Maintain Accommodation	1,951	59%
4b Statutory Order	343	10%
4c Self Harm	249	8%
4c Harm To Others	225	7%
4c Harm From Others	458	14%
Make A Positive Contribution		
5 Choice Control	1,830	55%

Source: Short Term Outcomes Forms, Supporting People

In Portsmouth, at the time of this study, better managing independent living as a result of assistive technology/aids and adaptations and maximizing income were the most common objectives, with support plans in place for three quarters of clients. More than half of clients were interested in establishing contact with external services, families or friends, maintaining accommodation and achieving choice control. The least common objectives were under the 'stay safe' heading: avoiding harm to others, managing self harm and complying with statutory emails. The relative size of each outcome was representative of the national cohort, with the main exception being the significantly higher proportion of clients opting for 'Aids and Adaptations' in Portsmouth. Nationally this was only 6%, but may simply reflect the different reporting times including specific policies promoting these (Centre for Housing Research, 2008, p. 27).

For each objective there is information about achievement of outcomes (Yes/No) and the option for 'reasons for failure'. The outcomes reported at the point of departure should reflect the user's view as well as the provider's view of the outcomes achieved. Where possible, the service user should be in agreement with the outcomes reported. However, the provider will ultimately have to make the judgement as to what is reported (Centre for Housing Research, 2007, p. 9).

Form completion

The SP Client Record Form is completed by service providers whenever a new service user enters a service. An Outcomes Form is completed whenever a service user departs or ceases to use the community support, regardless of the reason (with the exception of the death of the client). This can be planned or unplanned (and is recorded as such) (Centre for Housing Research, 2007). Access to the Client Record Form was not permitted, so this research relies on the latter Outcomes form that records a number of key demographic characteristics, and the overview of outcomes to be supported / included in the client's support plan. As this study focuses on the short term community support provided, then it is the Short Term Outcomes Form (for clients who leave short term services which are at least partially funded by SP) that will be used to collect data. A Short Term Outcome Form is still completed if a client moves to another support service, defined as having a different service ID, regardless of whether it is provided by the same or a different organisation (Centre for Housing Research, 2007).

The expectation is that *all* service users complete a Short Term Outcome Form at the point of departure, regardless of the length of stay and whether the departure is planned or unplanned. However, the Department for Communities and Local Government do allow some discretion on the most pragmatic approach to reporting outcomes for clients who are with those short term services which expect a high turnover and which have a high proportion of service users in receipt of their community support for a very short period, defined as less than 28 days (Centre for Housing

Research, 2007). Despite this allowance, the data does include some clients that received community support for less than 28 days.

There is the option to record that the client died whilst in receipt of service (Q0.9), in which case no detailed outcomes information is required (Centre for Housing Research, 2007). As the manner in which they died is not recorded, it is not known whether it was related to failing their outcome. These cases are treated as censored data for the purposes of survival analysis.

Support Plans

It is a Department for Communities and Local Government requirement for all services funded by SP that each service user has a regularly reviewed needs-based support plan in place. This necessitates that each service user must have had a needs assessment which then links to a clear support plan (Centre for Housing Research, 2007, p. 6). The Short Term Outcomes Form then captures outcome measures in relation to those areas clearly identified as needing support to achieve. Therefore, providers should only record outcomes if there were specifically identified support needs for the service user in relation to this area (Centre for Housing Research, 2007, p. 51). The steps that both the service and the client will take in order to achieve positive client outcomes are set out in the support plan. The support plans are evaluated and updated as required. To this extent, the client is expected at the very least to engage with their community support by: contributing to their support plan, specifying their support needs, and determining their expected outcomes. As such, the support plan marks an implicit agreement and obligation of clients to take the required steps towards positive outcomes for the duration of their involvement with the service (Centre for Housing Research, 2008, p. 34).

Planned versus unplanned

“Q0.24 Was this a planned move from the support service (if accommodation based) or a planned end to the receipt of the support service (if a floating support service) in accordance with the Client’s Support Plan?”

Please indicate Yes or No.

This question simply asks if the departure from the service (if it is an accommodation based service) or the ending of the service being provided (if a floating support service) happened in a planned way that was in line with the client’s support plan.

A planned move means just that – in line with the support plan. An unplanned move means that it was not in line with the support plan – such as abandonment; disappearance; being taken into custody or hospital; sleeping rough and other unplanned moves. At this point, the question is not asking if the planned move was to a more independent outcome.”

Source: Centre for Housing Research (2007, pp. 21-22)

Validation and data quality

Validation of ‘outcomes’ data is within the remit of the overall contract monitoring approach and as such is agreed at a local level between Administering Authorities and their providers. Some form of validation of this data will be done by Administering Authorities, including an element of random sampling and spot checks, as it is a condition that providers must be able to evidence the basis for their reported outcomes. Although there is an electronic submission of the Outcomes forms, providers must retain users’ support plans for a period following departure to allow Administering Authorities to undertake some sampling of support plans against reported outcomes (Centre for Housing Research, 2007, pp. 7-8). Data were collected by providers of SP community support. Completion was not mandatory, although a number of local authorities made it a condition of their contract with providers to submit this information. No estimates were made for missing returns.

Short-term versus long-term support

Short term services are usually provided for up to two years with the intention of moving an individual on to independent living or increasing the ability to live independently. The exception to this is mental health support which may be up to three years. Long term support is classified as

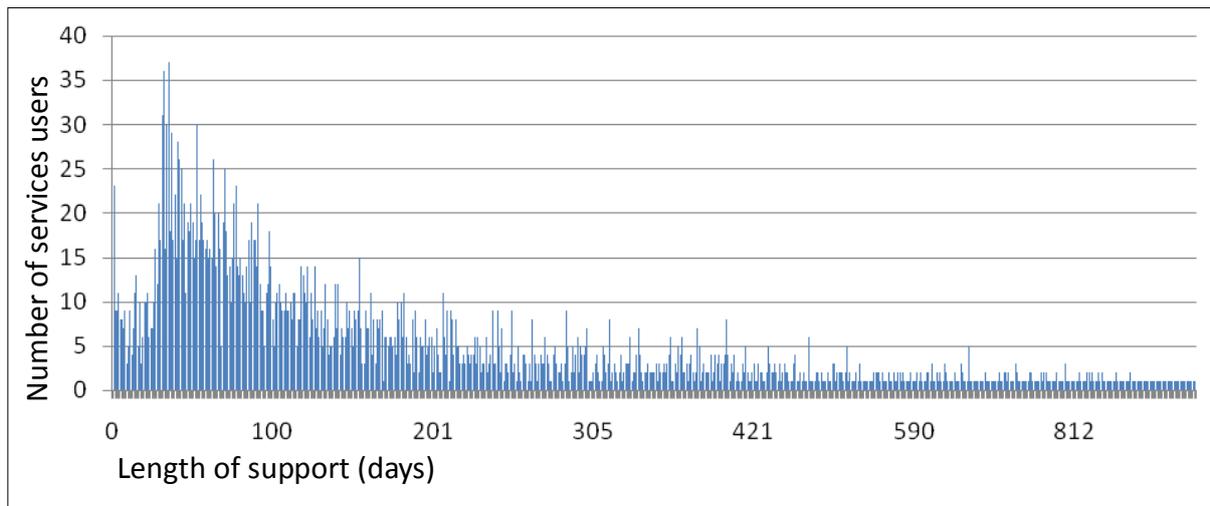
lasting for, or having an intended duration of, more than two years. Obviously this includes support that is likely to be permanent (Portsmouth City Council, 2010b). Generally, long-term services are provided on a continuous basis and are often characterized as open-ended, so are unsuitable for this type of analysis (Office of the Deputy Prime Minister, 2004).

It has already been noted that for all short term services, outcome information is collected at the time the service user departs from or ceases to use the service. However, outcomes information for long term services is captured on an annual basis as part of the regular review of the support plan (Centre for Housing Research, 2007, p. 8).

For the purpose of collecting outcome information, the definition of a short term service is a service that provides support for a period of up to a maximum of 2 years (Centre for Housing Research, 2007). This includes both accommodation based services and floating support services. For example, these may include supported housing, women's refuges and other DV services, Foyers, teenage parent accommodation, direct access accommodation, adult placements, supported lodgings, floating support services, outreach services, resettlement services. All short-term housing related community support services are provided at no charge to the client (Office of the Deputy Prime Minister, 2004).

The length of support was 198 days on average (mean) with a median amount of 115 days. This reflected some extreme values, with a maximum length of support of 2,841 days – despite the service being supposedly limited to two years. This does not take into account those that may have left the service and then rejoined.

Figure 10 Length of Support (Days), Q1 2007-Q3 2009, Portsmouth



Source: Short Term Outcomes Forms, Supporting People

Relevant Outcomes

The following extracts show the specific guidance for completing the Short-Term Outcomes framework for the outcomes directly relevant to this thesis (3c: Better manage substance misuse, 4b: comply with statutory orders and processes (in relation to offending behaviour) and 4cii): better avoid causing harm to others, 4ciii): minimise harm/risk of harm from others).

3c) Did the client need support to better manage their substance misuse issues? Yes / No

This question refers to an identified need in the support plan for support to enable the client to better manage their substance misuse issues. This covers all aspects of the client's substance misuse issues and could include supporting access to specialist substance misuse services when needed, as well as supporting the client to make appropriate use of substance misuses services, such as contacting them when unwell/ in crisis rather than only making use of emergency provision.

It could also include supporting the client to develop better awareness around managing everyday stresses and recognising how to better manage their own substance misuse. It is important to remember that this will not always be about the client's substance misuse stopping, since that is not necessarily within the remit of the service to achieve, but it is about supporting the client to better manage substance misuse.

Substance misuse services refer to in-patient drug treatment, home based detox, residential rehabilitation, specialist prescribing, GP prescription, structured day programme or other specialist counselling.

3c) Actual outcome for the client – Is the client managing their substance misuse better?

Yes / No

Yes – Please select this option if the client is managing their substance misuse better at the point of departure from the service or ceasing to receive the service.

(Success in managing substance misuse can vary, and so the assessment of whether the user is better managing their substance misuse, at the point of departure, needs to be made. A pragmatic approach is needed here and the outcome reported needs to be reflective of the support plans at the point of departure and the views of the user & the provider as to whether that support need was met. Where services support clients who have recently completed a course of rehab, the client will arrive at the service completely abstinent from substance misuse. In such situations, where the support service has supported the client to continue to remain free from substance misuse at the point of departure from the service, then it seems logical to conclude that the client is managing their substance misuse better, since they continue to remain abstinent. Of course, a relapse would mean that the outcome is unlikely to have been achieved, since they are not managing their drug/ alcohol use better at the point of departure from the service.)”

Source: Centre for Housing Research (2007, pp. 46-47).

4b) Did the client need support to comply with statutory orders and related processes, in relation to offending behaviour? Yes / No

This question refers to an identified need in the support plan to support the client to comply with statutory orders. This should include clients who are subject to a range of statutory orders and related processes within the criminal justice system.

- Statutory orders and related processes refer to the following:
- Youth Justice Orders (Crime and Disorder Act 1998)
- Anti-Social Behaviour measures (Anti-Social Behaviour Order [ASBO] or individual Support Order [ISO])
- Sentences in the Community (Supervision Order, Community Rehabilitation Order, Community Punishment Order, Action Plan Order, Attendance Centre Order, Referral Order, Reparation Order, Fine Conditional Discharge or Absolute Discharge.)
- All sentences to the community are open to the following orders: Curfew Order, Parenting Order, Drug Treatment and Testing Order
- Sentences to Custody (Detention and Training Order Section 90/91) – although these are custodial sentences they can lead to community based restrictions following release part way through a sentence, for example, tagging.
- Noise Abatement Notices, Litter Abatement Notices,
- Early Release/Licence arrangements, Bail Restrictions and Conditions, Restraining orders.
- Community orders relating to: unpaid work, specified activities, programmes aimed at changing offending behaviour, prohibition from certain activities, curfew (usually with electronic monitoring), exclusion from certain areas (usually with electronic monitoring), residence requirement, mental health treatment, drug rehabilitation requirement, alcohol requirement, alcohol treatment, supervision requirement, attendance centre requirement (for under 25s) and suspended sentence order (custody minus).

- Any child protection orders.

This means **all** statutory orders and processes in place for the client that the provider is aware of at the time when the client began to receive the support service and any subsequent statutory orders and process that the client acquires during the time they are in receipt of the support service of which the provider becomes aware.

4b) Actual Outcome for the Client: Has the client complied with their statutory orders/related processes? Yes / No

Yes – Please select this option if the client has complied with **ALL** their statutory orders/related processes at the point of departure from the service or ceasing to receive the service. (This can only be reported if the client has complied with all the orders and processes known to be in place whilst the client is in receipt of the service.)

No – Please select this option if the client has not complied with **ALL** their statutory orders/related processes at the point of departure from the service or ceasing to receive the service.”

Source: Centre for Housing Research (2007, pp. 53-54)

“4cii) Did the client need support to avoid causing harm to others? Yes/ No

This question refers to an identified need in the support plan for clients who are at risk of causing harm to others and who need support to enable them to avoid causing harm to others. For example, clients likely to cause harm to others may include those who are known or likely to demonstrate ASB, be violent to others, who have a criminal conviction/s regarding violence to others, who are under Multi-agency public protection agency (MAPPA) supervision, who are known sexual offenders, clients who have committed DV offences or clients who have present concerns related to abuse under Protection of Vulnerable Adults.

This covers all aspects of the client’s potentially harmful behaviour to others and could include supporting access to specialist support services when needed, as well as supporting the client to make appropriate use of specialist services.

It could also include supporting the client to develop better awareness of managing everyday stresses and recognising how to avoid causing harm to others. It is important to remember that this outcome is about the client **avoiding** causing to harm to others.”

Source: Centre for Housing Research (2007, p. 57)

“4ciii) Did the client need support to minimise harm/risk of harm from others? Yes/ No

This question refers to an identified need in the support plan for clients who are at risk of harm from others and who need support to enable them to minimise this harm or risk of harm. Clients at risk of harm from others include people with a range of vulnerabilities who need the protection of ‘Protection of Vulnerable Adults’ to safeguard them from harm or abuse, young people who may be at risk, clients at risk of DV, clients who are at risk of racial violence or racial harassment, clients who may be at risk of harm as a result of previous links in community or their previous lifestyle, such as links to gangs/ prostitution etc.

This covers all aspects of minimising the client’s risk of harm from others and could include supporting access to specialist support services when needed, as well as supporting the client to make appropriate use of specialist services.

It could also include supporting the client to develop better awareness of managing the risks of harm from others and recognising how best to minimise the risk of harm from others. It is important to remember that this will not always be about avoiding harm or risk of harm caused by others, since that is not necessarily within the remit of the service or the client to achieve, but it is about supporting the client to minimise the risk of harm from others.

4ciii) Actual outcome for the client – Is the client minimising the harm/ risk of harm from others? Yes / No

Yes – Please select this option if the client is minimising the harm/ risk of harm from others at the point of departure from the service or ceasing to receive the service. (Success in minimising the harm/ risk of harm from others can vary, and so the assessment of whether the user is minimising the harm/ risk of harm from others, at the point of departure, needs to be made. A pragmatic approach is needed here and the outcome reported needs to be reflective of the support plans at the point of departure and the views of the user & the provider as to whether that support need was met.)”

Source: Centre for Housing Research (2007, pp. 59-60)

“External Factors [reasons for not achieving ‘minimising the harm/risk of harm from others’]. These are factors that are external to both the client and the service, and therefore, beyond the control and scope of the client or service to change. They do however provide valuable information across the wider SP partnership.

- Problems with local specialist services
 - Local specialist services are unavailable
 - Long waiting lists for specialist services
 - Specialist services unwilling to provide services to the client
 - Problems resulting from previous experience/ risk of DV/ abuse
 - Problems in the wider community contributing to risk of client being harmed by others
 - Other”
- (Centre for Housing Research, 2007, p. 61).

Data Recode

From 2008 onwards, the data is recorded slightly differently in that the same questions have been asked, but the responses are coded slightly differently. Where applicable, the data has been recoded to take account of these changes to allow/ensure comparability/compatibility. Details of the recodings and all the inconsistencies/mistakes/typos in the data that needed to be corrected through recoding are detailed in Appendix 6.

Censored and Truncated Cases

The dataset used contains censored and uncensored cases. If there was no censoring then standard regression procedures could be used. Therefore survival analysis using the Cox proportional hazard method is used.

Data collection is based on all those leaving the state of interest, referred to as an outflow sample. It includes all those observed between Q1 2007 and Q3 2009. The records are collected from administrative data rather than a bespoke cross-section or panel and cohort study.

Logistic regression uses all those who left community support, regardless of the success of the outcome, and excludes those who died. In contrast, the survival analysis method focuses on those who did achieve a successful outcome and incorporates those who died as a censored event.

Those that died during receipt of community support are considered a form of right censored data, as they were lost to follow up. Similarly a client who withdraws from the study would normally be considered as a form of right censoring, but as this research utilises an outflow sample, this is the very incidence that triggers the collection of information on the success or failure of the outcome. Another form of right censoring, where the individual is still alive at the end of the study period, is affected by the character of an outflow sample. The characteristics of that client are simply not registered, as only those that experience the event within the observation period are included.

There is staggered entry, as clients do not enter the study at the same time. Many clients may have been exposed to the service prior to the observation period (i.e. some spells would have already been in progress). As the start date is known, and only those that experience the event within the observation period are recorded, then this is inconsequential to the robustness of the study. Left censoring, as used by biostatisticians: when the client experiences the event before the study period, may occur in this study – but is not of any significant concern.

There is no known interval censoring in the dataset, where it is only known that an outcome succeeded or failed during a particular time, for example between appointments. However, there is the potential for a regular assessment or appraisal to influence the length of time a client is in receipt of community support. However, this has not been included in this study and it is evident from Figure 10 that any impact of a regular assessment is not identifiable in the distribution of the data.

The SP data set is right truncated, in that only clients that have either experienced the event (and achieved a positive outcome), or are censored due to death, are included in the sample. There is the

potential for left truncation, also known as delayed entry, where only individuals who survive a certain amount of time are included in the study – as those receiving community support for less than 28 days do not have to complete an ‘outcomes form’. However, as discussed earlier, this is down to the discretion of the service – and the client data includes numerous accounts of service provision less than 28 days.

Regardless of the type of censoring, it is assumed that the censoring is non-informative about the event, i.e. that the censoring is caused by something other than the event. However, as clients can access several services for numerous issues – it may be their interaction with another (not directly related) service or outcome, that sparks the completion of the ‘Outcomes Form’ and therefore highlights that the outcome of interest is unsuccessful. This raises an opportunity for further study, as this element of the programme may be better suited to a competing risk model.

SP data records the exact start and end date allowing for the calculation of the number of days, rather than the nearest month, which in turn allows for the possibility of a more sensitive analysis (Parmar & Machin, 1995, p. 25). Therefore the data is closer to being continuous rather than discrete.

‘Treatments’ are non-randomised, as clients are able to choose and have an input into their treatment path and support plan. So too can the SP worker influence the outcome type chosen and the allocation of community support services via the support plan. Similarly, there is no external control group. Therefore it is not possible to know what would happen to these same people if they were not offered the community support. However, by calculating the change in the hazard ratio in one set of characteristics compared to another, then the impact of a client having different characteristics, needs or accessing different community support can be calculated. It may be possible to find an internal control group - those with similar characteristics and demographic make-up – who chose a different outcome to achieve, but this was beyond the scope of this research.

Another limitation of the data is the interpretation of a 'success' being that the SP community support in some way helped, or led to, a client achieving a positive outcome. In reality, it may be that the client would have reached that outcome without, or in spite of, the SP community support provided. Similarly, failing to achieve an outcome is interpreted as the failure of the SP community support - at least in part - to help.

Due to limitations in the data, certain assumptions are made about the nature of the transitions data recorded within the SP dataset. First, it is assumed that the data represents a single spell for each individual, and that this only measures a single state, i.e. the data only considers exits from a single point to a single destination. It is also assumed that the model parameters describing the transition process can be parameterised using explanatory variables. There are no secular trends/changes i.e. exogenous occurrences that may change survival rates, such as a change in service provision, or any other changes in the likelihood of left or right-censoring during the observation period. Finally, it is assumed that there are no issues with tied data.

Furthermore, it is assumed that there is no state dependence, i.e. the current state does not rely on prior transition history. It is a limitation of the data that an individual client cannot be identified and tracked across the observation period.¹¹ In other words, a client may enter and leave the SP programme multiple times during the period of study (although these cannot be overlapping). There is also the possibility that there are unobserved spells in-between the support plans. This introduces potential bias, where the same client is represented more than once. The extent of this bias would depend on the number of times a client repeated during the study period. However, there would be a limit to the number of times a client could repeat as a prolific repeater would likely be identified by the SP service as in need of longer-term support (whereas this study exclusively deals with clients with short term needs). The direction of the bias would depend on whether the client has a series of successes or failures (this would affect the logistic regression results). The impact of the bias would

¹¹ A thorough examination of the available data found no obvious signs of serial SP users, but individual client identification would be required to confirm this. Client identification is available with national level, and this will therefore become an area for further study.

be less severe on the survival analysis results, as firstly these depend on successes, and secondly they are used to determine the factors that affect the length of the service (where a shorter service length is deemed preferable). However, this may raise separate questions on the efficacy of the service provided if there are clients that regularly repeat the programme.

Parmar and Machin (1995) note that for patient follow-up studies, it is the number of critical events actually observed, rather than the number of patients recruited, that is more important for statistical power considerations.

Table 17 Outcomes, Q1 2007-Q3 2009, Portsmouth

Outcome	Substance misuse	Statutory order	Harm to others	Harm from others
Not positive	382	96	83	78
Positive	378	247	142	380
	760	343	225	458

Source: Short Term Outcomes Forms, Supporting People

Table 18 Primary, Secondary and Tertiary Reasons for Not Achieving Outcome: Better Manage Substance Misuse, Q1 2007-Q3 2009, Portsmouth

	Primary	Secondary	Tertiary
Client ceased to receive support service before outcome was achieved	128	31	4
Client unable to engage with support	37	10	
Client unwilling to engage with support	196	20	1
Other	4	4	
Client awaiting assessment		1	1
Difficulties with support planning	1		
Long waiting lists for treatment services		2	
Problems accessing alcohol services	4	2	
Substance misuse services unwilling to provide services to client		1	
Treatment ongoing	12	6	1
Problems accessing drug services		1	

Source: Short Term Outcomes Forms, Supporting People

Table 19 Primary, Secondary and Tertiary Reasons for Not Achieving Outcome: Statutory Order, Q1 2007-Q3 2009, Portsmouth

Reasons for not achieving outcome	Primary	Secondary	Tertiary
Client ceased to receive support service before outcome was achieved	31	6	3
Client unable to engage with support	10	3	
Client unwilling to engage with support	45	5	
Other	4		
Client has personal difficulties relating to restrictions within statutory orders	6	3	
Problems with integrated services under MAPPA, across a range of statutory organizations		1	
Problems with local specialist support services			

Source: Short Term Outcomes Forms, Supporting People

Table 20 Primary, Secondary and Tertiary Reasons for Not Achieving Outcome: Harm To Others, Q1 2007-Q3 2009, Portsmouth

Reasons for not achieving outcome	Primary	Secondary	Tertiary
Client ceased to receive support service before outcome was achieved	32	8	2
Client unable to engage with support	9	2	
Client unwilling to engage with support	38	6	
Other	3		
Client awaiting assessment			1
Problems with local specialist support services	1		

Source: Short Term Outcomes Forms, Supporting People

Table 21 Primary, Secondary and Tertiary Reasons for Not Achieving Outcome: Harm From Others, Q1 2007-Q3 2009, Portsmouth

Reasons for not achieving outcome	Primary	Secondary	Tertiary
Client ceased to receive support service before outcome was achieved	31	5	1
Client unable to engage with support	8	2	
Client unwilling to engage with support	28	6	
Other	3	2	
Factors relating to overall staffing levels			1
Problems in the wider community contributing to risk of client being harmed by others	4	1	
Problems resulting from previous experience/risk of DV/abuse	4	1	
Specialist support services are unwilling to provide services to client		1	

Source: Short Term Outcomes Forms, Supporting People

Generally, the two most consistent and common reasons for failure across the outcomes are client based, either 'ceased to receive support before outcome was achieved', or 'unwilling to engage with support'. This was followed by 'client unable to engage with support'.

4. Statistical Techniques

4.1. Imputation

One of the unique and attractive features of this survey was the collection of data on gross household income, spread across eleven bands ranging from 'under £50 per week' to 'over £600 per week'. However, this income data was missing in 34% (342) of cases, of which 62% (212) 'refused' to answer, 33% (112) responded 'don't know', and 5% (18) gave 'no answer'. To address this issue, a missing data imputation exercise was conducted to predict the missing observations.

The data followed a univariate missing data pattern, i.e. the missing data was disproportionately focused on the income variable. The data is missing due to respondent refusal or non-response – rather than random data collection issues, skip patterns in the survey or attrition of respondents (see section 3.1 for a detailed description of the survey methodology).

In order to impute the missing variables, certain assumptions about the nature of the missing data are necessary. Household income data is assumed to be missing at random. In other words, its missingness is not dependent on its own value, and depends only on variables that are observed.

The missing data mechanism is said to be ignorable, if the missing at random assumption is fulfilled and the parameters for the missing data-generating process are unrelated to the parameters to be estimated. In other words, there is no need to model the missing data mechanism as part of the estimation process. Therefore, multiple imputation, or other weighting techniques, can be used to obtain valid effect estimates if the data are missing at random. More complex models are required for non-ignorable missing data.

While it would have been possible to simply adopt listwise deletion, this process is not without potential harm, with consequences depending on the missing data mechanism. The resulting models from simple listwise deletion are shown in Studies One, Two and Three, and are not found

preferable to the models using imputed income. Additionally, listwise deletion would considerably reduce the sample size. For multiple imputation, the benefits from a larger and potentially more representative sample are weighed against the inherent approximation errors introduced by imputation (p.923, Cameron & Trivedi, 2005).

While a more sophisticated bootstrapping method could have been used, multiple imputation is deemed a respectable method to deal with missing data (Tabachnick & Fidell, 2007). Rubin (1977) proposes using the method of multiple imputations to calculate missing income observations: “This method produces a subjective probability interval for the statistic that would have been calculated if all non-respondents had responded. Background information which is recorded for both respondents and non-respondents plays an important role in sharpening the subjective interval... The general idea can be applied to any problem with non-respondents or missing data” (Rubin 1977, p.538). So the purpose of multiple imputation is not to exactly replicate the ‘true’ values, but to replace missing data with values that allow valid statistical inference to still be obtained.

Furthermore, this technique has been accepted for publications using this particular dataset (see Bunyan & Collins, 2013; Collins, Cox, & Leonard, 2015, Bunyan, Collins, & Torrisi, 2016, Bunyan, Collins & Duffy, 2016).

Where the approach in this study differs from the standard approach to multiple imputation, is that two researchers independently conducted multiple imputation to assign values to the missing income category, and then compared and converged their results. The two researchers had been working independently on the same original dataset, Residents’ Survey 2007, but focusing on very different research questions. For example, one researcher had focused on environmental concern and digital exclusion, while the other had focused on perceptions of crime and anti-social behaviour. Hence they had formed the raw data into different variables deemed important to their research question. Even where the same variable was formed, this may have been aggregated / collapsed or

expressed in a different way. For example, researcher 1 grouped age into bands, while researcher 2 kept exact age.

Each researcher independently estimated a binary logistic regression equation (based on the variables created by each researcher) to identify the significant independent variables that could accurately predict whether a household would report its income. These variables¹² were used to guide imputation of the missing income values, utilising the 'multiple imputation' method available on SPSS¹³, utilising ten imputations. The methodology involved taking the mid-value of each of the income bands (£ per week). The natural log of the 'non-missing' income values was input into the multiple imputation method and the imputed income results for the 'missing' income were transformed back. The average of the imputed income values for the 'missing' income was coded back into one of the original eleven income bands.

As a test of convergence, the results of these separate imputations were compared; the same imputed income band was found in 26.9% of cases, and was within \pm two income bands (out of eleven) in 88.3% of cases. The mean average 'missing' income value of these separate imputations was then used to assign one of the original eleven income bands.

¹² Researcher 1's significant variables: Age group: 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+. Tenure: Owned outright, Buying on mortgage, Shared Ownership (part own/part rent from Council/HA), Council. Housing association, Private landlord, Other, No answer. Ethnic group: White, Mixed, Asian or Asian British, Black or Black British, Chinese or other Ethnic Group. Maths skills (question 27). Education. Refused credit (1=yes). Student (1=yes).

Researcher 2's significant variables: Exact age, age squared. Ethnicity (1=non-white). Young people in the house (1=yes). Disability (1=yes). Credit refusal (1=refused credit). Tenure: Owner, Social, Private. Work: Full Time, Retired, Student. Education: Degree, Alevel, Olevel, Other.

¹³ SPSS uses an algorithm known as fully conditional specification.

4.2. Principal Component Analysis

Principal Component Analysis (PCA) has been used to summarise a large set of variables into a smaller set of factors (or components) that accounts for most of the variability in the pattern of correlations. Tabachnick & Fidell recommend PCA as the better choice (compared to factor analysis) for a simple empirical summary of the data (2007, p. 635), and Guadagnoli and Velicer (1998) conclude that there is little difference between the output of PCA compared to other factor analysis techniques. PCA reduces the number of variables by transforming the original variables into a smaller set of linear combos, whereas factor analysis does this via a mathematical model using shared variance. See Tabachnick and Fidell (2007), for further details of this method, and Stevens (1996) for further reasons supporting the use of PCA versus Factor Analysis.

Confirmatory analysis was conducted before applying PCA techniques. The data is deemed suitable for factor analysis if there are enough cases, recommended as “at least 300 cases” (Tabachnick & Fidell, 2007, p. 613) or ten cases to one component (Nunnally, 1978). This included ensuring strong correlation coefficients; greater than 0.3 is deemed adequate (Tabachnick & Fidell, 2007). Additionally, Bartlett’s test of sphericity (significance at $p < .05$) (Bartlett, 1954) and the Kaiser-Meyer-Olkin (KMO) measure of sampling accuracy (minimum value of 0.6 suggested by Tabachnick & Fidell (2007) are used (Kaiser 1970, 1974).

Following factor extraction, the following criteria were used for choosing the number of components: Kaiser’s criterion (keeping components with eigenvalues greater than 1), Catell’s (1966) Scree test (retaining all factors above the break in the plot) and Horn’s (1965) Parallel analysis (comparing eigenvalues to a similar sized randomly generated dataset).

4.3. Survival analysis

Survival analysis generally involves the modelling of time to event data. The 'event' is the change which causes the subject to transition from one state to another. This is often considered as a death or failure, although it is also possible to have repeated 'failure' events. The same methods are employed in a range of subjects, although they may commonly be referred to by different names: 'event-history analysis' in sociology, 'failure-time analysis' or reliability theory in engineering, customer journey or time-to-churn in marketing, and duration analysis/modelling in economics.

The survival function is the probability that the time of death is later than some specified time, t .

$$S(t) = P(T > t)$$

T is a random variable denoting the time of death, P = probability

It is usually assumed that $S(0) = 1$, but it is possible to be less than 1 if there is the possibility of an immediate event. $S(t)$ must be non-increasing, $S(u) \leq S(t)$ if $u \geq t$. In other words, survival to a later time is only possible if all earlier times are attained. It is also usually assumed to approach zero as time increases without bound $S(t) \rightarrow 0$ as $t \rightarrow \infty$.

A related concept, of particular importance is the hazard rate. The hazard rate is the instantaneous probability of the given event occurring at any point in time, or in other words the event rate at time t conditional on survival until time t or later.

This is also known by a variety of different names: 'force of mortality', hazard function, conditional failure rate, intensity function in stochastic processes, or the inverse of Mill's ratio in economics. Usually denoted as λ , the hazard rate must be non-negative, but can be increasing, decreasing, non-monotonic or discontinuous.

$$\lambda(t)dt = P(t \leq T \leq t + dt | T \geq t) = \frac{f(t)dt}{S(t)} = \frac{-S'(t)dt}{S(t)}$$

One of the main strengths of the Cox proportional hazards model (Cox, 1972) is that it allows a non-constant hazard rate to be modelled, without making any assumptions about the underlying distribution of the hazards in different groups, except that the hazards remain proportional over time (Parmar & Machin, 1995, p. 119). Therefore, the hazard rates are able to change over time – as long as their ratio remains constant. The Cox proportional hazards model is therefore semi-parametric, in that there is no assumption about the shape of the hazard function, but there are assumptions about how covariates affect the hazard function.

This can be interpreted as, at any given time, t , the hazard rate applying to a client will be h times that of the average client.

$$h(t) = e^{\beta(t)} = \exp[\beta(t)]$$

implies

$$\beta(t) = \log h(t)$$

So that when hazards are proportional

$$\log[h(t)] = \log h = \log\left[\frac{\lambda(t)}{\lambda_0(t)}\right] = \beta$$

The Cox model

$$\lambda(t) = \lambda_0(t)\exp(\beta x)$$

Where x = indicator for treatment/prognostic/covariate.

The Cox proportional hazards model (Cox, 1972), assesses the relationship between survival time (time to event) and covariates (explanatory variables). The hazard ratio is the main output of the Cox proportional hazards model. The Cox proportional hazards model has been used in a number of different contexts, from novel uses, such as predicting bank failure (Lane, Looney, & Wansley, 1986) or offender recidivism risks (Kruttschnitt, Uggen, & Shelton, 2000), to being regarded as one of the most important statistical models in biomedicine and medical research.

4.4 Logistic Regression

Logistic regression, also known as the logit model, helps reveal the probability of a particular outcome given the individual's characteristics, or responses to other questions. In the simplest case this is for a dichotomous, binary, dependent variable. However, it also has applications for multinomial (ordered or unordered) dependent variables.

Logistic regression, while similar to discriminant analysis, is more flexible and free of restrictions, particularly in the use of dependent variables. There are no assumptions about the distributions of independent variables, they can be discrete, dichotomous or continuous variables and do not have to be linearly related to the dependent variable, or of equal variance within each group. However, Tabachnick and Fidell (2007) report that discriminant analysis may be more powerful and efficient under the condition of dependent variables abiding by the restrictive distribution assumptions. Ordinary Least Squares regression would not be appropriate as it ignores the discreteness of the dependent variable and would not constrain the predicted probability between 0 and 1.

Other alternatives include probit, which assumes a normal distribution of the cumulative distribution function, rather than a logistical distribution. In comparison to probit, the logit model has a relatively simple form, and the interpretation of coefficients in terms of log-odds ratios are often more accessible. Additionally, this thesis also aims to replicate, or at least provide comparison to, previous studies that have used logistic regression (for example, Flatley et al., 2008). Furthermore, given that the theoretical consequences of model misspecification are not that great and there is often very little difference between predicted probabilities from probit and logit, logistic regression is preferred.

If we assume the cumulative distribution of the error term is logistic, then we can use the logit model. Assume p_i is the probability of having one of two outcomes based on a nonlinear function of the best linear combination of predictors.

$$p_i = \frac{e^z}{1 + e^z}$$

where p_i is the estimated probability that the i^{th} case is in one of the categories and z is a linear regression equation: $z = \beta_0 + \beta_1 X_1 \dots + \beta_k X_k$ with constant β_0 , coefficients β_j , and dependent variables X_j , for k predictors.

The following is referred to as the odds ratio, or relative risk:

$$\frac{p}{1 - p} = \exp(z)$$

This linear regression equation creates the logit or log of the odds:

$$\ln\left(\frac{p}{1 - p}\right) = \beta_0 + \sum \beta_j X_{ij}$$

The linear regression equation is the natural log of the probability of being in one group divided by the probability of being in the other group. In other words, the log odds ratio is a linear function of the explanatory variables.

Maximum likelihood is the procedure for estimating coefficients, following the best linear combination of dependent variables to maximize the likelihood of obtaining the observed outcome frequencies.

The coefficients (β_j), for the dependent variables are the natural logs of the odds ratio. Therefore, the odds ratio = $\text{Exp}(\beta_j)$. In other words, the change in odds of being in one category of outcome when the value a dependent variable increases by one unit. Odds ratios > 1 are interpreted as an increase in the likelihood, and values < 1 as a decrease. The closer the odds ratio is to 1, then the smaller the effect. For example, an odds ratio of 2.5 means the likelihood increases by 2 and a half

times for each one unit increase in that dependent variable. An odds ratio of 0.75 means it reduces, it is 0.75 times less likely (or 25% less likely). This can be inverted, to express the relationship such that an increase in the dependent variable results in a 1.33 times reduction.

Multinomial (also known as polychotomous) logistic regression can be used when there are more than two possible outcomes of a dependent variable. These outcomes are usually mutually exclusive. It is a simple extension of binary logistic regression, and retains the characteristic of giving a probability between 0 and 1. Interpretation of the results differs, as it is presented relative to the reference or base category. Study Two requires the use of multinomial logistic regression when there is a clear ordering of the outcome variable, and it is non-nested.

Three potential issues that can affect the reliability of logistic regression results: sample size, multicollinearity and outliers, are dealt with for each of the studies in this thesis. Firstly, large initial sample sizes and the collapsing of categories (where applicable) ensured there were enough cases to variables, enough cases in each category and avoided complete separation of groups (i.e. all responses in one group have the same value). Secondly, multicollinearity is tested by collinearity diagnostics, such as the coefficients table, where tolerances $<.1$ indicate the variable has high correlations. Any issues with multicollinearity are addressed by the factor reduction technique of Principal Component Analysis. Thorough initial checks and cleansing of the data ensured that inherent outliers were dealt with accordingly. As there were no serious issues identified with the goodness of fit of the final models, then a visual inspection of the residuals sufficed to check for further outliers.

This study adopts the direct (forced entry) logistic regression approach, i.e. all predictors enter the equation simultaneously, as opposed to a sequential or stepwise method. This approach is chosen as there are no specific hypotheses about the order or importance of dependent variables; the aim is simply to determine the significance of the independent variables entered into the regression.

The goodness of fit of the logistic regression models can be checked in a number of ways. While “no single test is universally preferred” (p.503, Tabachnick & Fidell) for goodness of fit, the most common are presented in this thesis for each of the models.

The Hosmer & Lemeshow Goodness of Fit test, uses deciles-of-risk statistics to evaluate whether observed event rates in each group match the number predicted into each group by the model. Well calibrated models will have similar expected and observed event rates in subgroups. Therefore a non-significant Chi-square value (more than 0.05 is considered reliable) is preferable.

When assessing the constant only versus full model, significance of more than .05 is preferable.

Pseudo R square values are reported for each model. These include McFadden’s R square, Cox and Snell’s R square (which takes account of sample size) and Nagelkerke R Square (which adjusts Cox and Snell’s R square so that a value of 1 is possible). It is worth noting that unlike R squared used in multiple regression, values in the range of 20% to 40% are considered highly satisfactory (Hensher & Johnson, 1981).

$$\text{McFadden's } R^2 = 1 - \frac{LL(B)}{LL(O)}$$

$$\text{Cox and Snell } R_{CS}^2 = 1 - \exp \left[-\frac{2}{N} [LL(B) - LL(O)] \right]$$

$$\text{Nagelkerke } R_N^2 = R_{CS}^2 / \{ 1 - \exp[2(N^{-1})LL(O)] \}$$

Where LL(B) is the log- likelihood of the full model and LL(0) is the log- likelihood of the constant-only model.

Classification tables compare the model’s predictions to the mean of the independent variable. The headline results presented for the studies in this thesis include; the overall percentage accuracy in classification, the sensitivity (true positives, with the characteristic correctly classified) and the

specificity (true negatives, without the characteristics correctly classified). The cut-off probability criterion of 0.5 was used for all logistic regression models in this thesis.

Individual variables can also be tested; the most common technique is the Wald statistic. This is formed from the squared logistic regression coefficient divided by its squared standard error. A significant result indicates a dependent variable that is reliably associated with the outcome. Results are presented in this thesis by * denoting significance at the 90% confidence interval, ** at the 95% confidence interval and *** at the 99% confidence interval, with standard errors provided in parenthesis.

It is also possible to evaluate the effect of omitting a predictor, also known as a likelihood ratio test. However, this has not been used in this study as the intention has been to assess the relative importance of independent variables presented by the literature rather than to perfect a predictive model.

5. Community Safety Under New Labour

This section intends to describe the context and history surrounding the concept of 'community safety', focusing on the period which saw the rise of community safety in the UK under 'New Labour' (see Jones & Norton, 2010, for an explanation of New Labour). The period associated with New Labour has been chosen as this represents the implementation of the Morgan Report recommendations, resulting in significant growth and widespread adoption of the term community safety. It is also in line with the data sources used throughout this thesis.

This is not intended to be an exhaustive review of the full literature (for this see Crawford, 1997; 1998; Gilling, 1997; 2007; Hughes, 1998; 2007; Hughes and Edwards, 2002; Hughes, McLaughlin & Muncie, 2002). Rather, this section takes a novel approach by attempting to explain the progression of community safety as a concept that has been influenced by various interested parties and ideologies. In doing so, this section addresses the research question:

Q2. To what extent has community safety been influenced, and if so how, by whom and why.

First the term is broadly defined, followed by a brief history of its legislative and political background, with particular focus on the New Labour period. The rise of community safety is described with some unique statistics. Community safety is then differentiated from 'crime prevention' with the aid of more detailed explanation. The reasons and consequences of the adoption of the former over the latter is expanded upon.

This section then considers the various influences on community safety. Firstly by, of and via the community, then it focuses on the opportunities and incentives for influencing community safety via the multi-agency arena. Particular focus is made on local authorities being placed at the forefront of these partnerships, bringing with them an emphasis on managerialism and evidence-based policy. Business interests and some other criticisms and explanations for the nature of community safety

are broadly discussed. The section concludes with some conjecture about the current and future state of community safety.

Community safety acts to provide formal social control and increase the perceived efficacy of it (the work of crime fighting agencies) to enhance the effectiveness of 'control signals'. At the same time, community safety attempts to instil, encourage and facilitate informal social control – through the active support of community groups, parental responsibility training etc. Therefore, it acts as an over-arching concept that pulls together the empirical studies in this thesis.

The term 'influence' can be used to describe a broad spectrum of interactions; from the taking over of something and using it for a different purpose, forcing it to go to a different destination or to use it for one's own purpose, to a more subtle nudging approach. The influence can also be unintentional, and no value judgement is made in this study. The concept of 'influencing' is used to pull together and explain the various influences and agencies that have effected and shaped community safety over this decade in England and Wales. Many of the 'influencers' detailed in this paper are relevant solely to the field of community safety, but there are a number of more widespread concepts that have filtered into community safety, for example the spread of 'evidence based policy' decision making. Using the effects these concepts have had on the field of community safety as a lens, helps to put a focus on these issues.

This study documents how, why, where and by whom community safety has been 'influenced' and the effects this has had. The broad theme is that the inherent vagueness of community safety allows influences to enter. Influencers have entered via both the 'community' and multi-agency arenas, with those in the latter arena encouraging the proliferation of such concepts as managerialism and evidence based policy which have diverted community safety away from its original course.

Defining 'Community Safety'

Northern Ireland's Community Safety Unit (n.d.) has the most widely used definition:

"Preventing, reducing or containing the social, environmental and intimidatory factors which affect people's right to live without fear of crime and which impact upon their quality of life. It includes preventative measures that contribute to crime reduction and tackle anti-social behaviour."

The Local Government Management Board (1996) defines community safety as:

"the concept of community-based action to inhibit and remedy the causes and consequences of criminal, intimidatory and other related anti-social behaviour. Its purpose is to secure sustainable reductions in crime and fear of crime in local communities. Its approach is based on the formation of multi-agency partnerships between the public, private and voluntary sectors to formulate and introduce community-based measures against crime".

However, it is perhaps the lack of a consistent definition that best characterises the term. Community safety has been described as being marked by extreme vagueness (Gilling, 1997). The "nebulous quality" (Gilling, 1999, p. 8) and "ill definition and vacuity" (Crawford, 1997, p. 25) of the term is discussed further below, with particular emphasis on it being this undefined characteristic that allows it to be influenced. While it is common for any government to adopt sound bites in relation to policy areas, particularly when presenting information to the general public, it could be argued that a strong association with New Labour and its reputation for doing this may have perpetuated the vagaries associated with community safety (see Beaton, 2000). The lack of a central definition and the adoption of the concept from academia into local government policy may also contribute (Gilling, 2007).

The term 'community safety' is often incorrectly used interchangeably with 'crime prevention'. Crime prevention is more easily classified into several overlapping concepts: situational, environmental and social crime prevention that specifically focus on the 'root causes' of crime (Hope, 2001). These are discussed in more detail below. Describing community safety as a "synonym of crime prevention with fluffy overtones" (Wiles and Pease, 2000, p. 25) and a "'capacious phrase' signifying security against harms from all sources, not just those proscribed by criminal law" (Hughes, 2006) fits the crime prevention categories while reflecting the move beyond traditional criminal justice conventions.

The term cannot be easily separated from the community support, or the activities entailed which go "beyond measures to reduce opportunities for crime, tackling specific types of crime and assisting victims to a focus on 'tackling the causes of crime'", through family support initiatives, youth and community development programmes, neighbourhood initiatives, substance misuse schemes, pre-school and education programmes as well as working with offenders and their families on employment, training and debt issues (Home Office, 1991. p. 32).

Brief History of Community Safety

This section concentrates on the New Labour period of government, from its election in 1997 to the end of its term in May 2010, although earlier influences in the formation of the concept of community safety have also been taken into account. This paper is written in the context of changes experienced in England and Wales, although many of the concepts discussed will also be relevant outside of this region, with the exception perhaps of specific legislation.

Classical and positivist perspectives about the nature of crime prevention, which were part and parcel of penal welfarism (Garland, 1985), were often built on slim evidence and contradictory assumptions and were increasingly viewed as having failed to stem the rising tide of crime by the

1970s (Garland, 1996; 2001; Hughes, 1998). This became the starting point for scholars seeking to consolidate, clarify and develop alternative ways of thinking about crime prevention.

The 1984 Home Office Circular 8/84, was the first explicit official recognition of the limited capacity of the police to effectively prevent crime without drawing on the resources of other statutory partners and the community (Edwards and Hughes, 2009, p. 65).

The Morgan Report (Home Office, 1991) found that community safety should be developed along multi-agency partnership lines and that this required the local authority and the police to play key roles under a statutory obligation. The Morgan Report 1991 gave this new approach “a nationally recognisable ‘brand name’: ‘community safety’” (Edwards and Hughes, 2009, p. 65).

These recommendations fell on deaf ears in the Conservative government of the time, epitomised by John Major’s words on crime: “we should understand a little less and condemn a little more”, (Jones, Kavanagh, Moran, & Norton, 2001, p. 545) but they were later championed by Tony Blair with the counter sound bite: “Tough on crime, tough on the causes of crime.” (Blair, 1994)

When New Labour came into power in 1997 it crystallised these recommendations into the Crime and Disorder Act 1998 and officially created Crime and Disorder Reduction Partnerships and Youth Offending Teams. This legislation was built on three key principles: to decrease youth offending, that the police and local authority – with the whole community – must establish local partnerships to cut crime, and that public bodies must consider the crime and disorder implications of all their decisions. The Act also introduced a number of powers such as Anti-Social Behaviour Orders and Parenting Orders (Home Office, 1998).

The Police Reform Act 2002 and the 2006 White Paper ‘*Building Communities, Beating Crime*’ increased the number of responsible authorities and broadened the agenda. Further legislation, such as the Anti Social Behaviour Act 2003 and the Youth Justice and Criminal Evidence Act 1999, that

emphasises the provision of support as well as sanctions, has been instrumental in shaping the ethos and scope of community safety. For a more detailed history of 'community' and 'partnerships' before New Labour see Crawford (1997).

The Rise of Community Safety

Community safety was first mentioned in the American press as early as 1972,¹⁴ regarding a "responsibility for community safety". "Community safety programs" were mentioned a year later, and two years after that it was used in the context of home protection, relating to "community safety-patrol office" ("The American home under siege; Bells, Bolts and Lights vs. Intruders," 1975, February 24). However it wasn't until the late 1970s that community safety was used specifically with regard to the "police and others responsible for our community safety" (West, 1979, November 15). It had been commonly used in America from 1980 onwards to describe bail options (Sawyer, 1980, April 3).

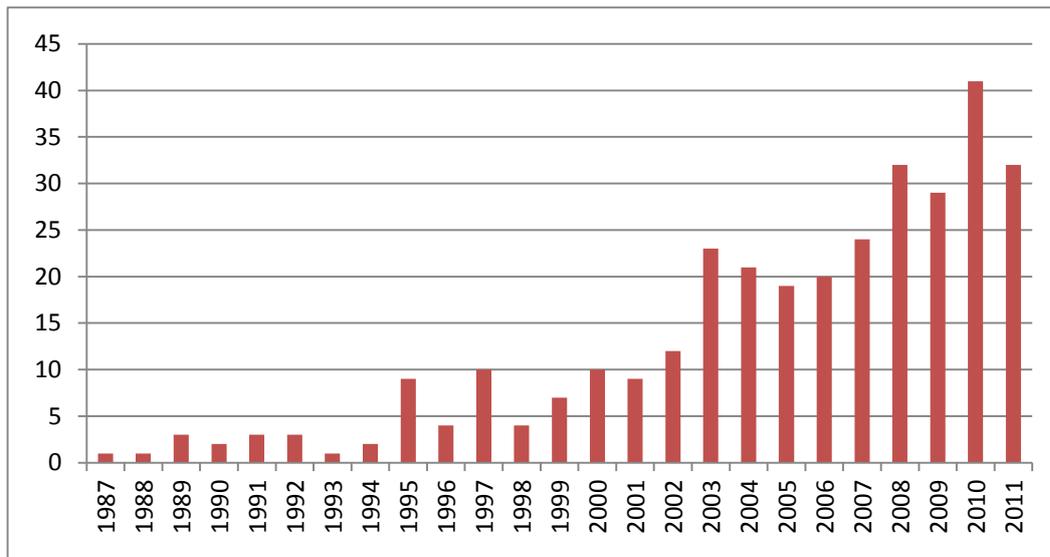
The first mention in the UK press was not until 1986, and even then this was only in the general form of "ensuring greater personal and community safety" (Tirbutt, 1986, March 17). However, less than a year later in early 1987 there was reference to "the council's policing and community safety unit" (Pallister, 1987, January 16).

As can be seen in Figure 11 below, major mentions of 'community safety' in UK national newspapers¹⁵ remained low, peaking in 1995 and 1997 (New Labour's election year) before continuing to rise steadily to a peak of 41 in 2010 (the end of the New Labour period). This supports the decision to focus on this period of time.

¹⁴ 'Community safety' was searched for as a 'common term' in 'All English Language News' (Nexis UK) to pinpoint the emergence of the term.

¹⁵ 'Community safety' as a 'major mention' in all UK National Newspapers to 31 December 2011. Retrieved 11:00 20th March 2012.

Figure 11 Major Mentions of 'Community Safety' in UK National Newspapers, 1987-2011



Source: Nexis UK

According to the Department for Communities and Local Government's (2009, p. 10) Revenue Account and Stats, Community Safety accounted for £504,251,000 local authority spend¹⁶ a year in England and Wales alone, towards the end of the New Labour period in 2009/10 (Department for Communities and Local Government, 2009, p. 10; Stats Wales, 2012).¹⁷ This is equivalent to £9.20 per capita. Additionally, 66,854 police officers in England and Wales had 'community' as their main function (defined as community safety, responses and neighbourhoods), accounting for almost half (46.5%) of police officers by 2010 (Her Majesty's Inspectorate of Constabulary, 2011). This is equivalent to more than the entire population of Royal Lemington Spa or Torquay. Furthermore, an additional 18,675 police staff and Police Community Support Officers had 'community' as their main function. To put this in context, there were 1.56 police officers, staff and Police Community Support Officers providing community safety per 1,000 population of England and Wales.

Crime Prevention

In order to accurately differentiate the notion of community safety from crime prevention, it is necessary to first define what is meant and understood by crime prevention. Van Dijk and de Waard

¹⁶ Net Current Expenditure (therefore not including 'Capital charges')

¹⁷ Figure derived from £463,564,000 in England and £40,687,000 in Wales,

(1991, p. 483) define crime prevention as: “The total of all private initiatives and state policies, other than the enforcement of criminal law, aimed at the reduction of damage caused by acts defined as criminal by the state”. Some see this as a complement to law and order, rather than a substitute or alternative development (Crawford, 1997). This forms part of O’Malley’s (1992) and Garland’s (1996; 2001) responsibilisation advancement, whereby individuals and communities take on a greater burden of, and responsibility for, safety issues. Others see crime prevention as the antidote to the over-reliance on law and order.

There are numerous classification systems for crime prevention techniques (see Brantingham and Faust, 1976; Crawford, 1998; Hughes, 1998; Tonry and Farrington, 1995; Van Dijk and de Waard 1991). However, two tend to dominate. They both have weaknesses, and equally recognise that conventional law and order forms part of crime prevention (White et al., 2008, p. 23):

1) The ‘criminological’ technique identifies two broad approaches based on the focus of their respective intervention:

1.1) Social – this approach aims to reduce the likelihood that individuals or groups will commit crime by strengthening informal (e.g. family, neighbourhood, friends) and institutionally based (e.g. schools, work, culture and sport) incentives to be law abiding, specifically by identifying and addressing ‘risk’ and ‘protective’ factors.

1.2) Environmental – this approach addresses Felson’s (2002) crime triangle elements of target and guardianship, aiming to modify the physical situation to minimise the extent to which environments can give rise to criminal opportunities. This is undertaken via two techniques: broad-based planning and design, and focused situational crime prevention (White et al., 2008, p. 22).

2) The second dominating crime prevention technique is Brantingham and Faust's (1976) and Brantingham, Brantingham and Taylor's (2005) classification that divides prevention on the stage and target of intervention, based on public health theory (see also Crawford 1998; Hughes 1998):

2.1) Primary prevention: early intervention that can target an entire populace. This can be physical or social; examples include intervention with disadvantaged infants to improve their legitimate life opportunities.

2.2) Secondary prevention: targeted intervention of population and environments at risk, prior to an offence happening. For example, increased surveillance of night time economy locations.

2.3) Tertiary prevention: rehabilitation, which targets recognised offenders and environments previously affected by crime. For example, prison-based treatments or targeting of crime hot spots.

From Crime Prevention to Community Safety

Felson's (1995, 2002) crime triangle describes three essential elements that are present when a crime takes place: 'Offender', 'Target' and 'Absence of capable guardianship'. This fits neatly within the environmental approach and is based on the routine activity model, where the emphasis is on manipulating physical environments as the most cost effective route to crime reduction, as opposed to changing human nature. However, this has been modified by Eck (2003) to include an outer triangle of 'controllers': 'handlers' for potential offenders; 'managers' for place; and 'guardian' for victim/target. This thereby helps to highlight that crime can often be a product of social processes and not merely physical interactions at certain times and places (White et al., 2008, p. 20). Therefore, interventions can also be directed towards the 'outer triangle' to deter offenders.

Moreover, by focusing on reducing criminal opportunities as opposed to a criminals' proclivity to offend, situational crime prevention can be criticised as 'commodified control' (Garland, 2001, p.

200), merely displacing crime rather than eliminating it (Halsey, 2001). Community safety attempts to address this limitation of crime prevention, avoiding simple displacement, by attempting to address the underlying causes.

Furthermore, crime prevention is often dovetailed with appeals to both 'community' and 'partnership' (Crawford, 1997, p. 44). This is undertaken through a community's role in enabling, enforcing and engendering informal social control (Skogan, 1990) as well as being a way of reaching the population and encouraging them to adopt preventative measures, as seen with the Neighbourhood Watch scheme (Hope and Shaw, 1988).

Community safety activities are not as narrowly defined as crime prevention ones (Crawford, 1998). They tend to focus on people or society as opposed to simply property. Wiles and Pease (2000) recognise that people and communities face a broad spectrum of risks that cannot easily be categorised as specifically about crime or not. For example, environmental hazards, road safety or health-related issues that may tend to correlate with crime or affect the same communities. Therefore, a more comprehensive term like community safety avoids having to distinguish between anti-crime initiatives and strategies to combat other harms (such as excessive alcohol use, road safety, issues associated with the management of the night time economy) which perhaps should not be performed in isolation. Furthermore, Wiles and Pease (2000) propose a 'pan-hazard' approach to community safety that is similarly endorsed by Hughes (2002). However, Cherney (2003) reports on the perils of program drift, or mission creep: when agencies adopt 'community safety' and drop the 'crime prevention' term, the focus can be lost and the objectives and activities have the tendency to shift and become unclear.

By the term community safety being so flexible and all encompassing, new ideas and practices can be readily adopted. Some authors have described this as one of community safety's strengths over

the more narrowly defined penal-welfare system. Moreover, Edwards and Hughes (2009) point to community safety's capability of aligning with a spectrum of political positions.

However, this flexibility is perhaps a double-edged sword. This "capacious phrase" (Hughes, 2006), with its "nebulous quality" (Gilling, 1999, p. 8), "ill definition and vacuity" (Crawford, 1997, p. 25) means that this same flexibility allows it to be bent to the will of potential influencers. However, the direction of the causality is not clear cut, as the breadth of 'influencing' that has already occurred may have reinforced and escalated the inherent 'vagueness' of community safety.

Potential influencers of community safety include: "political parties, organisations, commercial interests, pressure groups, academics, and the public using them to pursue particular agendas or to justify and legitimate certain policies and demands" (Crawford, 1997, p. 26).

Community

This section of the thesis is primarily interested in the term 'community safety' when it is used as a noun, expressing an idea, concept or as the physical manifestation of a partnership of agencies or a department. This is in contrast to simply joining the two separate nouns of 'community' and 'safety' which would only refer to the safety of the community. However, the remainder of the thesis uses community safety in its more general sense.

Calling for community "unites and transcends the established British political parties" (Crawford, 1997, p. 45). Appealing to the 'community' has become commonplace; from 'community medicine' through 'community architecture' to 'care in the community', various government programmes have been launched to political acclaim. This idea is perhaps most commonly used for crime and criminal justice; use of 'community policing', 'community-based crime prevention', 'community mediation', and 'punishments in the community' for example. For more on the use of community within criminal justice settings see Crawford (1997).

'Community Policing' has become a catch-all term for a whole host of initiatives and strategies within police organisations. Weatheritt (1993) classifies three characteristics of community policing: foot patrols and officers with ongoing responsibility for a neighbourhood, partnerships, and consultation with local communities. The latter point ties in with efforts to increase police accountability, and so some have said that community policing developed as the panacea for poor public confidence, and a lack of legitimacy and effectiveness (Crawford, 1997, p. 47). Similarly, it was regarded as a way to fix the increased separation between the police and communities, brought on in part by the increased professionalism and specialism within the police force and the introduction of panda cars and Unit Beat Policing. Therefore it represented a move away from, or cure to, a merely reactive policing style, or one that when it was proactive, seemed to alienate and create further divisions between certain communities, according to Kinsey, Lea and Young (1986).

Neighbourhood watch schemes, established in 1982, are often heralded as the archetype of community safety, combining a crime prevention ethos with one of community control and regulation. This is despite the growing evidence that they have had little success in reducing crime, but may address communal fear of crime and instil confidence in relationships between the police and the wider community (Crawford, 1997).

In the context of 'Community punishments and sanctions', 'community' refers to any form of punishment not 'in prison'. This is in a similar vein to 'care in the community' for mentally ill patients during the 1980s. Embodied in the 1991 Criminal Justice Act, this implies that 'less serious offenders' could and should be dealt with in the community rather than in costly prisons.

The idea of Community Mediation and Community (or Family Group) Conferencing is thought to "embody to some degree a perceived need to connect the formal criminal justice process with informal control and mechanisms and to involve ordinary people in its workings" (Crawford, 1997, p. 54).

The specific use of the term 'community' itself is also important as it not only suggests communities can be the cause of crime and ASB, but they can also embody the solution. The following section takes yet another angle, whereby the community element can also form the source, route or mechanism of the influencing.

The Influence on Community Safety: Community Groups

This section will first look at the influence of community groups, then at the possible hijacking of the community groups themselves, by interested parties within the community. The community is directly and indirectly involved with community safety activities in a number of ways:

Firstly, communities (and community groups) are consulted on their views about what they perceive to be the most important problems and issues in their local area. Those issues identified, become the priorities for community safety agencies. Therefore, the agencies are implicitly assuming and accepting that the 'community' of local residents, are accurately perceiving local problems. However, the third study in this thesis identifies that a mismatch exists between perceptions and measured observations of local (drug) problems. Furthermore, there is also a feedback loop, whereby the perceptions that inform the priorities, are more likely to be informed by the perceived effectiveness of the agency services they are directing.

Furthermore, community groups, or volunteer associations, at the 'grass roots' level are also encouraged to participate and partner with the community safety agencies. Usage of the term 'community safety', as opposed to crime or crime prevention, is often recommended to avoid the associated stigma (also see Cherney, 2004).

Lacey and Zedner (1995, p. 315) propose that community groups may not actually represent the views of people in the neighbourhood as in the UK they are often initiated, constructed, funded, and run by the state, or officials on their behalf. Therefore, superficially the 'community' may be asked

for their views – but that ‘community’ was organised by the state. This is also known as agency dependency.

Regardless of whether the community group is directly run by the state or not, there is the potential for the so called ‘veil of community’ to be used to justify preferred policies. This is the process by which a consensus, or community consultation, is used by an agency as the cover or justification for policies, initiatives or legitimising certain activities (Crawford, 1997, p. 39).

Even where there is no state intervention, then the ‘community’ may still be hijacked from within. Rather than uniting local residents and business people around a common objective, the US experience was that the prospect of funding became a catalyst for power struggles between interest groups with widely differing outlooks and philosophies. Voluntary associations are described by Skogan (1988) as one of two extremes. Preservationists are typically conservative, “long-term residents, home-owners, small business and local institutions with an interest in preserving the status quo” (Skogan, 1988, p. 43). They tend to advocate more intensive local policing and surveillance, and coordinate resistance to anything that would attract ‘undesirables’ – such as lower cost housing or drug treatment centres. Whereas insurgents tend to be disadvantaged or in some way marginalised, and tend to support the addressing of structural problems like unemployment, racial discrimination, and access to housing and health care (Skogan, 1988, p. 56).

Furthermore, Squires (1999, p. 13) points to the selective interest representation (or misrepresentation) more generally in local corporatist policy making systems. There is an overwhelming representation of the views of white, middle-age, middle-class men. Therefore, crimes against young people, women, the lesbian, bisexual, gay and transgender communities do not appear as community problems, and are therefore less likely to surface in community safety activity.

This section will continue by looking at specific agencies that have attempted to influence community safety before exploring the overarching role of broader intangible concepts, such as managerialism.

The Influence on Community Safety: Multi-Agency Partnerships

Community safety cannot be easily separated from the service or process by which it is delivered. Integral to the delivery of community safety is the multi-agency partnership approach that has become ubiquitous with community safety, encapsulating New Labour's aim "to make us all partners against crime" (Blair, 1996).

Crime prevention is often a secondary, if not a primary, concern for numerous agencies already in existence. Therefore, appeals for partnership working already go hand-in-hand with crime prevention. By further expanding the scope of activities under community safety - so has the pool of agencies with an interest grown.

The multi-agency approach is oft-cited as one of the strengths of community safety: working for the eventual benefit of the community and society, rather than solely the goals of any one institution (as previously epitomised by the criminal justice system). However, this can also be one of its weaknesses as it not only allows, but encourages, agencies with different priorities, agendas and objectives to enter and steer the amorphous forming of community safety. Given that different agencies will have varying levels of skill in communicating and garnering support for their priorities, then Squires (1999, p. 13) proposes that the strategies may be less well formed, and potentially biased, than desired or even intended.

Similarly, there is often an uncertain hierarchy, with prevention rarely the core business of all partners; there may be no ownership of the concept. Another potentially attractive feature of community safety stems from the responsibility for action transcending the jurisdiction of any one

criminal justice agency (Crawford, 1997, p. 44). However, it tends to be the police that have overall responsibility and drive the process for crime prevention activities, whereas community safety programmes tend to emphasise the role of local authorities and community groups over the police (Squires, 1999, p. 2).

There is an inclination towards inward-looking measurement; judging how effective or successful a community safety agency is based on the level of multi-agency partnership working, rather than its ability to reduce crime, ASB and the fear of crime in an area. This continuous striving towards multi-agency partnership working, may result in the dilution of the original intended purpose. Therefore, the concept of 'multi-agency partnership working' has the potential to influence community safety. It is also worth noting that this element has the potential to develop a mono-agency, whereby all agencies are involved but they have lost their original or different characteristics that made their collective contributions worthwhile in the beginning. However, this study does not attempt to address whether multi-agency working has been achieved, or whether it is desirable.

The Influence on Community Safety: Local Authorities

Given the prominent role of local authorities in Community Safety partnerships, there is extensive involvement of local authority managers delivering these services. This strong influence is not necessarily intentional, but is perhaps inescapable as these managers are on the frontline of service delivery (see Hughes & Gilling, 2004).

The long-held practice and need for local authorities to solicit and bid for funding, and bidding from central government and other external sources has also affected the practice of community safety. Collins (2007, p. 76) uses the example of economic development staff, but a parallel can be drawn in the field of community safety, where contestants enter an inverse beauty contest for funding. This can also be thought of as negative urban boosterism. On the one hand, ostensibly trying to reduce

the fear of crime, while on the other stressing the terrible increase in crime that requires urgent and ongoing funding.

The Influence on Community Safety: Modernisation and Evidence Based Policy

In crime prevention and criminology more generally, the scientific rigour and empirical investigations that underpin research, encompassed by experimental criminology and crime science, is used to identify 'what works'. This is then used to inform and guide policy and practice. It is this underlying technique and principle that is to some extent embodied, or at least heralded to be, in the approach of Evidence Based Policy. However, Evidence Based Policy goes beyond the narrow focus of crime prevention and forms a part of a wider ranging government modernisation strategy, where it is embodied across all policy domains and throughout the policy process (Wells, 2007; Sanderson, 2002). This includes the monitoring, auditing and setting of numerous targets and performance indicators that have crept across the whole spectrum of governmental activity (Collins, 2009, p. 247).

Rhetoric became an established part of New Labour's government modernisation agenda; epitomised by the phrase "What counts is what works" in the Labour Party's 1997 General Election Manifesto (Blair, 1997). As local authorities were increasingly taking the lead in community safety partnerships this rhetoric filtered through to decision making, resulting in numerous unintended consequences.

The UK's Crime Reduction Programme, a 10 year project initiated in 1999, but wound up after its initial three-year trial, has been proclaimed as "the most ambitious attempt to translate these principles into working practice" (White, et al., 2008, p. 15). The stigma of this failure may give some clue as to why Evidence Based Policy did not work for community safety during New Labour's reign.

However, there is also a tendency, or certainly an incentive, for distorted versions of Evidence Based Policy. For example, 'policy based evidence' (Hayden and Jenkins, 2014) when the political or

organisational decision has already been made, and then the evidence to support the policy is collected. This can be seen where pilot studies are conducted after the funding of the project has been agreed and the political declaration has been made.

Furthermore, Gilling (1994, p. 244) highlights the inherent inability to evaluate the complex social policies that comprise the community safety approach. By their very nature, decision makers are unable to compare them. Hence, the tendency to revert to situational 'crime prevention' activities that lend themselves to decision makers' tried and tested techniques of evaluation. Similarly the decision makers may take the path of least resistance: to choose policies that can be most easily measured.

There is also the possibility that policies will be implemented for reasons other than their ability to reduce crime. This could be the inclusion of ideas that 'appeal' or are 'affective' (rather than being effective), such as ineffective diversion schemes. Furthermore, the managerialist way of thinking that has seeped into the fabric of community safety practice – where it is the means rather than the ends that are important – can influence the chosen projects. This could mean processing a certain number of 'youths hanging around' regardless of its impact, or meeting a target for diversionary activities without considering the likelihood of those attending being 'diverted' from anything. Likewise it could be observed as a return to situational crime prevention. Equally it could surface as a move away from long-term or indirect social policies with indefinite or hard to measure outcomes.

The Influence on Community Safety: Business interests

It can be argued that the business community has influenced the path of community safety. This is perhaps most evident within town centre areas with closed circuit television (CCTV) (which clearly only protects each camera's immediate area). For example, the 'CCTV Challenge Competition' was a special £15 million fund announced in late-1995 "to support bids to resource the installation of CCTV cameras in public places as a crime prevention measure" resulting in up to 10,000 more CCTV

cameras (Crawford, 1997, p. 41). This trend is of particular importance to this study area, as Portsmouth has one of the highest concentrations of CCTV cameras in the country, with 7.8 cameras per 1,000 people (Big Brother Watch, 2009). However, there is some contradiction to this argument as many significant costs of crime to businesses (such as fraud) very rarely appear as priorities of Community Safety Partnerships.

Further Criticisms of Community Safety

Further criticisms of community safety are briefly included here. Gilling (1999) reviews those who see community safety as a means of acceptable governance of an underclass. This links to the literature review of blaming parents in Section 6.1. This governance is often supported by calls for more punitive measures such as ASBOs, enabling a conflict between the desire to punish versus management of society. Community safety is vacuous enough to incorporate such wildly different perspectives. Another viewpoint is that community safety encourages a divisive fortress mentality; with insiders to be protected and outsiders to be kept away or punished.

Summary

This section has used the concept of 'influence' to discuss the role and shaping of community safety practices in the UK under New Labour. This study documents by whom, how, why, and where community safety has been 'influenced' and the effects this has had. The broad theme is that the inherent vagueness of community safety allows influences to enter. Influencers have entered via both the 'community' and multi-agency arenas, with those in the latter arena encouraging the proliferation of such concepts as managerialism and evidence based policy which have diverted community safety away from its original course.

This section ends with some thoughts on where community safety is heading. The election of Police Commissioners may replace the democratic deficit previously filled by 'police accountability' to local

communities and erode local authorities' role as the only democratically elected partners (except the police authority). Or alternatively, they may just be the latest influencer. There is also potential for community safety to be further influenced by counter terrorism issues and the Prevent strategy.

6. Study One: Analysing Popular Support for the Deficient Household Social Capital Transmission Thesis

This study explores belief in parental deficiency as a causal factor of youth anti-social behaviour and crime. Empirical interrogation considers whether there is widespread support for blaming parents.

This section includes a sub-section for the relevant literature review which informed the research questions, a modelling strategy that sets out the methodology, key variables and a priori expectations before the results are then presented and discussed. As a theoretical aside, Becker's (1968) supply of offences function is expanded to incorporate the effects of parental responsibility on youth crime.

6.1. The Relationship Between Parental Responsibility and Youth Anti-social Behaviour: A Review of the Literature

Excessive child and youth anti-social behaviour (ASB) has long been perceived as a concern in western society (Bates, 1921; Burrows, 1946; Elliott, 2011; Hutchinson, Parada, & Smandych, 2009; Le Sage & De Ruyter, 2008). In various countries, as part of the 'punitive turn', this has led to the introduction of a range of punitive measures and interventions to encourage and enforce parental responsibility for the behaviour of their children (Arthur, 2005; Bennett, 2008; Burney & Gelsthorpe, 2008; Flint & Nixon, 2006). The legislation aimed towards parents, particularly emphasised by the Crime and Disorder Act 1998, has changed in tone from 'advise and ameliorate' (from the landmark Acts of the 1960s) to 'insist and punish' (Goldson, 2000).

In the United Kingdom these range from voluntary 'parenting contracts' (agreements between parents and support agencies to control a child's behaviour), through to compulsory training and counselling for parents, becoming criminal offences if not met. Parents can be 'bound over' by the court with a 'parenting order' to apply control over their child, obliging parents to improve the perceived deficiencies of their parenting, with fines imposed for non-compliance. Some local authorities affected by such ASB have also applied to use eviction from local authority rented

accommodation as an additional instrument of deterrence (Flint & Nixon, 2006). The parenting order has been described as a continuation of the criminalisation of 'inadequate parenting', within the more general context of the 'criminalising of social policy' (Brown, 2005; Muncie, 2004).

More recently, the coalition government launched the 'troubled families' initiative, continued by the 2015 conservative government, which further exacerbates the stereotype of an 'underclass', re-branding them as 'troubled families'. This initiative sees 'problem' families - including children involved in crime, ASB or truancy - that cost the public sector a significant amount of resources, addressed with methods that support families and challenge poor behaviour (Department for Communities and Local Government, 2013). The influx of legislation imposing the responsibility, and blame, for the behaviour of youths onto their parents is part of a wider ideological shift from social democracy to neo-liberalism that is explored in more detail below.

In the United States there is widespread use of parental responsibility laws. While these differ in each state, they generally refer to the potential or actual tort liability on parents for damages resulting from the acts and behaviour of their children, with some states proposing prison terms for parents if a child commits a serious crime. Parental responsibility laws can hold parents legally responsible, requiring parental involvement with the child's criminal sanctions, or criminally liable for contributing to the delinquency of their child (Brank & Weisz, 2004).

These punishments may in part be retributive but are also premised on the assumption that their use can encourage parents of offenders (and also, through a deterrence effect, other parents) to exert more effective direction and control at home. The pattern of evidence on the effectiveness (Brank, Hays, & Weisz, 2006; Hutchinson et al., 2009) and actual public support for such measures is somewhat mixed (Brank et al., 2006). For a critical look at the function and history of parenting orders see Burney and Gelsthorpe (2008) and Arthur (2005).

The 'blaming' of parents for the criminal behaviour of their children can be traced throughout criminology theory, and across its' different schools (Brown, 2005; Pearson, 1994). The family plays an integral role in the development of delinquency, according to a number of theoretical approaches, such as social control theories, social learning theories and psycho-analysis. However, the 'blaming' of parents has been popularised, emphasised and in some cases enshrined in law, through various government policies and rhetoric. This section first explores the role of parental involvement in child development as perceived by social scientists and economists. Then, the idea of youth as a social construct and the implications of the extension of youth, are introduced before further exploring relevant criminology theories. Finally this research is placed within the wider ideological shifts in social policy and government implementation.

Many social scientists have explored the role of parental involvement in child development (Lamb, 2010) and specifically in the contexts of positively improving academic outcomes (Coleman, 1988, 1990; Kim & Schneider, 2005; Morgan & Sørensen, 1999; Parcel & Menaghan, 1994; Teachman, Paasch, & Carver, 1997) and in reducing the likelihood of participation in crime and delinquency (Knafo & Plomin, 2006; McNeal Jr, 2001; Parcel & Menaghan, 1993, 1994; Patterson & Dishion, 1985; Sagatun, 1991; Smith & Stern, 1997; Thompson, Hollis, & Richards, 2003; Wilson, 1980; Wright & Cullen, 2001). Despite some concerns as to the bounds and specificity of the concept (Morrow, 1999; Portes, 2000) a number of these studies have deployed the concept of social capital formation in the family to help label the family processes and interactions involved in generating these positive outcomes for children. Many economists have also explored the foundations of household interactions. For example, Becker's (1974) 'rotten kid theorem' is premised on the existence of a parent who is concerned about the welfare of their children and has planned to give them wealth and other gifts. Should one of the kids be rotten and wish to harm their siblings, the parent could channel money to the other siblings when the rotten kid behaved harmfully to them. This, Becker

surmises, should provide an incentive to the rotten kid not to harm their siblings as it would incur a cost in terms of lost transfers from the parent.

However, this household-focused and non-interventionist approach to sustaining behavioural order in a family (and thus to the potential benefit of wider society) can be subverted by various circumstances. First, some parents may not be concerned about their children's welfare or be wholly absent or effectively absent by virtue of the very low levels of effort and time expended in actually nurturing offspring. Secondly, as Bergstrom (1989) highlights, there may be no transferable utility, or indeed prospect of any non-negligible transferable utility forthcoming from the parent. Thirdly, Bergstrom (1989) argues there may be considerable asymmetric information characterising parental-child relations in the family, though he shows this may not obviate some solutions to the rotten kid theorem in various particular classes of social interactions.

Becker (1976) also extended the analysis to try to explain more general altruistic behaviour beyond the family. This is premised on the existence of at least one identifiable altruist in a given large group such that they are concerned about the welfare of all the members. Becker contended that any egoist in the group would not engage in harming the altruist as well as the other group members in order that transfers to them (from the altruist) would not be reduced or discontinued. The model also suggests that transfers may contribute to the 'fitness' of the altruists and egoists at different rates. In this model altruism is wholly sustained via social interaction rather than kinship and thus does not require the existence of family relationships. Again, the absence of such an altruist proves a subverting stumbling block to this world view.

The absence of one or both parents/guardians would mean that parental capital was not being deployed to adequately transmit expected social norms of behaviour to their children. Yet even if they were physically present, this would not guarantee sufficient parental capital existed to enable

such transmission to take place effectively. Put simply, some parents/guardians may not be up to the job of childrearing, thus warranting intervention and punitive sanctions.

The concept of 'youth' needs to be understood as a social construct (and by extension, so is youth ASB, see Muncie, 2004), with the way it is understood varying over time and across cultures. Jones (2002) proposes that if childhood is defined as full economic dependence (for example, on parents), and adulthood is full economic independence, then youth can be thought of as the in-between, transitional, period of semi-independence. Further, this in-between period of 'youth' has become extended, with transitions to adulthood becoming far more complex (Jones & Wallace, 1992). While there are some examples of a cultural change, the extension of youth is exacerbated by legislation that does not define young people as fully independent from their parents until much later, such as in 'mature students' (21 years), minimum wage legislation (22 years) and access to welfare support, such as income support and housing benefit (25 years). Therefore the implicit responsibilities of parents have been extended, while at the same time, there is no provision or guidelines on their parental responsibility to young people over the age of 16 years. While welfare support has been withdrawn, there is no certainty that parents have the resources to, or will, bridge the gap (Jones, 1995; Jones & Bell, 2000).

While it has been argued that the social construct of youth is extending upwards, there has also been a move towards the criminalisation of young people at an earlier age. Pitts (2001) has referred to this as 'dejuvenilization', in that it erodes the principle of treating young people separately from adults. In particular, the abolition of the presumption of *doli incapax* (which previously meant that courts had to establish that young offenders under fourteen understood the consequences of their actions) led to the reduction in the criminally responsible age of children to ten and the child being 'responsibilised' in criminal law. This effectively implied that children from the age of ten were responsible for their own behaviour. Simultaneously, the implementation of a raft of seemingly contradictory parenting policies (e.g. parenting contracts and child safety orders) specifically blamed

parents and had the conflicting objective of making them responsible for the behaviour of their children (Goldson, 1999).

Muncie (2000) points to the fact that both major UK parties hold a shared belief of crime causation, highlighting the consistent theme of blaming irresponsible parents and holding offenders personally responsible for their actions. The empirical studies cited as influencing New Labour's policy include the 'Cambridge study of delinquent development' by Farrington and West (1993) and later analysis by Graham and Bowling (1995). Both studies found the quality of parent-child relationships and parental supervision as risk-factors in the chances of children offending. Graham and Bowling (1995) found that parental supervision was the factor most closely correlated with criminality in young people, with children experiencing weak parental supervision twice as likely to offend. However, these risk factor approaches received criticism for not taking into account the social and political context (Haines & Drakeford, 1998; Smith, 2003). Moreover, Wikstrom and Loeber's (1997) Pittsburgh study, looking at the socio economic status of the neighbourhood, found that the correlation between family risk factors and youth offending breaks down in low socio-economic status neighbourhoods. Despite the existence of some evidence to support the targeting of parents, it is in practise almost irrelevant, as there is broad agreement across academics and practitioners that the blaming of poor parenting has more to do with political popularism than the efficacy of such methods (Allen, 1996).

As part of control theory, Gottfredson and Hirschi (1990) argue that a lack of self-control is the key factor underlying criminal behaviour. They propose that this is caused by an unsuccessful or incomplete socialisation, and is especially likely to be caused by ineffective childrearing. Poor parental supervision is blamed for this, rather than school or peers, as they argue the most important negative sanction comes from the explicit disapproval of parents. Wilson (1980) observes there is a link between lax chaperonage and delinquent youth behaviour, while less than ideal parenting is explained by the stress or strain of unemployment, ill health and poverty. Stresses, such

as long-term unemployment, can have an additional impact on the formation of a child's delinquent behaviour: regardless of the parenting quality, as a role model the child is presented with an underlying association that one can follow the social norms and still suffer.

However, a contrasting position is formed within the field of right-realism, where crime is seen as the product of individual characteristics committed because of lack of self-control. In particular, Murray (1990) used the notion of the underclass, where its members' distinguishing characteristic is not that they are living in poverty, but that they are not respectable. Three main characteristics, or phenomena, of an 'underclass' are identified by Murray (1990): illegitimacy, violent crime and economic inactivity. These early warning signals are found in abundance within the study area of this research (evidenced in Section 2). The underclass is described by Murray (1990) as morally weak, which is established by choice rather than circumstance. According to Murray (1990) this results in illegitimate children growing up ill-schooled and ill-behaved in a culture of unemployment, involvement in crime and drug addiction.

Murray's (1990) emphasis on individual weaknesses preventing full participation in society is considered as 'weak' social exclusion, as opposed to 'strong' social exclusion which is determined at a structural level. Young (2002) observes two approaches within explanations of strong social exclusion: 'passive' and 'active'. A 'passive' approach emphasises the failure of the system to provide jobs, leading to social isolation. For example, this would include such relevant theories as the familial and cultural theories of deprivation that can lead to the inter-generational transmission and recurrence of deprivation and inaccessible attainment. Whereas an 'active' approach (more closely aligned with this research) stresses the 'active' rejection of the underclass by society, stereotyping them as criminals and drug addicts and stigmatising those without jobs. The discussion of 'proper parenting' has strong connections to an enduring theme of neo-conservative criminology, where the choice element of right-realism is derived from parental failure to imbue self-control, whereas left-

realism is more concerned with the restricting circumstances and social context within which parents must exist.

Concerns over child and youth ASB have also been stoked by various episodic moral panics following particular child and youth crimes with very high media visibility. One such high profile example was the murder in 1993 of the two year old child, James Bulger, by two ten year old boys (Hollingsworth, 2007; Such & Walker, 2004). Taken together, such incidents have prompted calls in the media for a greater use of sanctions applied to the parents of child and youth offenders.

More recently, the riots, violence, arson, and looting that engulfed many parts of London and other UK cities during August 2011 clearly showed considerable and widespread breakdown of social order. It also provided numerous examples of children and adults engaging in serious and costly ASB. In the aftermath of these riots police arrested and brought before law courts many of these children and youths. Articles in the news media, (Williams, Greenwood, & Tozer, 2011; Alleyne, Ward, & Orr, 2011; Brown, Sherman, & Asthana, 2011) reflected considerable societal concern over the fact that in many cases the children and youths attending court were unaccompanied by parents or guardians. A widely aired inference was that the absence of these parents or guardians simply highlighted in sharper relief their negligence in bringing up their children with sufficient pro-social behavioural skills to sustain law-abiding civic participation. Put simply, the view promulgated was that parents were in large part responsible for the criminal actions of their children. This view was further supported by the final report of The Riots Communities and Victims Panel (2012), an independent panel set up to investigate the causes of the riots. Through a survey of residents in areas affected by the riots the Panel repeatedly identified “perceptions about poor parenting and a lack of shared values” (p. 3), as well as being frequently and explicitly told that “poor parenting was the underlying cause of the riots” (p. 28). This led to the report identifying children and parents as one of the key areas highlighted for action, with particular focus on absent fathers. Another view,

epitomised by Boris Johnson and David Lammy MP in the national press, partly blames the riots on the 2004 decision to tighten the law on parents smacking their children (Watson, 2012).

The intervention of policy into family life occurred within the context of wider social policy developments – most notably a shift from the social democratic, with its universal welfare state, to neo-liberalism, with its reduction in government control and the replacement of community with individual responsibility. Ideas from right-realists, such as Murray's (1990) writings on the underclass, united with the moral panics and condemnation of young people (Brown, 2005; Muncie, 2004) and shaped a climate of retribution and blame. This growing climate of blame focused on those branded as the 'underclass', and insisted that parents should be punished if they failed to control and discipline their children (Drakeford & McCarthy, 2000). Particular groups of parents, most notably the increasing number of divorced parents, single mothers and families with absent fathers were swept up in this definition. These so-called 'underclass' parents became the scapegoat, and were re-branded under New Labour as the socially excluded (and more recently by the coalition government as 'troubled families'). Whilst ostensibly accepting that social exclusion is a structural problem, New Labour's policies (epitomised by the Social Exclusion Unit) nonetheless went on to blame the supposed victim of social exclusion by targeting solutions at the individual level, blaming poor parenting, identified by Matthews and Young (2003) as shifting to an implicit control theory. Smith (2003) suggests that poor parents are treated as 'shock absorbers', charged with instilling self-control in their children regardless of the social and economic restraints.

6.2. Modelling Strategy

This study explores belief in parental deficiency as a causal factor of youth anti-social behaviour and crime. Empirical interrogation of household interview data from a UK city considers whether there is widespread support for blaming parents.

For the interventions and sanctions against parents (discussed in the literature review Section 6.1) to be successful it would be advantageous to have support from the general population (Nagin, Piquero, Scott, & Steinberg, 2006; Roberts, 1992), and for these sanctions to be considered as enforcing social norms (Posner & Rasmusen, 1999). Accordingly, empirical scrutiny of this concern based on more recent data is warranted to potentially inform policy design and also shed some light on the likely pattern of acceptability for directing sanctions towards parents as a means of reducing child and youth ASB. The literature informs the research questions addressed by this study:

Q4. Is there widespread support across society for channelling blame (and sanctions) via the parents of youth offenders?

Q5. Is it 'troubled families' and the so-called 'underclass' that survey respondents are thinking of when they blame the parents?

The research aims to ascertain whether there is general public support for the idea that parents should be held responsible for the behaviour of their children. Specifically, this study explores the open empirical question of whether channelling blame and sanctions via the parents has widespread support across society, or if such a view is confined largely to a specific group. Some groups merit particular consideration, such as wealthier households which can afford more childrearing support, or older households which may consider child and youth ASB a relatively recent phenomenon. In addition, households with young people may be less likely to blame other parents, as this in some way indicates themselves as not taking responsibility. Alternatively, households containing young

people may exhibit a form of parental 'NIMBYism' (not in my back yard), whereby households advocate the proposal by blaming other parents but actually oppose it applying to themselves.

These are represented as specific research hypotheses:

H1.1: The extent to which households blame parents for the behaviour of their children increases for childless households.

H1.2: The extent to which households blame parents for the behaviour of their children increases for wealthier households who can afford more childrearing support.

H1.3: The extent to which households blame parents for the behaviour of their children increases for older respondents who may consider youth anti-social behaviour to be a relatively new phenomenon.

H1.4: The extent to which households blame parents for the behaviour of their children increases for those who experience crime or anti-social behaviour.

H1.5: The extent to which households blame parents for the behaviour of their children increases for those who feel there is little community cohesion or informal social control.

The study reported in this thesis has explored these issues using household interview survey data consisting of a representative sample of just over one-thousand households.

The dependent variable for analysis reflects the extent to which respondents indicated that 'parents not taking responsibility for the behaviour of their children' was perceived to be a problem in their area. Respondents were asked to indicate their response to this question using a four-point forced choice scale, with responses ranging from 'a very big problem' to 'not a problem at all'. The dependent variable is transformed into a binary form, where a value of 1 indicates a positive response to the statement, i.e. 'a very big problem' or 'a fairly big problem', and 0 otherwise (mean = 0.46). The

relationship between the response to this question and the range of independent variables is tested using a direct logistic regression (binary logit). For the purposes of confirming the robustness of the empirical results, the logistic regression is also re-estimated with the imputed income removed.

Table 22 sets out the variables used in the empirical analysis alongside their formats, definitions, range, mean and standard deviations where possible. *A priori* expectations are then set out in Table 23.

Table 22 Model Variables – Study One

Variable Name	Item Description	Mean (Std. Dev.)	Range
BLAME PARENTS	Respondent agrees that 'parents not taking responsibility for the behaviour of their children' is a big problem	0.46	0-1
IMPUTED INCOME	Income band (including imputed income) of respondent and their partner/spouse's total gross income from all sources. <£50 / £50-£74 / £75-£99 / £100-£149 / £150-£199 / £200-£249 / £250-£299 / £300-£399 / £400-£499 / £500-£599 / £600+ per week	7.41 (2.803)	1-11
YOUNG PEOPLE IN HOUSE	Respondent lives with children (under the age of 18).	0.35	0-1
NOT TREATING WITH RESPECT	Respondent agrees that 'people not treating each other with respect and consideration' is a big problem in their area.	0.44	0-1
THOUGHT CRIME WENT UP	Respondent indicates that they think crime has gone up in their area in the last two years.	0.38	0-1
DRUG USE OR DEAL	Respondent agrees that drug use and/or dealing is a big problem in their area.	0.25	0-1
ASB AND CRIME COUNT	The number of different types of ASB or crimes that respondents had personally experienced or witnessed in their area.	1.63 (2.43)	0-14
FEAR OF CRIME AT NIGHT	Respondent indicates that fear of crime prevents them from going out in Portsmouth in the evening at least a fair amount.	0.30	0-1

Table continued on next page

Continuation of Table 22 Model Variables – Study One

EXACT AGE	Exact age of respondent.	45.75 (19.473)	16-95
FEMALE	Respondent is female.	0.53	0-1
ETHNIC MINORITY	Respondent is not White British.	0.05	0-1
DISABILITY	Respondent household includes at least one person who has a long-term illness, health problem or disability which limits their daily activities or the work they do.	0.15	0-1
WORK FULL OR PART TIME	Respondent is in full-time (30+ hours per week) or part-time (9-29 hours per week) work.	0.37	0-1
CAR OWNERSHIP	Household has access to at least one car or van.	0.68	0-1
VOLUNTEERED	The respondent has given unpaid help to any groups, clubs or organisations in the last 12 months.	0.237	0-1
COMMUNITY COHESION	The respondent agrees that their local area 'is a place where people of different backgrounds get on well together'.	0.647	0-1
EDUC DEGREE / EDUC ALEVEL / EDUC OLEVEL / EDUC OTHER	Respondents highest educational qualification. Exclusive dummies, reference group 'no educational qualifications'. Degree / Alevel / Olevel / Other qualification	0.18 / 0.17 / 0.17	0-1
TENURE OWNER / TENURE SOCIAL / TENURE PRIVATE	Tenure. Exclusive dummies, reference group 'buying with mortgage'. Owner / Social rented / Private rented	0.64 /	0-1
POST CODE DISTRICT	Postcode district where the resident resides. Exclusive dummies, reference group 'PO3'.	0.13	PO1 / PO2 / PO4 / PO5 / PO6

Source: Residents' Survey 2007

Table 23 Model Variables A Priori Expectations – Study One

Independent variables	A Priori Expectations
IMPUTED INCOME,	Positive sign as would expect wealthier households with higher incomes to be able to afford more child bearing support and have more resources to exert control and monitoring of children.
YOUNG PEOPLE IN HOUSE	Conflicting expectations, as households with young people may be less likely to blame other parents, as this in some way indicates themselves (negative sign). Alternatively, they may exhibit a form of parental ‘NIMBYism’ (not in my back yard), whereby they advocate the proposal by blaming other parents but actually oppose it applying to themselves (positive sign).
NOT TREATING W RESPECT	Positive sign would be expected as households that consider there to be a problem with ‘respect’ in their area may also be more inclined to consider other issues a problem.
THOUGHT CRIME WENT UP, DRUG USE OR DEAL, ASB AND CRIME COUNT, FEAR OF CRIME AT NIGHT	Positive signs are expected for all variables relating to crime and ASB. Assuming that the higher the perceived level, experience and fear of crime, drug use and anti-social experience then the more likely respondents are to think there is a problem and therefore blame someone (i.e. the parents).
EXACT AGE	Positive sign, assuming a bygone age effect from older residents who may consider child and youth ASB a relatively recent phenomenon.
WORK FULL OR PART TIME	Positive sign, with similar reasoning as to wealthier households i.e. residents have more resources to exert control and monitoring of children.
CAR OWNERSHIP	Negative sign as households with access to a vehicle have the ability to more easily get away from their local area and bypass potentially ASB interactions.
VOLUNTEERED	Expected sign is unclear. This variable is an indication that the respondent does engage in pro-social behaviour.
COMMUNITY COHESION	Negative sign, assuming that if a resident thinks people get on well together, then they are less likely to think there are problems.
EDUC	Positive sign for all education levels, with an increasing magnitude associated with the higher educational qualifications. This is based on the assumption that the level of human capital resources to exert control and monitoring on children increases with education.
TENURE	A positive sign is expected for those living in social rented accommodation as the assumption is that they are more likely to experience crime and ASB.
POST CODE DISTRICT	Positive sign expected for PO1 given the higher level of reported crime and ASB, as well as the larger proportion of young people (and young offenders), located in PO1 (the city centre).

6.3. Results and Discussion

A direct logistic regression analysis was performed on the outcome of whether respondents to a survey thought that 'parents not taking responsibility for the behaviour of their children' was a big problem in their area, with various demographic and attitudinal predictors. Twenty-four cases were excluded because they were missing information for at least one of the variables.

The logistic regression model was found to be statistically significant, with the McFadden R^2 value estimated to be 0.44 (a value in the range of 0.2 to 0.4 is usually considered to be highly satisfactory) and the LR statistic indicating significance at the 99% confidence interval. Strong classification results were found, with 82.6% of those who thought 'parents not taking responsibility' was a major problem and 87.7% who thought it was not a major problem correctly predicted, for an overall success rate of 85.4%.

The model was also run excluding those cases where income banding had originally been missing, resulting in a smaller sample of 650 cases. The model retained its explanatory power, with a McFadden R^2 value of 0.44 and the LR statistic indicating significance at the 99% confidence interval. Correct classification was still strong with an overall success rate of 84.7%. The signs and magnitudes of the predictor variables did not change considerably, with the exception of 'TenureOwner' and 'Disability' that changed sign but remained non-significant. There were more noteworthy changes to the significance of the predictors with the following indicators no longer identified as significant at the 90% confidence interval: 'Community Cohesion', 'Young People In House', 'EducALevel', 'EducOther', 'PO4' and 'PO5', while the reverse was true for 'Female'. This implies that the inclusion of the imputed income cases has not detracted from the goodness of fit of the model or changed the underlying relationships, as the signs and magnitudes have not changed considerably. However, the increase in the sample size and resulting degrees of freedom has helped to clarify those predictors which are significant.

Table 24 Logistic Regression Results – Study One

	Model excluding imputed income		Model including imputed income	
	Coefficient	(S.E.)	Coefficient	(S.E.)
Constant		-1.210 (.872)		-1.028 (.678)
Imputed Income	**	-0.142 (.064)	**	-0.116 (.057)
Young People In House		0.185 (.285)	*	0.385 (.233)
Exact Age		-0.005 (.011)		-0.004 (.008)
Female	*	-0.457 (.261)		-0.267 (.207)
Ethnicity		0.108 (.654)		0.665 (.442)
Disability		-0.136 (.316)		0.106 (.260)
Work Full Or Part Time		0.375 (.341)		0.322 (.254)
Car Ownership		0.215 (.318)		0.103 (.102)
Volunteered		0.285 (.285)		0.190 (.235)
Community Cohesion		-0.125 (.249)	*	-0.358 (.199)
Not Treating with Respect	***	3.194 (.257)	***	3.165 (.205)
Thought Crime Went Up	**	0.594 (.255)	**	0.508 (.203)
Drug Use Or Deal	*	0.490 (.288)	***	0.656 (.239)
ASB and Crime Count	***	0.207 (.059)	***	0.123 (.045)
Fear of Crime at Night		0.133 (.280)		0.316 (.226)
EducDEGREE		0.569 (.438)		0.468 (.352)
EducALEVEL		0.671 (.441)	**	0.706 (.353)
EducOLEVELhigh		-0.196 (.400)		-0.114 (.324)
EducOTHER		0.524 (.385)	**	0.642 (.310)
TenureOwner		0.030 (.409)		-0.077 (.323)
TenureSocial	*	0.838 (.451)		0.477 (.358)
TenurePrivate		-0.125 (.398)		-0.312 (.326)
PO1	*	-0.842 (.472)	***	-1.225 (.399)
PO2		0.174 (.387)		-0.101 (.340)
PO4		-0.372 (.402)	**	-0.688 (.333)
PO5		-0.933 (.572)	**	-0.965 (.406)
PO6		-0.069 (.410)		-0.334 (.336)
R Squared McFadden		0.442		0.443
R Squared Cox & Snell		0.459		.456
R Squared Nagelkerke		0.612		.610
Hosmer & Lemeshow		11.065	Sig. 0.198	2.762
-2LL		488.619		741.976
LR	***	370.968		244.309
N		634		963

Source: Residents' Survey 2007. * Denotes significance at the 90% confidence interval, ** at the 95% and *** at 99%

Generally, these results suggest that exposure to greater levels of crime and ASB positively associates with a perceived problem of parental responsibility. For example, such beliefs are significantly and positively associated with a perception that crime levels had increased over the last two years. The calculated odds ratio of 1.66 implies that the probability of thinking that there is a problem with 'parents not taking responsibility' increases by 66% if the respondent also thought crime rates had increased in the last two years. Additionally, a perception that drug use or dealing is a problem in the local area is found to be significant at the 99% level. The odds ratio of 1.93 indicates that those who thought drug use and/or dealing in their local area was a problem were just under twice as likely to also think that 'parents not taking responsibility' was a problem. Respondents that thought that there was community cohesion in their area were 30% less likely to think that 'parents not taking responsibility' was a problem. However, this was only significant at the 90% level.

Additionally, the effect of the level of ASB and crime experienced or witnessed by the respondent is also found to be statistically significant at the 99% confidence interval. This independent variable measures the number of different types of ASB or crimes experienced, rather than presenting the absolute number or making any value judgements about the severity of different experiences. The estimated odds ratio of 1.13 indicates that for every extra type of ASB or crime experienced, the respondent is 13% more likely to believe parents not taking responsibility for their children to be a problem. Given that the highest number of incidents identified by respondents was fourteen (out of a possible nineteen), there is the potential that those who had experienced the greatest number of different types of incidents could increase their likelihood of thinking parents not taking responsibility for their children was a problem by just under five times as much as those respondents with no experience of such incidents.

Somewhat surprisingly, the effect of living in the city centre (PO1) was found to significantly and negatively impact upon perceptions of a lack of parental responsibility being a problem. The sign is contrary to expectations given the higher level of reported crime and ASB, as well as the larger

proportion of young people located in that area (Safer Portsmouth Partnership, 2007a). The odds ratio of 0.29 indicates that the odds of thinking that parents not taking responsibility for their children is a problem decreases by around 70% if the respondent lives in the 'city centre' area. This could indicate a greater tolerance of those directly affected that would be counter to the positive results seen for those experiencing ASB and crime and for those households containing young people. It could be that the respondents in this area are more likely themselves to be the parents of children exhibiting child and youth ASB (the 'city centre' postcode has the highest proportion of young offenders (Safer Portsmouth Partnership, 2007a)), and therefore are less likely to perceive this to be a problem, or be willing to cast negative aspersions on their own standard of parenting. Yet another explanation might be that acts of ASB carried out in this area are considered to be less a result of poor parenting *per se*, perhaps due to a perception that crimes in this area are largely committed by young adults who are legally responsible for their own behaviour.

Imputed income, measured on a scale representing household gross income bands ranging from under £50 per week to more than £600 per week, was found to be negative and significant at the 95% level. The odds ratio of 0.89 indicates that for every increase on the household income scale the concern of 'parents not taking responsibility' reduces by 11%. This implies that those in the lowest income band are around three times more likely to think that 'parents not taking responsibility' is a problem than those in the highest income band.

The effect of the respondent household containing young people (defined as seventeen years of age or under) had a significant and positive impact on the belief that 'parents not taking responsibility for the behaviour of their children' is a big problem. This could be because of the greater contact that these households are likely to have with other young people and families, or an increased propensity to pass judgement on the parenting of others if the respondent is a parent themselves. However, the variable that was found to associate most significantly with 'parents not taking responsibility' is a belief that 'people not treating each other with respect and consideration' is a problem in the area.

The odds ratio of 23.7 indicates that those that think people not treating each other with respect is a problem are around twenty-four times more likely to also think there is a problem with 'parents not taking responsibility', than those who do not think there is a problem with respect and consideration.

Only limited evidence is found that fear of crime, educational attainment, gender, ethnicity, disability, tenure, car ownership, volunteering experience and working status significantly affects the perception that lack of parental responsibility in the area is a problem. Age is found to (weakly) reduce the probability of considering a lack of parental responsibility to be a significant problem.

In summary, variables included to control for exposure to increased levels of crime (for example, drug dealing) and ASB are unsurprisingly found to associate positively with the extent to which parental responsibility is thought to be to blame. Higher incomes are found to associate with a reduced likelihood of believing parental responsibility to be a problem in their area, although other socio-demographic information, such as age, gender, educational attainment, car ownership etc. show only limited evidence of a statistically significant association with a perception of lack of parental responsibility being a problem. An unexpected finding relates to the reduced likelihood of respondents in the city-centre perceiving there to be a problem of parental responsibility, as crime and ASB levels in this area are among the highest in the city. Perhaps this is because respondents living in this area are more likely themselves to be the parents of children demonstrating ASB and thus less likely to perceive crime committed in their area to be a problem of their own making.

By far the largest and most significant positive influence on the perception of parents not taking responsibility for the behaviour of their children was a jointly held perception on the part of the respondent that people not treating each other with respect was a problem in their area. There is also evidence that a greater likelihood of considering parental responsibility to be a problem associates positively with having young people in the household. This suggests that respect for other

residents is strongly regarded to be associated with responsible parenting and that those more likely to pass negative judgement on the parenting of others are more likely to be parents themselves.

Contrary to expectations, the opposite was found for H1.1 and H1.2, which proposed that childless and wealthy couples would have a higher tendency to blame the parents. There was inconclusive evidence to support or reject the effect of age (H1.3).

There was broad support for H1.5. Informal social control, encapsulated in the idea of respect, found to have a large and significant effect, whereas a lack of community cohesion had the expected sign it was found to be less significant. Similarly for H1.4, variables included to control for exposure to increased levels of crime were found to associate positively with the extent to which parental responsibility is thought to be to blame.

6.4. A Brief Theoretical Sketch: Parental Responsibility Using Economic Analysis

Study One presented the characteristics of those households most likely to feel that parents not taking responsibility for their children was a problem. However, this section is motivated by the potential reasons why people may suspect that there is a link between parents' behaviour or actions and their child's antisocial or criminal behaviour. In other words, providing a motivation for parents to impact on the behaviour of their children through parental responsibility. In turn, providing some justification to those who feel that parents should be blamed for the behaviour of their children.

Becker's (1968) supply of offences function will be applied to young people and expanded to include measures of parental responsibility. This addresses the research question:

Q3. Is there scope to include parental responsibility within Becker's (1968) supply of offences function?

However, Freeman's (1999) version of crime in a market context will be used as a starting point, as it is a simplified version that incorporates the key elements from both Becker's (1968) original supply of offences function and Ehrlich's (1973, 1996) advances/improvement of a market model. This allows for simpler discussion of how more general intergenerational links can potentially influence an individual's level of criminal activity.

In Freeman's (1999, p. 3538) model, individuals choose between legal activity with W earnings from legitimate work, and criminal activity with gains of W_c for a successful crime, and punishment of S . The probability of being apprehended is p . Individuals will choose to be a criminal if the expected utility from committing the crime is greater than the utility gained from legitimate earnings:

$$(1 - p)U(W_c) - pU(S) > U(W) \quad (1)$$

The economic literature, aptly summarised by Gregory (2004), finds that family environment, and specifically parental criminality, is a strong predictor of an individual's level of criminal activity.

Hjalmarsson and Lindquist (2013) find parental criminality to be a strong predictor of child criminality, with a son's chances of conviction increasing by 12.1 and 13.4 percentage points if the father or mother (respectively) has at least one conviction. Swedish adoption data is used to show that for those who grow up to commit any crime, then both pre-birth (e.g. genetic) and post-birth factors (such as poverty, role-modelling, traumas and abuse) are important determinants. However, for those who go on to commit multiple crimes, while pre-birth factors retain some effect, it is post-birth factors that dominate, i.e. the parental input.

Similarly, Hjalmarsson and Lindquist (2012) find that the odds of sons having a criminal conviction are more than doubled if the father has at least one sentence, compared to fathers with none. The intergenerational transmission of crime, from father to child, is found to be higher than that for poverty but below that of high school completion. However, for multiple criminal convictions it can be as strong as years of schooling and earnings. Parental human capital and parental behaviours account for 60-80% of the father-child crime correlation (Hjalmarsson & Lindquist, 2012, p. 553). However, the study does not have a proxy for direct transference of crime related human capital or role-modelling.

The transmission of crime-related human capital may be enacted by a parent teaching their child or making the necessary introductions into an established criminal network. For example, Bayer, Hjalmarsson and Pozen (2009) find evidence of transference of crime-specific capital between juveniles. It is also possible that having a parent who is a reasonably successful criminal may enhance a child's ability to maximise the gains (W_c) from crime and/or reduce the probability of being apprehended (p). Equally, having an unsuccessful criminal parent may inflate the perceived probability of being apprehended (p) and the reality of the punishment (S).

The utility functions themselves can be influenced by parental actions. For example, Duncan, Kalil, Mayer, Tepper and Payne (2005) ascertain that if parents are criminal role models, they have the

ability to impart antisocial norms and behaviours directly to their offspring. As these models deal with the expected utility, then an individual's risk preferences are important. According to Dohmen, Falk, Huffman and Sunde (2012) there is strong intergenerational transmission of risk and trust attitudes. Therefore, a risk loving parent begets a risk loving child, and a risk loving child is more likely to engage in criminal activity.

Furthermore, the potential for legitimate earnings (W) can be affected by parents, with Black and Devereux (2011) finding intergenerational correlation of earnings. An increase in parental income has also been found (Akee, Copeland, Keeler, Angold & Costello, 2010) to lower the probability of minor offences among children directly, with the authors suggesting that improved parental behaviour (quality), rather than quantity, is a likely mechanism for the change.

Similarly, the impact of neighbourhood environments on youth crime rates is well documented. Damm and Duffman (2014) find strong evidence linking neighbourhood crime to individual criminal behaviour, through social interaction. In particular, males growing up in area where a high proportion of youths are convicted for crimes (notably violent crimes), have an increased risk of arrest in later life. Social interaction is suggested as the channel through which this occurs. Kling, Ludwig and Katz's (2005) analysis of the Moving to Opportunity experiment, relocating families from high deprivation (high crime) areas to lower poverty areas, found reduced arrest rates for a range of crime types for young females, and for violent crimes for young males. However, an increase in property crimes is observed for young males. Therefore there is a mechanism by which the parent's actions (albeit reliant on income and opportunity) can impact the likelihood of their child becoming a criminal through their ability to remove their children from certain neighbourhoods and social interactions.

However, by analysing the criminal careers of siblings, Eriksson, Hjalmarsson, Lindquist and Sandberg (2016) unpick the importance of family background, finding that parental income, level of education

and neighbourhood characteristics account for less of the sibling crime correlation than parental criminality and family structure.

The concept of 'taking responsibility' referred to in Study One may be more closely associated with ideals of 'active' parental child rearing practices (or a lack thereof), rather than focusing on the inherent and inherited intergenerational links presented above.

Therefore, the following analysis takes a more literal interpretation of the 'responsibility' not taken by parents, where these traits would normally map to the 'responsibilities' of the police and criminal justice services for an adult. These will be introduced into a formal model that returns to Becker's (1968) original supply of offences function and focuses on just two elements: a child's monitoring by, and punishment received from, its parents.

It would be possible, and reasonable, to explore the relationship between parent and child through a delegated enforcement model or something similar from the financial regulation literature (such as Llewellyn, 1999), taking into consideration the principal-agent relationship (see Grossman & Hart, 1983). This is a potential area for further study. However, this work has adopted an approach consistent with the most standard approach to the economics of crime theory.

Accordingly, the starting point is Becker's (1968) 'supply of offences' function, where an individual takes a decision about whether or not to commit a crime in the same way as any other decision. The individual compares utility to be gained from a legal pursuit, known with certainty, to the expected utility they can gain from a criminal activity. The expected utility takes into account the risk of being caught and the cost of any punishment imposed if caught. The utility expected from committing an offence can be expressed as:

$$EU = pU(Y - f) + (1 - p)U(Y) \quad (2)$$

Where: EU = expected utility, p = probability of capture and conviction, Y = income if undetected, and f = value of punishment. This is assumed to apply for all individuals. However, the UK legal system treats juveniles (aged ten to seventeen) differently to adults. It is also the case that the UK legal system does not engage with those under the age of ten at all, except in extreme circumstances. Therefore, up to the age of eighteen, p and f can be thought of as inversely related to age.

The parallels between Becker's (1968) approach to crime and restorative justice for juvenile criminals have already been explored by Lawson and Katz (2004). However, this thesis attempts to include a 'parental responsibility' element to the economic analysis of crime through a simple exposition of Becker's model. This is made up of two elements: the monitoring by, and the punishment from, parents.

m = the monitoring and control effort of parents, and the ability for transmission of civility.

This can be thought of as similar to the probability of being caught and convicted (p), and can take a value $0 \leq m \leq 1$.

However, m is not mutually exclusive to p . This assumption, supported by findings of a complimentary relationship between police presence and social capital in reducing crime (Yamamura, 2009), allows the monitoring and control effort of parents to both positively impact the possibility of being caught by law enforcement (p), as well as for parents to separately catch their children for incidents not dealt with by law enforcement.

s = punishment imposed by parents on children who are caught (either by p or m) and can be thought of as another f . For example: smacking, restricting pocket money or grounding. This is imposed on the child caught for the offence; both if they are dealt with by law enforcement (in

which case it can be thought of as simply increasing the value of punishment, (f), and separately if caught by parents alone due to m .

Inclusion of these variables in the model, with p replaced by the non-mutually exclusive probability of p or m [written as $P(p \cup m)$], leads to:

$$EU = P(p \cup m)U(Y - f - s) + [1 - P(p \cup m)]U(Y) \quad (3)$$

Expanding the non-mutually exclusive $P(p \cup m)$ into $[p + m - P(p \cap m)]$ leads to:

$$EU = [p + m - P(p \cap m)]U(Y - f - s) + [1 - [p + m - P(p \cap m)]]U(Y) \quad (4)$$

Assuming p and m are independent, $P(p \cap m)$ becomes $p \cdot m$

$$EU = (p + m - p \cdot m)U(Y - f - s) + [1 - (p + m - p \cdot m)]U(Y) \quad (5)$$

This retains many of the characteristics of Becker's (1968) original model, most importantly that "an increase in either p or f would reduce the utility expected from an offence and thus would tend to reduce the number of offences because either the probability of 'paying' the higher 'price' or the 'price' itself would increase" (Becker, 1968, p. 177).

Proof that an increase in p or f would reduce the expected utility from an offence.

$$\frac{\partial EU}{\partial p} = U(Y - f - s) - mU(Y - f - s) - U(Y) + mU(Y) < 0 \quad (6)$$

$$\frac{\partial EU}{\partial f} = U(p + m - p \cdot m)U'(Y - f - s) < 0 \quad (7)$$

It is also worth noting that the same proof can be used for the two new variables, m and s , such that an increase in either would also reduce the expected utility from an offence.

$$\frac{\partial EU}{\partial m} = U(Y - f - s) - pU(Y - f - s) - U(Y) + pU(Y) < 0 \quad (8)$$

$$\frac{\partial EU}{\partial s} = U(p + m - p \cdot m)U'(Y - f - s) < 0 \quad (9)$$

The model can demonstrate the outcome for three different types of parental responsibility: absent parents, weak parents, and strict parents, where:

$$(m_{absent} = 0) < (m_{weak}) < (m_{strict}) \leq 1 \quad (10)$$

For absent parents, this model will just be the same as the original Becker (1968) model:

$$EU_{absent} = pU(Y - f) + (1 - p)U(Y) \quad (11)$$

For strict parents:

$$EU_{strict} = (p + m_{strict} - p \cdot m_{strict})U(Y - f - s_{strict}) + [1 - (p + m_{strict} - p \cdot m_{strict})]U(Y) \quad (12)$$

Ceteris paribus, $EU_{strict} < EU_{absent}$, as long as m_{strict} or $s_{strict} > 0$.

This simple extension of Becker's (1968) original supply of offences function suggests that parental responsibility, in the form of monitoring and control (m) and penalties imposed by parents (s), such as smacking, can have an effect on the expected utility of committing an offence, and therefore the number of offences committed.

However, parents face the same issue of time inconsistency as highlighted in the work of Barro and Gordon's (1983a, 1983b). Ex-ante, parents have an incentive to be credible in their threat of a suitable punishment for committing a crime. However, given that the parent's utility may depend on the wellbeing of their child, then there is less incentive to be credible ex-post, after the crime has been committed. A key dilemma stems from the anticipation of this time inconsistency by the child.

Nevertheless, the relationship expressed above is just a simple monotonic decreasing function with respect to m that does not reflect some of the relationships observed in real life, such as rebellion against excessively strict parents (Patterson, DeBaryshe, & Ramsey, 1990), or excessive parental punitiveness / child abuse resulting in criminality (for a review of several longitudinal studies of poor child rearing practices and child abuse resulting in criminality, see Haapsalo and Pokela, 1998).

The following model builds on the above, but transforms the level of monitoring and control, m , so that there is a non-monotonic relationship between m and expected utility; and therefore the number of crimes committed. It is proposed that there is a level of m , referred to as m^* , where EU (and therefore the number of crimes committed) is at a minimum turning point, after which rebellion against strict parents occurs. Strict parents, weak parents, and absent parents fit into this model:

$$(m_{absent} = 0) < m_{weak} < m^* < m_{strict} \leq 1 \quad (8)$$

Building on the simple exposition expressed in equation (4) above and writing $U(Y - f - s)$ as $U(Y_L)$, where $U(Y_L) < U(Y)$ as long as $f + s > 0$, and transforming m into $[-(m - m^*)^2]$ leads to:

$$EU = [p - (m - m^*)^2 + p(m - m^*)^2]U(Y_L) + [1 - [p - (m - m^*)^2 + p(m - m^*)^2]] U(Y) \quad (9)$$

$$\frac{\partial EU}{\partial m} = 2[-(m - m^*) + p(m - m^*)]U(Y_L) + 2[(m - m^*) - p(m - m^*)]U(Y) \quad (10)$$

As long as $p < 1$, and $(f + s) > 0$, so that $U(Y_L) < U(Y)$. If $m_{weak} < m^*$, then $(m - m^*) < 0$, and:

$$\begin{aligned} \frac{\partial EU}{\partial m_{weak}} &= 2[-(negative) + p(negative)]U(Y_L) + 2[(negative) - p(negative)]U(Y) \quad (11) \\ &= (positive)U(Y_L) + (negative)U(Y) < 0 \end{aligned}$$

The same proof applies to m_{absent} as $m_{absent} < m^*$.

If $m_{strict} > m^*$, then $(m - m^*) > 0$, and:

$$\begin{aligned} \frac{\partial EU}{\partial m_{strict}} &= 2[-(positive) + p(positive)]U(Y_L) + 2[(positive) - p(positive)]U(Y) \quad (12) \\ &= (negative)U(Y_L) + (positive)U(Y) > 0 \end{aligned}$$

If $m = m^*$ then $(m - m^*) = 0$ and $\partial EU/\partial m = 0$. The second order derivative is also positive, proving that m^* is a minimum point:

$$\frac{\partial^2 EU}{\partial m^2} = -(2 - 2p)U(Y_L) + (2 - 2p)U(Y) > 0 \quad (13)$$

A similar transformation and proof can be applied to the parental punishment variable, s . Such that, transforming s into $[-(s - s^*)^2]$ leads to:

$$EU = (p + m - p \cdot m)U\{Y - f - [-(s - s^*)^2]\} + [1 - (p + m - p \cdot m)]U(Y) \quad (14)$$

$$\frac{\partial EU}{\partial s} = 2(p + m - p \cdot m)(s - s^*)U'[Y - f - [-(s - s^*)^2]] \quad (15)$$

If $s_{weak} < s^*$, then $(s - s^*) < 0$, and: $\partial EU/\partial s_{weak} < 0$. The same proof applies to s_{absent} as $s_{absent} < s^*$. If $s_{strict} > s^*$, then $(s - s^*) > 0$, and: $\partial EU/\partial s_{strict} > 0$. If $s = s^*$ then $(s - s^*) = 0$ and: $\partial EU/\partial s = 0$.

The above thinking implies that the expected utility from committing an offence, and therefore the number of offences likely to be committed, are affected by the level of parental strictness. The expected utility initially decreases as parental strictness increases from a situation with absent parents, through a weak parent, before reaching a minimum level of expected utility, represented by m^* and s^* . Increasing strictness beyond this point, represented by the actions of a strict parent, will result in the expected utility from committing an offence increasing, and therefore the likelihood that a young person will commit more crimes. Further work is required to extend this simple model from Becker's (1968) original model to include major developments such as Ehrlich's (1973, 1996)

market model of crime, including a non-linear variable in the degree of punishment society imposes, or to test some of the assumptions with relevant data on parental monitoring levels and child behaviour.

By applying Becker's (1968) supply of offences function to young people and expanding it to include measures of parental responsibility, this theoretical framework seems to present a broadly plausible characterisation of the motivation for parents to impact on the behaviour of their children through parental responsibility. Hence, it provides some justification to those who feel that parents behaviour can be blamed for the behaviour of their children.

7. Study Two: Fear of Crime and Out-of-Home Evening Leisure Participation

This study empirically considers the factors influencing fear of crime and its impact on constraining evening out-of-home leisure participation in a city through analysis of detailed household interviews. Limitations of similar studies are addressed by making an explicit association between fear of crime (rather than darkness) and the decision to limit evening leisure activities that would otherwise occur.

This section includes a sub-section for the relevant literature review which informed the research questions, a modelling strategy that sets out the methodology, key variables and a priori expectations before the results are then presented and discussed.

7.1. Fear of Crime: A Review of the Literature

A considerable body of work has explored both theoretically and empirically the interplay of fear of darkness and participation in out-of-home leisure activities in various towns and cities throughout the world. It is possible to simply consider fear of darkness (nyctophobia) as the original source of this behavioural restraint, possibly derived from base 'predator-prey' fears that pre-date the formation of cities. Alternatively, one might plausibly consider that the true underlying behavioural driver is actually the fear of crime. The fear of becoming a victim of crime might be expected to be (rightly or wrongly) more likely and/or severe in the hours of darkness.

There is an extensive body of work that is concerned with the fear of crime. Darkness is one of the major factors influencing fear, turning comfortable situations into frightening ones (Warr, 1990) and is typical of a so-called 'formless fear' (Skogan & Maxfield, 1981). Lupton (1999) suggests that fear of crime is dynamic and contextual, where one of the most significant factors affecting increased fear is night-time. A significant number of empirical studies on the fear of crime make use of survey data where the analysis is focused on a respondent's expressed fear of being out of the house alone after dark. Furthermore, Walklate and Mythen (2008) identify the importance of the particular circumstances, or situation, in which the risk of crime is identified and traversed. Specific details of

the fear of crime measure used in this study, alongside the dynamic and contextual elements, are presented in Section 7.2. The main factors that are associated with increased fear of the night and/or crime are found to be relatively consistent across the literature and are discussed in detail below.

The two demographic variables most consistently linked to a fear of crime are age and gender. A substantial number of studies find that older people are more likely to express a fear of being out alone after dark, including Antunes, Cook, Cook & Skogan (1977); Jaycox (1978); Yin (1982; 1980); Clarke and Lewis (1982); Jeffords (1983); Giles-Sims (1984); Miethe and Lee (1984); Alston (1986); Baldassare (1986) and Smith (1987). Ortega and Myles (1987) find that old age enhances the already devalued positions of other vulnerable groups, especially females and ethnic minorities. However, LaGrange and Ferraro (1989), corroborated by Chadee and Ditton (2003), suggest that the issue of increased fear of crime amongst the elderly is typically exaggerated due to measurement error. Furthermore, Ziegler and Mitchell (2003) find that age is not the cause of fear of crime *per se*, but variations in the level of expressed fear are considered more likely to be explained by victimisation experience, media exposure and/or neighbourhood crime rates. Akers, La Greca, Sellers, and Cochran (1987) also find that fear of crime among the elderly is strongly influenced by community setting.

The other major characteristic of survey respondents that is associated with significant variation in fear of being out alone after dark is gender. Studies that show an increased fear of crime amongst women are Gordon, Riger, LeBailly and Heath (1980); Toseland (1982); Stafford and Galle (1984); Warr (1984); Brillon (1987); Parker and Ray (1990) and Pain (1995). The increased fear of crime typically expressed by women has been found in studies by Warr (1985); Ferraro (1996) and Scott (2003) to be heightened by and heavily linked to the fear of rape, particularly by strangers. More recent studies exploring the relationship between fear of crime and gender have explicitly focused on a fear of violent/sexual assault in public places (Goodey, 1997; Koskela & Pain, 2000; Pain, 2001).

Others have found the location of sexual entertainment venues responsible for the profoundly different experience of the night time city by gender (Hubbard & Colosi, 2015).

However, some studies have found that men are more likely to suppress their reporting of fear of crime due to social pressures or ideas of masculinity. Therefore, Sutton and Farrall (2005) find that men's fears tend to be under-estimated, rather than women's fears being over-estimated. In addition, Cops and Pleysier (2011) propose that women may simply be socialised to identify more situations as potentially dangerous. Therefore, they insist that gender should not be used as a simplistic tool for determining the cause of fear of crime, but rather it is understood as an attribute of a person that can amplify different levels of fear of crime.

Outside of the two main socio-demographic influences on the fear of crime discussed above, factors such as disability (Jackson & Stafford, 2009; Pain, 1997) and marital status (Kennedy & Silverman, 1985) are also found to be significant predictors of fear of crime in some studies. Both income/social class and ethnicity are also associated with significant variations in the extent to which fear is expressed. Numerous studies (Borooah & Carcach, 1997; Clemente & Kleiman, 1977; Hale, 1996; Will & McGrath, 1995) and Pantazis and Gordon (1997, 1998) all suggest that respondents with lower incomes or lower social status are more likely to express a fear of going out after dark. Pantazis (2000) arrives at a very similar conclusion, although finds that fear of crime itself is only one of the reasons behind such behaviour. Additionally, some studies (Baumer, 1985; Figgie, 1980; Taylor & Hale, 1986) have chosen to focus on the influence of ethnicity, finding evidence of a heightened fear of crime among ethnic minorities. The racial composition of a neighbourhood has been suggested to serve as a major factor in this regard, with increased fear for ethnic minorities living in predominantly white neighbourhoods observed by Walker (1994). Sampson (2009) finds evidence that an area's racial composition can impact levels of perceived disorder and incivility, which indirectly influences the fear of crime. However, Chiricos, Hogan and Gertz (1997) conclude that racial composition has no consequence for fear of crime when other factors are controlled for

and that perceived racial composition is a significant source of fear among Caucasians, but not amongst African-Americans.

The literature on crime prevention through environmental design (CPTED) formally links the design of cities to perceptions of the effectiveness of crime prevention strategies, quality of life, and fear of crime. The concept, largely based on Wilson and Kelling's (1982) 'broken windows' theory, suggests that the design of the urban landscape can influence the fear of crime, especially in the context of the city environment. Early studies exploring a link between environmental design and the incidence and fear of crime in the UK include Clarke and Mayhew (1980); Poyner (1983) and Coleman (1985), while more recent contributions have emphasised the importance of socio-demographic profiling (Plaster Carter, 2002) and community cohesion and participation (Sarkissian & Perglut, 1994; Sarkissian & Walsh, 1994; Sarkissian, Walsh, & Cook, 1997; Saville, 1994) as part of the process. The aforementioned studies suggest that the use of clearly defined zoning and surveillance to create 'defensible space' (Newman, 1973) can both increase the overall quality of life and decrease rates of offending and fear of crime. The chain of causality between these variables may be bi-directional in nature. Just as fear of crime can be influenced by satisfaction with crime prevention strategies, so the reverse may also be true.

Local crime prevention efforts are undertaken not only by the local police and emergency services, but also the local authority, collectively represented through a multi-agency partnership with a directive to reduce crime and the fear of crime. Over and above the core services one would expect each partner to supply, the partnership provides a dedicated anti-social behaviour unit, community wardens, support for Safer Neighbourhood Teams and Community Support Officers (Paskell, 2007), a Preventing Young Offenders Project and extensive CCTV provision. These services are particularly relevant for the policing and patrolling of public spaces by municipal authorities (Helms, 2007) which are likely to have an impact on residents' willingness to go out at night in their local area.

However, the assertion that CPTED can 'design out fear' is not without contention (Koskela & Pain, 2000), while other studies (Hedayati Marzbali, Abdullah, Razak, & Maghsoodi Tilaki, 2012) have found no direct significant relationship between CPTED and fear of crime, only an indirect relationship through victimisation. These disagreements often stem from the wider idea that fear of crime is socially constructed. While this view is recognised, it is beyond the scope of this study to fully consider the ramifications of this viewpoint here (for an extensive discussion on this issue see Lee, 2001; Vanderveen, 2006). The dependent variable used in this study implies that fear of crime has a direct and measurable effect on respondents' out-of-home evening leisure participation choices and is therefore worthy of further investigation.

Brunton-Smith (2011) explains the weaker causal relationship from fear of crime to disorder, as fearful individuals adjust their behaviour to restrict interactions and avoid areas they may be fearful of. Wood (2004) illustrates the stated effect that experience or perception of ASB has on people's behaviour. Of those who reported a problem with each ASB strand, those who perceived young people hanging around were most likely to change their behaviour by avoiding going out after dark (18%). This was closely followed by those perceiving drunk or rowdy behaviour (17%), drug use or dealing (16%) and vandalism and graffiti (14%). Even a small proportion (3%) of those experiencing noisy neighbours stated they would avoid going out after dark because of this ASB. In addition, eight per cent of those perceiving some form of ASB stated they were less likely to use town centres as a direct result of ASB, and over a quarter (27%) avoided them at particular times of the day (Wood, 2004, p. 36).

Behavioural changes in response to the risk of crime are well documented in the economics literature, where a sub-optimal choice can be measured as the indirect cost of fear of crime. These changes may become apparent as changes to daily activity, and can include tangible costs such as changing working routines or the level of physical activity, as well as more intangible costs such as a detrimental impact on mental health. Behavioural changes may affect both those who have directly

experienced a crime and those whose level of fear, or perceived risk of victimisation, has been altered.

For example, Hammermesh (1999) studies the behavioural changes observed through the timing of work, with the individual choosing lower pay to avoid victimisation risk. The study finds a significant impact of homicide rates on work timing, resulting in an inefficient allocation of working time as production is displaced from its most productive time (Hammermesh, 1999, p. 326). The key finding relates to the idea that fear of crime alters the timing of work, and the magnitude of this cost can be calculated. However, the important implication for this study is that there is a mechanism for fear of crime to effect the timing of economic activities generally, i.e. the timing of leisure participation.

Individuals may adapt in other ways to offset an increase in victimisation risk. Braakmann (2012) finds evidence of individuals adopting preventative measures to protect themselves, such as taking defensive or evading behaviour, for example carrying a weapon or changing transportation and routes in response to an increase in risk of victimisation. These constraints on behaviour, resulting in the individual not attaining their preferred, and therefore optimal, choice, can be thought of as the indirect costs (Braakmann, 2012, p.337). There is an additional element to this, as these behavioural changes may in turn have externalities. Similar changes in behaviour are observed for non victims who perceive an increased risk of victimisation (Braakmann, 2012).

Janke, Propper and Shields (2013) find that crime levels, and therefore the fear of crime, change other daily activities such as exercise patterns. They find increased violence in an area reduces the level of walking exercise that takes place in that area.

Both Braakmann (2012) and Janke, Propper, Shields (2013) find that gender effects the response, with females more likely to take evasive action by changing routes or avoiding walking, whilst males actually increase the level of engagement – walking or going out – in response to increased victimisation.

The effect of local crime on mental health is estimated by Dustmann and Fasani (2015). They find a significant and negative impact on mental distress from local crimes. Responses differ by crime type; property crime has a more localised impact, whereas violent crime can impact surrounding areas. They identify three paths from crime to mental distress: anxiety and fear of victimisation, reduced freedom and behavioural changes, and the costs of deterrent strategies.

Another contributing factor to the fear of crime that is highlighted by many studies (Jackson, 2004) is the degree of perceived community cohesion, defined as the extent to which locally based identities and social networks are important (Forrest & Kearns, 2001). These tend to be built around models of community influence via social capital (Coleman, 1988) and collective efficacy (Sampson & Raudenbush, 1999; Sampson, Raudenbush, & Earls, 1997) i.e. the ability and will of a community to deal with local problems on behalf of the common good. These see the role of community and social organisations as a process allowing communities to monitor anti-social activities and maintain both formal and informal social controls. It is the existence of these informal social controls in a community that Sampson and Groves (1989) say reduces ASB. The 'community integration model' predicts that social ties support the perception that the community is willing and able to respond to disorder (Bursik Jr & Grasmick, 1993), thereby social integration leads to reduced fear of crime. This is supported by Taylor, Gottfredson and Brower (1984) who found social ties lowered fear of crime directly and Ross and Jang (2000) find that though disorder weakened social ties, residents who established social ties had lower levels of fear of crime.

A range of studies using similar multivariate regression techniques to analyse survey datasets from different countries, such as those by Villarreal and Silva (2006) and Kanan and Pruitt (2002), arrive at differing conclusions as to the significance and nature of the relationship between neighbourhood cohesion and fear of crime. More broadly, the literature on CPTED suggests that satisfaction with the quality of life in an area of residency should associate positively with the success of crime prevention efforts and negatively with the fear of crime.

Through the use of similar UK based data, Sampson and Groves (1989) also find evidence in support of Shaw and McKay's (1942) social disorganisation theory by suggesting that residential mobility, family disruption, economic status and ethnic diversity all positively influence the degree of social disorganisation in a neighbourhood, which in turn increases the rate of crime. Support for this contention is established by Taub, Taylor and Dunham (1981), who find that fear of crime is less prevalent among those who consider their neighbourhoods to be stable or where neighbourhood confidence exists. Skogan (1986) also shows that fear of crime is associated with neighbourhood decline and further that there is a bi-directional causality between the two, because fear undermines a community's ability to deal with issues such as crime. Villarreal and Silva (2006) find that neighbourhood cohesion is positively associated with perceived fear of crime due to the effect of word-of-mouth. Community networks have the potential to lead to higher levels of fear of crime (Rountree & Land, 1996; Taylor & Hale, 1986) through 'indirect victimisation' (Covington & Taylor, 1991) or the sharing of crime experience, whereby residents are more likely to hear about recent incidents, resulting in heightened awareness and therefore increased fear. LaGrange, Ferraro and Supancic (1992) find evidence of a significant positive relationship between neighbourhood incivility and fear of crime using US survey data. However, Kanan and Pruitt (2002) find that neighbourhood incivility does not have a significant impact on fear of crime. The study finds that neighbourhood disorder, income and crime prevention measures represent the most robust predictors. Hunter (1978) states that disorder results in fear of crime, whereas Spelman (2004) sees causation in the opposite direction. However, others (Sampson & Raudenbush, 2004; Tseloni, 2007) consider there to be an endogenous relationship, with another set of variables forming them.

The mechanisms by which the characteristics of neighbourhoods contribute to the fear of crime, are further explored by Brunton-Smith and Sturgis (2011), finding that visual signs of disorder and recorded crime have a direct and independent effect on fear of crime. However, they find that these are moderated at the individual level by neighbourhood socio-economic characteristics. Brunton-

Smith (2011) provides further evidence on the directional nature of this relationship from a longitudinal study, finding evidence that fear of crime is consistently driven by individual perceptions of low level disorder over time, but not vice versa. However, a high residual correlation between disorder and fear remains. This could be explained in part by the bridging link, between the structural characteristics of an area and an individual's worries about crime, that is enabled by collective efficacy and neighbourhood disorder (Brunton-Smith, Jackson, & Sutherland, 2014).

Empirical studies in the area of fear of darkness and crime are still somewhat hampered by the 'information fog' surrounding residents' perceptions of criminal activity in their city. Although research by Warr (1980, 1982) has demonstrated that public perceptions of crime rates are actually remarkably accurate, one should not ignore the distinction between an accurate perception of the general rate of crime and the probability of one's own victimisation. The perceived risk of victimisation has been found to associate with fear of crime (Ferraro, 1995; Jackson, 2004), although Skogan (1987) suggests that this association can be irrational due to the paradox between those groups that express the greatest levels of fear and those with higher rates of victimisation. Jackson and Gray (2010) find evidence that the fear of crime can actually be functional, acting as a motivating factor leading to precautions to reduce victimisation. Of particular importance to the findings of this research is that those who have a dysfunctional worry of crime (one that has led to a negative impact on the quality of life such as reducing participation in out-of-home evening leisure participation) are found to have the least confidence in local policing activities (Gray, Jackson, & Farrall, 2011). Further, that some particular groups may not feature highly in terms of victim prevalence rates might simply reflect the exercise of caution and anticipation of problems on account of their actual or perceived level of vulnerability. For example, Greve (1998) finds that the increased fear of crime amongst the elderly is due to a rational assessment of vulnerability and the use of crime preventing behaviours, rather than evidence of a debilitating or irrational emotional state. Smith and Torstensson (1997) suggest that this might also be due to hidden victimisation,

particularly among women. Thus, more generally, it seems reasonable to consider responses through the lens of strongly bounded rationality (Simon, 1957). In this vein, residents' decision-making with regard to risk of victimisation can only be considered as being informed by the extent and quality of the various sources of mediated information they had available to them at the relevant time and irrespective of their actual level of accuracy.

The 2007/08 British Crime Survey (BCS) suggests that approximately 3% of all UK adults were at risk of being a victim of violent crime at least once in the last year. The risk is twice as high (approximately 6%) for women aged 16-24 and more than double that again (approximately 13%) for men aged 16-24. The risk decreases with age to less than 1% for women aged 55+ (and men aged 65+). The same pattern is seen for the sub-categories of violence that one would associate with going out at night: 'stranger violence' and 'mugging' (robbery and snatch theft). The risk of 'stranger violence' increases with income, but the risk of 'mugging' decreases up to the top income category of £50,000 before increasing again.

7.2. Modelling Strategy

This study empirically considers the factors influencing fear of crime and its impact on constraining evening out-of-home leisure participation in an English city through analysis of detailed household interviews.

Limitations of similar studies are addressed by making the association between fear of crime (rather than darkness), and the decision to limit evening leisure activities that would otherwise occur, explicit. Alongside the standard range of economic and demographic factors typically considered, the findings indicate the importance of dissatisfaction with crime prevention efforts (control signals) and perceptions of problems with anti-social behaviour and drugs in the area of residency. The findings also suggest that the perception of quality of life and neighbourhood cohesion do not have a significant influence on the fear of crime.

This study employs a representative household interview survey of 1,005 households, drawn from across the City of Portsmouth in the United Kingdom during 2007. Multivariate statistical analysis of the household interview data reveals those statistically significant factors raising or depressing the probability of avoiding participation in the evening/night-time leisure economy of a city due specifically to fear of crime in darkness hours.

Additionally, this paper also addresses a key limitation of many similar studies appearing in the literature, which is that surveys tend to frame questions on the fear of leaving the home after dark without specifically mentioning crime as the specific underlying reason. As part of the empirical analysis conducted in this paper, the dependent variable has been carefully worded to make the association explicit. The dependent variable used in this study implies that fear of crime has a direct and measurable effect on respondents' out-of-home evening leisure participation choices and is therefore worthy of further investigation.

The dependent variable used in this empirical analysis reflects the extent to which respondents indicate that a fear of crime prevents them from going out in the evening. A majority of similar studies that use survey data to investigate the issue focus their attention upon questions relating to a fear of going out after dark, where the association with crime is implied rather than explicit. The survey questions that form the basis of the empirical analysis are based on responses that specifically mention the fear of crime as a reason for not wanting to leave the home after dark. Thus, where other studies use the response to a question of this sort to imply a fear of crime, this study makes the relationship between a fear of being out of the home at night and the fear of crime both clear and explicit.

It is recognised that there can be many dynamic uses of the local area at night, particularly in a city centre (Bromley, Tallon, & Thomas, 2003), and these uses and the people attracted to them can change over the duration of a 24 hour period. Whilst other studies commonly state 'walking alone at night' in their fear of crime measures, the dependent variable in this study neither states whether

the respondent is in the presence of others nor the mode of transportation (e.g. walking). By leaving this context open to the respondent's interpretation, rather than restricting it to an activity that they may have been unlikely to undertake regardless of their fear of crime, it is therefore implied that the respondent is applying their fear of crime to a choice they would otherwise have considered. Therefore, the dependent variable in this study is more likely to measure the direct impact than a more general fear of crime at night, in terms of foregone out-of-home leisure participation. The dependent variable consistently maps to the 'worry' dimension of fear of crime, described by Jackson and Gray (2010), - be it functional, or dysfunctional - rather than the more general feeling of 'anxiety' that is not acted upon or justified by experience. Other contextual elements are addressed to a certain extent, by limiting the area to within Portsmouth, which one would assume the respondent resident would have significant experience of and indeed familiarity.

Respondents are asked to indicate their response to the question: "To what extent does fear of crime prevent you from going out in Portsmouth in the evening?", using a five-point Likert scale, with responses ranging from 'A great deal' to 'Not at all'. These responses are codified on a scale of 1-5, with higher values indicating agreement with the statement to a greater extent. For the purposes of confirming the robustness of the empirical results, both a binary and ordinal logistic regression are then estimated in order to explore the significant determining factors that explain variations in this ordered variable. For the binary logit regression, the dependent variable is transformed to take a value of 1 where there is a positive response to the fear of crime statement (i.e. 'a great deal' or a 'fair amount') and 0 otherwise.

This study addresses the research question:

Q6. Can community safety initiatives have an impact on the level of fear of crime?

The findings highlighted in the literature review (Section 7.1) lead to the formulation of the following specific research hypothesis to be tested:

H2.1: Socio-demographic factors significantly influence the extent to which fear of crime prevents the respondent from going out in the evening.

H2.2: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who perceive a low quality of life and/or lack of neighbourhood cohesion in their area of residency

H2.3: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who do not have confidence in local crime prevention efforts.

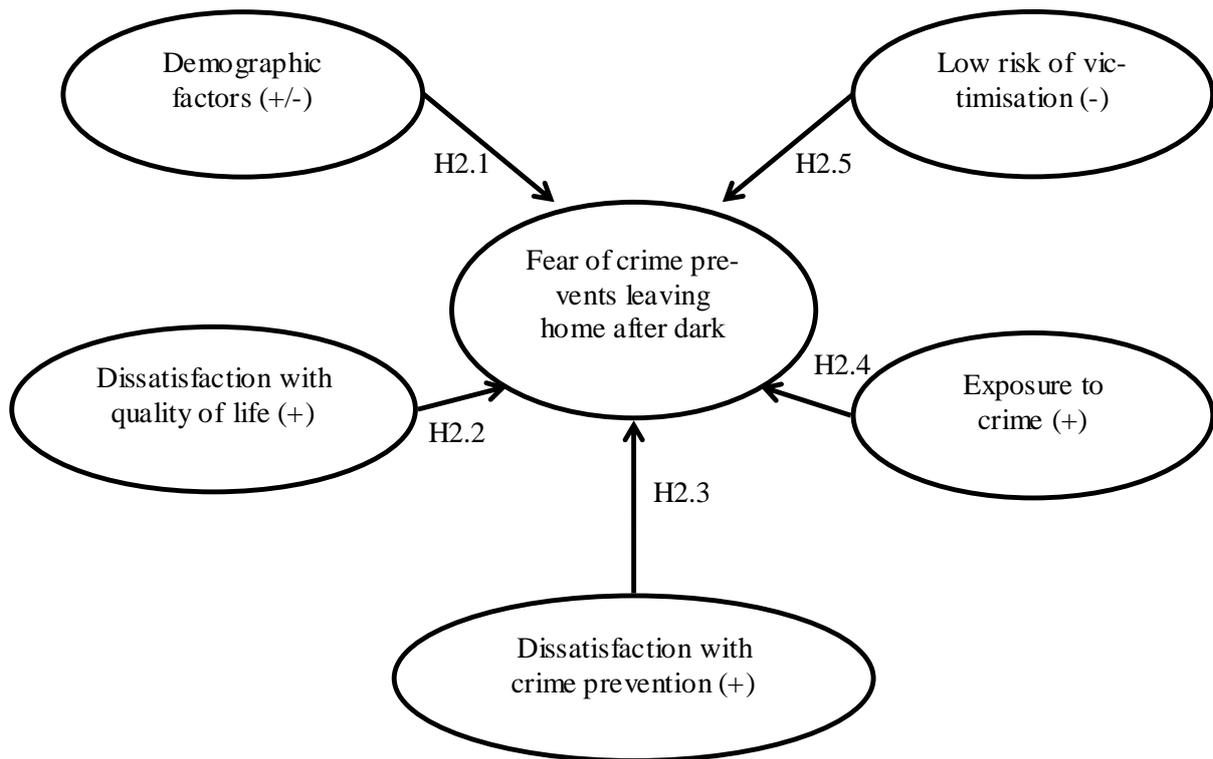
H2.4: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who perceive greater levels of exposure to offending in the area of residency

H2.5: The extent to which fear of crime prevents the respondent from going out in the evening decreases for those who perceive there to be lower risk of victimisation.

The variables that are suggested to affect fear of crime and the willingness on the part of the respondent to leave their home after dark are presented as part of a conceptual model summarised in

Figure 12, which also indicates the expected sign of the relationships.

Figure 12 Willingness to Leave Home in the Evening – A Conceptual Model



A full breakdown of the variables appearing in the empirical analysis can be found in Table 25.

Table 25 Model Variables – Study Two

Variable Name	Item Description	Mean (Std. Dev.)	Range
FEARBINARY	Respondent responds positively to the statement 'fear of crime prevents me from going out in the evening'.	0.299	0-1
FEARORDERED	Response to the statement 'fear of crime prevents me from going out in the evening' on a Likert scale (1=not at all, 5=a great deal).	2.941 (1.084)	1-5
EXACT AGE	Respondent's age (years).	45.750 (19.473)	16-95
YOUNG PEOPLE IN HOUSE	Respondent lives with children (under the age of 18).	0.348	0-1
FEMALE	Respondent is female.	0.527	0-1
DEGREE	Respondent's highest educational attainment is degree.	0.183	0-1
A-LEVEL	Respondent's highest educational attainment is A-Level (16-18).	0.174	0-1
GCSE	Respondent's highest educational attainment is 5 or more GCSE grades A-C (11-16).	0.173	0-1
DISABLED	Respondent is themselves disabled.	0.151	0-1
ETHNICITY	Respondent is non-white.	0.049	0-1
PO1	Respondent lives in a PO1 postcode (city centre)	0.129	0-1
DISFEAR	Respondent is dissatisfied with the City Council's efforts to reduce the fear of crime.	0.337	0-1
DISSAFE	Respondent is dissatisfied with the City Council's efforts to make Portsmouth a city where people feel safer.	0.325	0-1
DISASB	Respondent is dissatisfied with the City Council's efforts to reduce anti-social behaviour.	0.423	0-1
DISVIOLENT	Respondent is dissatisfied with the City Council's efforts to reduce violent crime.	0.380	0-1

Table continued on next page

Continuation of Table 25 Model Variables – Study Two

Thought crime went up	Respondent indicates a belief that the crime rate in Portsmouth has increased within the last two years.	0.376	0-1
CLASS	Respondent's social class (scale: 1 = E, 6 = A).	A=.013, B=.182, C1=.313, C2=.21, D=.149, E =.128	1-6
FULLTIME	Respondent works full time.	0.371	0-1
OWNEROCC	Respondent is the owner-occupier of their home.	0.636	0-1
IMPINCOME	Respondent's gross household income (scale: 1 = <£2,500 p.a., 11 = >£31,199 p.a.).	7.405 (2.803)	1-11
OWNCAR	Respondent indicates that they own one or more cars.	0.679	0-1
ASBPROB	Respondent indicates that they believe anti-social behaviour to be a problem in their area.	0.439	0-1
ASBEXP	Respondent indicates that they have personally been affected by anti-social behaviour.	0.415	0-1
DRUGUSE	Respondent indicates that they believe that their area has a problem with drug users.	0.239	0-1
DRUGDEAL	Respondent indicates that they believe that their area has a problem with drug dealers.	0.181	0-1
DISQUAL	Respondent is dissatisfied with the overall quality of life in Portsmouth.	0.066	0-1
DISAREA	Respondent is dissatisfied with their area as a place to live.	0.126	0-1
DISCOHESION	Respondent disagrees that the local area is a place where people of different backgrounds get on together.	0.130	0-1
NO AREA OF CITY UNSAFE	Respondent's perception of exposure to risk. Respondent indicates that there were no areas in Portsmouth where they feel frightened or avoid going through fear of crime.	0.31	0-1

Due to high levels of correlation observed between individual sub-sets of attitudinal responses, the affected data are entered into a principal component analysis, which also allows for empirical results to be linked to the research hypotheses more explicitly. Where possible, the classification of these factors is consistent with a similar study by Box, Hale and Andrews (1988), who find that fear is influenced by demographic characteristics, neighbourhood cohesion, confidence in the police, levels of local incivility, experience of victimization, perception of risk and assessment of offence seriousness. This study uses the aforementioned survey responses to construct appropriate variables relating to a majority of these categories. The results of this exercise are presented in Table 26. As several of these variables are binary, the mean value can be interpreted as the percentage of respondents who responded positively to the stated question.

Overall, five unique factor scores are created from the raw dataset, which are as follows:

(1) CONTROL SIGNALS (DISSATISFACTION WITH CRIME PREVENTION EFFORTS): perceptions of how (in)effective the efforts of the local authority have been in reducing the impact of crime, Cronbach's Alpha = .82,

(2) AFFLUENCE: the extent to which the respondent is affluent, which is associated with income, social class, car and home ownership etc., Cronbach's Alpha = .58,

(3) CONCERN OVER ANTI-SOCIAL BEHAVIOUR: the extent to which the respondent feels there is a problem with or has been affected by anti-social behaviour, correlation coefficient = .95,

(4) CONCERN OVER DRUGS: the extent to which the respondent feels that there is a problem with drug dealing/taking in the area, correlation coefficient = .77 and

(5) DISSATISFACTION WITH QUALITY OF LIFE: captures the extent to which respondents are dissatisfied with living in Portsmouth and their particular area, Cronbach's Alpha = .53. As the fifth factor score is partially based on perceptions that the area of residency is a place where people get on together, it is considered to be a reasonably proxy for the variables used in a similar study by

Hartnagel (1979) to measure levels of social cohesion, these being the extent of face-to-face interaction with other residents and the number that would be known by name if met in the street.

Although 'respondent works full time' and 'respondent indicates a belief that the crime rate in Portsmouth has increased within the last two years' have comparatively lower loadings than other variables contributing to the respective factor scores, each exceeds the minimum value of 0.32 as recommended by Tabachnick and Fidell (2001). The formulation of these five attitudinal factors (specifically dissatisfaction with quality of life, control signals - dissatisfaction with crime prevention efforts, concern over antisocial behaviour, concern over drugs and affluence) allows for the testing of H2.2 – H2.4 and the partial testing of H2.1 respectively. Finally, a single variable is included to proxy for the respondent's perception of exposure to risk, which allows for the testing of H2.5. Although this variable is not included in the formal calculation of any of the factors mentioned above, the variable is included for exploratory purposes due to the theoretical importance of controlling for perceived risk exposure. A final check for any remaining multicollinearity reveals that no pair of variables included in the model following the principal component factor analysis is found to have a correlation coefficient in excess of 0.4.

Table 26 Principal Component Analysis – Study Two

Factor	Loadings	Variable Name
1 – Control signals (Dissatisfaction with crime prevention efforts)	.843	DISFEAR
	.871	DISSAFE
	.787	DISASB
	.745	DISVIOLENT
	.462	Thought crime went up
2 – Affluence	.657	CLASS
	.552	FULLTIME
	.668	OWNEROCC
	.832	IMPINCOME
	.758	OWNCAR
3 – Anti-social behaviour concerns	.960	ASBPROB
	.963	ASBEXP
4 – Drug concerns	.916	DRUGUSE
	.922	DRUGDEAL
5 – Dissatisfaction with quality of life	.734	DISQUAL
	.792	DISAREA
	.618	DISCOHESION

7.3. Results and Discussion

While the results are broadly consistent with many previous studies, there are some conspicuous contrasts particularly in respect of perceptions as to the quality of life and neighbourhood cohesion in the area of residency. Additionally, this study also finds strong evidence that control signals (dissatisfaction with crime prevention efforts) on the part of the municipal authorities and a perception of anti-social behaviour or drug problems in the area of residency are also found to positively and significantly influence fear of crime. Evidence is also presented that supports the contention that affluence reduces fear of crime.

The regression output from both the binary and ordered logistic regressions is presented in Table 27. The estimated coefficients are consistent across model specifications, suggesting that the findings are appropriately robust on the whole, regardless of whether fear of crime is measured in binary form or on a rising scale.

Table 27 Logit Regression Results – Study Two

Variable Name	Model 1 (Binary Logit)		Model 2 (Ordered Logit)	
		Coefficient		Coefficient
Constant Term	***	-2.5		-
Exact Age	***	0.025	***	0.019
Young People in Household		0.027		0.005
Female	***	1.196	***	0.982
EducDegree	*	-0.444	**	-0.435
EducA-level		-0.042		0.023
EducGCSE		0.063		0.021
Disability		0.141		-0.051
Ethnicity	*	0.708		0.363
PO1		0.17		0.093
Control signals (Dissatisfaction with crime prevention efforts)	***	0.34	***	0.255
Affluence	*	-0.16		-0.078
Antisocial behaviour concerns	*	0.162	***	0.192
Drug concerns	**	0.187	***	0.164
Dissatisfaction with quality of life		0.093		0.016
No area of city unsafe	***	-1.391	***	-1.277
R Squared McFadden		0.178		0.094
LR	***	215.323	***	252.163

Source: Residents' Survey 2007

*Denotes significance at the 90% confidence interval, **at 95% & *** at 99%.

The preferred model specification is the binary logit model, which is itself found to be significant. The McFadden R² value is estimated to be around 0.17 (a value of 0.20 or more is usually considered to be highly satisfactory) and the likelihood ratio indicates significance at the 99% confidence interval. The results suggest that females and older respondents are more likely to indicate that a fear of crime has prevented them from leaving the home after dark, with gender seemingly exerting a more significant influence over fear of crime in Portsmouth compared to age.

There is limited evidence that non-white respondents exhibit a greater fear of crime than those who are white, although this coefficient is only significant at the 90% confidence interval in the binary

logistic regression. The regression output suggests that higher educational attainment associates with a reduced likelihood of respondents expressing a fear of crime, although the difference in log-odds ratios relative to the base of 'no education' (mean = .47) is only found to be statistically significant at degree level. Thus it seems those that hold a degree (or higher) are significantly less likely to express a fear of crime compared to any other level of education attainment, which could be taken to be indicative of more informed decision making by these individuals in relation to actual risks of victimisation. Neither disability nor residence in a city centre postcode is found to cause a statistically significant variation in the fear of crime in either of the model specifications presented.

The affluence factor score is found to be negative and statistically significant in both specifications and suggests more affluent individuals tend to express a lower fear of crime. This corresponds with previous studies findings, and can be attributed at least in part to the more affluent respondents being better equipped to insulate themselves and having the means to be able to remove themselves from a situation. As such, these findings offer partial support for H2.1, in that age, gender, affluence and to some extent, ethnicity are associated with significant variations in a stated fear of crime, whereas disability, area of residency and the presence of children in the home are not. In the context of the arguments made in Sections 7.1 relating to the actual risk of victimisation for these groups being lower than the average (particularly in the case of the elderly), this result suggests that respondents engage in boundedly rational behaviour and/or demonstrate increased levels of preventative behaviour, as these groups express the greatest fear of crime while the risk of victimisation is actually comparatively low.

Of the five factor scores included in the empirical analysis, dissatisfaction with the crime prevention efforts of the local authority seems to associate with fear of crime to the greatest extent being positive, relatively large and statistically significant in both model specifications. These findings therefore offer strong support for H2.3. However, the variable assessing the perceived quality of life in the City of Portsmouth is not found to associate with a statistically significant variation in the fear

of crime, with estimated coefficients that are equivalent to zero in both regressions. This survey dataset therefore suggests that the most important attitudinal influence of fear of crime is dissatisfaction with specific crime prevention policy, rather than an over-arching dissatisfaction with quality of life in the city and area of residence in general. These results are largely consistent with those of Box et al. (1988), although only partial support is found for the contention that neighbourhood cohesion is a significant factor explaining variation in the fear of crime. Despite there being several variables included in the *Control Signals (Dissatisfaction with crime prevention efforts)* factor that are related to neighbourhood cohesion, a stated disagreement that the respondent's area of residence is a place where people get on together is an important component of the *Dissatisfaction with quality of life* factor score, which is not found to offer a statistically significant explanation for variations in the stated fear of crime. As a result, H2.2 cannot be accepted.

Finally, the two factor scores relating to the belief on the part of the respondent that there is a problem relating to anti-social behaviour and drugs in their area of residency are both positively and significantly related to the expressed fear of crime in both model specifications, indicating that fear of crime significantly increases where the respondent considers these types of offences to be a problem in their area, suggesting increased exposure to these offence types. The variable included to control for the (lack of) perceived risk of victimisation on the part of the respondent has the largest overall influence on fear of crime, being negative and statistically significant at above the 99% confidence interval. Unsurprisingly, the interpretation of this result is that those who have the lowest perceived risk of victimisation are the least likely to avoid leaving the house at night due to fear of crime. These findings together offer strong support for both H4 and H5.

Thus, the acceptance of four out of the five research hypotheses conforms to theoretical expectations directed by the literature in section 7.1. Specifically, fear of crime does appear to be significantly influenced by demographic factors (H2.1), satisfaction with crime prevention efforts (H2.3), exposure to criminal behaviour (H2.4) and perceived risk of victimisation (H2.5).

The one result that is contrary to expectations is the failure to accept the hypothesis that perceived quality of life affects fear of crime (H2.2). This seems to contradict the findings of other research focusing on the reductions in crime and the fear of crime through the built environment (Kitchen & Schneider, 2002, 2007) and enshrined in policy within the UK Government guidance paper 'Safer Places' (Office of the Deputy Prime Minister, 2004b). CPTED theories would suggest that there should be a strong relationship between satisfaction with crime prevention efforts and satisfaction with the quality of life in the area of residency, where both should also significantly and negatively associate with fear of crime. The evidence presented here only offers limited support for this contention, in that satisfaction with quality of life and neighbourhood cohesion are not found to associate with fear of crime. This calls into question the likely effectiveness of policy geared around the concepts of CPTED in terms of meeting all of its stated objectives.

8. Study Three: Analysing Multiple Indicators of Illegal Drug Activity

This study assesses the extent of perceptions about the level of drug use and/or dealing in an area against the observed or measurable drug problem, recorded by the police as well as drug litter finds. Therefore, the significant characteristics of those people with the highest perception (in areas of low measurable drug problems) are uncovered.

Many previous studies (Wood, 2004; Moon, Walker, Murphy, Flatley, Parfremment-Hopkins & Hall, 2009; Flatley, Moley and Hoare, 2008; Taylor, Twigg & Mohan, 2010) have identified the significant factors for perceiving anti-social behaviour or drug problems in an area. However, these studies have not been able to accurately ascertain whether these perceptions are supported by measurable observations of the problem. The perception measures are recorded at a local level (post code district) but remain comparable to those collected nationally. The local level of the data allows for far more accurate matching of the perception of drug problems in an area to the observed and measurable problem, making this study unique.

This section includes a sub-section for the relevant literature review which informed the research questions, a modelling strategy that sets out the methodology, key variables (including postcode district drug observations) and a priori expectations before the results are then presented and discussed.

8.1. Perceptions of Antisocial Behaviour, Drug Use and Dealing: A Review of the Literature

Section 1 of the 1998 Crime and Disorder Act defines ASB as an individual acting:

“... in a manner that caused or was likely to cause harassment, alarm or distress to one or more persons not of the same household [as the perpetrator].”

Squires (2008, p. 368) notes that the phrase 'likely to cause' allows a subjective interpretation to be applied to others' behaviour, and makes ASB about "perceptions, relationships and interaction and contexts". There are a variety of ways in which an individual may regard a particular behaviour as problematic. According to Millie, Jacobson, McDonald & Hough (2005) ASB tends to include the following types of behaviour:

- interpersonal/malicious ASB (e.g. hoax calls, vandalism directed at individuals or groups, forms of intimidation);
- environmental ASB (e.g. litter, graffiti, fly-tipping, noise nuisance);
- ASB that restricts access to shared public spaces (e.g. intimidating behaviour by groups of youths, drug use/ dealing in public, rowdy street drinking)

Drug use and dealing has the potential to exhibit or be associated with all of these types of behaviour. For example, evidence of drug problems may contribute to environmental ASB (e.g. drug litter and discarded paraphernalia) but it is perhaps more likely to be considered a problem if the behaviour restricts access to shared public spaces or enhances malicious ASB.

'Perception of drug problems' is often one strand of ASB incorporated into a broader range of perceptions of ASB (including abandoned cars, noisy neighbours, rubbish, vandalism, drunken behaviour and teenagers hanging around). However, the drivers of perception of drug problems differ to these other strands of ASB and deserve individual attention. For example, Wood (2004) and Moon, Walker, Murphy, Flatley, Parfremment-Hopkins and Hall (2009) found that, of all ASB strands, a perception of drug problems was least likely to be formed through the respondent's personal experience. Problems of drug use and dealing are also more likely to be associated with more serious emotional responses such as fear, worry and shock, than other types of ASB. These are discussed in more detail below.

Both Wood (2004) and Moon et al. (2009) asked a series of additional follow-up questions to BCS respondents about perceptions of ASB to further explore how perceptions were formed. While perceptions of both drug use and dealing were most commonly formed through personal experience (61% for drug use and 54% for drug dealing), this was much lower than for all other types of ASB (Moon et al., 2009; Wood, 2004). For example, 96% of those perceiving problems with teenagers hanging around, and 86% of those perceiving problems with people being drunk and rowdy, stated that they formed their opinion on personal experience (Moon et al., 2009). The next most common ways an impression of drug use and dealing problems was formed are: through the experience of others (neighbours, friends and family - 37% drug use; 36% drug dealing) and it being 'just generally known' (39% drug use; 38% drug dealing) (Moon et al., 2009).¹⁸ 'Just generally known' was considerably higher for drug use and dealing than other forms of ASB. Another common way of forming an impression was through local media, and it is hypothesised by Wood (2004) that where perceptions are less likely to be formed by personal experience, this void is filled by experience of others and stories in the local media. Given the relative importance that stories in the local media have on perceptions of drug use and dealing, references to crack house closures, cannabis factories and drug raids reported in the local media during the time of this survey are provided in Study 3.

Respondents to the 2008/9 BCS reported experiencing problems with drug use more frequently than drug dealing (61% and 50% respectively; at least once a month). However, Moon et al. (2009, p. 29) also found no real difference in the proportion experiencing very high frequencies of problems (daily or almost daily).

Wood (2004) asked further questions of those who reported a particular type of ASB being a problem. This was in part to address and analyse the different situations or subjective views of their experience. Respondents who stated they had experienced one of the forms of ASB were asked what had happened on the last occasion. It was noted that this method would be more likely to

¹⁸ Responses add to more than 100 as respondents could choose more than one option.

generate a typical view, rather than recording the 'worst' type of behaviour experienced. However, it is worth noting that ASB can be an ongoing experience, the intensity of which can vary over time.

The type of area in which the incident occurred had a notable association to the number of incidents, although the general ranking of most common incidents remained the same. For example, people taking hard drugs was more likely to occur in areas of urban prosperity (27%) than in comfortably-off areas (15%) (Wood, 2004). A similar pattern was observed for other incidents such as drug-related begging and violence between gangs, which was higher in areas of urban prosperity than other wealthy areas. Similarly, for those experiencing incidents in areas of modest means, drug dealing was more common (38%) than in wealthy achiever areas (23%) (Wood, 2004, p. 27).

The specific location of drug use and dealing incidents experienced is another important factor to consider. Moon et al. (2009) found that those perceiving drug use problems were somewhat more likely to say that the problem occurred close to where they lived than those perceiving drug dealing problems (54% and 49% respectively, p. 28). Perhaps unsurprisingly this type of ASB was reported to occur most commonly outside; on the streets in the local area (39%), or in their own street (37% of cases on foot and 20% of cases in cars) and in parks (32%) (Wood, 2004, p. 28).

Perceiving a problem with drug use or dealing in their area resulted in serious emotional impact (shock, fear, stress, depression, anxiety, panic attacks or crying) for almost a quarter (23%) of respondents. This was second only to problems with noisy neighbours (27%). While a greater proportion experienced shock and fear due to drug problems than any other type of ASB, one of the most interesting findings is the large proportion (35%) who experienced 'worry'. Not only was this the most common emotional impact for those perceiving drug problems, it was also much greater than for all other ASB types. However, to put this in context, drug problems were also the ASB strand that had the highest proportion of people (27%) who did not react emotionally. It is perhaps no

coincidence that this ASB type coincides with the lowest amount of personal experience (Wood, 2004, p. 34).

Of those who perceived a problem with drugs in their area, over half (52%) regarded this as having a low impact on their quality of life (scoring it 1 or 2 out of 10). This reflects the more long-term impact on their quality of life and was more than all other types of ASB: young people hanging around (38%), drunk or rowdy behaviour (39%). However, 19% regarded drug problems as having a high impact on their quality of life (scoring 6+ out of 10). This is close to young people hanging around (22%) and drunk or rowdy behaviour (20%) and greater than vandalism and graffiti (16%). This can be interpreted as meaning the majority of those who see it as a problem realise it has little direct impact on them compared to other forms of ASB. This could be because of the private and secretive nature of many drug use and dealing experiences. However, when it does have a direct impact, then it is a greater impact than many other types of ASB. This may reflect those occurrences in shared public spaces, or where it occurs in a neighbouring property (Wood, 2004, p. 34).

Perceiving drug problems in their area was found to lead respondents to make some behavioural changes in 39% of cases. This was broadly in line with other ASB types; 41% for young people hanging around and 47% for drunk or rowdy behaviour. The types of behavioural changes were wide ranging, but limiting the use of public spaces in the area was a theme common to many of the changes mentioned. In common with many other ASB types (such as drunk or rowdy behaviour and young people hanging around), avoiding certain places in the local area was ranked the highest behavioural change, and at 22%, it was also slightly higher for those perceiving drug problems than for other ASB strands (Wood, 2004, p. 35).

Behavioural changes were less about anticipatory costs to reduce the chances of becoming a victim, such as improving home and car security. Neither was it about feeling unsafe, which was equivalent to those perceiving drunk or rowdy behaviour, although less than from young people hanging

around. Responses to the community, such as becoming less trusting of people in the local area (11%) were more common as were encouraging others not to go out alone (although there was less change in a respondent going out alone). Also covered in Study Two, 16% of those who perceived drug use or dealing problems in their area would change their behaviour by not going out after dark – but this was broadly in line with other ASB types (Wood, 2004, p. 35). Interestingly, a third (33%) of those who perceived a drug problem in their area, but did not report personally experiencing it, still felt some kind of impact on their behaviour

Therefore, drug problems tend to have a relatively low emotional impact, on average, as they include less personal experience – but the perception of a problem has more long-term impacts on both the quality of life and on the individual's behaviour. Therefore, the perception of drug use and dealing in an area can still negatively affect those living there.

If the supply and consumption of illicit drugs is considered as representative of a market, then the perception of drug use and dealing as a problem is a negative externality. The economic and social costs of drug use and dealing have been estimated as £15.4 billion in the UK in 2003/4 (Gordon, Tinsley, Godfrey, & Parrott, 2006). While the negative externalities would be limited for less observed drug dealing and use, from a public policy point of view there would still be damage and harm if local residents still had a high perception, for example, enhanced fear of crime and the resultant negative effect on wellbeing. There is also a link to Wilson & Kelling's (1982) 'broken windows' theory and the possibility of a negative cycle of decline for the area if these perceptions are shared by outsiders to the area. It is also worth considering Wikström's (2009) comment (expressed in more detail below) that these perceptions may sometimes be good predictors for more serious and damaging effects.

Drug use and dealing appears to be a phantom menace. It causes a large amount of serious worry, but very few perceptions of it being a problem are based on any direct experience. To add to its

illusiveness, it is also generally in the interests of the users and dealers to keep it hidden. So it may be rational for a resident to conclude that the fact they do not personally experience it does not necessarily mean that it is not occurring. However, it could be argued that no 'evidence' (in terms of arrests, or drug litter, may actually imply, or actively be because of, an 'underground', well-hidden drug use or dealing network. Evidence on the extent of drug use and supply in Portsmouth is provided in Section 2.2 and Section 8.2.1. This draws not only on police data, but on drug signals that may be harder to keep hidden – such as drug related hospital admissions or deaths, and those on drug treatment programmes.

Therefore, some will be likely to over-estimate their perception of ASB compared to the evidence, while others may perhaps not see drug use and dealing as a 'problem', despite the evidence that it exists. This view is borne out by Upson's (2006) analysis of the 2004/5 BCS, which found that there were a significant number of respondents who do not perceive ASB to be a problem – despite experiencing it. However, this was much lower for the drug use or dealing strand (7%) than for other ASB strands (53% of those who had experienced young people hanging around).

The strength of emotion is also likely to be influenced by the location and context in which a particular behaviour is experienced, or the comparative context of how a perception is formed. Allen (2008, p. 109) notes that it may also be true that an act of ASB may not be regarded as a problem or an issue if it has become a 'natural' phenomenon of the local community, is considered a 'fact of life', or it is assumed that all other areas are experiencing the same ASB incidents. In such cases individuals may simply regard the issues as too unproblematic or trivial to be worth reporting as ASB (Casey & Flint, 2007). Conversely, Atkinson and Flint (2004) find that residents may report that the ASB they are experiencing is unbearable despite the fact that it may be uncommon or comparatively trivial.

Two types of studies directly inform this area of research. The first commonly find that perceptions of fear of crime and ASB rarely correspond accurately with observed levels, be that official records of crime or an environmental audit (Sampson, 2009), and attempt to explain the mechanisms behind perceptions. These theories are developed by interrogating responses of those classified as having high perceptions in areas with low observed and measured drug evidence. The second type informs the relevant variables that should be included in the model to predict perceptions of ASB – and drug problems in particular.

One explanation, proposed for understanding the paradox between reported perceptions and experience or observations of ASB incidents, is that ASB acts as a metaphor for some other more serious social problem. Therefore, perceptions of ASB respondents are not interpreting the behaviour they are specifically being asked about as problematic, but are seeing ASB as an indicator of social and neighbourhood fragmentation, through a lack of social control (formal and informal) or moral decline. For example, Bursik and Grasmick (1993) and Lewis and Maxfield (1980) take the view that perceptions of ASB are strongly related to forms of incivility that may be a sign of the intensity of social control. Perceptions of ASB have also been linked to wider concerns of parenting and respect (Hayton & Shaw, 2008) or highlighting ‘a deeper neighbourhood malaise’ (Sampson & Raudenbush, 2004, p. 319).

This raises the question of whether perceptions of ASB can ever be considered accurate, given that respondents are believed to report something other than their observations. Nevertheless, Wikström (2009) argues that perceptions may sometimes be accurate if the ASB observed leads to, or is associated with, more serious incidents. In other words, it is perfectly rational to consider the same level of ASB in one area to be problematic (if it correlates with more serious incidents) – while not perceiving it as problematic elsewhere (where this correlation does not exist).

The potential drivers of perceptions of ASB can be grouped into: neighbourhood characteristics, perception of an area, personal and household characteristics and experience. These groupings are perhaps best summarised in Wood's (2004) influential study, based on the 2003/4 BCS, which contained additional detailed questions to explore what people's perceptions were based upon. Using multivariate analysis Wood (2004) found the strongest independent predictors of perceptions of ASB were related to the area; those living in inner-city and 'hard-pressed' Acorn areas were four times more likely to identify ASB problems than those in 'wealthy achiever' areas.

Flatley, Moley and Hoare (2008) conducted similar analysis of BCS data but repeated this for each strand of ASB – including drugs. They found that of all ASB strands, deprivation most strongly associated with drug problems; those in the most deprived being four times more likely than the least to perceive problems. This is supported by Sampson and Raudenbush (2004) and Skogan (1990) who found an increased likelihood of reporting serious problems of disorder in lower income areas. Saxe et al. (2001) suggest that drug dealing is more visible in both disadvantaged and densely populated areas. As Sampson (2009) notes, drawing on the work of Stinchcombe (1963), certain activities conducted in a private space are socially acceptable, or at least non anti-social, but the same activity becomes unacceptable, or anti-social, when conducted in a publicly accessible space. Examples include drinking, drug taking, or even 'teenagers hanging around'. The act itself may be considered criminal or anti-social, but if the activity merely restricts access or use of public space (for other purposes) then it can also be considered as ASB. Therefore, given that the disadvantaged may have less access to private spaces compared to the more privileged, then some of their activities are pushed into becoming 'disorder' in public spaces. Therefore, it is not that those in disadvantaged areas are necessarily committing more of this activity – but when they do undertake this, it is exposed and easily observable by others.

The relationship between perceptions of ASB and demographic or other background aspects uncovered in the BCS findings is supported by numerous studies (Austin & Sanders, 2007; Mackenzie

et al., 2010; McAuley & Macdonald, 2007; Millie, 2007; Taylor, Twigg, & Mohan, 2010). Ames, Powell, Crouch and Tse (2007) find evidence to support the positive association between perceptions of ASB and deprivation, population density and proportion of young people. In addition, net population outflow was found to be linked to higher perceptions of ASB by both Ames et al. (2010) and Taylor (1996).

The BCS uses 'level of physical disorder', based on the interviewer's observation of vandalism, graffiti, deliberate damage to property, litter and the condition of homes in an area. This was found to be an independently strong and significant predictor for overall perceptions of ASB, and every ASB strand other than drug problems (Flatley et al., 2008).

Wood (2004) finds the geographical region to be a significant factor, with this study area's region (South East) associated with higher perceptions of ASB. Furthermore, living in areas with a high relative proportion of young people, and low proportion of economically active people, were also found to be strong independent predictors of high perceptions of ASB. However, the proportion of households that are couples with children was a weak but statistically significant, predictor of perceptions of ASB. McCord, Ratcliffe, Garcia, and Taylor (2007) found that living close to a 'crime relevant' non-residential land-use site also led to higher perceptions of ASB.

The proportion of the local population who are white was found by Wood (2004) to be negative and statistically significant, but a weak predictor, of high perceptions of ASB. However, another British study (Taylor, Twigg, & Mohan, 2010) finds that diversity is less important than deprivation and poverty in influencing perceptions of ASB. Other research reflects some relationship (Skogan, 1990; Wilcox, Quisenberry, & Jones, 2003) where signs of disorder were more likely to be reported by residents in predominantly minority neighbourhoods.

However, there are other ways to interpret the racial composition of an area. Sampson (2009) describes the use of stereotypes as a mechanism to predict the level of ASB in an area. Sampson and Raudenbush (2004) show that cultural stereotypes are used as a cue for disorder akin to other

observable aspects of disorder (rubbish, graffiti and drug paraphernalia). Sampson's (2009) study found that the racial composition of an area was three times better at predicting higher perceptions of ASB than the 'real', observed, level of disorder. The racial composition of an area was used as a shorthand, heuristic, way to make judgements about an area. This stereotype mechanism worked for both those residing in, and those from outside, an area (Sampson & Raudenbush, 2004). Therefore, Sampson is proposing that it is not ASB that is observed and reported as a problem, but some other variable related to the area. While the racial composition of an area would not be directly applicable to this English city, it is worth considering that some aspect of the neighbourhood characteristic is influencing perceptions of drug problems, through a stereotype mechanism. Sampson (2009) suggests that it may be social distinctions within the British white working class that replace the role of race in the USA.

There are competing arguments about the effect of community relations, networks, cohesion collective efficacy, on perceptions of ASB. These are discussed above in more detail with respect to the fear of crime. Nevertheless, Wood (2004) found collective efficacy to be the third strongest predictor of ASB after type of area and criminal victimisation. However, this was excluded from their multivariate analysis due to the inability to define the direction of causality. Higher perceptions of ASB has been found to correlate with 'perceived powerlessness' - the antonym of collective efficacy (Christie-Mizell & Erickson, 2007; Geis & Ross, 1998; Ross, Reynolds, & Geis, 2000). Combined with this sense of powerlessness, is residents' commonly held view that ASB arises because 'outsiders' are encroaching into the neighbourhood (Atkinson & Flint, 2004). Another perception of ASB correlate is perceived neighbourhood cohesion (Flatley et al., 2008; Innes & Jones, 2006; Sampson, 2009), i.e. whether people from different backgrounds get along with each other.

Weak community cohesion and a feeling of powerlessness can be related to perceptions of local 'control signals', such as crime reduction, detection or other law enforcement activity (Innes, 2004). However, it is the perceived efficacy of these activities that is key to countering the anxiety over loss of control. Provided that control signals represent genuine and legitimate control of crime and ASB

(Crawford, 2009; Tyler & Fagan, 2008) then, even in high crime areas, confidence in control signals can contribute to lower perceptions of ASB (Bottoms, 2006; Myhill & Beak, 2010; Smithson & Flint, 2006). However, causality may be bi-directional; just as perceptions of ASB can be influenced by satisfaction with law enforcement, so the reverse may be true. Flatley et al. (2008) did not include confidence in control signals in their model.

Differences within neighbourhoods, and even within the same street (Atkinson & Flint, 2004), have been found to be a factor in other studies. Flint and Nixon (2006) found that even within the same street, the housing type of the respondent was most important in determining perceptions of ASB; with tenements, flats, as well as social rented accommodation (Wood, 2004), associating with higher perceptions of ASB.

Innes and Jones (2006) found the difference within neighbourhoods was explained in part by the ethnicity of respondents, who may share economic and demographic characteristics and live in close proximity, but have a different perception of the area. There are mixed findings of the role of a respondent's ethnicity (Taylor, Twigg, & Mohan, 2010), but where it is found to be significant, a respondent being of a minority tends to associate with higher perceptions of ASB (Wood, 2004). In some situations, the combination of age and ethnicity is found to be most significant. For example, Wallace and Murdoff (2002) found African American adolescents were more likely to report observing drug sales in their neighbourhood.

Several studies have found age, in particular being a young person (aged 16-24) to be positively correlated with perceptions of ASB (Ames et al., 2007; Wood, 2004). However, Flatley et al. (2008) find this relationship is considerably weaker for perceptions of drugs. The following personal demographic information was found not to be significant: gender, marital status, number of visits to the pub, occupation, highest educational qualification, or household income.

Some studies find those in 'very bad health' to be amongst those most at risk of perceiving high levels of ASB (Wood, 2004). However, Flatley et al. (2008) found the level of physical disorder of the

respondent did not associate strongly with perceiving drug problems. There is a vast body of literature highlighting the persistent correlation between perceptions of disorder and its detrimental impact on physical and mental health (Aneshensel & Sucoff, 1996; Geis & Ross, 1998; Mitchell & LaGory, 2002; Poortinga, Dunstan, & Fone, 2007; Ross, 2000; Ross, Reynolds, & Geis, 2000; Sampson, Morenoff, & Gannon-Rowley, 2002). There are two further routes by which an individual's physical or mental health could feedback to the perceptions of drug problems in an area. Firstly, an individual with a disability may be less able, willing or likely to access the 'public areas' where these activities occur. This has been reflected in several of the aforementioned studies and is similarly likely to impact experience and perceptions of many forms of ASB. The second, is more specifically related to perceptions of drug use and dealing, and stems from the increased likelihood that someone with a disability may have previous or current experience of personal drug use – either as a form of self-medication, or as the cause of their health issues. The effect that this has on perceptions of others drug use in the context of ASB is an area that has not been thoroughly explored and is an area suggested for further study.

While living in an area with low levels of deprivation has been found to lower perceptions of ASB, a greater affluence and mobility of the individual household also does so (McCord et al., 2007). Residents may observe the same levels of ASB, but wealthier residents are perhaps less bound to the fate of their current area, or see it as less of a problem, as they have the opportunity to move away from the situation (Carvalho & Lewis, 2003).

Another important variable to consider is the length of residence in an area (Flatley et al., 2008), with Taylor (1996) finding residential stability to be one of the most significant determinants of responses to disorder. This can represent the extent of social relations with neighbours, 'being known' or 'having grown up' with others in the area; this can act as a mechanism when interpreting the perceived level of threat from an experience of ASB (Atkinson & Flint, 2004). Unfortunately this variable was not available for this study.

Another link exists between the length of residence and the feelings towards 'outsiders'. Carvahlo and Lewis (2003) propose that the longer a resident lives in an area, the less local problems have the potential to scare; becoming part of the ordinary, everyday life experience. Longer-term residents gain an understanding of risk and dangers and how they may be restricted to specific locations or times - and can therefore better avoid them and mitigate those risks.

While direct and personal experience of ASB have a stronger influence on perceptions of ASB than indirect or vicarious experience – from the experience of others, media or information from authorities – the latter are still significant. However, the strength of this relationship changes with different ASB strand. Wood (2004) found impressions of drug problems were least commonly formed through the respondent's personal experience. Surprisingly, Payne and Gainey (2007) found that being approached by a drug dealer increases perceptions of ASB more than direct victimisation, such as being harassed by teenagers or drunk people. This could be because of the signal this sends about an area and wider views on neighbourhood decline. Being a victim of any crime in the last year is generally found to be a strong independent predictor of perceptions of ASB (Flatley et al., 2008).

While fear of violence and property crime is found to be a strong independent predictor of perceptions of ASB (Wood, 2004), Brunton-Smith (2011) finds that fear of crime is driven by individual perceptions of low level disorder, but the relationship is not bi-directional.

As direct comparison is made between this study and Flatley et al.'s (2008), the latter's results have been summarised here. Flatley et al.'s (2008) builds on and improves previous analysis of the BCS (Kershaw, Nicholas, & Walker, 2008) by including measures of community cohesion and deprivation. Their study is restricted to England and uses data from the 2007/8 BCS. They begin by using multivariate analysis to identify the characteristics that are independently associated with having high levels of perceived overall ASB. However, of particular importance to this study, is the separate

analysis of each of the seven strands that comprise the overall ASB measure. It is the results of the drug use and dealing ASB strand that are summarised here – compared to overall, or other strands of, ASB when appropriate. The model predicted 26 per cent of the variance in perceptions of high levels of drug use and dealing.

The odds of perceiving a drug problem clearly decrease as one moves from the most deprived to the least deprived neighbourhoods. This was also seen for the overall measure of ASB - but interesting to note the comparison with the other strands of ASB. The level of deprivation was also the most strongly associated factor for the overall measure of perceptions of ASB, but apart from drugs it was only significant for the more environmental ASB strands of rubbish and burnt-out cars.

However, the level of physical disorder was not found to be significant for the drug use and dealing strand. Community cohesion had a strong and significant impact of drug perceptions for those who strongly, and tended, to agree. However, the impact was not as strong as it was for overall ASB. The impact of time spent living in an area, broadly follows the overall ASB pattern (but is statistically significant for a few more bands under the drugs strand).

Most personal and household characteristics broadly followed the findings for overall ASB, especially age and tenure. The main exception was highest educational qualification, which along with gender, marital status and household income was not found to be significant. Conversely, the ethnic group of the respondent was found to be significant (albeit weakly) for drug perceptions, but this was not reflected across all ASB strands. Also, having a standing illness or disability was significant but of a lesser importance than for overall ASB. Collectively, Flatley et al.'s (2008) findings suggest that individual characteristics are less important for effecting perceptions of drug use and dealing.

It is interesting to note that Flatley et al. (2008) find residing in the South East region, the location of this study area, does have a statistically significant and positive effect on the likelihood of perceiving drug problems.

Disparity between perceptions and observations

Misperceptions are often defined in other studies by using surveys of a particular (often self contained) group (such as students on campus) and asking both: their perceptions of something (for example others' drug use) and their own use. Numerous studies (Kilmer et al., 2006; Perkins, Meilman, Leichliter, Cashin, & Presley, 1999) find college students repeatedly misperceive (and over-estimate) the extent of peers' substance abuse, and thus use more themselves than they otherwise would. A social norms framework is generally used to address this topic, emphasising the individual's misperception of others usage and norms, which in turn endorses such behaviour (Perkins, 2002). In part, this can be due to selective exposure to others in their social network that share the same interests as themselves (Wolfson, 2000).

However, this study is different in a number of ways; there is no 'self-reported' use and a less clearly defined social group, although the survey still limits it to residents of Portsmouth and the perception of drug use in a particular area. Personal drug use is not recorded by the Residents' Survey, but would be an interesting angle to pursue in further research. This is further discussed in Study 3, in terms of how personal use may influence a respondent's view of drug use or dealing as a problem or otherwise.

For all Police Force Areas in England and Wales, Innes and Weston (2010, p. 5) map perceptions of ASB against reported incidents of ASB. The unambiguous result is that there is great inconsistency between perceptions and reported incidents, with only three areas (the Metropolitan Police, Greater Manchester and West Yorkshire) showing a combination of high levels of both reported and perceived ASB.

8.2. Modelling Strategy

This study directly compares the perception of drug use and dealing in an area to that which is observed and measurable; defined as the number of drug related incidents recorded by police and the quantity of drug litter found in the area.

Principal component analysis is used to address high inter-item correlations and reduce the number of variables entered in the model. Logistic regression (binary logit) is used to isolate the importance of each variable to accurately analyse the drivers of perceptions of drug problems in an area.

Going beyond replicating previous studies, this process is repeated with data split into areas with high and low observations of drug offences. This allows for the identification of factors that drive the mismatch of high perceptions of drug problems in areas with low drug observations. The robustness of empirical results is confirmed by removing imputed income and re-estimating the model.

Research questions to be addressed by Study Three

Q7. What are the characteristics of respondents with high perception of drug use and/or dealing? How do they compare with previous studies?

Q8. Are residents' perceptions of drug use and dealing in their area supported by the observed and measurable evidence?

Q9. Is there a difference between those that perceive a problem which is supported by the observed and measurable drug evidence and those that perceive a problem when there is a lower observed and measurable drug problem?

Model specification

The aim of the research is twofold. Firstly it is to identify the characteristics of those residents who have a high perception of drug use and dealing in their area (this is comparable to previous studies). The second aim of the research is to discover the characteristics of those people with high perceptions in areas presenting low observed and measured drug problems.

This study follows a similar approach to Sampson (2009) and the Crime Survey for England and Wales, by observing and recording the level of observable disorder or deprivation in the respondent's area. However, instead of using this as an independent variable within the model, the data is split into areas of high and low observable drug use and dealing, and the resulting models are compared. Those residing in areas of low observable drug problems, but perceiving a high problem, become the focus of the second part of the study. The drivers of perceptions of drug use and dealing problems are compared to previous studies, such as Flatley et al. (2008).

The value of the research lies in the better understanding of the drivers of perceptions of drug use and drug dealing in an area with low observable drug use problems. This would allow agencies to tackle 'fears' more efficiently by targeting specific demographics and characteristics. This study is conducted at a local, rather than national, level with characteristics of the area related to the postcode district.

The specific research hypotheses based on the review of the literature in Section 8.1 are listed below, and assessed for both phases of this study:

H3.1: The extent to which perceptions of drug use or dealing in their area increases for respondents in neighbourhoods with 'undesirable' characteristics.

H3.2: The extent to which perceptions of drug use or dealing in their area increases for respondents in neighbourhoods with a poor perception of their area.

H3.3: The extent to which perceptions of drug use or dealing in area increases for respondents that have experienced crime and anti social behaviour

H3.4: Socio-demographic factors (personal and household) significantly influence the extent that respondents perceive drug use and dealing problems in their area.

The measure of drug problems

The dependent variable analysed in this paper combines responses to two questions, reflecting the extent to which respondents considered drug use (and drug dealing) to be a problem in their area. Respondents were asked to indicate their response to each of these questions using a four-point forced choice scale, with responses ranging from 'not a problem at all' to 'a very big problem'. These have been transformed into a simple binary form with a value of 1 indicating there is a 'very big' or 'fairly big problem' with drug use and or dealing in the area, and 0 otherwise (mean = 0.25). This measure corresponds with that used in the BCS and its successors. In fact, the 2008/9 BCS demonstrated a very similar 28 percent of people who perceived people using or dealing drugs to be a problem in their local area, and of those, 65 percent perceived a problem with both behaviours (Moon et al., 2009).

Perceiving problems with people using or dealing drugs, as one of the seven ASB strands, contributes to the overall measure of perceptions of ASB which was in turn used as an indicator for the Government's Public Service Agreement (PSA23) at the time of this study via the 'Making Communities Safer' element. However, perceptions of drug use and dealing problems also contributes directly to PSA 25, alongside the drunk and rowdy behaviour ASB strand, within the 'Reduce the Harm Caused by Alcohol and Drugs' agenda.

Every effort is taken in the phrasing of the question to gauge the extent to which drug use (and dealing, asked separately) is specifically regarded as a problem, rather than whether it is 'common' or has been experienced (Mackenzie et al., 2010, p. 4). Therefore, the measure can be interpreted as

identifying when the respondent considers it has become a 'problem', rather than the fact that it merely exists or that there are more general problems. Therefore, drug use or dealing has gone beyond the socially accepted norm, and as a 'problem' is in some way damaging. This can address one concern with the chosen measure, in that it is not necessary to assume that this illegal activity, if observed, is a problem.

According to the Residents' Survey 2007, of the 440 Portsmouth respondents who thought that ASB was a problem in their area, only 42 stated they had personally experienced or witnessed drugs in the area. Wood (2004) expounds that where perceptions are less likely to be formed by personal experience, such as for drug use and dealing, then stories in the local media are likely to take on a greater importance in filling this informational void. The Safer Portsmouth Partnership (2007b) reported a number of cannabis factories were identified and successfully targeted during 2006/7. Several cases were also reported in the local newspaper ("Cannabis Seized in Southsea Drugs Raid", 2007; "Police Storm Cannabis Factory", 2007; "20 Held in Cannabis Factory Raids", 2007; "Police Busted a Cannabis Factory", 2007; "Jail for Man", 2009). However, the survey explicitly asks whether it is drug use or dealing in the area. While the locations of drug production activities may not tie to areas reporting high levels of drug problems, these are likely to have a larger impact on residents' perceptions of a drug problem in an area.

Independent variables

This study will begin with a logistic regression to identify the independent variables that increase the likelihood of perceiving drug use and dealing to be a problem. The independent variables are chosen based on the findings of numerous previous studies. The main variables that have been found in various studies and research, mostly UK based, to have the biggest or most significant impact on perceptions of ASB (where the definition includes an element of drug use/dealing) or specifically perceptions of drug use/dealing have been grouped into one of four categories:

1. Perception of an area
2. Personal and household characteristics
3. Experience of crime and ASB
4. Neighbourhood Characteristics

Across all the studies considered there are many duplications and repetitions in the variables found. By grouping these together it is possible to create a shorter list of the key variables. Table 28 provides details of the variables used in Study Three based on the literature and data availability. No variable representing crime and ASB experience or victimisation was directly comparable to that used in the BCS. Nonetheless, respondents were asked to indicate which incidents of ASB and crimes they personally experienced or witnessed in their area: measuring the number of different types of incidents experienced, rather than presenting the absolute number or making any value judgements about the severity of different experiences.

Details on variables representing neighbourhood characteristics at the postcode district level can be found in Section 3.2. Principal Component Analysis is then used to further reduce the number of variables.

Table 28 Model Variables – Study Three

Variable Name	Item Description	Mean (Std. Dev.)	Range
Perception of an area			
PARENTS NOT TAKING RESPONSIBILITY	Respondent agrees that 'parents not taking responsibility for the behaviour of their children' is a big problem	0.46	0-1
NOT TREATING WITH RESPECT	Respondent agrees that 'people not treating each other with respect and consideration' is a big problem in their area.	0.437	0-1
DISAREA	Respondent is dissatisfied with their area as a place to live.	0.126	0-1
DISQUAL	Respondent is dissatisfied with the overall quality of life in Portsmouth.	0.066	0-1
DISCOHESION	Respondent disagrees that the local area is a place where people of different backgrounds get on together.	0.130	0-1
DISFEAR	Respondent is dissatisfied with the City Council's efforts to reduce the fear of crime.	0.337	0-1
DISSAFE	Respondent is dissatisfied with the City Council's efforts to make Portsmouth a city where people feel safer.	0.325	0-1
DISASB	Respondent is dissatisfied with the City Council's efforts to reduce anti-social behaviour.	0.423	0-1
DISVIOLENT	Respondent is dissatisfied with the City Council's efforts to reduce violent crime.	0.380	0-1
Personal and household characteristics			
IMPUTED INCOME	Respondent's gross household income (scale: 1 = <£2,500 p.a., 11 = >£31,199 p.a.).	7.405 (2.803)	1-11
CLASS	Respondent's social class (scale: 1 = E, 6 = A).	A=.013,B=.182, C1=.313,C2=.21 D=.149, E =.128	1-6
OWNER OCCUPIER	Respondent is the owner-occupier of their home.	0.636	0-1

Table continued on next page

Continuation of Table 28 Model Variables – Study Three

FULLTIME	Respondent works full time.	0.371	0-1
CAR OWNERSHIP	Respondent indicates that they own one or more cars.	0.679	0-1
DEGREE	Respondent's highest educational attainment is degree.	0.183	0-1
EXACT AGE	Respondent's age (years).	45.750 (19.473)	16-95
GENDER	Respondent is female.	0.527	0-1
ETHNICITY	Respondent is non-white.	0.049	0-1
DISABILITY	Respondent is themselves disabled.	0.151	0-1
YOUNG PEOPLE IN HOUSE	Respondent lives with children (under the age of 18).	0.348	0-1
FEMALE	Respondent is female.	0.527	0-1
Experience of crime and ASB			
THOUGHT CRIME WENT UP	Respondent indicates a belief that the crime rate in Portsmouth has increased within the last two years.	0.376	0-1
FEAR OF CRIME AT NIGHT	Respondent responds positively to the statement 'fear of crime prevents me from going out in the evening'.	0.299	0-1
ASB AND CRIME COUNT	The number of different types of ASB or crimes that respondents had personally experienced or witnessed in their area.	1.63 (2.43)	0-14

Table continued on next page

Continuation of Table 28 Model Variables – Study Three

Neighbourhood Characteristics ^a			
COUPLES WITH CHILDREN (inverse)	Proportion of households that are not couples with children.	81	0.75-0.90
LEVEL OF DEPRIVATION	Level of deprivation according to the Index of Multiple Deprivation 2007. Average weighted score.	24.6	15.8-38.1
BME %	Proportion of population that are non White:British.	8.1	0.04-15.7
AGED 10-24	Proportion of population aged 10-24.	25	0.21-0.30
ECONOMICALLY ACTIVE (inverse)	The proportion of the population that were not economically active.	32	0.27-0.38
<i>Population density</i>	The density of area (people per hectare)	46.4	25.8-88.3

^a Details on neighbourhood characteristics at the postcode district level can be found in Section 3.2. Each neighbourhood characteristic refers to the respondent's postcode district.

High and low drug areas; Mismatch of perceptions and observations

The high correlation between the measure of observable drug offences and 'neighbourhood characteristics' would drastically reduce the reliability of the model if simply included as an independent variable. Therefore the dataset is split by respondents' locality, in either an area with high or low observations of drug, with the logistic regression technique repeated for each. If the odds-ratio (of perceiving a problem) of factors within low observable drug areas differ significantly to those in high observable drug areas – then the research can highlight which characteristics are more aligned to a mismatch of perceptions and observations.

It is known some areas of the city experience a higher than average number of drug related problems (drug use, dealing, litter and paraphernalia, begging, shoplifting etc.). By characterising one half of the city as high drug areas (HDAs), experiencing a high observable drug problem, compared to the low drug areas (LDAs), the study can better assess what drives the perception of drug problems. A mismatch occurs when drugs are perceived as a big problem but this is not observed and measured in the area. i.e. those in LDAs who perceive drug use and dealing as a problem. Those with high perceptions in LDAs become the focus of the second part of this study. However, this study cannot definitively determine whether these perceptions are based on other information available to the respondent so no judgement is made as to whether these are misperceptions.

The evidence for the grouping of HDAs and LDAs is provided in Section 8.2.1. However, even within 'high' drug offence areas, the pattern of drug choice, and the split of offences by drug use (possession) and dealing (supply) is not homogeneous (see Table 29). For example, the PO1 area clearly has a preference for cocaine and ecstasy use, largely due to the location of the city's main night time economy area, and can be characterised as an area of drug use (possession) rather than dealing. Whereas the PO4 area is more synonymous with harder drugs (such as heroin) and dealing (supply).

Table 29 shows a basic analysis of perceptions of drug problems across both areas. As may be expected, this reveals that those living in HDAs are more likely to perceive a drug problem than those residing in LDAs (in spite of previous studies in fact showing a weak link to direct experience of drug problems). However, this does not allow for other variables that may influence a respondent's perceptions, such as their personal and household characteristics.

To muddy the waters, the areas with the highest observable drug related incidents also demonstrate a number of other characteristics known to associate with a higher perception of ASB. The study

could control for the different areas – to a certain extent – by replicating this study within each of the six postcode districts that make up the city. However, the number of respondents in each area would make interpretation of the component scores unreliable. Given the low numbers per postal district and for simplicity of explanation, the population is split fairly equally into two groups – those residing in areas with relatively high, and low, numbers of drug related incidents.

Table 29 Perceptions of Drug Problems in Low and High Drug Areas, per cent (number).

Perception:	Low Drug Area	High Drug Area
No Problem	77.8% (378)	71.4% (355)
Problem	22.2% (108)	28.6% (142)

Source: Residents' Survey 2007 and Drug Evidence

8.2.1. Drug Observations

This section details the evidence of observed and/or measurable drug use and dealing in Portsmouth, as opposed to perceptions of it, from secondary data sources. This includes official statistics from the local police force, Hampshire Constabulary (drug possession and drug use charges) and PCC (drug paraphernalia cleared away by PCC's Clean Team and its contractors). This provides the evidence for the grouping of postcode districts into areas of high, or low, drug activity.

While only two data sources are used explicitly in Study Three (Hampshire Constabulary and PCC's Clean Team), the others inform the overall profile of the study area. This section will describe each data source in more detail and explain whether these different sources of drug use and dealing paint the same picture of an area. This section also addresses the questions of how it is possible to observe or measure drug use, dealing and supply, and whether it is possible to measure something which may wish to remain un-measured.

The evidence of actual drug use and dealing in an area is quantitative and based on directly observable and measurable data. There are strict guidelines (that are enforced and checked) stating what each agency should count and record which minimises the potential for subjective classification.

Using secondary data is the chosen sampling method as this research is looking at evidence of actual drug use and dealing that has already occurred in the past (in 2007, so that it can be compared to the perceptions at that time). As such it cannot be collected by direct observation presently, for example through staking out an area and recording the number of incidents seen over a given period. Therefore, using the secondary recorded sources that are available and have already been collected by the agencies detailed above is the most practical way of collecting this information.

The information is specific to the Portsmouth area, while being of a recognised standard so that they are comparable with other areas. The secondary data from the police (Hampshire Constabulary) is expected to be of high quality. This is because the organisation should follow nationally agreed guidance as to how to collect, measure and present the information this research will be using. The organisation has systems in place to ensure data quality standards are met and are regularly audited.

The evidence of actual drug use and dealing needs to remain anonymous and has been aggregated to the relevant geographic area level (for example, from police beats to postcode districts). If the absolute number of incidents is still so low that someone could be identified, then the data has been rounded up, or excluded, from the analysis.

The majority of the evidence used for drug use and dealing has been collected from publicly available sources to ensure that this study is replicable. However, the study also makes use of privileged access to some more detailed information that may not be publicly available (although could potentially be requested by a freedom of information request). This includes information from

PCC's Clean City service, and the 'needle exchange', that deals with (and records) the disposal of drug paraphernalia. It is unlikely that this information will be as easily available to other academics. Neither is this information recorded to a nationally recognisable standard that is directly comparable to other areas. This has been taken into account by ensuring that this privileged information is kept to a minimum and is only included where it adds value, or strengthens the argument that is presented by the publicly available information.

It is important to make it clear that the visibility of drug dealing in an area does not necessarily mean that residents of that area are using drugs (and vice versa). Neither does stating that respondents thought drug use was a problem in an area explicitly mean that residents are using drugs. It merely means that people are using drugs in the area – which could include public spaces. The importance of public spaces is reflected in the literature described in this study, but also has an impact on the level of drug crimes recorded and used to represent the observed and measured drug evidence; see the limitations of the 'drug litter' data.

8.2.2. Police Drug Evidence

Police statistics only represent those incidents that were actually caught. This number can be affected by a number of factors other than the prevalence and location of drug use and dealing. For example, the number of hours spent on the police beat, the amount of investigative resources to specifically target drug possession and supply and the level of technology.

Where possible, comments on the data from Portsmouth's Strategic Assessment (Safer Portsmouth Partnership, 2007a), a publicly available report based on the restricted police intelligent report, have been included to help explain the local context of the data.

Data on Class A drug offences were made available by commodity type and the 16 police beats that cover Portsmouth. However, these needed to be aggregated and recoded into their relevant postcode district to directly compare to the survey data and ensure that the data remained

anonymous. The pairings of police beat to postcode district were used based on Geographic Information System software. Where a police beat did not entirely fit within one postcode district, then it has been included in the postcode district that has the highest area/proportion. The combination of police beat and postcode districts used can be found in Appendix 4.

Table 30 Police Recorded Class A Drug Crimes: Commodity by Postcode District 2007/8

Postcode district	Supply - Cocaine	Supply – Heroin	Supply – Crack	Supply – Other	Possession - Cocaine	Possession - Heroin	Possession – LSD	Possession – MDMA	Possession – Crack	Possession – Methadone	Possession - Other	Possession with intent to supply - Cocaine	Possession with intent to supply - Heroin	Possession with intent to supply - Crack	Possession with intent to supply - Other	Total
PO1	1	2	2	0	43	2	5	14	1	1	13	0	3	1	2	90
PO2	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4
PO3	0	0	0	0	1	1	0	0	0	0	0	0	2	0	1	5
PO4	0	1	0	1	6	6	0	1	0	0	7	4	2	2	3	33
PO5	0	1	2	1	5	1	0	1	0	0	3	1	4	0	1	20
PO6	1	0	0	0	1	1	1	0	0	0	7	1	1	0	0	13

Source: Hampshire Constabulary

Table 31 Police Recorded Class A Drug Crimes and Drug Litter by Postcode District 2007/8

	PO1	PO2	PO3	PO4	PO5	PO6	Total
Police recorded figures - Class A drug supply crimes	90	4	5	33	20	13	165
Drug litter	48	12	10	33	70	21	194
	138	16	15	66	90	34	359

Source: Hampshire Constabulary

Table 32 Police Recorded Class A Drug Crimes: Offence Type by Postcode District 2007/8

	PO1	PO2	PO3	PO4	PO5	PO6	Total
Supply	5	0	0	2	4	1	12
Possession	79	4	2	20	10	10	125
Possession with intent to supply	6	0	3	11	6	2	28

Source: Hampshire Constabulary

Table 33 Police Recorded Class A Drug Crimes: Commodity Type by Postcode District 2007/8

	PO1	PO2	PO3	PO4	PO5	PO6	Total
Cocaine	44	3	1	10	6	3	67
Heroin	7	1	3	9	6	2	28
Crack	4	0	0	2	2	0	8
MDMA	14	0	0	1	1	0	16
Other (incl LSD and Methadone)	21	0	1	11	5	8	46

Source: Hampshire Constabulary

Table 34 Police Recorded Class A Drug Supply Crimes (2007/8) and Drug Litter (2007), by Postcode District: per 1,000 households; 1,000 population; hectare

Per 1,000 households	PO1	PO2	PO3	PO4	PO5	PO6
Police recorded figures - Class A drug supply crimes	8.7	0.2	0.6	2.0	1.7	0.8
Drug litter	4.7	0.7	1.3	2.0	5.8	1.3
Total drug evidence	13.4	1.0	1.9	4.0	7.5	2.1
Per 1,000 population						
Police recorded figures - Class A drug supply crimes	3.7	0.1	0.3	0.9	0.8	0.3
Drug litter	2.0	0.3	0.5	0.9	2.8	0.5
Total drug evidence	5.7	0.4	0.8	1.7	3.6	0.9
Per hectare						
Police recorded figures - Class A drug supply crimes	0.2	0.0	0.0	0.1	0.1	0.0
Drug litter	0.1	0.0	0.0	0.1	0.2	0.0
Total drug evidence	0.3	0.0	0.0	0.1	0.3	0.0

Source: Hampshire Constabulary; Drug Litter Group

Drug Possession and Supply by Postcode District

The highest number of class A drug offences occurred, or were at least recorded, in the PO1 (city centre) postcode district. This was replicated across almost all types of Class A drugs (see Table 33) with the exception of heroin which was as prevalent in PO4 and PO5. Cocaine and MDMA (commonly known as ecstasy) use was much higher in PO1 and this is likely to be impacted by the

second point identified by police intelligence below. Table 30 shows possession of class A drugs was exceptionally high in the PO1 area, particularly for cocaine (44), MDMA (14), and 'other' Class A drugs (13) which were the highest number for any area. However, while possession made up the majority of offences, the recorded incidents of 'supply' or 'possession with intention to supply' (which can be interpreted as drug dealing) was not considerably different to that in the PO5 and PO6 areas.

Police intelligence reports identify the peak police beat as PC01 (Charles Dickens East ward), within the PO1 postcode district. They identify two factors that contribute to this area having the highest number of class A drug offences. Firstly, the custody centre where those arrested or cautioned may be searched and processed, and therefore found in possession of drugs, is located in this police beat.

Secondly, and perhaps more pertinent to perceptions of the use of drugs, it is the location of Portsmouth's main night time economy area (pubs and nightclubs). This is particularly relevant for the cocaine offences recorded, which police intelligence describes as the recreational drug of choice for those socialising in pubs and nightclubs. However, the impacts on perceptions and other crime levels may be less for this drug than others, as this tends to be used irregularly, recreationally and funded by legitimate earnings, so only a small impact on acquisitive crime, but there may be more impact on violent crime (Safer Portsmouth Partnership, 2007b).

The PO4 area had the second highest number of offences overall, but noticeably lower than the PO1 area. Also, although the number is small (4), the largest number of cocaine 'drug dealing' offences were recorded in PO4 (see Table 30). Possession of Heroin was also the largest in the PO4 area.

The PO5 area had the third highest number of drug offences overall. However, this was only just above the median, but below the mean, number of drug offences. Despite this, the area can be considered as a relatively high drug offence area as it has almost the same number of 'drug dealing' offences as the PO1 area.

When the number of class A drug crimes is expressed relative to the number of households, population and size of an area, as shown in Table 34, then PO5 is clearly closer to the PO4 area than with the low drug areas of PO2, PO3 and PO6. This is similarly reflected in the consistently higher number of each drug type recorded in the PO5 area, with the exception of the catch-all 'other (including LSD & methadone)', than the low drug areas. Additionally, the number of drug litter finds, more than any other area, also contributes to its classification.

Across almost every measure, the postcode districts: PO2, PO3 and PO6 all have relatively (and absolutely) low levels of drug offences recorded by the police.

Overall, this shows that different areas of the city have strikingly different levels of drug offences. There is a clear group of high (PO1, PO4 and PO5) and low (PO2, PO3 and PO6) drug offence areas. This pattern is further enforced and supported when the number of drug litter finds (discussed below) are included.

However, even within these 'high' drug offence areas, the pattern of drug choice, and the split of offences by drug use (possession) and dealing (supply) is not homogeneous. For example, The PO1 area clearly has a preference for cocaine/MDMA use, in strong part due to the location of the city's main night time economy area and would appear to be characterised as an area of drug use (possession) rather than dealing. Whereas, the PO4 area appears to be more synonymous with drug dealing and 'harder', addiction forming, drugs such as heroin.

Analysing the drug evidence relative to the number of households, population and area of each postcode district finds little change in the overall picture. PO1, PO4 & PO5 remain the 'worst', or highest drug evidence areas, but the order changes so that PO5 is more often worse than PO4 (the exceptions being except for police records only, by household or population). However, this has the potential to make the PO1 area appear as if it has an even larger drug problem, as it is a hub area (and a destination) with a disproportionate number of highly frequented shared public spaces.

Therefore, a lot of the offences committed and recorded there were not necessarily committed by those resident in the area.

8.2.3. Drug Litter

The Drug Litter Group, a sub-group of the Safer Portsmouth Partnership, which includes the Needle Exchange and PCC, monitors and takes action on drug litter finds. 194 incidents were recorded between 1st January 2007 to 31st December 2007. These incidents are recorded by PCC's Clean Team officers each time they dispose of suspected drug litter. This could be drug litter found as part of their normal cleansing/maintenance routine, or where they have been called out specifically to clean up and dispose of drug litter evidence.

Each drug litter find is recorded onto a Microsoft Access database consisting of the following fields:

- *Date found*; e.g. 01-Jan-07
- *Location*; open space, public convenience, communal building¹⁹, park²⁰ and garden shed.
- *Street Name*; not recorded for 2007 data.
- *Grid reference*; based on a 100 meter by 100 meter grid system. Drug litter was found and recorded across 117 unique grids in 2007.
- *Litter type*; needles²¹, heroin paraphernalia, cannabis paraphernalia, empty syringe packs, "foil, ligature", empty needle packs, foil, blood and other.
- *Amount*; this was only recorded for the litter type 'needles', with numbers from 1 to 20 (although any number was possible).

The grid reference has been used to re-code this drug litter data to one of Portsmouth's six postcode districts (to match the Residents' Survey 2007 and the re-coded drug data collected by the police). Where a grid reference traversed more than one postcode district, then data on the location type has been used to clarify the relevant postcode district. Where this did not help clearly assign a postcode district, then the postcode district that represented the largest proportion of the 100x100 metre grid was used to assign a postcode district.

¹⁹ 28 records were incorrectly recorded as 'communal building'. To rectify this, they have been re-coded and recorded as additions to the 'communal building' category.

²⁰ Park includes an additional location originally recorded as 'Orchard park'.

²¹ Needles includes an additional three drug litter finds recorded as 'Needle' with an 'Amount' of one.

It is worth pointing out that this data is potentially biased towards publicly accessible areas as these are the responsibility/jurisdiction of PCC's Environmental team, or their contractors, that records this information. The communal buildings are also more likely to include social housing buildings that are cleaned and maintained by PCC employees. Drug litter finds within privately owned/accessible buildings and areas are a lot less likely to be recorded.

Other limitations to this data, as with measuring the number of drug seizures, is that each record does not necessarily represent an equal magnitude of drug activity. For example, the butt of one marijuana joint would be counted as one drug litter record in the same way as a find of 20 used needles.

This raises an additional issue: the frequency of drug litter finds. For example, if a park is only cleansed once a week, and seven needles are found, then this counts as one record of drug litter in that area, or 52 in a year. If that park is cleansed daily, then one needle may be found a day, with each one counting as a record of drug litter. Therefore, seven records a week, 365 a year.

Furthermore, if that park was split up into two separate areas that fell within adjacent but separate 100x100 metre grids, and still only cleansed once a week, then those seven needles could be spread between the two areas and would therefore be recorded as two incidents each time. An attempt has been made to address this concern to some extent by recording the 'amount' of needles found each time.

It is only an assumption that drug activity occurred in the place the litter was found, it could have been discarded or left there having been used in another area at another time completely.

2007 was the first full year that the data was recorded in this way, but the findings can be considered broadly representative as subsequent years recorded similar levels (146 in 2008, 124 in 2009 and 129 in 2010).

The following analysis attempts to highlight the key elements of this data in 2007.

Table 35 Drug Litter by Location and Drug Litter/Paraphernalia Type, 2007

Location	Needles ^c	Heroin paraphernalia	Cannabis paraphernalia	Other	Empty syringe packs	Foil, ligature	Empty needle packs	Foil	Blood	Total
Open space	51	4	12	6						73
Public convenience	41	13		1	2		1		1	59
Communal building ^a	23	13	15	5		2		1		59
Park ^b	2									2
Garden shed	1									1
Total	118	30	27	12	2	2	1	1	1	194

Source: Drug Litter Group

^a including 28 incorrectly recorded as "communal building",

^b including "Orchard Park",

^c including 3 recorded as "Needle"

As would be expected with the nature and role of the Council department that records this information, the location types reflect their areas of patrol and regular maintenance. Table 35 shows that open space is only a marginally more common location than public convenience and communal building, but the three form the overwhelming majority of locations. While the limitations of this data have been addressed above, the publicly accessible locations do support the use of this data to represent the 'evidence' that members of the public may observe.

However, this data may also act as a signal to residents to perceive a higher 'problem' of drug use or dealing in their area and hence support their perception. Even though the visibility (or lack) of drug litter in publicly accessible spaces does not necessarily accurately reflect the extent of drug use occurring within private homes or even whether that drug was used in the area or simply dumped there.

Overall, the most prevalent drug litter type was needles, and this prevalence is reflected in needles being the most common drug litter type in each of the locations. Heroin and cannabis paraphernalia were the joint second most common litter types in total. However, heroin paraphernalia was more often found in public conveniences and communal buildings, perhaps reflecting the nature of heroin use as a more 'private' activity. Cannabis paraphernalia was equally common in open spaces and communal buildings, but not at all in public conveniences. This may reflect the fact it is a more socially acceptable, or public, form of drug use. Alternatively it may simply reflect the easy disposal of any 'drug litter', e.g. joint butts or 'roaches', in the public convenience.

Table 36 Needles Found, 2007

	Amount												Total
	1	2	3	4	5	7	8	9	14	15	20	(blank)	
Needles ^a	51	17	10	2	2	1	1	2	2	1	1	28	118

Source: Drug Litter Group

^a including 3 recorded as "Needle", amount 1

Table 37 Drug Litter Type by Postcode District, 2007

Postcode district	Needles ^a	Heroin paraphernalia	Cannabis paraphernalia	Other	Empty syringe packs	Foil, ligature	Empty needle packs	Foil	Blood	Total
PO1	30	5	8	1	1	2		1		48
PO2	7	2	2		1					12
PO3	5	3	1	1						10
PO4	25	6					1		1	33
PO5	46	12	8	4						70
PO6	5	2	8	6						21
Total	118	30	27	12	2	2	1	1	1	194

Source: Drug Litter Group

^a including 3 recorded as "Needle", amount 1

PO5 is the area where drug litter is most commonly found, followed by PO1 (the city centre) and then PO4. To some extent, this may reflect the geographical make-up of these areas – as the more

open spaces (that are patrolled and cleansed by PCC contractors) and communal buildings (that are PCC owned social rented housing) in an area, then the more likely they will be patrolled and cleansed by those that are searching for and recording drug litter evidence.

The high number of drug litter finds in PO5 may reflect the concentration of social rented housing in this area, and therefore the regular cleansing and maintenance of these areas by Council Officers, as communal buildings were the most common area to find drug litter. However, drug litter found in open spaces and public conveniences were also absolutely and relatively high compared to other area types.

Needles is the most common drug litter type found in all areas but PO6, where cannabis paraphernalia was the most common. In the three areas with the most drug litter found, needles represented approximately two thirds of all the drug litter found. PO5 had the highest number of needle and heroin paraphernalia finds by far, and the joint highest cannabis paraphernalia drug litter finds. Needles and heroin paraphernalia were found in every postcode district of the city in 2007.

Table 38 Drug Litter Location by Postcode District, 2007

Postcode district	Open space	Public Convenience	Communal building ^a	Park ^b	Garden shed	Total
PO1	20	10	18			48
PO2	5	2	5			12
PO3	5	4	1			10
PO4	9	19	2	2	1	33
PO5	22	21	27			70
PO6	12	3	6			21
Total	73	59	59	2	1	194

Source: Drug Litter Group

^a including 28 incorrectly recorded as "communal building",

^b including "Orchard Park"

In summary, across all of the measures discussed, there is a clear split in the study area, with three postcode districts presenting high (HDA) observations and measurements of illicit drug use and

An inspection of the screeplot (see figure 13) revealed a possible break after the fifth component. Using Cattell's (1966) scree test, it was decided to retain five components for further investigation. This was further supported by the results of Parallel Analysis, showing only five components with eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same size (22 variables x 979 respondents). Therefore, the decision to retain five components for further investigation led to a solution explaining 59.80 per cent of the total variance. The Varimax rotation method was performed to aid in the interpretation of these components. This method was adopted given the lack of a strong theoretical basis to suggest a relationship between the factors, supported by the relatively low correlation between the components, with perhaps the exception of Components 2 and 4 that had a correlation of 0.29. The rotated solution revealed the presence of simple structure (Thurstone, 1947), with all components showing a number of strong loadings (greater than 0.4) and the majority of variables loading substantially on only one component. Full details are contained within Table 39. Pedhazur and Schmelkin (1991) propose it is reasonable to use the orthogonally rotated solution if the oblique rotation shows a negligible correlation between the extracted components.

Table 39 Principal Component Analysis Findings by Imputed and Non-Imputed Income – Study Three

	Imputed Income			Non-Imputed Income		
Components from:	Whole Sample	HDA	LDA	Whole Sample	HDA	LDA
<i>KMO</i>	.642	.736	.729	.635	.725	.729
<p>COMPONENT(Cronbach's Alpha),</p> <p><i>Variables (Component loadings after Varimax rotation)</i></p>						
NEIGHBOURHOOD CHARACTERISTICS	.666	.748	.689	.666	.748	.689
<i>Couples with children % (inverse)</i>	.948	-	-	.949	-	-
<i>Level of deprivation</i>	.532	-	-	.533	-	-
<i>BME %</i>	.960	.871	.873	.959	.873	.873
<i>Aged 10-24 %</i>	.894	.858	.841	.894	.854	.845
<i>Economically Active % (inverse)</i>	.589	-	-	.591	-	-
<i>Population density</i>	.723	-	-	.721	-	-
CONTROL SIGNALS	.821	.809	.832	.821	.809	.832
<i>DisFear</i>	.805	.773	.847	.804	.771	.847
<i>DisSafe</i>	.844	.842	.858	.843	.839	.858
<i>DisASB</i>	.783	.799	.766	.783	.800	.766
<i>DisViolent</i>	.765	.775	.752	.765	.777	.752
<i>Thought Crime Went Up</i>	.533	.485	.579	.533	.485	.578

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Continuation of Table 39 Principal Component Analysis Findings by Imputed and Non-Imputed
Income – Study Three

AFFLUENCE	.606	.615	.608	.609	.614	.622
<i>Income</i>	.848	.854	.851	.860	.871	.866
<i>Class</i>	.722	.708	.557	.742	.723	.772
<i>Owner Occupier</i>	.534	.551	.572	.518	.529	.557
<i>Full Time Employment</i>	.625	.676	.747	.617	.673	.545
<i>Car Ownership</i>	.675	.667	.711	.693	.695	.717
<i>Education – Degree</i>	.580	.624	.524	.568	.612	.518
SOCIAL CONTROL	.820	.832	.802	.820	.832	.802
<i>Parents Not Taking Responsibility</i>	.887	.896	.886	.887	.896	.885
<i>Not Treating Each Other With Respect</i>	.878	.884	.876	.878	.883	.876
DISSATISFACTION WITH QUALITY OF LIFE	.537	.475	.572	.537	.475	.572
<i>DisArea</i>	.709	.726	.706	.707	.780	.710
<i>DisQual</i>	.737	.784	.727	.734	.780	.727
<i>DisCohesion</i>	.585	.450	.666	.587	.461	.666

Source: Residents' Survey 2007

Capital letters = component, Bold = Cronbach's Alpha, Italic letters = variables loading onto components, normal text = *Component loadings after Varimax rotation*

These components represent: neighbourhood characteristics, control signals (also known as 'dissatisfaction with crime prevention efforts'), affluence, social control and dissatisfaction with quality of life. Control signals and dissatisfaction with quality of life are the same components found in Study Two, while Affluence is broadly similar.

Based on the neighbourhood characteristics found to be significant in other studies, this study includes: the level of deprivation, population density and the proportion of the population that are: not economically active, non-white British, aged 10-24 and not couples with dependent children. Apart from the level of deprivation, which uses the 2007 Index of Multiple Deprivation scores, all neighbourhood characteristic variables were derived from the 2001 Census data. Details of these variables can be found in section 3.2. To attain consistency of the 'neighbourhood characteristics' scale, some variables were inverted so that a greater magnitude of a variable represents a characteristic that associates negatively with the area (according to previous research). This component achieved a Cronbach's Alpha score of 0.67, slightly below the recommended value of 0.7. While removal of 'population density' from the PCA would increase the reliability of the scale (0.83), it has remained part of this component rather than losing it completely (as an independent variable it would have an enduring strong correlation with this component).

Flatley et al. (2008) did not include confidence in control signals, but this has been included here, based on four questions representing how unsuccessful respondents thought the council was at: making a safe city, and reducing: fear of crime, ASB and violent crime. After converting into binary variables, a value of 1 representing an unsuccessful local authority, PCA found these were best combined with respondents' views on whether the crime rate had increased over the last two years (in contradiction to the official record of crime). The 'control signals' component, interpreted as representing the underlying dissatisfaction with the efficacy of crime prevention efforts of local authorities, created the most reliable scale (Cronbach's Alpha: 0.82).

An affluence component, incorporating household income (imputed)²², social class (1=E, 6 =A), full-time employment, highest educational qualification, owner-occupier²³ and car ownership, is used in this model. This version includes the highest educational achievement of the respondent so does not map directly with the 'AFFLUENCE' factor used in the Study Two. Individually, some of the affluence

²²Same result if use original income values.

²³Defined as, tenure: owned outright or buying with mortgage.

loadings have been found to be either not statistically significant (Flatley et al., 2008), or significant but weak predictors of perceptions of ASB (Wood, 2004). The 'affluence' of the household component only achieved the second lowest Cronbach's Alpha (0.61), despite the high number of variables loading onto this component. However, removal of any individual variable would not increase reliability.

Social control, incorporating collective efficacy (or more accurately, a lack of it), is accounted for within this study. PCA uncovered a component representing respondents who thought: parents not taking responsibility for the behaviour of their children (a lack of social control), as well as people not treating each other with respect (respondents did not feel neighbours looked out for one another), was a problem in their area. The 'social control' component was shown to be very reliable (Cronbach's Alpha: 0.82).

High perceptions of ASB have been found to be related to the extent to which people enjoy living in a particular area (Wood, 2004). This study uses a component incorporating respondent's dissatisfaction with: overall quality of life, their area as a place to live and a proxy for community cohesion (whether people from different backgrounds got on together). Therefore, the final component is interpreted as capturing 'dissatisfaction with quality of life' and community cohesion. While there are some concerns over the reliability of this scale (Cronbach's Alpha: 0.537), the variables did correlate strongly and removal of any individual variable would not increase reliability.

Although a few variables, such as 'thought crime went up', have comparatively lower loadings than others, all exceed the minimum value of 0.32 as recommended by Tabachnick and Fidell (2001).

In the split sample, excessively strong, and occasionally negative correlations necessitated that the variables signifying the neighbourhood characteristic component were reduced to the proportion of population that are non-white or aged 10-24 years. This allowed for the PCA to proceed and led to respectable scale reliability (Cronbach's Alpha: 0.689 and 0.748 respectively), with no significant

difference between the loadings and reliability of components derived from either the split or whole sample.

It was not possible to re-introduce those variables excluded from the PCA process as independent variables, due to high correlations with the remaining neighbourhood characteristics component. The only concern would be the even lower reliability (Cronbach's Alpha: 0.475) of the dissatisfaction with quality of life component in the HDA. In large part this is due to the inclusion of the 'community cohesion' variable which loads very weakly (0.450) onto this component. However, this is inconsequential given the limited significance of this component in the HDA model.

Similar results were found when this process was repeated with missing (non-imputed) income values, shown in Table 39.

8.3. Results and Discussion, Part i)

Initial model results

The component scores are combined with the respondent's demographic information, their experience of crime and ASB and an attitudinal response accounting for fear of crime. Direct logistic regression was performed to assess the impact of these independent variables on the likelihood that respondents would report drug problems in their area.

The initial model based on the whole sample, utilising 786 of the 1005 cases, was found to be statistically significant. The likelihood ratio indicates significance at the 99 per cent level and the Hosmer-Lemeshow Goodness of Fit Test chi-square of 8.837 with a significance value of 0.356 (above 0.05 is desirable), indicate that the model was able to distinguish between respondents who reported drug problems and those who did not.

The goodness-of-fit scores suggest an improvement of the full model over the intercept only model with values between 20.1 (Cox and Snell pseudo R squared) and 29.3 per cent (Nagelkerke pseudo R squared), comparable to the 21 per cent (Nagelkerke pseudo R squared) achieved by Flatley et al. (2008). The model correctly classified 76.5 per cent of cases, with the sensitivity of the model reported at 40.2 per cent (the true positives) and the specificity as 89.6 per cent (the true negatives).

As shown in

Table 40, six independent variables made a unique statistically significant contribution to the model. This included four of the five component scores, the exception being 'affluence'.

There is a general trend that personal and household characteristics of the respondent, such as age, gender, ethnicity and affluence are not found to be as significant to perceptions of drug problems as the neighbourhood characteristics and perceptions. This reflects the findings of Flatley et al. (2008). The exception, albeit at only a 95 per cent confidence level, is the respondent's health.²⁴ Interestingly, those without a limiting long-term illness, health problem or disability were about 80 per cent more likely to perceive drugs as a problem. This is possibly a reflection that these respondents may be less likely to observe drug problems, as they are presumably at a higher risk of victimisation, their boundedly rational response may be to take greater preventative measures or avoid certain areas and situations where a high perception of drug problems may be formed. While other research finds some relationship between the level of disorder and poor health, it is not the intention of this study to address the nature of this causality.

The 'neighbourhood characteristics' component is found to be significant (99.9 per cent) and positive. This implies that the more deprived an area, or the further its socio-demographic make-up is from the norm, the more likely residents are to perceive drug problems. This strongly echoes the findings of previous studies. The mechanism by which the characteristics of an area translate into perceptions of drug problems can be straight-forward, or more circuitous via stereotypes (Sampson, 2009).

All three components representing the perception of an area were found to be significant. The 'social control' component is found to be strongly significant (99.9 per cent) and positive. Therefore, respondents feeling there is a lack of collective efficacy and respect in their neighbourhood, are more likely to report a problem with drugs. Again, this relationship could be bi-directional in nature. Alternatively, this could tie in with metaphor theories; these other concerns about society breaking

²⁴ It makes a difference to the model if it is the respondent, rather than another member of the household, that has a health issue that limits their daily activities. 'Disability' is only significant in the model when it is the respondent who is disabled.

down are tainting respondents' views on drug problems. Moreover, dissatisfaction with 'control signals' is also found to be significant and increase the likelihood of perceiving a drug problem. This too may be bi-directional in nature, with an increase in perceptions of drug problems being just as likely to result in dissatisfaction with local authorities' ability to tackle crime. A longitudinal study would be necessary to better understand the nature of these relationships. Furthermore, 'dissatisfaction with quality of life' at the city and neighbourhood level – as well as incorporating a belief of a dearth of community cohesion – is found to be positive and significant (although to a lesser degree than other perceptions). This broadly compares with the findings of Flatley et al. (2008) where greater community cohesion corresponds with lower perceptions of drug problems. While community cohesion is wrapped up in the dissatisfaction with quality of life component, it did share the same sign, and tended to be more important in the low drug areas discussed below.

Experience of crime and ASB, represented by the number of different incidents personally experienced or witnessed by the respondent in the area, was found to be positive and significant (99 per cent). This implies that for every extra type of incident experienced, the likelihood of perceiving drug problems increased by 13.4 per cent. Those respondents experiencing the maximum number of different incidents (fourteen) are close to five times more likely to report drug problems than those with no experience. However, experience does not transform into a 'fear of crime at night'. However, this relationship does not hold when there is a low level of observable drug crime.

Overall, the findings are representative of previous research into drivers of perceptions of ASB. There is strong evidence to support the proposition that perceptions and characteristics of an area are more likely to have an impact on perceptions of drug problems than the respondent's personal and household characteristics. Even then, it appears that perceptions and judgements of local neighbourhoods and their ability to tackle issues with informal social controls are more important in forming perceptions of drug problems in the local area than city-wide perceptions and opinions about formal social control.

These results, based on the whole sample, form the baseline upon which to compare the mismatch of perceptions and observations identified in the next section.

8.4. Results and Discussion, Part ii)

The model's robustness is tested by using both original component scores derived from the whole sample, and derived solely from the cases available within each area type (the split sample).

Table **40** shows the results of these various models.

Table 40 Imputed Income: Logistic Regression Results by Model – Study Three

Model:	Original	Components Whole Sample		Components Split Sample Only	
		HDA	LDA	HDA	LDA
N	786	384	402	384	402
Cox & Snell pseudo R ² and Nagelkerke pseudo R ²	20.1%- 29.3%	24.2%- 34.3%	17.4%- 26.1%	23.9%- 34.0%	17.4%- 26.2%
Hosmer-Lemeshow	Yes Chi-square 8.837 Sig. .356	Yes Chi-square 9.322 Sig. .316	Yes Chi-square 7.232 Sig. .512	Yes, Chi-square 14.934 Sig. .060	Yes, Chi-square 13.200 Sig. .105
LR	733.895	360.914	362.925	362.110	362.648
Variables [Exp (B)]					
NEIGHBOURHOOD CHARACTERISTICS	1.45*** (.093)	1.898*** (.209)	1.494 (.457)	1.613*** (.152)	1.094 (.143)
CONTROL SIGNALS	1.34*** (.093)	1.366** (.134)	1.389** (.135)	1.351** (.131)	1.392** (.135)
AFFLUENCE	.97 (.100)	.895 (.134)	1.083 (.165)	.896 (.145)	1.053 (.150)
SOCIAL CONTROL	2.39*** (.105)	2.294*** (.144)	2.538*** (.161)	2.348*** (.143)	2.521*** (.158)
DISSATISFACTION WITH QUALITY OF LIFE	1.22** (.084)	1.134 (.124)	1.292** (.118)	1.127 (.116)	1.309** (.123)
Fear of Crime at Night	1.39 (.212)	1.218 (.325)	1.673 (.286)	1.199 (.324)	1.729* (.286)

Table continued on next page

Continuation of Table 40 Imputed Income Logistic Regression Results by Model – Study Three

Model:	Original	Components Whole Sample		Components Split Sample Only	
		HDA	LDA	HDA	LDA
Experience of ASB and Crime	1.13*** (.037)	1.225*** (.055)	1.045 (.052)	1.226*** (.055)	1.046 (.052)
Exact Age	1.00 (.006)	1.008 (.008)	.996 (.010)	1.008 (.008)	.994 (.010)
Gender	.90 (.199)	.789 (.289)	1.046 (.285)	.817 (.289)	.975 (.283)
Ethnicity	.83 (.365)	.881 (.454)	.701 (.658)	.915 (.450)	.716 (.655)
Disability	.55** (.299)	.453* (.420)	.663 (.442)	.617 (.369)	.535 (.393)
Young People in House	.94 (.217)	.821 (.312)	1.057 (.324)	.785 (.312)	1.072 (.323)
Constant	.21 (.297)	.125*** (.451)	.274*** (.451)	.206*** (.409)	.239** (.461)

* Denotes significance at the 90% confidence interval, ** at 95%, *** at 99%.

Logistic regression of the split sample data found the pseudo R-squared to be consistently higher in the HDA, but the value for the LDA is still reasonable (minimum of 17.4 per cent) and only slightly less than the original whole sample model. Conversely, the HDA only just passes the Hosmer-Lemeshow Goodness of Fit Test (significance of 0.060) when components are derived solely from the split sample. All split sample models have better overall predictive power (correct classification) than if cases had simply been allocated to the most likely outcome (no problem), although this is more evident for the HDA models. The LDA models are generally superior at predicting true negatives,

whereas the HDA models are better at predicting true positives. In fact, in the LDAs, where a positive result can be interpreted as a high perception in an area with low observations, the model is only correctly predicting this outcome in approximately a quarter of cases - half as accurate as the HDA models. This is somewhat improved in the missing income models discussed below, where these are predicted in a third of cases, but is still below the HDA and whole sample models. While there is a clear distinction between the results in the different area, there are only minor differences between the models with components derived from the whole sample, or the split sample.

To further test the robustness of the models, they have been repeated with the imputed income removed and replaced by the original income values that have a high proportion of missing values (see Table 41). The imputed income models are preferred to using the missing income values for several reasons, including the exclusion of potentially useful information and the concerns about the suitability and reliability of PCA on a smaller sample. In addition, the whole sample model with missing income does not pass the Hosmer-Lemeshow Goodness of Fit Test, achieving a significance of only 0.028 (above 0.05 is desirable). The low drug area models are also considerably weaker. However, in other respects the missing income models were superior, with slightly higher goodness-of-fit and a greater proportion correctly classified.

Similar patterns are found in the variables that associate with perceptions of drug problems. The same signs are observed, and all variables found to be significant in the imputed income models remain so in the missing income models with only a couple of additional variables found to be significant. Notably, 'fear of crime at night' is significant in the whole sample and LDA models. The main variation is that both the significance and the magnitude of the odds ratios tend to be larger. Therefore, the models based on missing income, while not preferred, support the findings of the preferred imputed income models.

Table 41 Non-Imputed income: Logistic Regression Results by Model – Study Three

Model:	Original	Components Whole Sample		Components Split Sample Only	
		HDA	LDA	HDA	LDA
N	532	229	303	229	303
Cox & Snell pseudo R ²	21.5%-	25.8%-	19.1%-	24.9%-	19.9%-
Nagelkerke pseudo R ²	30.7%	35.7%	28.3%	34.4%	29.4%
Hosmer-Lemeshow	Yes, Chi-square 17.255 sig. .028	Yes, Chi-square 6.035, sig. .643	Yes, Chi-square 13.471, sig. .097	Yes, Chi-square 11.171, sig. .192	Yes, Chi-square 14.278, Sig. .075
LR	511.394	225.542	277.112	228.267	274.173
<i>Variables [Exp (B)]</i>					
NEIGHBOURHOOD CHARACTERISTICS	1.594*** (.121)	2.475*** (.292)	1.380 (.522)	1.875*** (.210)	1.144 (.171)
CONTROL SIGNALS	1.400*** (.112)	1.532** (.173)	1.356* (.156)	1.485** (.167)	1.365** (.158)
AFFLUENCE	1.013 (.118)	.998 (.166)	1.131 (.188)	1.021 (.177)	1.082 (.170)
SOCIAL CONTROL	2.196*** (.126)	1.954*** (.185)	2.483*** (.181)	2.000*** (.183)	2.516*** (.177)
DISSATISFACTION WITH QUALITY OF LIFE	1.220* (.103)	1.167 (.170)	1.268* (.134)	1.163 (.159)	1.287* (.141)
Fear of Crime at Night	1.638** (.251)	1.335 (.404)	2.128** (.329)	1.351 (.402)	2.260** (.331)

Table continued on next page

Continuation of Table 41 Non-Imputed Income Logistic Regression Results by Model – Study Three

Model:	Original	Components Whole Sample		Components Split Sample Only	
		HDA	LDA	HDA	LDA
Experience of ASB and Crime	1.124** (.046)	1.226*** (.070)	1.046 (.063)	1.224*** (.069)	1.039 (.063)
Exact Age	1.00 (.007)	1.003 (.010)	1.002 (.012)	1.002 (.010)	1.000 (.012)
Gender	.867 (.237)	.764 (.364)	.964 (.325)	.790 (.363)	.890 (.327)
Ethnicity	.937 (.499)	1.118 (.668)	.775 (.800)	1.100 (.669)	.730 (.799)
Disability	.529* (.345)	.408* (.498)	.703 (.500)	.686 (.452)	.451* (.466)
Young People in House	.874 (.257)	.917 (.400)	.730 (.373)	.880 (.399)	.755 (.375)
Constant	.285*** (.365)	.156*** (.610)	.251** (.685)	.329** (.532)	.247** (.579)

Source: Residents' Survey 2007

* Denotes significance at the 90% confidence interval, ** at 95%, *** at 99%.

Discussion of Results

Affluence and the majority of personal and household characteristics remain non significant within both areas. This supports the hypothesis that personal and household characteristics do not significantly and independently contribute to the likelihood of perceiving drug problems in an area, even in HDAs. The exception is disability, which is found to have a negative, albeit weakly significant, association across a few model variants.

Formal and informal controls remain significant across all model variants. The social control component is generally more significant than the control signals component in both areas. However, the magnitude of the likelihood of social control influencing perceptions of drug problems is consistently greater in LDAs.

The neighbourhood characteristic component only remains significant in the HDA. In this context, the component allows 'within' (as opposed to 'between') neighbourhood analysis. Experience of crime and ASB is also only a statistically significant strong independent predictor of ASB in the HDA. Both neighbourhood characteristics and experience reflect the signs seen in the original model covering the whole study area, but the likelihoods are of a greater magnitude in HDAs. In contrast, neighbourhood characteristics and experience are no longer significant in the LDAs, and are replaced with dissatisfaction with quality of life and fear of crime. Perhaps this is unsurprising, in an area that has less visible drug problems, the individual's perceptions take on more importance than the physical environment.

There is some, albeit relatively weak, evidence that fear of crime contributes positively towards high perceptions in the LDA. It is known from previous studies (Sampson & Raudenbush, 1999; Taylor, 1999) that those with higher fear of crime have a heightened tendency to report more disorder. This makes sense for the LDA, with less likelihood of actual observations and experience of drug problems, other beliefs and fears take on more relative importance in influencing perceptions. This is borne out by the fear of crime variable being unsupported by experience of crime and ASB within the LDA. The opposite is true in the HDA where experience of crime is found to be a significant factor, but fear of crime is not.

9. Study Four: Effectiveness of Support Offered to Vulnerable Adults

9.1. Study Four: Modelling Strategy

The SP programme buys, funds and monitors housing-related support services making sure that they are of good quality and meet the needs of the people receiving them. The main purpose of 'housing-related support' is to develop and maintain a person's ability to live independently, either in their own home or in supported accommodation.

The impact of this research will ensure that improvements to the support offered can be best targeted, therefore allowing the SP programme to not only improve the support it currently offers but also help more vulnerable people with the same amount of funding.

Given that the data is not heavily censored – a normal reason for the sole use of survival analysis – then it is possible and advantageous to first use regression techniques (logistic regression) to determine the independent variables that significantly impact the likelihood of a specific outcome being a success or a failure.

However, the hazard function can lend more insight into the failure mechanism than linear regression. Therefore survival analysis, using the Cox proportional hazards model, will be used in addition to assess the independent variables that impact the time to event of an outcome. Specifically, the length of time to achieve a successful outcome. This decision is supported by the findings of the logistic regression section (see Section 9.2) which found the length of service to be consistently significant for the majority of outcomes.

The importance of how long an intervention lasts is somewhat reflected by the costs of the community support. The time that a client spends with a service has a cost to the SP organisation, but there is also the client's opportunity cost. Therefore, the faster that a client can be dealt with then the more cost-effective, or cheaper, the community support.

In this context, the event is a successful outcome, so the hazard rate can be interpreted as the rate of a successful outcome at a particular time. The higher the rate then the more likely that a successful outcome will be achieved at that time. Hence, a higher hazard rate can be interpreted as reducing the length of time to a successful outcome.

The hazard ratio, $\text{Exp}(B)$, created by the Cox proportional hazards model can be interpreted as the predicted change in the hazard for a one unit increase in the predictor. A positive impact ($\text{Exp}(B) > 1$) will increase the hazard rate, and therefore shorten the length of time to a successful outcome. Whereas a negative impact (or $\text{Exp}(B) < 1$) will reduce the hazard rate, and therefore elongate time to a successful outcome.

Dependent Variable

As discussed in Section 4.3, the outcomes are chosen as the dependent variable, as opposed to client groups, as the latter do not necessarily reflect the main need, service or desired outcome of the client. In particular the following outcome types are of greatest importance to this study:

- Better manage substance misuse, [Outcome 3c]
- Comply with statutory orders and processes (in relation to offending behaviour), [Outcome 4b]
- Better avoid causing harm to others, [Outcome 4cii]
- Better minimise harm/risk of harm from others [Outcome 4ciii]

Those attempting to achieve outcomes 4b and 4cii) can be interpreted as 'offenders', while those attempting to achieve 4ciii) can be considered 'victims'. There is no cross-over between those defined as 'offenders' and 'victims'. However, for those wishing to 'better manage substance misuse', there is some crossover with both 'offenders' and 'victims'.

The following research question and hypotheses are addressed by the initial part of this study:

Q11. Do the characteristics of an individual, or the community support they are provided with, effect the successful achievement of Supporting People outcomes (Better manage

substance misuse; Abide by statutory orders; Avoid harm to others; Avoid harm from others)?

H4.1: The extent to which socio demographic characteristics (age, gender, ethnicity, disability, economic status, accommodation) contribute to the success or failure of Supporting People outcomes.

H4.2: The extent to which community support provision (support type, support provider, planned exit, length of support) contributes to the success or failure of Supporting People outcomes.

H4.3: The extent to which support needs (other outcomes and identified support needs) contributes to the success or failure of Supporting People outcomes.

The following research question and hypotheses are addressed by the second part of this study, using the survival analysis technique of Cox Proportional Hazard:

Q12. What characteristics determine the length of time to a successful outcome (as measured by the Cox proportional hazard ratio)?

H4.4: The extent to which socio demographic characteristics (age, gender, ethnicity, disability, economic status, accommodation) effect the length of community support to achieve a successful outcome.

H4.5: The extent to which service provision (service type, service provider, planned exit) effect the length of community support to achieve a successful outcome.

H4.6: The extent to which support needs (other outcomes and identified support needs) effect the length of community support to achieve a successful outcome.

For ease of clarification, the same independent variable codings are used for both parts of the study, with the exception of 'length of service' which becomes the time variant in the Cox Proportional Hazard Model.

However, the logistic regression technique uses all those cases where clients left the support (and therefore completed a Short-Term Outcomes Form), regardless of the success of the outcome, and excludes those who died during receipt of the community support. In contrast, the survival analysis method focuses on those clients who did achieve a successful outcome and incorporates those who died as a censored event.

Independent Variables – Logistic Regression – Study 4

Table 42 Model Variables – Continuous and Binary – Study Four: Part one

	All clients (3,317)		Substance Misuse (760)		Statutory Order (343)		Harm To Others (225)		Harm From Others (458)	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
<i>Continuous Variables:</i>										
ClientAge	32.62	16.13	32.77	11.96	30.01	11.57	30.35	12.30	30.98	12.22
	Range:	16-94	Range:	16-83	Range:	16-72	Range:	16-86	Range:	16-88
LengthOfService (Days)	198.42	239.31	176.80	242.22	192.90	284.24	205.28	318.55	187.91	240.26
	Range:	0-2841	Range:	1-2210	Range:	1-2210	Range:	1-2210	Range:	1-2210
<i>Binary Variables:</i>										
ClientSex	0.49	0.50	0.32	0.47	0.29	0.45	0.37	0.48	0.66	0.47
EthnicRecode	0.10	0.30	0.06	0.23	0.06	0.23	0.07	0.25	0.13	0.33
DisabilityYesNo	0.19	0.39	0.16	0.36	0.15	0.35	0.18	0.39	0.17	0.38
PlannedWay	0.58	0.49	0.44	0.50	0.46	0.50	0.41	0.49	0.64	0.48
EconomicWellbeingYES	0.83	0.38	0.88	0.32	0.91	0.29	0.89	0.31	0.90	0.30
EnjoyAndAchieveYES	0.64	0.48	0.69	0.46	0.81	0.39	0.82	0.38	0.85	0.36
BeHealthyYES	0.51	0.50	1.00	0.00	0.82	0.39	0.87	0.34	0.79	0.40
StaySafeYES	0.66	0.47	0.87	0.34	1.00	0.00	1.00	0.00	1.00	0.00
ChoiceControlYES	0.55	0.50	0.57	0.50	0.67	0.47	0.68	0.47	0.81	0.39
NeedsAlcoholProblems	0.14	0.35	0.24	0.43	0.18	0.39	0.18	0.38	0.17	0.38
NeedsDrugProblems	0.11	0.32	0.20	0.40	0.14	0.35	0.14	0.35	0.13	0.34
NeedsGeneric	0.22	0.41	0.19	0.39	0.20	0.40	0.16	0.37	0.19	0.39
ComplexNeeds	0.04	0.19	0.02	0.15	0.03	0.17	0.04	0.19	0.05	0.22
NeedsLearningDisabilities	0.13	0.34	0.15	0.36	0.16	0.36	0.15	0.35	0.18	0.39
NeedsMentalHealth	0.08	0.27	0.07	0.25	0.06	0.23	0.08	0.27	0.10	0.30
NeedsPeopleAtRiskOfDV	0.06	0.23	0.04	0.19	0.05	0.22	0.04	0.19	0.04	0.19
NeedsPhysicalOrSensoryDisability	0.08	0.27	0.10	0.31	0.15	0.36	0.11	0.31	0.11	0.31
NeedsOffender	0.52	0.50	0.57	0.50	0.50	0.50	0.51	0.50	0.52	0.50
NeedsHomeless	0.05	0.21	0.03	0.18	0.05	0.22	0.05	0.23	0.04	0.20
NeedsYoungPeople	0.06	0.24	0.04	0.20	0.06	0.23	0.02	0.13	0.03	0.17
NeedsOlderPeople	0.02	0.13	0.01	0.11	0.01	0.09	0.02	0.15	0.02	0.13

Source: Short Term Outcomes Forms, Supporting People

Table 43 Model Variables – Categorical variables – Study Four: Part one

	All Clients		Substance Misuse		Statutory Order		Harm To Others		Harm From Others	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<i>Economic Status</i>										
• Work Or Training	497	15.0	51	6.7	32	9.3	22	9.8	43	9.4
• Seeking Work	894	27.0	218	28.7	116	33.8	80	35.6	90	19.7
• Not Seeking Work	1207	36.4	178	23.2	81	23.8	61	27.1	221	48.3
• Unable To Work Illness	718	21.6	315	41.4	114	33.2	62	27.6	103	22.5
• Missing system	1	.0							1	.2
<i>Accommodation</i>										
• General Housing Need HA and LA	1101	33.2	148	19.5	61	17.8	34	15.1	158	34.5
• Temporary	260	7.8	82	10.8	29	8.5	25	11.1	39	8.5
• Floating	228	6.9	22	2.9	20	5.8	8	3.6	17	3.7
• Family and Friends	357	10.8	88	11.6	37	10.8	26	11.6	64	14.0
• Other and Unknown	476	14.4	221	29.1	88	25.7	65	28.9	41	9.0
• Private Rented, Owner Occupied	467	14.1	72	9.5	44	12.8	26	11.6	45	9.8
• Supported Housing	293	8.8	76	10.0	35	10.2	20	8.9	51	11.1
• Prison	30	.9	20	2.6	24	7.0	14	6.2	5	1.1
• Hospital, Rehab, DV and Residential Care	90	2.7	29	3.8	4	1.2	7	3.1	38	7.9
• Missing System	15	.5	2	.3	1	.3			2	.4
<i>Service Provision</i>										
• Housing association/RSL	1041	31.4	431	56.7	171	49.9	103	45.8	114	24.9
• Local Authority - Joint H&SS	616	18.6	61	8.0	19	5.5	9	4.0	58	12.7
• Voluntary Organisation and Private Company	1660	50.0	268	35.3	153	44.6	113	50.2	286	62.4
<i>Service Type</i>										
• Supported Housing	800	24.1	243	32.0	131	38.2	88	39.1	120	26.2
• Direct Access	454	13.7	246	32.4	83	24.2	60	26.7	44	9.6
• Floating Support	1407	42.4	146	19.2	73	21.3	55	24.4	121	26.4
• Resettlement Services	387	11.7	80	10.5	36	10.5	5	2.2	21	4.6
• Women's Refuge	192	5.8	28	3.7	8	2.3	5	2.2	138	30.1
• Other (Adult placement, Foyer, Outreach centre, Teen Parent)	77	2.3	17	2.2	12	3.5	12	5.3	14	3.1

Source: Short Term Outcomes Forms, Supporting People

Independent Variables – Survival Analysis – Study 4

The Cox proportional hazards model is suitable for many types of variables: binary, categorical and continuous. It can be used for two or more explanatory variables, but they should be independent (or the interactions should be modelled).

It is often recommended that the Cox proportional model should not include more variables than the fourth root of the number of events available for analysis, or at least 15 to 20 events for every additional variable. This recommendation has been stretched to the limit to allow for the ability to compare the effect of the same range of variables on four groups of clients. If only one group was being assessed then it would be possible, and more accurate, to remove a number of non-significant variables. However, these non-significant variables may be significant for another group. It is also

recommended that there should be a 'reasonable' number of subjects in each subcategory. These are discussed in more detail in Simon and Altman (1994).

Table 44 Frequency of Variable Codings by Outcomes – Survival Analysis

Categorical Variable Codings		Outcomes			
		Better manage substance misuse	Comply with Statutory Order	Reduce Harm to Others	Reduce Harm from Others
ClientSex	0=Male	256	168	88	123
	1=Female	121	79	53	252
EcStatRecode	1.00=WorkOrTraining	27	23	11	42
	2.00=SeekingWork	102	87	50	72
	3.00=NotSeekingWork	83	58	37	187
	4.00=UnableToWorkIllness	165	79	43	74
EthnicRecode	0=White British	359	237	132	323
	1=Not White British	18	10	9	52
DisabilityYesNo	0=No disability	309	209	111	313
	1=Disability	68	38	30	62
PlannedWay	0=No	121	100	62	100
	1=Yes	256	147	79	275
AccomTypeFINAL	1.00=General Housing Need Housing Associationand LA	106	57	30	144
	2.00=Temporary	35	24	16	31
	3.00=Floating	19	19	7	16
	4.00=Family and Friends	39	22	19	46
	5.00=Other and Unknown	46	48	25	22
	6.00=Private Rented, Owner Occ	47	38	20	40
	7.00=Supported Housing	61	31	16	45
	8.00=Prison	5	5	2	1
	9.00=Hospital, Rehab, DV and Residential Care	19	3	6	30
ServiceTypeRecode	1.00=Supported Housing	138	94	58	97
	2.00=Direct Access	95	51	34	28
	3.00=Floating Support	77	55	34	100
	4.00=Resettlement Services	40	29	3	14
	5.00=Womens' Refuge	19	6	4	125
	6.00=Other (Adult placement, Foyer, Outreach centre, Teen Parent)	8	12	8	11
TypeProvRecode	1.00=Housing association/RSL	198	110	61	74
	2.00=Local Authority - Joint H&SS	39	18	9	52
	3.00=Voluntary Organisation and Private Company	140	119	71	249

Table continued on next page.

Continuation of Table 44 Frequency of Variable Codings by Outcomes – Survival Analysis

Categorical Variable Codings		Better manage substance misuse	Comply with Statutory Order	Reduce Harm to Others	Reduce Harm from Others
EconomicWellbeingYES	0	38	20	13	33
	1	339	227	128	342
EnjoyAndAchieveYES	0	101	45	21	53
	1	276	202	120	322
StaySafeYES	0	69	48	19	83
	1	308	199	122	292
ChoiceControlYES	0	145	79	43	65
	1	232	168	98	310
NeedsAlcoholProblems	0	280	201	113	310
	1	97	46	28	65
NeedsDrugProblems	0	302	218	125	330
	1	75	29	16	45
NeedsGenericComplexNeeds	0	292	194	110	299
	1	85	53	31	76
NeedsPeopleAtRiskOfDV	0	358	235	132	336
	1	19	12	9	39
NeedsOffender	0	339	212	125	337
	1	38	35	16	38
NeedsHomeless	0	176	128	71	185
	1	201	119	70	190
NeedsYoungPeople	0	366	234	131	358
	1	11	13	10	17
NeedsOlderPeople	0	356	231	139	362
	1	21	16	2	13
NeedsOther	0	370	245	137	367
	1	7	2	4	8
NeedsDisabilityOrMentalHealth	0	291	189	113	286
	1	86	58	28	89

Source: Short Term Outcomes Forms, Supporting People

As noted by Box-Steffensmeier and Jones (2004, p. 131), the primary concern when fitting a Cox proportional hazard model is whether the proportional hazards assumption holds. Along with visual checks and graphical diagnostics of the scaled Schoenfeld residuals, the proportional hazards assumption was evaluated by exploratory analysis that included an interaction term between ‘length of service’ and the explanatory variable, into the Cox model. The significance of a time-dependent covariate tests for the suitability of the data for the proportional hazards assumption. No

interaction terms were found to be statistically significant, hence it was considered reasonable that the assumptions necessary for using the Cox proportional hazards model were met.

9.2. Study Four: Results and Discussion

Table 45 Logistic Regression Model Results – Study Four

Outcome	Cases	Mean (%)	Model Summary				Hosmer and Lemeshow Test		
			Correctly classified	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square	Chi-square	Degrees of freedom	Significance
Better Manage Substance Misuse	753	49.7	76.6%	767.614	0.307	0.409	11.347	8	0.183
Abide by Statutory Order	341	72.0	83.6%	262.224	0.339	0.489	6.154	8	0.630
Reduce Harm to Others	223	63.1	80.7%	189.222	0.373	0.510	6.836	8	0.554
Reduce Harm from Others	449	83.0	87.1%	253.908	0.291	0.487	6.206	8	0.624

Source: Short Term Outcomes Forms, Supporting People

Table 45 shows that all models were found to be statistically significant, with the likelihood ratio indicating significance at the 99 per cent level and the Hosmer-Lemeshow Goodness of Fit Test being found to have significance well above the 0.05 level. Therefore, the models were able to distinguish between those clients who achieved their outcome and those who did not. The models exhibited relatively high pseudo R^2 values of between 30 to 50%, representing an improvement of the full model over the intercept only model. A minimum of 76.6% of cases were correctly classified.

For the ‘better managing substance misuse’ outcome, it was found that identifying any of the ‘needs’ did not affect the likelihood of achieving an outcome. Yet having an identified drug or alcohol need had a significant impact in reducing harm from others and abiding by statutory orders. Working towards a ‘stay safe’ outcome (relating to offenders and victims) had a significant and negative impact (.507), reducing the likelihood of better managing substance abuse. It could be

assumed that this represented those who were also offenders, as residing in prison had a negative effect (.313), whereas those accessing the 'victim's' service of women's refuge, had a large positive impact (2.637). Other notable findings include the negative impact of living in temporary and other or unknown accommodation. Those not seeking work (for reasons other than illness or disability) were less than half as likely to better manage substance misuse than those in work. The only personal and demographic factor that was significant, albeit weakly, was ethnicity, which was found to have a negative impact on the likelihood of achieving the outcome (.486).

For those that may be classed as offenders (complying with a statutory order or reducing harm to others outcome), those who were actively seeking work, compared to those in work, had a positive impact – increasing the likelihood of a successful outcome by more than three times. Similarly, but only found for those complying with a statutory order, those who had been attempting to achieve an economic wellbeing outcome had a positive impact of 2.867. The ethnicity of the client was found to have a large and statistically significant negative effect (.093) on achieving a positive outcome.

Of all accommodation types, residing in prison had the largest negative impact (.047) on abiding by statutory orders and a large negative impact (.14) on those attempting to achieve the 'reduce harm to others' outcome. This is perhaps unsurprising if the community support ends abruptly because the client has been sent to prison – in particular if the reason for prison relates in some way to the statutory order or for causing harm to others. However, prison also had a negative impact on victims achieving a successful outcome (.058).

Living with family and friends or in other and unknown accommodation had a negative impact on achieving the outcome (albeit with weak statistical significance for those with statutory orders). Similarly for those reducing harm to others, staying in 'other and unknown' accommodation had a statistically significant and negative (.051) impact.

Of particular note, for those seeking to reduce harm to others, identifying generic/complex needs or 'young person' needs increases the chance of a positive outcome by approximately six times (5.650 and 6.293). This may be to do with the additional community support services available to those with these needs. Whereas having 'older person' needs actually reduces the likelihood (.076) of successfully avoiding harming others. For those with statutory order outcomes, having identified drug problems as a need also had a negative effect (.397).

For the 'victims' outcome, being unable to work due to illness has a negative impact on the outcome (.117) compared to those in work or training. Resettlement services reduce the likelihood of a successful outcome (.225), while accessing women's refuge services more than triples (3.211) the likelihood of success compared to supported housing services. Having alcohol problem needs or generic/complex needs has a positive impact (2.554, 3.204) on the success of the avoiding harm from others outcome. Again this may be due to the additional help and support available to those with these specific needs.

Unsurprisingly, across all outcome types, leaving the community support in a 'planned way' strongly and significantly increased the likelihood of recording a positive outcome by at least four times. This was as high as 8.5 and close to 9.7 for 'statutory orders' and 'victims'. However, it is worth pointing out the potential issues with causality in this case. It may have been 'planned' that the client leaves the community support when they have achieved their outcome.

Across all outcomes, with the exception of victims, floating support services were consistently found to have a highly significant and relatively large negative impact (.291, .235 and .153) on successfully achieving the desired outcomes compared to supported housing services.

The length of community support was consistently significant at the minimum of the 90% confidence level, for all of the outcomes except the 'reducing harm to others' outcome. While each additional day only improved the likelihood of achieving the outcome by 0.2%, this is equivalent to doubling

the likelihood of success after one year. This was roughly twice as high for those ‘at risk of harm from others’.

It is clear that it is more than the service offered that determines successful outcomes, with behaviours such as ‘seeking work’ or attempting to achieve ‘economic wellbeing’ seeming to have an equally significant effect on the outcome.

Table 46 Logistic Regression Independent Variable Results – Study Four

	Better manage substance misuse	S.E.	Comply with Statutory Order	S.E.	Reduce Harm to Others	S.E.	Reduce Harm from Others	S.E.
ClientAge	0.998	.010	1.01	.022	1.015	.023	1.018	.018
ClientSex	0.785	.221	1.133	.416	1.014	.475	1.126	.469
EcStat: WorkOrTraining								
EcStat: SeekingWork	0.663	.394	3.148*	.610	3.972**	.745	0.53	1.176
EcStat: NotSeekingWork	.423**	.418	2.349	.659	1.922	.766	0.303	1.124
EcStat: UnableToWorkIllness	0.621	.425	2.154	.691	2.061	.872	.117*	1.202
EthnicRecode	.486*	.421	.093***	.878	1.338	.822	1.428	.636
Disability	0.988	.288	1.123	.507	1.92	.665	0.741	.517
Accom: General Housing Need HA and LA								
Accom: Temporary	.341***	.400	0.38	.935	0.271	.935	0.831	.729
Accom: Floating	1.846	.724	1.973	1.378	0.296	1.551	N/A	9032.
Accom: Family and Friends	.458*	.429	.178*	.930	0.415	1.072	0.723	.718
Accom: Other and Unknown	.210***	.418	.211*	.899	.051***	1.002	0.519	.761
Accom: Private Rented, Owner Occ	1.047	.415	0.671	.865	0.401	.980	0.59	.819
Accom: Supported Housing	0.872	.443	0.639	.986	0.216	1.170	0.664	.779
Accom: Prison	.313*	.653	.047***	1.020	.014***	1.306	.058*	1.448
Accom: Hospital, Rehab, DV and Residential Care	0.618	.548	0.091	1.466	0.219	1.516	0.476	.795
PlannedWay	4.026***	.246	8.572***	.532	5.134***	.594	9.678***	.478
Service: Supported Housing								
Service: Direct Access	0.675	.255	1.439	.445	1.132	.553	1.047	.588
Service: Floating Support	.291***	.354	.235**	.591	.153***	.662	0.591	.631
Service: Resettlement Services	.423**	.368	2.121	.662	1.375	1.401	.225*	.827
Service: Women’s Refuge	2.637*	.557	0.435	1.179	0.192	1.495	3.211*	.627
Service: Other (Adult placement, Foyer, Outreach centre, Teen Parent)	0.619	.632	N/A	10462	0.557	.876	0.752	.909

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	Better manage substance misuse	S.E.	Comply with Statutory Order	S.E.	Reduce Harm to Others	S.E.	Reduce Harm from Others	S.E.
TypeProv: Housing association/RSL								
TypeProv: Local Authority - Joint H&SS	1.483	.487	5.206	1.370	N/A	11930	1.778	.865
TypeProv: Voluntary Organisation and Private Company	0.782	.291	2.018	.519	0.869	.610	1.519	.470
LengthOf	1.002***	.001	1.002*	.001	1.002	.001	1.004**	.002
EconomicWellbeingYES	1.341	.306	2.867*	.563	1.604	.642	1.427	.553
EnjoyAndAchieveYES	0.998	.227	0.696	.465	2.12	.578	1.503	.494
BeingHealthyYES			1.008	.497	0.569	.575	0.434	.521
StaySafeYES	.507**	.305						
ChoiceControlYES	0.875	.218	1.031	.403	0.538	.497	0.932	.434
NeedsAlcoholProblems	1.031	.228	1.633	.426	1.556	.601	2.554*	.485
NeedsDrugProblems	0.855	.243	.397*	.474	0.817	.614	0.961	.502
NeedsGenericComplexNeeds	1.502	.272	0.899	.497	5.650**	.675	3.204*	.635
NeedsPeopleAtRiskOfDV	0.65	.392	0.7	.699	1.316	.705	1.674	.657
NeedsOffender	1.381	.327	0.736	.516	0.383	.860	0.865	.559
NeedsHomeless	1.069	.224	0.623	.407	1.075	.441	0.779	.425
NeedsYoungPeople	0.582	.479	0.75	.777	6.293*	.989	3.396	1.102
NeedsOlderPeople	1.549	.501	0.728	.763	.076*	1.526	1.247	1.259
NeedsOther	4.66	.920	0.124	2.352	3.942	1.372	N/A	12679.
NeedsDisabilityOrMentalHealth	1.191	.242	1.007	.417	0.583	.602	1.014	.416
Constant	3.697	.866	0.68	1.514	1.323	1.698	1.787	1.699

Source: Short Term Outcomes Forms, Supporting People

* Denotes significance at the 90% confidence interval, ** at 95%, *** at 99%.

To summarise the logistic regression results, having some connection to offending reduced the chances of successfully managing substance misuse, and having an identified drug problem reduced the chances of abiding by a statutory order. However, having an identified alcohol problem actually helped increase the chances of ‘victims’ having a successful outcome, possibly due to the additional support services this opened up.

Demographic information was generally found not to be significant, with the exception of ethnicity which was found to negatively (weakly) reduce chances of managing substance abuse, and to positively effect offenders’ chances of success. Of more importance across the outcome types was a client’s attitude and action towards seeking work or achieving some other form of economic wellbeing outcome.

Across all outcomes, residing in prison was one of the largest and significant negative factors. However, living with family and friends or accommodation being unknown also had a negative impact. Receiving floating support, as opposed to supported housing services consistently reduced the likelihood of a successful outcome.

Unsurprisingly, leaving the community support in a planned way was strongly related to a positive outcome, as was the length of service for most of the outcomes. Therefore it would be beneficial to further investigate the factors that speed up a successful outcome.

Survival Analysis

Table 47 Survival Analysis Cases

	Substance misuse	Statutory order	Harm to others	Harm from others
Event (positive outcome)	376	246	141	373
Censored	1	1	0	2
Total	377	247	141	375

Source: Short Term Outcomes Forms, Supporting People

Across all four outcomes, the tests of model coefficients were found to be significant and suitable and can be found in Appendix 7. Perhaps of more importance to the Cox proportional hazards model is that the assumption of proportional hazards over time is respected. This was the case for each of the explanatory variables.

Table 48 Cox Proportional Hazard Results, Exp(B) by Outcome

Explanatory Variable	Substance Misuse	Statutory Order	Harm to Others	Harm from Others
ClientAge	0.981***	.966***	0.985	.984**
ClientSex	0.979	1.102	1.759*	1.233
EcStat: WorkOrTraining				
EcStat: SeekingWork	1.554*	1.824**	2.211	1.369
EcStat: NotSeekingWork	1.089	1.214	2.587*	1.052
EcStat: UnableToWorkIllness	1.053	1.105	1.374	0.721
EthnicRecode	1.194	0.762	0.606	.665**
DisabilityYesNo	0.754	0.854	0.957	0.791
PlannedWay	1.096	1.018	1.406	0.956
Accom: General Housing Need Housing Association and local authority				
Accom: Temporary	2.690***	3.580***	4.606***	1.395
Accom: Floating	0.899	1.815*	1.107	0.66
Accom: Family and Friends	3.382***	5.163***	22.064***	3.831***
Accom: Other and Unknown	2.103***	2.303**	6.290***	2.021**
Accom: Private Rented, Owner Occupied	1.201	1.185	3.102***	1.456*
Accom: Supported Housing	1.344	1.473	1.244	0.857
Accom: Prison	4.752***	8.239***	5.864*	2.144
Accom: Hospital, Rehab, DV and Residential Care	1.231	0.472	4.384**	2.806***
Service: Supported Housing				
Service: Direct Access	1.763***	2.349***	1.729*	2.004***
Service: Floating Support	1.357	1.12	1.001	.712*
Service: Resettlement Services	0.901	0.697	0.809	0.841
Service: Women's Refuge	3.169***	5.447***	2.298	8.028***
Service: Other (Adult placement, Foyer, Outreach centre, Teen Parent)	0.967	0.884	1.142	0.862
TypeProv: Housing association/RSL				
TypeProv: Local Authority - Joint H&SS	0.756	.426**	0.69	0.856
TypeProv: Voluntary Organisation and Private Company	.635***	.390***	.316***	.481***
EconomicWellbeingYES	.539***	.350***	.169***	.603**
EnjoyAndAchieveYES	1.031	1.096	0.575	0.974
Being Healthy	-	1.379	2.395**	0.968
StaySafeYES	.709**			
ChoiceControlYES	1.141	0.89	0.919	.718**

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Continuation of Table 48 Proportional Hazard Results, Exp(B) by Outcome

Explanatory Variable	Substance Misuse	Statutory Order	Harm to Others	Harm from Others
NeedsAlcoholProblems	0.812	0.804	0.749	0.923
NeedsDrugProblems	.551***	1.135	1.239	1.439**
NeedsGenericComplexNeeds	1.061	0.962	0.878	0.893
NeedsPeopleAtRiskOfDV	2.451***	2.937***	5.376***	0.82
NeedsOffender	1.272	.640**	0.86	0.745
NeedsHomeless	1.222	1.207	0.972	1.328*
NeedsYoungPeople	2.941***	1.061	3.490***	1.254
NeedsOlderPeople	0.769	0.859	0.79	1.013
NeedsOther	1.037	0.995	1.112	1.363
NeedsDisabilityOrMentalHealth	0.913	.617**	.385***	.713**

Source: Short Term Outcomes Forms, Supporting People

* Denotes significance at the 90% confidence interval, ** at 95%, *** at 99%.

Across all successful outcomes, the client's age is found to reduce the hazard ratio by a small amount (approximately .98) for every additional year. However, this relationship is not found to be significant for one outcome: those at risk of causing harm to others. There was less consensus for the impact of other demographic details of the client. Gender was only a weakly significant explanatory variable of the hazard ratio for those who successfully reduced causing harm to others, where being female increased the hazard ratio by 1.759 (.992-3.120).

The ethnicity of the client was only significant for those successfully avoiding harm from others. A non White-British client has a smaller hazard rate .665 (.473-.934). However, this relationship may reflect that this outcome incorporates reducing harm from others with respect to race and ethnicity. There may also access to more specialist services.

For those managing substance misuse or abiding by a statutory order, seeking work increases the hazard by 50-80% compared to those in work. Clients having an additional 'economic wellbeing' outcome was found to significantly reduce the hazard rate. This was most notable for those at risk of causing harm to others (.169).

However, there was a contradictory finding, albeit statistically weak, for those at risk of causing harm to others, where not seeking work resulted in a positive impact on the hazard rate compared to being in work.

For those who better managed substance abuse, having a 'stay safe' (i.e. crime related) outcome reduced the hazard ratio by .709 (.511-.984). Similarly, of those clients who avoided causing harm to others, those that identified a requirement for a 'being healthy' outcome also had a reduced hazard ratio. In other words, the length of service was likely to be greater for those with a combination of substance misuse and offending issues.

Conversely, being a 'victim' identified with drug problem needs increased the hazard rate by 30-40%. The same was true for those identifying a homeless need. However, those clients with a disability or mental health needs saw their hazard ratio being decreased by almost the same amount.

Perhaps unsurprisingly, those who successfully managed their substance misuse who had previously identified drug problems as a specific need had a reduced hazard ratio of close to 50%, .551 (.407-.747). However, being identified as having DV or 'young person' needs actually increases the hazard rate. i.e. reduces the length of service, possibly due to a more intense support system or access to more specialised services.

For those successfully achieving the offender type outcomes statutory orders, those who were identified as at risk of DV or having 'young person' needs had a higher hazard ratio. Again, this is possibly due to access to more intense and specialist support services. However, those who identified their need as being an offender, or having a disability, learning difficulty or mental health need had a lower hazard rate.

Almost all housing types increased the hazard ratio in comparison to those living in Housing Association and Local Authority general needs housing. This was certainly the case for all those that

were found to be significant. In particular, living with family and friends was consistently highly significant, most notably for 'offenders' where it was extremely high [22.064 (7.079-68.769)].

Similarly, prison was significant and large for most successful outcomes, the exception being the 'victims'. Prison had the largest impact for those managing statutory orders [8.239 (2.431-27.924)], and the second largest for 'offenders' [5.864 (.722-47.606)] - although the latter was only just significant at the 90% level.

For those managing substance misuse and at risk of causing harm, temporary and 'other and unknown' accommodation were also significant and positive.

As mentioned above, those successful 'victims' were slightly different, with those residing in hospital, rehabilitation or DV related accommodation having the most significant positive impact on the hazard ratio. This perhaps reflects the nature of the reason for their outcome – avoiding harm by others.

Direct access services were consistently found to have a significant and positive impact on the hazard ratio in comparison to supported housing services. A similar trend is found for women's refuge, particularly for those 'victims' [8.028 (5.390-11.958)] – with the exception of those successfully avoiding harm to others where it is not found to be significant.

However, it is also noteworthy that when a service was provided by voluntary organisations, as opposed to housing association provision, then this consistently and statistically significantly reduces the hazard ratio across all outcome types. In other words, it lengthens the support time.

Surprisingly, leaving the community support in a planned way was not found to significantly affect the hazard ratio for any of the outcomes.

10. Conclusions

This section will pull together the key findings and conclusions from the thesis, directly answer the research questions and hypotheses and provides policy implication.

This thesis has applied and expanded economic analysis to incorporate the broad concept of community safety. This has been achieved through a number of supporting studies, to provide a high resolution empirical (micro-econometric) analysis of community safety intervention at the individual level. These studies sit under the umbrella of community safety and address the issue from different angles using rich data sources specific to the City of Portsmouth.

Community safety acts to provide formal social control and increase the perceived efficacy of it (the work of crime fighting agencies) to enhance the effectiveness of 'control signals'. At the same time, community safety attempts to instil, encourage and facilitate informal social control – through the active support of community groups, parental responsibility training etc. Therefore, it acts as an over-arching concept that pulls together the empirical studies in this thesis. The recurring role of control signals, collective efficacy, and formal or informal social control – concepts that are addressed by community safety interventions and activities - throughout the studies demonstrates how these studies are tied together. The studies are also inter-related with a strong thread of connection running through them:

All four studies are linked under the umbrella of community safety. The recurring role of control signals, collective efficacy, and formal or informal social control – concepts that are addressed by community safety interventions and activities - throughout the studies demonstrates how these studies are tied together. The studies are all also inter-related with a strong thread of connection running through them:

Perceptions of anti-social behaviour, particularly of drug use and dealing, are important in the local community. In particular, when comparing the perceptions of residents to actual observations of the

activity in their area. If perceptions are not based on observations then there can only ever be a limited impact of the more traditional crime prevention techniques and there is therefore more scope for community safety type activities.

Perceptions of anti-social behaviour are deemed to be important because of their relationship with fear of crime. This is of particular interest when fear of crime has tangible effects, such as restricting out-of-home evening leisure activities.

If perceptions of anti-social behaviour are deemed to be a problem and of concern to the local community, then it is beneficial to look specifically at youth anti-social behaviour. Asking residents whether they think parents are to blame for the behaviour of their children taps into formal and informal social control, the policy space that community safety attempts to straddle. If there is general support that parents are responsible, then this also provides some justification for community safety activities to target parents (or the lack of them) with support and possibly sanctions.

Finally, there is the actual community safety support that can be offered to vulnerable adults, which includes support for those 'blamed' parents, the vulnerable adults that are restricting their out-of-home evening leisure participation because of fear of crime and those vulnerable adults with substance abuse issues that may be raising perceptions of drug use and dealing.

10.1 Research Questions

The research questions have been informed by the relevant literature review presented within each study.

Q1. Is there a role or a need for community safety in addressing: debilitating fear of crime, perceptions of anti-social behaviour – particularly drug use and dealing, perceptions of poor parenting and support for substance misusers, offenders and those at risk? The findings of this study do indicate that there is a role for community safety to address the issues of parental responsibility, fear of crime, perceptions of drug use and support for vulnerable adults. However, this role is limited.

Q2. To what extent has community safety been influenced, and if so how, by whom and why? Influencers include the community, the state, business interests and partnership agencies – especially local authorities. The latter has also brought with it managerialism and an Evidence Based Policy agenda. This has been achieved via the call for community support, the multi-agency arena and the central role of local authority in a multi-agency partnership. The reasons why include a legitimisation of practices and policies, a need to influence the direction of policy and calls for funding.

Q3. Is there scope to include parental responsibility within Becker's (1968) supply of offences function? A functioning model of parental responsibility – modelled as parental monitoring and strictness – that retains all of the workability of Becker's (1968) original model was developed in section 6.4. There is also the potential, and desire, to take this model further and apply it to Ehrlich's (1973, 1996) market model of crime or test some of the assumptions with relevant data on parental monitoring levels and child behaviour. There are no immediate policy implications to this, but it does offer some support for the role of intervention to encourage/replace parental responsibility.

Study One '*Analysing popular support for the deficient household social capital transmission thesis*' explored belief in parental deficiency as a causal factor of youth anti-social behaviour and crime.

Q4. Is there widespread support across society for channelling blame (and sanctions) via the parents of youth offenders? Empirical interrogation found that there was not widespread support for blaming parents.

Q5. Is it 'troubled families' and the so-called 'underclass' that survey respondents are thinking of when they blame the parents? On the one hand this may be inadvertently implied by the weight given to the idea of 'respect', but this is counterbalanced by the characteristics of those who were more likely to blame the parents (i.e. lower income households and/or those with families. There is insufficient information to definitively say either way.

H1.1: The extent to which households blame parents for the behaviour of their children increases for childless households. Somewhat surprisingly, those with children, are found to be more likely to consider parental responsibility a problem.

H1.2: The extent to which households blame parents for the behaviour of their children increases for wealthier households who can afford more childrearing support. Lower income households are found to be more likely to consider parental responsibility a problem.

H1.3: The extent to which households blame parents for the behaviour of their children increases for older respondents who may consider youth anti-social behaviour to be a relatively new phenomenon. Inconclusive evidence to support or reject the effect of age.

H1.4: The extent to which households blame parents for the behaviour of their children increases for those who experience crime or anti-social behaviour. Strong evidence was found to support this hypothesis.

H1.5: The extent to which households blame parents for the behaviour of their children increases for those who feel there is little community cohesion or informal social control.

Strong evidence was found to support this hypothesis. Most notably, a tendency to blame the

parents very strongly associates with a perception that people in the area do not treat each other with respect. This suggests that a very important associated aspect (or perception) of poor parenting is the engendering of a lack of respect and understanding for others on the part of their children.

Study Two '*Fear of crime and out-of-home evening leisure participation*' empirically considered the factors influencing fear of crime and its impact on constraining evening out-of-home leisure participation in a city through analysis of detailed household interviews. Limitations of similar studies are addressed by making an explicit association between fear of crime (rather than darkness) and the decision to limit evening leisure activities that would otherwise occur.

Q6. Can community safety initiatives have an impact on the level of fear of crime?

The study suggests that there is a role for community safety to play in terms of boosting 'control signals' and managing perceptions of crime and ASB. The findings suggest that community safety has more of an impact than Crime Prevention Through Environmental Design (CPTED), but traditional 'crime fighting' is still important. The most important influences on fear of crime are perceptions of risk exposure, gender and age respectively.

H2.1: Socio-demographic factors significantly influence the extent to which fear of crime prevents the respondent from going out in the evening. Strong evidence was found to support this hypotheses. Gender and age were amongst the most influential. The level of affluence was also found to reduce the effects of fear of crime. Ethnicity, disability and area of residency are not found to offer a significant explanation for variation in the expressed fear of crime.

H2.2: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who perceive a low quality of life and/or lack of neighbourhood cohesion in their area of residency. The findings also suggest that the perception of quality of life and neighbourhood cohesion do not have a significant influence on the fear of crime. The findings support those of Kanan and Pruitt (2002) in that no evidence of a statistically significant relationship

between the two is found. This implies that Crime Prevention Through Environmental Design (CPTED) has potentially less of a role to play in reducing perceptions of crime and ASB than community safety activities that more directly address control signals.

H2.3: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who do not have confidence in local crime prevention efforts.

Strong evidence was found to support this hypothesis. The findings indicate the importance of dissatisfaction with crime prevention efforts (control signals), and therefore the role community safety has to play in limiting this dissatisfaction / improving satisfaction.

H2.4: The extent to which fear of crime prevents the respondent from going out in the evening increases for those who perceive greater levels of exposure to offending in the area of residency.

Strong evidence was found to support this hypothesis. The findings indicate the importance of perceptions of problems with anti-social behaviour and drugs in the area of residency, but also the exposure to levels of criminal activity.

H2.5: The extent to which fear of crime prevents the respondent from going out in the evening decreases for those who perceive there to be lower risk of victimisation.

Strong evidence was found to support this hypothesis.

These results are consistent with findings reported in previous studies and suggest that a fear of crime is formed on a boundedly rational basis and/or the most vulnerable groups take the greatest precautions against risk of exposure to offending by adjusting their behaviour appropriately (e.g. reducing the amount of time spent outside of the home after dark).

Study Three '*Analysing multiple indicators of illegal drug activity*' assessed the extent of perceptions about the level of drug use and/or dealing in an area against the observed or measurable drug problem, recorded by the police and other agencies. Therefore, the significant characteristics of

those people with the highest perception (in areas of low measurable drug problems) are uncovered.

Many previous studies (Wood, 2004; Moon, Walker, Murphy, Flatley, Parfremment-Hopkins & Hall, 2009; Flatley, Moley and Hoare, 2008; Taylor, Twigg & Mohan, 2010) have identified the significant factors for perceiving anti-social behaviour or drug problems in an area. However, these studies have not been able to accurately ascertain whether these perceptions are supported by measurable observations of the problem.

Q7. What are the characteristics of respondents with high perception of drug use &/or dealing? How do they compare with previous studies? In common with previous studies (Flatley et al., 2008), strong evidence is found to support the proposition that perceptions and characteristics of an area are more likely to have an impact on perceptions of drug use and dealing than the respondent's personal and household characteristics. Additionally, all perceptions of drugs (regardless of the observed and measurable level in the area) are strongly influenced by a feeling that informal social control is lacking.

Q8. Are residents' perceptions of drug use and dealing in their area supported by the observed and measurable evidence? Those residing in areas with higher amounts of observable drug use and dealing do tend to have higher perceptions of drug use and dealing (28.6%) compared to those in low drug areas (22.2%). However, the divergence between observations and perceptions remains high.

Q9. Is there a difference between those that perceive a problem which is supported by the observed and measurable drug evidence and those that perceive a problem when there is a lower observed and measurable drug problem? There is evidence to propose that those with high perceptions of drugs in areas with low observed and measurable recording of drugs, are less influenced by experience, observations or visual and stereotype cues provided by neighbourhood

characteristics. Instead, they are more powerfully influenced by softer feelings of dissatisfaction, beliefs, fears and attitudes. All perceptions of drugs (regardless of the observed and measurable level in the area) are strongly influenced by a feeling that informal social control is lacking.

H3.1: The extent to which perceptions of drug use or dealing in their area increases for respondents in neighbourhoods with 'undesirable' characteristics.

There was acceptance of this statement at the city-wide level. However, when perceptions were differentiated by being in high or low observable drug areas, those with high perceptions in a low observable drug area were less likely to be strongly influenced by neighbourhood characteristics

H3.2: The extent to which perceptions of drug use or dealing in their area increases for respondents in neighbourhoods with a poor perception of their area.

There was acceptance of this statement at the city-wide level. However, when perceptions were differentiated by being in high or low observable drug areas, those with high perceptions in a low observable drug area were more likely to be strongly influenced by a poor perception of their area

H3.3: The extent to which perceptions of drug use or dealing in area increases for respondents that have experienced crime and anti social behaviour

There was acceptance of this statement at the city-wide level. However, when perceptions were differentiated by being in high or low observable drug areas, those with high perceptions in a low observable drug area were less likely to be strongly influenced by experience of crime

H3.4: Socio-demographic factors (personal and household) significantly influence the extent that respondents perceive drug use and dealing problems in their area.

There was little support for this hypothesis

Community safety attempts to address the underlying reasons and root causes of crime, be they social or environmental, rather than just preventing or displacing specific crimes in a situational

context. Therefore, the support services offered to victims, offenders and the cross-cutting issue of substance misuse are deemed to be of equal importance to reducing crime, anti-social behaviour and the fear of crime, as enforcement and punishment activities. The fourth study evaluates the efficacy of such housing-related support.

Study Four, *'Supporting vulnerable people': Effectiveness of support offered to vulnerable adults* focused on the outcomes of short-term community support provided, in particular those clients attempting to achieve outcomes of reducing offending, reducing harm from others (victims) and those with drug and alcohol problems.

The initial part of the study focused on the characteristics of a client and a support package that led to a success, while the second part of the study evaluated the factors that reduced the length of community support for successful outcomes

Q10. Do the characteristics of an individual, or the community support they are provided with, effect the successful achievement of Supporting People outcomes (Better manage substance misuse; Abide by statutory orders; Avoid harm to others; Avoid harm from others)?

H4.1: The extent to which socio demographic characteristics (age, gender, ethnicity, disability, economic status, accommodation) contribute to the success or failure of Supporting People outcomes. Demographic information was generally found not to be significant, with the exception of ethnicity which was found to negatively (weakly) reduce chances of managing substance abuse, and to positively affect offenders' chances of success. Of more importance across the outcome types was a client's attitude and action towards seeking work, or achieving some other form of economic wellbeing outcome. This links back to the multi-agency cross-cutting ethos of community safety.

H4.2: The extent to which community support provision (support type, support provider, planned exit, length of support) contributes to the success or failure of Supporting People outcomes.

Accommodation type was found to be important, with those residing in prison, living with family and friends or accommodation being unknown having large negative effects. Similarly, receiving 'floating support', as opposed to supported housing services consistently reduced the likelihood of a successful outcome. Unsurprisingly, leaving the community support in a planned way was strongly related to a positive outcome, as was the length of community support for most of the outcomes.

H4.3: The extent to which support needs (other outcomes and identified support needs) contributes to the success or failure of Supporting People outcomes.

This study found some connection to offending reduced the chances of successfully managing substance misuse, and having an identified drug problem reduced the chances of abiding by a statutory order. However, having an identified drug problem actually helped increase the chances of 'victims' having a successful outcome, possibly due to the additional support this opened up.

Q11. What characteristics determine the length of time to a successful outcome (as measured by the Cox proportional hazard ratio)?

H4.4: The extent to which socio demographic characteristics (age, gender, ethnicity, disability, economic status, accommodation) effect the length of community support to achieve a successful outcome.

The study found most demographic information was not significant – with the exception of age which reduced the hazard ratio by a small amount and therefore elongated the length of community support. Being in prison was found to have a large positive impact on the hazard ratio of offender types, and actually reduce the time to a successful outcome.

H4.5: The extent to which service provision (service type, service provider, planned exit) effect the length of community support to achieve a successful outcome.

Those experiencing direct access support were more likely to achieve successful outcomes faster than those in supported

housing services, although this was countered by consistent delays for those accessing voluntary services.

H4.6: The extent to which support needs (other outcomes and identified support needs) effect the length of community support to achieve a successful outcome. Actively seeking work, or attempting to achieve some other economic wellbeing outcome was generally found to reduce the length of community support required for a success. There was a strong inter-relation between substance misuse and offending behaviour, where having both delayed a successful outcome. Whereas those with specific needs, such as domestic violence or being young people, tended to cut the length of community support – possibly due to the more specialist and intense support offered. This is somewhat reflected in the positive effect of accessing women’s refuge services.

10.2 Policy Implications

- A possible policy implication (from Q2) is that the initial aims of community safety may be further diluted, which may result in resources being directed to simply maintain the structure/agency rather than achieve the goal of reducing crime, ASB and the fear of crime.
- Although the nature of the causal relationship between respect for others and responsible parenting is unclear, the evidence presented here (Q4-Q5) suggests that government policy measures may ultimately prove to be more effective if a focus were to be placed on learning to treat others with respect and understanding, or at least engendering the perception of it.
- Evidence of a relationship between satisfaction with crime prevention efforts and fear of crime is found (Q6), but no such evidence of a relationship with the perceived quality of life. Only limited support is found for the theoretical relationships between those variables postulated to exist by the CPTED literature. Similarly, it is found (Q7-Q9) that CPTED has potentially less of a role to

play in reducing perceptions of crime and ASB than community safety activities and that more directly address informal social control, fears and attitudes.

- A major policy implication, similar to that raised by Sampson and Raudenbush (2004), is that solely removing visual signs (such as drug litter and people selling drugs) will not fully remove perceptions of drug problems. Even encouraging social control and enforcing formal control, or convincing residents of its efficacy, something which is likely to be important in informing perceptions of drug problems regardless of the level of observed problems, may only have a limited impact. As long as residents continue to harbour dissatisfaction with their quality of life and an underlying fear of crime then high perceptions of drug problems are likely to remain present.
- All perceptions of drugs (regardless of the observed and measurable level in the area) are strongly influenced by a feeling that informal social control is lacking.
- A (Supporting People) client's attitude and action towards seeking work, or achieving some other form of economic wellbeing outcome was an important factor in achieving success (in a different outcome) and in reducing the length of community support. This was evident across all of the outcome types. This links back to the multi-agency cross-cutting ethos of community safety.
- The interaction of substance misuse and offending resulted in worse outcomes for both needs. Whereas 'victims' with substance misuse problems had greater success faster. Therefore the policy implication would be to ensure the same level of specialist substance misuse support is available to offenders.
- Specialist Supporting People services can bring about much greater success rates, in a shorter amount of time – but it does depend on what type of agency is running them.

10.3 Areas for Further Research

- Future work would require a longitudinal study to better understand the nature of the relationships behind perceptions.
- An update to the Residents' Survey – or panel data, possibly from other cities and across the UK.
- Calculation of the indirect cost imposed by fear of crime as a sub-optimal allocation of leisure participation.
- Taking the adaptation to Becker's (1968) model further, by expanding it to fit the market for crime model. It would also be useful to test the assumptions with data.
- It would be interesting to assess the importance of a respondent's own current or historical drug use habits and the impact this has on perceiving drug problems.
- Extending the coverage of the History of Community Safety chapter beyond New Labour. This could be updated to include the coalition, current government and future implications such as spending reviews and anti-terror legislation.
- Expanding the established analysis of Supporting People data to a national cohort. This would allow for regional comparisons, as well as extending the analysis across a longer time span.
- Possibly including the other outcomes and client types such as being healthy and economic wellbeing (including debt).
- It would be beneficial to have a more qualitative study, perhaps based on interviews, to delve deeper into the Supporting People programme.
- Presenting Study Four as a competing risks model.

Appendices

Appendix 1: Ethical Checklist Form UPR16 and Ethics Approval

Appendix 1a: Ethical Checklist Form UPR16



FORM UPR16

Research Ethics Review Checklist

Please include this completed form as an appendix to your thesis (see the Postgraduate Research Student Handbook for more information)

Postgraduate Research Student (PGRS) Information		Student ID:	510405
PGRS Name:	Alan Leonard		
Department:	Economics and Finance	First Supervisor:	Prof. Alan Collins
Start Date: (or progression date for Prof Doc students)	01/02/2010		
Study Mode and Route:	Part-time <input checked="" type="checkbox"/>	MPhil <input type="checkbox"/>	MD <input type="checkbox"/>
	Full-time <input type="checkbox"/>	PhD <input checked="" type="checkbox"/>	Professional Doctorate <input type="checkbox"/>
Title of Thesis:	An Economic Analysis of Community Safety: Evidence from the City of Portsmouth		
Thesis Word Count: (excluding ancillary data)			
<p>If you are unsure about any of the following, please contact the local representative on your Faculty Ethics Committee for advice. Please note that it is your responsibility to follow the University's Ethics Policy and any relevant University, academic or professional guidelines in the conduct of your study.</p> <p>Although the Ethics Committee may have given your study a favourable opinion, the final responsibility for the ethical conduct of this work lies with the researcher(s).</p>			
<p>UKRIO Finished Research Checklist: (if you would like to know more about the checklist, please see your Faculty or Departmental Ethics Committee rep or see the online version of the full checklist at: http://www.ukrio.org/what-we-do/code-of-practice-for-research)</p>			
a) Have all of your research and findings been reported accurately, honestly and within a reasonable time frame?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
b) Have all contributions to knowledge been acknowledged?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
c) Have you complied with all agreements relating to intellectual property, publication and authorship?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
d) Has your research data been retained in a secure and accessible form and will it remain so for the required duration?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
e) Does your research comply with all legal, ethical, and contractual requirements?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
Candidate Statement:			
I have considered the ethical dimensions of the above named research project, and have successfully obtained the necessary ethical approval(s)			
Ethical review number(s) from Faculty Ethics Committee (or from NRES/SCREC):	E142		
If you have not submitted your work for ethical review, and/or you have answered 'No' to one or more of questions a) to e), please explain below why this is so:			

UPR16 – August 2015

Signed (PGRS):	<i>Alan Leonard</i>	Date:	
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Appendix 1b: 'PBS Ethics Approval V3, 2007'

Ethical Review Checklist – Staff and Doctoral Students

This checklist should be completed by the researcher (PhD students to have DoS check) and sent to Sharman Rogers who will coordinate Ethics Committee scrutiny.

No primary data collection can be undertaken before the supervisor and/or Ethics Committee has given approval.

If, following review of this checklist, amendments to the proposals are agreed to be necessary, the researcher must provide Sharman with an amended version for scrutiny.

What are the objectives of the research project?

Econometric analysis of the outcomes of short-term services provided by the Supporting People programme and a broader review of “Community Safety” in Portsmouth. Primarily focusing on the client group of “Ex-offenders and people at risk of offending and imprisonment”, but also reporting on those client groups “at risk of domestic violence” &/or “with alcohol and drug problems” where appropriate.

Does the research involve *NHS patients, resources or staff*? ~~YES~~ / NO (please circle).

If YES, it is likely that full ethical review must be obtained from the NHS process before the research can start.

Do you intend to collect *primary data* from human subjects or data that are identifiable with individuals? (This includes, for example, questionnaires and interviews.) ~~YES~~ / NO (please circle)

If you do not intend to collect such primary data then please go to question 14.

If you do intend to collect such primary data then please respond to ALL the questions 4 through 13. If you feel a question does not apply then please respond with n/a (for not applicable).

What is the *purpose* of the primary data in the dissertation / research project?

What is/are the *survey population(s)*?

How big is the *sample* for each of the survey populations and how was this sample arrived at?

How will respondents be *selected and recruited*?

What steps are proposed to ensure that the requirements of *informed consent* will be met for those taking part in the research? If an Information Sheet for participants is to be used, please attach it to this form. If not, please explain how you will be able to demonstrate that informed consent has been gained from participants.

How will *data* be *collected* from each of the sample groups?

How will *data* be *stored* and what will happen to the data at the end of the research?

How will *confidentiality* be assured for respondents?

What steps are proposed to safeguard the *anonymity* of the respondents?

Are there any *risks* (physical or other, including reputational) *to respondents* that may result from taking part in this research? YES / NO (please circle).

If YES, please specify and state what measures are proposed to deal with these risks.

Are there any *risks* (physical or other, including reputational) *to the researcher or to the University* that may result from conducting this research? ~~YES~~/ NO (please circle).

If YES, please specify and state what measures are proposed to manage these risks.²⁵

Will any *data* be *obtained from a company or other organisation*. ~~YES~~/ NO (please circle)
For example, information provided by an employer or its employees.

If NO, then please go to question 18.

What steps are proposed to ensure that the requirements of *informed consent* will be met for that organisation? How will *confidentiality* be assured for the organisation?

Does the organisation have its own ethics procedure relating to the research you intend to carry out? YES / NO (please circle).

If YES, the University will require written evidence from the organisation that they have approved the research.

Will the proposed research involve any of the following (please put a \surd next to 'yes' or 'no'; consult your supervisor if you are unsure):

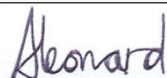
- | | | | | |
|---------------------------------------------|-----|-------------------------------------|----|-------------------------------------|
| • Vulnerable groups (e.g. children) ? | YES | <input checked="" type="checkbox"/> | NO | <input type="checkbox"/> |
| • Particularly sensitive topics ? | YES | <input checked="" type="checkbox"/> | NO | <input type="checkbox"/> |
| • Access to respondents via 'gatekeepers' ? | YES | <input checked="" type="checkbox"/> | NO | <input type="checkbox"/> |
| • Use of deception ? | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |
| • Access to confidential personal data ? | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |
| • Psychological stress, anxiety etc ? | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |
| • Intrusive interventions ? | YES | <input type="checkbox"/> | NO | <input checked="" type="checkbox"/> |

Are there any other ethical issues that may arise from the proposed research?

No.

Details of applicant

The member of staff undertaking the research should sign and date the application, and submit it directly to the Ethics Committee. However, where the researcher is a supervised PhD candidate, the signature of the Director of Studies is also required prior to this form being submitted.

	Name	Signature
Researcher	Alan Leonard	

²⁵ Risk evaluation should take account of the broad liberty of expression provided by the principle of academic freedom. The university's conduct with respect to academic freedom is set out in section 9.2 of the Articles of Government and its commitment to academic freedom is in section 1.2 of the Strategic Plan 2004-2008.

Director of Studies		
Date	15.03.2010	

Approval by Ethics Committee

I/We grant Ethical Approval

FREC

Date

AMENDMENTS

If you need to make changes please ensure you have permission before the primary data collection. If there are major changes, fill in a new form if that will make it easier for everyone. If there are minor changes then fill in the amendments (next page) and get them signed before the primary data collection begins.

Appendix 1c: Ethical Approval E142

-----Original Message-----

From: Sharman Rogers [mailto:Sharman.Rogers@port.ac.uk]

Sent: 19 April 2010 14:29

To: Leonard, Alan

Subject: Ethics application E142 : Alan Leonard [Prof Alan Collins]

Dear Alan

I am pleased to be able to confirm that your ethics application ref. E142 has been approved.

Best wishes,

Sharman

Senior Administrator
Faculty Office
University of Portsmouth Business School
T: +44(0)23 9284 4202

Senior Administrator
Faculty Office
University of Portsmouth Business School
T: +44(0)23 9284 4202

Appendix 2: The Residents' Survey 2007 Questionnaire – Relevant Questions

IPSOS MORI/J31215
1-5

Questionnaire No:

Serial No _____
OUO (5-9) _____
CARD 1 10

Portsmouth Residents' Survey 2007 DRAFT FINAL 27/09/07

Sample Point Number:

(11) (12) (13)

Sample point name:

QA Gender

Male	1	
Female	2	(14)

WRITE IN & CODE EXACT AGE

QB Exact Age (15-16)

16-24	1	
25-34	2	
35-44	3	
45-54	4	
55-64	5	
65-74	6	
75+	7	(17)

QC Working Status of Respondent:

Full time (30hrs/wk+)	1	
Part-time (9-29hrs/wk)	2	
Not working (under 8 hours)	3	
Housewife/husband, no paid work	4	
Retired	5	
Registered unemployed	6	
Unemployed, but not registered	7	
Government training scheme	8	
Student	9	
Other	0	(18)

QD Occupation of Chief Income Earner
Position/rank/grade

Industry/type of company

Quals/degree/apprenticeship

Number of staff responsible for

REMEMBER TO PROBE FULLY FOR PENSION
AND CODE FROM ABOVE

QE Class

A	1	
B	2	
C1	3	
C2	4	
D	5	
E	6	(19)

QF Young People in household:

Aged 0-5	1	
Aged 6-9	2	
Aged 10-17	3	
No young people under 18	4	(20)

Interviewer Declaration

I confirm that I have carried out this interview face-to-face with the named person of the address attached and that I asked all the relevant questions fully and recorded the answers in conformance with the survey specification and within the MRS Code of Conduct and the Data Protection Act 1998.

Signature:

Interviewer Name (CAPS):

Interviewer Number:

-
(21) (22) (23) (24) (25) (26) (21-26)

Day of Interview 1 2 3 4 5 6 7
(Mon) (Thur) (Sun) (27)

Date of Interview: / /07 (28-31)

Length of Interview: (minutes) (32-33)

THIS FORM IS THE PROPERTY OF IPSOS MORI
IPSOS MORI House, 79-81 Borough Road, London SE1 1FY

QG Number in household in full-time education							
Primary	0	1	2	3	4	5+	(34)
Secondary	0	1	2	3	4	5+	(35)
Other full time	0	1	2	3	4	5+	(36)

QH Are you the parent or guardian of any children attending school in the city? SINGLE CODE ONLY

Yes	1	
No	2	(37)

QI Tenure SINGLE CODE ONLY

Owned outright	1	
Buying on mortgage	2	
Shared Ownership (part own/part rent from Council/HA)	3	
Rented from:		
Council	4	
Housing association	5	
Private landlord	6	
Other	7	(38)

QJ SHOWCARD AD (R) Could you please tell me from this card the group in which you would place your and your partner/spouse's current total gross income from all sources before deductions, tax and national insurance – that is income from work and any other sources, such as pensions and benefits? Just read out the letters that apply. SINGLE CODE ONLY

Weekly		Annually			
A	Under £50 per week	Under £2,500 per annum		1	
B	£50 - £74 per week	£2,500 - £3,749 per annum		2	
C	£75 - £99 per week	£3,750 - £4,999 per annum		3	
D	£100-£149 per week	£5,000 - £7,499 per annum		4	
E	£150-£199 per week	£7,500 - £9,999 per annum		5	
F	£200-£249 per week	£10,000 - £12,499 per annum		6	
G	£250-£299 per week	£12,500 - £15,999 per annum		7	
H	£300 - £399 per week	£15,000 - £20,799 per annum		8	
I	£400 - £499 per week	£20,800 - £25,999 per annum		9	
J	£500 - £99+ per week	£26,00 - £31,199 per annum		0	
K	£600 +	£31,200+ per annum		X	(39)

QK Cars or vans in household SINGLE CODE ONLY

Yes:		
One	1	
Two	2	
Three or more	3	
No	4	(40)

QL SHOWCARD AE (R) Which of these, if any, do you personally use? Just read out the letter(s) that apply MULTICODE OK

A	PC – desktop, laptop or other computer at home, place of work or study, or elsewhere	1	
B	Internet at home via 'dial up' modem	2	
C	Broadband internet at home via a high-speed, always-on connection (e.g. via ADSL or cable modem)	3	
D	Internet at work, place of study or elsewhere	4	
E	Stand alone DVD player / recorder	5	
F	DAB Digital radio through a specialist DAB receiver	6	
G	Portable digital music player (e.g. iPod, Zen, mp3 players)	7	
	None of these	8	
	Don't Know	9	(41)

QM SHOWCARD AF (R) What is your highest educational qualification? SINGLE CODE

A	Degree or equivalent qualification	1	
B	GCE 'A' level/Higher School Certificate	2	
C	GCE 'O' level grades A, B, C/GCSE grades A, B, C/ISE grade 1	3	
D	GCE 'O' level grades D, E/GCSE grades D, E/ISE grades 2-5	4	
E	School certificate or matriculation	5	
F	Certificate of Sixth Form Studies	6	ASK QN
G	SCE/SLC/SUPE Higher Grade	7	
H	SCE Ordinary Grade A-C/Standard Grade 1-2	8	
I	SCE Ordinary Grade D-E/Standard Grade 3-5	9	
J	SLC/SUPE Lower or Ordinary	10	
K	Foreign school/college qualifications	X	
	Other	Y	
	None of these	1	GO TO QO (42-43)
	Don't know/can't remember	2	(42-43)

ASK IF CODES 1-Y AT QM. OTHERS GO TO QO
 QN And how old were you when you got this qualification? SINGLE CODE ONLY

Under 16	1
16-18	2
19-24	3
25-34	4
35-54	5
55-64	6
65+	7

(44)

ASK ALL

QO Do you or does anybody else in your household, have any long-term illness, health problem or disability which limits your daily activities or the work you can do? MULTICODE OK

Yes, self	1
Yes, other household members	2
No	3

(45)

QP Would you be interested in registering to receive information and updates by email from Portsmouth City Council? SINGLE CODE ONLY

Yes	1
No	2

(46)

QQ Would you be interested in registering to receive information and updates by text message from Portsmouth City Council? SINGLE CODE ONLY

Yes	1
No	2

(47)

QR SHOWCARD AG (R) To which of the groups on this card do you consider you belong? Just read out the letters that apply. SINGLE CODE ONLY

WHITE		(48)
A	British	1
B	Irish	2
C	Any other white background WRITE IN & CODE '3'	3
MIXED		
D	White and Black Caribbean	4
E	White and Black African	5
F	White and Asian	6
G	Any other mixed background WRITE IN & CODE '7'	7
ASIAN OR ASIAN BRITISH		
H	Indian	8
I	Pakistani	9
J	Bangladeshi	0
K	Any other Asian background WRITE IN & CODE 'X'	X
BLACK OR BLACK BRITISH		
L	Caribbean	Y
		(49)
M	African	1
N	Any other black background WRITE IN & CODE '2'	2
CHINESE OR OTHER ETHNIC GROUP		
O	Chinese	3
P	Any other background (WRITE IN & CODE '4')	4
		(48-49)
	Refused	5

INTERVIEWER RECORD END TIME AFTER DEMOGRAPHICS
 Hours Mins

Ipsos MORI

INTERVIEWER RECORD START TIME

Hours Mins

INTRODUCTION/CONFIDENTIALITY

Good morning, afternoon, evening. My name is ... from Ipsos MORI, the research organisation. We are carrying out a survey for Portsmouth City Council about local issues. The interview will take about 25 minutes.

I would like to assure you that all the information we collect will be kept in the strictest confidence, and used for research purposes only. It will not be possible to identify any particular individual or address in the results.

QUALITY OF LIFE AND CITY PRIORITIES

Q1. SHOWCARD A (R) Firstly, how would you rate the overall quality of your life in Portsmouth? SINGLE CODE ONLY

Very good	1
Fairly good	2
Neither good nor poor	3
Fairly poor	4
Very poor	5
No opinion	6

(50)

Q2. SHOWCARD B (R) And thinking about the area/ neighbourhood where you live, on the whole, how satisfied or dissatisfied are you with it as a place to live? SINGLE CODE ONLY

Very satisfied	1
Fairly satisfied	2
Neither satisfied nor dissatisfied	3
Fairly dissatisfied	4
Very dissatisfied	5
No opinion	6

(51)

Q3. SHOWCARD C (R) To what extent do you agree or disagree that this local area is a place where people of different backgrounds get on together? SINGLE CODE ONLY

Strongly agree	1
Tend to agree	2
Neither agree nor disagree	3
Tend to disagree	4
Strongly disagree	5
Don't know	6

(52)

Q4. SHOWCARD D (R) Overall, how satisfied or dissatisfied are you with the way Portsmouth City Council is running the city? SINGLE CODE ONLY

Very satisfied	1
Fairly satisfied	2
Neither satisfied nor dissatisfied	3
Fairly dissatisfied	4
Very dissatisfied	5
No opinion	6

(53)

Ipsos MORI

- Q5. SHOWCARD E (R) And compared to a year ago, do you now feel more satisfied, less satisfied or about the same about how Portsmouth City Council is running the city?
SINGLE CODE ONLY

Much more satisfied	1
A little more satisfied	2
About the same	3
A little less satisfied	4
A lot less satisfied	5
No opinion	6

(54)

- Q6. SHOWCARD F (R) Here are some possible priorities for the area – which two or three do you think are most important for the City Council and its partners to achieve? Just read out the letters that apply. MULTICODE UP TO THREE ONLY

(55)

A	Crime and the safety of the local community	1
B	Education for children	2
C	Creating a city of culture	3
D	Lifelong learning for all	4
E	Making sure the city is prosperous and there are enough jobs	5
F	Ensuring the City is clean and attractive	6
G	Improving public transport	7
H	Ensuring there is enough good quality, affordable housing	8
I	Improving the health and wellbeing of residents	9
J	Helping the City to be a friendly place to live where everyone feels they belong and knows how to make their views known	0
	Other (PLEASE WRITE IN AND CODE 'X')	X
	None of these	Y
		(56)
	Don't know	1

(55-56)

Ipsos MORI

Q7. SHOWCARD G (R) The following are Portsmouth City Council's current priorities for improvement in the city. How successful or unsuccessful would you say the council is being in dealing with them? READ OUT (a-q). PLEASE ROTATE ORDER AND TICK START. SINGLE CODE ONLY FOR EACH.

		Very successful	Fairly Successful	Neither /nor	Fairly unsuccessful	Very unsuccessful	Don't know	
<input type="checkbox"/>	a) Reducing the fear of crime	1	2	3	4	5	6	(57)
	b) Making Portsmouth a city where people are safer	1	2	3	4	5	6	(58)
	c) Reducing anti-social behaviour	1	2	3	4	5	6	(59)
	d) Reducing violent crime	1	2	3	4	5	6	(60)
	e) Improving educational attainment	1	2	3	4	5	6	(61)
	f) Having a thriving economy	1	2	3	4	5	6	(62)
	g) Promoting Portsmouth as a waterfront city with a distinctive culture	1	2	3	4	5	6	(63)
	h) Keeping the city clean	1	2	3	4	5	6	(64)
<input type="checkbox"/>	i) Maintaining and developing the quality and design of buildings and public spaces in the city	1	2	3	4	5	6	(65)
	j) The provision of public transport	1	2	3	4	5	6	(66)
	k) Improving facilities for walking and cycling	1	2	3	4	5	6	(67)
	l) Tackling traffic congestion	1	2	3	4	5	6	(68)
	m) Promoting and enhancing road safety	1	2	3	4	5	6	(69)
	n) Providing and maintaining parking provision	1	2	3	4	5	6	(70)
	o) Protecting and supporting vulnerable adults and children	1	2	3	4	5	6	(71)
	p) Enhancing living standards in the city's most deprived areas	1	2	3	4	5	6	(72)
<input type="checkbox"/>	q) Being more efficient and effective in everything the council does	1	2	3	4	5	6	(73)

Ipsos MORI

Q8. SHOWCARD G (R) AGAIN Thinking about children in the city, how successful or unsuccessful would you say the council is in dealing with the following? READ OUT (a-f). PLEASE ROTATE ORDER AND TICK START. SINGLE CODE ONLY FOR EACH.

	Very successful	Fairly Successful	Neither /nor	Fairly unsuccessful	Very unsuccessful	Don't know	
<input type="checkbox"/> a) Helping children to be healthy	1	2	3	4	5	6	(74)
<input type="checkbox"/> b) Helping children to enjoy life	1	2	3	4	5	6	(75)
<input type="checkbox"/> c) Helping children to achieve their potential	1	2	3	4	5	6	(76)
<input type="checkbox"/> d) Helping children to stay safe	1	2	3	4	5	6	(77)
<input type="checkbox"/> e) Helping children to make a positive contribution to the city	1	2	3	4	5	6	(78)
<input type="checkbox"/> f) Helping children and young people to take up further education, training, or jobs after leaving school	1	2	3	4	5	6	(79)

Q9. SHOWCARD H (R) To what extent do you agree or disagree with the following statements about Portsmouth City Council? READ OUT (a-d). REVERSE ORDER AND TICK START. SINGLE CODE ONLY FOR EACH.

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	No opinion	
<input type="checkbox"/> a) Portsmouth City Council gives people the opportunity to have their say	1	2	3	4	5	6	(80)
<input type="checkbox"/> b) Portsmouth City Council does its best to act on what local people say	1	2	3	4	5	6	(81)
<input type="checkbox"/> c) Portsmouth City Council treats all types of people fairly	1	2	3	4	5	6	(82)
<input type="checkbox"/> d) Portsmouth City Council offers good value for money	1	2	3	4	5	6	(83)

CARD 2 10

CRIME AND ANTI-SOCIAL BEHAVIOUR

ASK ALL

Q47. SHOWCARD Z (R) How much would you say the crime rate here has changed in the last two years? In this area, would you say there is more crime or less crime? Please just read out the letter that applies. SINGLE CODE ONLY

A	A lot more crime	1
B	A little more crime	2
C	About the same	3
D	A little less crime	4
E	A lot less crime	5
F	Lived here less than two years	6
	Don't know	7

(57)

Ipsos MORI

Q48. Are there any parts or places in Portsmouth where you feel frightened or where you avoid going through fear of crime? IF YES: Where are these? CODE BELOW. MULTICODE OK. DO NOT PROMPT BUT CLARIFY IF NECESSARY.

(58)	
Buckland	1
Commercial Road	2
Cognor	3
Cosham	4
Drayton and Farlington	5
Fratton	6
Guildhall Walk entertainment areas	7
Gunwharf quay	8
Hilsea	9
Landport	0
Milton/Eastney	X
Old Portsmouth	Y
(59)	
Paulsgrove and Wymering	1
Port Solent	2
Portsea	3
Somerstown	4
Southsea (generally)	5
Southsea entertainment area/clubland	6
Tipner and Stamshaw	7
Other (WRITE IN AND CODE '8')	8
None/nowhere	9
Don't know	0

ASK Q49

GO TO Q50 (58-59)

ASK IF ANY AREA MENTIONED AT Q48 (CODES 1-Y OR 1-8). OTHERS GO TO Q50.
 Q49. Why do you feel frightened or avoid these parts or places in Portsmouth? PROBE FULLY USING 'why else'. DO NOT PROMPT. IF PEOPLE SAY 'JUST FEEL UNSAFE', PROBE FURTHER. MULTICODE OK.

(60)	
Bad reputation/known as a trouble spot/has a high crime rate	1
Know of someone who has been harassed there	2
Have been harassed there in the past	3
Noisy area	4
Problems with graffiti/vandalism	5
Area run down - litter/abandoned vehicles	6
Area badly lit	7
Problem with drugs there	8
Problems with stray dogs	9
Disputes/arguments between neighbours/local residents	0
Street drinking/drunks	X
People begging	Y
(61)	
Groups of teenagers/young people 'hanging around'	1
Groups of teenagers/young people act in a way that's intimidating	2
Other (WRITE IN & CODE '3')	3
Don't know	4

(60-61)

Ipsos MORI

ASK ALL

Q50. SHOWCARD AA (R) To what extent does fear of crime prevent you from going out in Portsmouth in the evening? SINGLE CODE ONLY

A great deal	1	
A fair amount	2	
Not very much	3	
Not at all	4	
Don't know	5	(82)

Q51. Is anti-social behaviour a problem in your area? SINGLE CODE ONLY.

Yes	1	ASK Q52
No	2	GO TO Q53
Don't know	3	(83)

ASK ALL WHO THINK ANTI-SOCIAL BEHAVIOUR IS A PROBLEM (CODE 1) AT Q51. OTHERS GO TO Q53.
Q52. And which types of anti-social behaviour have you personally experienced or witnessed in this area? MULTICODE OK

	(84)
Large gangs of youths hanging around/shouting abuse/intimidating	1
Car damage/vandalism	2
Drunks when pubs/clubs shut	3
Very noisy	4
General vandalism (bus stops/phone boxes etc)	5
Fighting	6
Youngsters drinking alcohol	7
A lot of burglaries/break in the area	8
Bad language	9
Motorbikes/scooters/mopeds being driven illegally	0
Cars broken into/stolen	X
Eggs thrown at house/windows	Y
	(85)
Kids throwing things e.g. stones, food etc	1
Other (WRITE IN & CODE 'Z')	2
None	3
Don't know/can't say	4

(84-85)

ASK ALL

Q53. SHOWCARD AB (R) Thinking about your local area, how much of a problem do you think the following are.? READ OUT (a-d). ROTATE ORDER. TICK START. SINGLE CODE ONLY FOR EACH.

	A very big problem	A fairly big problem	Not a very big problem	Not a problem at all	DK/ can't remember	
<input type="checkbox"/> (a) Drug use	1	2	3	4	5	(86)
<input type="checkbox"/> (b) Drug dealing	1	2	3	4	5	(87)
<input type="checkbox"/> (c) Parents not taking responsibility for the behaviour of their children	1	2	3	4	5	(88)
<input type="checkbox"/> (d) People not treating each other with respect and consideration	1	2	3	4	5	(89)

Ipsos MORI

Q54. SHOWCARD AC (R) How well informed do you feel about what the council is doing to tackle anti-social behaviour in your local area? SINGLE CODE ONLY

Very well informed	1
Fairly well informed	2
Not very well informed	3
Not at all informed	4
Don't know	5

(70)

Q55. Thank you for giving your time today to answer our questions. Over the next 12 months the Council may want to re-contact you by email about other issues of local concern. The Council would have your email address but it would be securely stored. Would you be prepared for the Council to re-contact you and for Ipsos MORI to pass them your details?

PLEASE WRITE IN ANY RESPONDENT COMMENTS (E.G. 'YES CAN RE-CONTACT, BUT NOT WITHIN THE NEXT SIX MONTHS')

Yes	1	(71)
Write in email address		
No	2	

COMMENTS

PLEASE OBTAIN SIGNATURE ON FINAL PAGE IF RESPONDENT AGREES FOR EMAIL ADDRESS TO BE PASSED TO THE COUNCIL.
GO TO DEMOGRAPHICS AND COMPLETE BACK PAGE. THANK AND CLOSE

Ipsos MORI

THIS MUST BE THE LAST PAGE OF THE QUESTIONNAIRE AND MUST BE SINGLE SIDED

IPsos MORI/J31215
1-5

Questionnaire No

Serial No
OUO (8-9)

CARD 4 10

Portsmouth Residents Survey 2007

Sample Point Number:

 (11) (12) (13)
 Sample point name:

Interviewer Number:
 -
 (14) (15) (16) (17) (18) (19) (14-19)

Name/Initial/Title: Mr/Mrs/Ms/Miss _____
 Address: _____

Full Postcode (20-26)

QTEL1 Do you have a fixed line telephone at home which you use for incoming and outgoing voice calls?

Yes	1	
WRITE IN Full tel. No		
No	2	
Refused	3	GO TO QTEL2
Ex-directory	4	

(27)

ASK IF NO FIXED LINE/REFUSED/EX-DIRECTORY (CODES 2-4) AT QTEL1. OTHERS CLOSE

QTEL2 Can I just check, do you have a mobile phone? IF YES ASK: Can I take the number please?

Yes	1	
WRITE IN Full tel. No		
No	2	
Refused	3	

(28)

REMEMBER TO OBTAIN RESPONDENT SIGNATURE BELOW

RESPONDENT'S SIGNATURE IF AGREE TO BE RECONTACTED

Signature: _____
 Name (Print): _____
 Date: _____

IT IS VERY IMPORTANT THAT YOU FILL IN THE SAMPLE POINT NUMBER, QUESTIONNAIRE NUMBER AND INTERVIEWER NUMBER ON BOTH THE FRONT AND BACK PAGE OF THE QUESTIONNAIRE.



Appendix 3: Postcode Districts, LSOA and MSOA

Using the example of a postcode unit: PO1 2UP

- PO is the 'postcode area'
- PO1 is the 'postcode district' (also known as the 'outward code'. There are approximately 2800 of these in Great Britain [from 'open data communities'].
- PO1 2 is the 'postcode sector' (approximately 1 square mile) and PO1 2UP is the 'postcode unit'. The number of addresses per postcode unit is restricted to less than 100. However, it is possible that one address may have several postcodes if it deals with large volumes of mail or has separate entrances.

Attempts have been made to match postcode districts to their constituent lower layer super output area (LSOA), middle layer super output area (MSOA) and police beats (dealt with below) that fall within their boundary. A postcode to LSOA / MSOA look-up table available from the ONS Postcode Directory (UK) was utilised to achieve this task (Office for National Statistics, 2011b).

As it is the grid reference of the postcode centroid that is matched to the administrative boundary, the ONS accept that some addresses will inevitably be allocated incorrectly (Office for National Statistics, 2013c). Therefore, some LSOAs and many MSOAs straddle the boundary of at least two Portsmouth postcode districts. Following ONS Guidance and Methodology (2013c), where this occurs, within each LSOA or MSOA, the proportion of postcode units that fall into each postcode district has been used to share / weight the characteristics of the LSOA between the relevant postcode districts. This method has been used to calculate the characteristics below where data was originally available at LSOA or MSOA level.

It is worth noting that there is a potential bias within this method, as postcode units are not necessarily equal measurements of land/population/addresses. To ensure this was an accurate way of allocating LSOA and MSOA characteristics, separate analysis was conducted where each LSOA and MSOA was placed within the postcode district where the highest proportion of the land coverage was located, rather than the centroid. This resulted in only minor changes in the values of each postcode district, but very little change in their ranking for each of the characteristics.

- Note: there are some anomalous postcodes within Portsmouth that are prefixed within the postal district of PO7, (seven out of 37 postcodes, in LSOA E01017061 (Portsmouth 003B), in the north of Portsmouth (PO6 district code). None of these were recorded as being surveyed by Ipsos-MORI, although there are some (five) missing postcode data records. For the purposes of this research, the LSOAs within PO7 in Portsmouth have been included in the neighboring PO6 postcode district.
- Note: PO12 2XY is the only postcode unit recorded as being within the Portsmouth boundary that does not have a 3 digit postcode district. It is reported as appearing in LSOA: E01017123

& MSOA: EO20004772. It is believed that this postcode unit is linked to Spitbank Fort – a small fort/island located off the coast of Portsmouth, within the Solent. As such, it is reasonable to exclude this from the analysis.

— Note: two postcodes with the postcode district PO6 are located outside of Portsmouth and have been excluded from this analysis.

Either LSOA or MSOA level data can be used to calculate many of the neighbourhood characteristics of a postcode district. However, only data available at MSOA level could be aggregated to postcode district level to derive the “Proportion of 10-24 year olds” and “Net population outflow”.

LSOAs are built from groups of four to six adjacent Output Areas. They are as consistent in population size (1,000 to 1,500) as possible. The concern with MSOAs not fitting neatly into postcode districts was less of an issue for the smaller LSOAs that make up the MSOAs. The results created by LSOAs were the preferred method for inclusion in Study 3’s model as variables for: ‘Proportion of population that are economically active’, ‘Proportion of population that are of black or minority ethnic (BME) origin’ and ‘Population density’.

Table 49 Neighbourhood Characteristics (MSOA) by Postcode District

Postcode District	Percent of population				Density of area (people per hectare) ^d
	Economically active ^a	Aged 10-24 (June 2007) ^b	Non-white ^c	Non-White-British ^c	
PO1	63%	30%	7.6%	10.9%	53
PO2	73%	22%	4.0%	5.6%	46
PO3	72%	22%	3.8%	5.5%	71
PO4	68%	26%	5.7%	10.0%	59
PO5	62%	30%	10.0%	15.1%	97
PO6	68%	21%	2.3%	4.0%	26
Portsmouth	68%	25%	5.3%	8.1%	
England and Wales	67%	19%	8.7%	12.5%	

2001 unless stated otherwise.

^a Based on calculations using: ONS 2001 Census, Economic Activity (UV28), All People; Economically Active, Persons, Count, , by Super Output Area Middle Layer.

^b Based on calculations using: ONS Resident Population Estimates, All Persons: All Ages; Aged 10-14; Aged 15-19; Aged 20-24, June 2007, by Super Output Area Middle Layer.

^c Based on calculations using: ONS 2001 Census, Ethnic Group (UV09) All People; White; White:British, Persons, Count, by Super Output Area Middle Layer.

^d Based on calculations using: ONS 2001 Census, Population Density (UV02), All People, Persons, Count; Area (Hectares), by Super Output Area Middle Layer.

Appendix 4: Police Beat and Postcode District

Postcode district	Police beats
PO1	PF01, PF04, PC01, PC02, PC04
PO2	PF02, PF03
PO3	PF05
PO4	PS02, PS03, PS04
PO5	PS01, PC03
PO6	PN01, PN02, PN03

Appendix 5: Outcome Form for Short Term Services – Relevant Questions



Outcome Form for Short-Term Services

PLEASE NOTE – We are asking you to complete a form for every client that leaves the support service regardless of whether their departure was planned or unplanned. You must complete a form if the client has been in receipt of the service for 28 days at the point of departure. You will need to agree the approach with your local authority for clients who leave prior to 28 days. See guidance for more info.

Provider and Service Details

Q0.3 Organisation Name: _____

Q0.4 SP Administering Authority: _____

Q0.5 Service Name: _____ Q0.6 Is service jointly funded? (Yes / No)

Q0.7 SP Service ID: _____ Q0.8 Support Plan Completed: Completed/ Declined

Q0.9 Client Died whilst in receipt of service: (Yes/ No)

Q0.10 Service Type: (choose one)

Supported housing	<input type="checkbox"/>
Womens' refuge	<input type="checkbox"/>
Foyer	<input type="checkbox"/>
Teenage parent accommodation	<input type="checkbox"/>
Direct access	<input type="checkbox"/>
Floating support	<input type="checkbox"/>
Outreach service	<input type="checkbox"/>
Resettlement services	<input type="checkbox"/>
Supported Lodgings	<input type="checkbox"/>
Adult Placement	<input type="checkbox"/>

Support Duration Details

Q0.11 Start Date: __/__/__

Q0.12 End Date: __/__/__

Client Characteristics

Q0.13 Client/Tenant Code: _____

Q0.14 Enter age, sex, economic status of the client.

	Age	Sex	Economic status
		M or F	See list below for code
Client			

Categories for Economic status:

Description	Code	Description	Code
Other adult	0	Retired	5
Full-time work (24 hrs or more/week)	1	Not seeking work	6
Part-time work (less than 24 hrs/week)	2	Full-time student	7
Govt training/New Deal	3	Long-term sick/disabled	8
Job seeker	4		

Q0.15 Ethnic origin of client *(as defined by client)*:

White: British	<input type="checkbox"/>	Black/Black British: Caribbean	<input type="checkbox"/>
White: Irish	<input type="checkbox"/>	Black/Black British: African	<input type="checkbox"/>

White: Other		Black/Black British: Other	
Mixed: White & Black Caribbean		Chinese/Other ethnic group: Chinese	
Mixed: White & Black African		Chinese/Other ethnic group: Other	
Mixed: White & Asian		Did not wish to disclose	
Mixed: Other			
Asian/Asian British: Indian			
Asian/Asian British: Pakistani			
Asian/Asian British: Bangladeshi			
Asian/Asian British: Other		<i>Note: categories from 2001 UK Census</i>	

Q0.16 User-defined ethnic coding (optional) _____

Q0.17 What is the client's religion? (Please choose one - optional)

None		Muslim	
Christian (including Church of England, Catholic, Protestant and all other Christian denominations)		Sikh	
Buddhist		Any other religion	
Hindu		Not known	
Jewish		Do not wish to disclose	

Q0.18 Is the service user a disabled person? Yes/No

Please state the nature of the disability (please tick all that apply)

Mobility	
Visual Impairment	
Hearing Impairment	
Progressive disability/ Chronic Illness (e.g. MS, Cancer	
Mental Health	
Learning Disability	
Did not wish to disclose	
Other	

Q0.19 If Other, please state the nature of service user's disability _____

Q0.20 Client group by which the client is defined:

	Primary	Secondary (choose up to three)		
		1	2	3
Older people with support needs				
Older people mental health				
Frail elderly				
Mental health problems				
Learning disabilities				
Physical or sensory disability				
Single homeless with support needs				
Alcohol problems				

Drug problems				
Offenders or at risk of offending				
Mentally disordered offenders				
Young people at risk				
Young people leaving care				
Women at risk of domestic violence				
People with HIV/AIDS				
Homeless families with support needs				
Refugees				
Teenage parents				
Rough sleeper				
Traveller				
Generic				
Complex Needs (secondary only)				

Q0.22 Type of accommodation the client intends to occupy immediately after departing the support service or ceasing to receive the service if floating support was being provided

Local authority general needs tenancy		Direct access hostel	Bed and breakfast	
Local authority general needs with floating support		Women's refuge	Short life housing	
Housing association general needs tenancy		User who has experienced DV returning home with partner	Living with family	
Housing association general needs with floating support		User who has experienced DV returning home without partner	Living with friends	
Private sector tenancy		Foyer	Mobile Home/Caravan	
Private sector leasing		Housing for older people	Any other temp accom	
Tied housing or rented with job		Residential care home	Rough sleeping	
Owner occupation		Hospital	Residential rehabilitation service	
Shared ownership		Prison	Unknown	
Supported housing		Approved probation hostel	Other	

Q0.23 Which local authority area will the client be living in immediately after departing the support service or after ceasing to receive the service if floating support was being provided? (drop down list of local authority area names): _____

Q0.24 Was this a planned move from the support service (accommodation based) or a planned end to the receipt of service (floating support) in accordance with client's support plan? Yes/ No

Q0.25 Did this planned move or planned end to the support service result in greater independence for the client? Yes/ No

Section 1 - Achieve Economic Wellbeing

1a) Did the client need support to maximise their income, including receipt of the correct welfare benefits? Yes / No

If No, please go to question 1b

If Yes, please continue

Actual outcome for the client – Has the client now maximised their income, including receipt of the correct benefits? Yes / No

1b) Did the client need support to reduce their overall debt? Yes / No

If No, please go to question 1c

If Yes, please continue

Actual outcome for the client -Has the client reduced their overall debt? Yes / No

1c) Did the client need support to obtain paid work? Yes / No

If No, please go to question 2a

If Yes, please continue and answer both outcome questions

(i) Actual outcome for the client – Is the client now in paid work? Yes / No

(ii) Actual outcome for the client – Has the client participated in paid work whilst in receipt of the service? Yes / No

Section 2 - Enjoy and Achieve

2a) Did the client need support to participate in training and/or education? Yes / No

If No, please go to question 2b. If Yes, please continue

(i) Actual outcome for the client - Has the client participated in their desired training and /or education? Yes / No

(ii) Actual outcome for the client - If qualification (s) applicable, has the client achieved this? Yes / No / Not Applicable

If Yes or Not Applicable please go to question 2b. If No, please continue.

2b) Did the client need support to participate in leisure /cultural / faith and /or informal learning activities? Yes / No

If No, please go to question 2c)

If Yes, please continue

Actual outcome for the client - Has the client participated in their chosen activities? Yes / No

2c) Did the client need support to participate in any work-like activities, e.g. unpaid work /work experience /work-like experience / voluntary work? Yes/No

If No, please go to question 2d)

If Yes, please continue

Actual outcome for the client - Has the client participated in their chosen work-like activities?
Yes / No

2d) Did the client need support to establish contact with external services /groups /friends /family?
Yes / No

If No, please go to question 3a)

If Yes, please continue and answer both outcome questions

(i)Actual outcome for the client - Has the client established contact with external services /groups? Yes / No / Not Applicable

(ii) Actual outcome for the client - Has the client established contact with friends/family? Yes / No / Not Applicable

Section 3 - Be Healthy

3a) Did the client need support to better manage their physical health? Yes / No

If No, please go to question 3b)

If Yes, please continue

Actual Outcome for the Client: Is the client managing their physical health better? Yes / No

3b) Did the client need support to better manage their mental health? Yes / No

If No, please go to question 3c)

If Yes, please continue

Actual Outcome for the Client: Is the client managing their mental health better? Yes / No

3c) Did the client need support to better manage their substance misuse issues? Yes / No

If No, please go to question 3d)

If Yes, please continue

Actual Outcome for the Client: Is the client managing their substance misuse issues better? Yes / No

If the outcome did not happen, please provide reasons:

	Main reason	Second reason (optional)	Third reason (optional)
Factors to do with client – List of reasons to choose from:			
○ Client unable to engage with support			
○ Client unwilling to engage with support			
○ Client ceased to receive support service before outcome was achieved			
Service unable to meet the support need – List of reasons to choose from			

<input type="radio"/> Factors relating to staff skills and experience			
<input type="radio"/> Factors relating to overall staffing levels			
<input type="radio"/> Funding difficulties within organisation			
<input type="radio"/> Difficulties with support planning			
<input type="radio"/> Service restrictions due to local eligibility criteria			
Factors in the external environment - List of reasons to choose from:			
<input type="radio"/> Problems accessing drug services			
<input type="radio"/> Problems accessing alcohol services			
<input type="radio"/> Local treatment services are unavailable			
<input type="radio"/> Access to local substance misuse services limited due to funding pressures			
<input type="radio"/> Long waiting lists for treatment services			
<input type="radio"/> Substance misuse services unwilling to provide services to client			
<input type="radio"/> Client awaiting assessment			
<input type="radio"/> Treatment ongoing			
<input type="radio"/> Other			

3d) Is assistive technology / aids and adaptations helping the client to maintain independence?
Yes/No

If No, please go to question 4a)

Actual Outcome for the Client: Is the client now able to manage independent living better as a result of the assistive technology/aids and adaptations? Yes / No

Section 4 - Stay Safe

4a) Did the client need support to maintain their accommodation and avoid eviction? Yes / No

If No, please go to question 4b)

If Yes, please continue

Actual Outcome for the Client: Has the client maintained their accommodation? Yes / No

4b) Did the client need support to comply with statutory orders and related processes in relation to offending behaviour? Yes / No

If No, please go to question 4c)

If Yes, please continue

Actual Outcome for the Client: Has the client complied with their statutory orders/related processes? Yes / No

If the outcome did not happen, please provide reasons:

	Main reason	Second reason (optional)	Third reason (optional)
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Factors to do with client – List of reasons to choose from:			
○ Client unable to engage with support			
○ Client unwilling to engage with support			
○ Client ceased to receive support service before outcome was achieved			
○ Client has personal difficulties relating to restrictions within statutory orders			
Service unable to meet the support need – List of reasons to choose from:			
○ Factors relating to staff skills and experience			
○ Factors to overall staffing levels			
○ Funding difficulties within organisation			
○ Difficulties with support planning			
○ Service restrictions due to local eligibility criteria			
Factors in the external environment - List of reasons to choose from:			
○ Problems with statutory organisations			
○ Statutory organisations unwilling to provide additional support in line with statutory orders			
○ Problems with integrated service delivery under MAPPA, across a range of statutory organisations			
○ Problems with agreed integrated service delivery generally, across a range of statutory organisations			
○ Other			

4c) (i) Did the client need support to better manage self harm? Yes/No

If No, please go to question 4c(ii)

If Yes, please continue

4c) (i) Actual Outcome for the Client: Is the client better managing self harm? Yes /No

4c) (ii) Did the client need support to avoid causing harm to others? Yes/No

If No, please go to question 4c(iii)

If Yes, please continue

4c) (ii) Actual Outcome for the Client: Has the client avoided harm to others? Yes /No

If the outcome did not happen, please provide reasons:

	Main reason	Second reason (optional)	Third reason (optional)
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Factors to do with client – List of reasons to choose from:			
○ Client unable to engage with support			
○ Client unwilling to engage with support			
○ Client ceased to receive support service before outcome was achieved			
Service unable to meet the support need – List of reasons to choose from:			
○ Factors relating to staff skills and experience			
○ Factors relating to overall staffing levels			
○ Funding difficulties within organisation			
○ Difficulties with support planning			
○ Service restrictions due to local eligibility criteria			
Factors in the external environment - List of reasons to choose from:			
○ Problems with local specialist support services			
○ Local specialist support services are unavailable			
○ Long waiting lists for specialist services			
○ Specialist support services are unwilling to provide services to client			
○ Client awaiting assessment			
○ Other			

4c) (iii) Did the client need support to minimise harm / risk of harm from others? Yes/No

If No, please go to question 5

If Yes, please continue

4c) (iii) Actual Outcome for the Client: Is the client minimising the harm/ risk of harm from others? Yes /No

If the outcome did not happen, please provide reasons:

	Main reason	Second reason (optional)	Third reason (optional)
Factors to do with client – List of reasons to choose from:			
○ Client unable to engage with support			
○ Client unwilling to engage with support			
○ Client ceased to receive support service before outcome was achieved			
Service unable to meet the support need – List of reasons to choose from:			
○ Factors relating to staff skills and experience			
○ Factors relating to overall staffing levels			
○ Funding difficulties within organisation			

<input type="radio"/> Difficulties with support planning			
<input type="radio"/> Service restrictions due to local eligibility criteria			
Factors in the external environment - List of reasons to choose from:			
<input type="radio"/> Problems with local specialist support services			
<input type="radio"/> Local specialist support services are unavailable			
<input type="radio"/> Long waiting lists for specialist services			
<input type="radio"/> Specialist support services are unwilling to provide services to client			
<input type="radio"/> Problems resulting from previous experience/ risk of DV/ abuse			
<input type="radio"/> Problems in the wider community contributing to risk of client being harmed by others			
<input type="radio"/> Other			

Section 5 - Make a Positive Contribution

5 Did the client need support in developing confidence and ability to have greater choice and / or control and / or involvement? Yes / No

If Yes, please continue

Actual Outcome for the Client: Did the client have more choice and /or involvement and/ or control? Yes / No

If yes, was this at: Service level or within the Wider community or both?

Answer all questions as fully as possible. Always complete the client / tenant code on every form. This will ensure that you can identify the form from your own records if the Client Record Office needs to contact you with queries. Do not return paper forms. Data must be submitted electronically.

- Please submit Outcome forms (short-term) for clients who have left the service to the Client Record Office at the end of the month in which the support ceased.
- If you are using SP Digital, please export your data and email the text file to outcomedata@st-andrews.ac.uk
- If you are using CROSS web entry, please enter and validate your data. Entries that have passed the first level of validation will be downloaded automatically by the Client Record Office.

Appendix 5: Recoding of the Supporting People Dataset

Recoded:	Original coding
Service Type	
1 Supported Housing	Supported housing
2 Direct Access	Direct access
3 Floating Support	Floating support
4 Resettlement Services	Resettlement services
5 Women's Refuge	Women's refuge

6 Other	Adult placement Foyer Outreach service Teenage parent accommodation
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EcStat

1 Working/Training	Working full-time Working part-time Government training/New Deal
2 Seeking work	Job seeker
3 Not seeking work	Retired Not seeking work Full-time student Other adult
4 Unable to work because of long term sickness or disability	Unable to work because of long term sickness or disability

Client Needs

Alcohol problems	Alcohol problems
Drug problems	Drug problems
Generic/Complex needs	Generic/Complex needs
Offender	Offenders/at risk of offending Mentally disordered offenders
Elderly	Frail elderly Older people mental health Older people with support needs
People at risk of domestic violence	People at risk of domestic violence
Homeless	Rough sleeper Single homeless with support needs Homeless families with support needs
Other	Traveller Refugees
Young People	Young people at risk Young people leaving care Teenage parents
Disability, learning difficulty or mental health	Physical or sensory disability Learning disabilities Mental health problems

Accommodation type recode

1 General Needs LA & HA	Housing association general needs tenancy Local authority general needs tenancy
2 Temporary	Any other temp accom Approved probation hostel Bed and breakfast Direct access hostel Foyer Rough sleeping Short life housing
3 Floating	Housing association general needs with floating support

		Local authority general needs with floating support
4	Friends and Family	Living with family Living with friends
5	Other & Unknown	Mobile home/caravan Other Unknown
6	Private Rented & Owner Occupied	Owner-occupation Shared ownership Private sector leasing Private sector tenancy Tied housing or rented with job
7	Supported housing	Supported housing
8	Prison	Prison
9	Hospital, Rehab, DV & Residential	Hospital User who has experienced DV returning home with partner User who has experienced DV returning home without partner Women's refuge Housing for older people Residential care home Residential rehabilitation service

- EcStat: 'Long-term sick and disabled' was combined with 'Long-term sick/disabled',
- Service type: 'Supported housing' was combined with 'Supported lodgings' (N.B. only one record in the latter), 'Womens' refuge' was combined with 'Womens refuge'.
- Client groups (Primary and secondary): 'Offenders/at risk of offending' combined with 'Offenders at risk of offending', 'People at risk of domestic violence' was combined with 'Women at risk of domestic violence' [N.B. Only two males were categorised in the former group, this will have repercussions when modelling the survival analysis]. It is also worth noting the inconsistency in the use of 'Generic/Complex Needs' rather than the two separate items of 'Generic' and 'Complex Needs', although this has negligible impact on this research.
- From 2009, combined Generic and Complex needs into "Generic/Complex". Therefore, this has been applied to earlier data.

Appendix 7: Omnibus Tests of Model Coefficients – Survival Analysis

Better Manage Substance Misuse Outcome:

-2 Log Likelihood
3722.989

	Overall (score)			Change From Previous Step			Change From Previous Block		
	Chi-square	df	Sig.	Chi-square	Df	Sig.	Chi-square	df	Sig.
-2 Log Likelihood	3539.523	201.121	.000	183.466	37	.000	183.466	37	.000

Comply with Statutory Order:

-2 Log Likelihood
2226.121

-2 Log Likelihood	Overall (score)			Change From Previous Step			Change From Previous Block		
	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
2050.138	187.126	37	.000	175.983	37	.000	175.983	37	.000

Harm to others

-2 Log Likelihood	Overall (score)			Change From Previous Step			Change From Previous Block		
	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
972.537	148.601	37	.000	148.514	37	.000	148.514	37	.000

Harm From Others

-2 Log Likelihood
3693.617

-2 Log Likelihood	Overall (score)			Change From Previous Step			Change From Previous Block		
	Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.
3383.973	329.369	37	.000	309.644	37	.000	309.644	37	.000

References

- 20 Held in Cannabis Factory Raids (2007, May 9). *Express*. Retrieved from <http://www.Express.co.uk/news/uk/6571/20-held-in-cannabis-factory-raids>
- Akee, R. K. Q, Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2010). Parents' Incomes and Children's Outcomes: A Quasi-Experiment Using Transfer Payments from Casino Profits. *American Economic Journal: Applied Economics*, 2(1), 86-115.
- Akers, R. L., La Greca, A. J., Sellers, C., & Cochran, J. (1987). Fear of Crime and Victimization Among the Elderly in Different Types of Communities. *Criminology*, 25(3), 487-506.
- Allen, C. (2008). *Housing Market Renewal and Social Class*. Abingdon: Sage.
- Allen, R. (1996). *Children and Crime: Taking Responsibility* (Vol. 4): Institute for Public Policy Research.
- Alleyne, R., Ward, V., & Orr, J. (2011, August 13). Parents of Young Rioters Don't Care, Says Judge; Teenage Looting, *The Daily Telegraph*, 3.
- Alston, L. T. (1986). *Crime and Older Americans*. Springfield, IL: Charles C. Thomas.
- Ames, A., Powell, H., Crouch, J., & Tse, D. (2007). *Anti-Social Behaviour: People, Place and Perceptions*. London: Ipsos-MORI.
- Aneshensel, C., & Sucoff, C. (1996). The Neighborhood Context of Adolescent Mental Health. *Journal of Health and Social Behaviour*, 37(4), 293-310.
- Antunes, G. E., Cook, F. L., Cook, T. D., & Skogan, W. G. (1977). Patterns of Personal Crime Against the Elderly: Findings from a National Survey. *The Gerontologist*, 17(4), 321-327.
- Arthur, R. (2005). Punishing Parents for the Crimes of their Children. *The Howard Journal of Criminal Justice*, 44(3), 233-253.
- Atkinson, R., & Flint, J. (2004). Order Born of Chaos? The Capacity for Informal Social Control in Disempowered and 'Disorganised' Neighbourhoods. *Policy & Politics*, 32(3), 333-350.

- Austin, D. M., & Sanders, C. (2007). Graffiti and Perceptions of Safety: A Pilot Study Using Photographs and Survey Data. *Journal of Criminal Justice and Popular Culture*, 14(4), 292-316.
- Baldassare, M. (1986). The Elderly and Fear of Crime. *Sociology and Social Research*, 70(3), 218-221.
- Barro, R. J., & Gordon, D. B. (1983). A Positive Theory of Monetary Policy in a Natural Rate Model. *The Journal of Political Economy*, 589-610.
- Barro, R. J., & Gordon, D. B. (1983b). Rules, Discretion and Reputation in a Model of Monetary Policy. *Journal of Monetary Economics*, 12(1), 101-121.
- Bartlett, M. S. (1954). A Note on the Multiplying Factors for Various χ^2 Approximations. *Journal of the Royal Statistical Society, Series B (Methodological)*, 296-298.
- Bates, S. (1921). Possibilities and Methods of Increasing Parental Responsibility for Juvenile Delinquents. *Journal of the American Institute of Criminal Law and Criminology*, 12, 61-75.
- Baumer, T. L. (1985). Testing a General Model of Fear of Crime: Data from a National Sample. *Journal of Research in Crime and Delinquency*, 22(3), 239-255.
- Bayer, P., Hjalmarsson, R. And Pozen, D. (2009). Building Criminal Capital Behind Bars: Peer Effects in Juvenile Corrections. *Quarterly Journal of Economics*, 124(1), 105-47.
- Beaton, A. (2000). *The Little Book of New Labour Bollocks: The Ultimate Antidote to Spin*. London: Simon & Schuster.
- Becker, G. S. (1968). Crime and Punishment: An Economic Approach. *Journal of Political Economy*, 76(2), 169-217.
- Becker, G. S. (1974). A Theory of Social Interactions. *Journal of Political Economy*, 82(6), 1063-1093.
- Becker, G. S. (1976). Altruism, Egoism, and Genetic Fitness: Economics and Sociobiology. *Journal of Economic Literature*, 14(3), 817-826.
- Bennett, J. (2008). They Hug Hoodies, Don't They? Responsibility, Irresponsibility and Responsibilisation in Conservative Crime Policy. *The Howard Journal of Criminal Justice*, 47(5), 451-469.

Bergstrom, T. C. (1989). A Fresh Look at the Rotten Kid Theorem and Other Household Mysteries. *Journal of Political Economy*, 97(5), 1138-1159.

Big Brother Watch (2009). Retrieved from <https://www.bigbrotherwatch.org.uk/2009/12/big-brother-is-watching-local-council-controlled-cctv-cameras-treble-in-a-decade/>

Black, S. & Devereux, P. (2011). Recent Developments in Intergenerational Mobility. In D. Card & O. Ashenfelter (Eds.), *Handbook of Labor Economics, Volume 4B* (pp. 1487-1541). Holland: Elsevier.

Blair, A. (1994). 'First Speech to Conference by the Rt Hon Tony Blair MP, Leader of the Labour Party', Labour Party Conference 1994, Blackpool, England. 04/10/1994.

Blair, A. (1997). *Labour Party Manifesto for the 1997 General Election*.

Borooh, V. K., & Carcach, C. A. (1997). Crime and Fear: Evidence from Australia. *British Journal of Criminology*, 37(4), 635-657.

Bottoms, A. (2006). Incivilities, Offence and Social Order in Residential Communities. In A. P. Simester (Ed.), *Incivilities: Regulating Offensive Behaviour*. Oxford: Hart.

Box, S., Hale, C., & Andrews, G. (1988). Explaining Fear of Crime. *British Journal of Criminology*, 28(3), 340-356.

Box-Steffensmeier, J. M., & Jones, B. S. (2004). *Event History Modeling: A Guide for Social Scientists*. Cambridge University Press.

Braakmann, N. (2012). How do Individuals Deal with Victimization and Victimization Risk? Longitudinal Evidence from Mexico. *Journal of Economic Behavior & Organization*, 84(1), 335-344.

Brank, E. M., & Weisz, V. (2004). Paying for the Crimes of Their Children: Public Support of Parental Responsibility. *Journal of Criminal Justice*, 32(5), 465-475.

Brank, E. M., Hays, S. A., & Weisz, V. (2006). All Parents are to Blame (Except this One): Global Versus Specific Attitudes Related to Parental Responsibility Laws. *Journal of Applied Social Psychology*, 36(11), 2670-2684.

Brantingham, P., Brantingham, P., & Taylor, W. (2005). Situational Crime Prevention as a Key Component in Embedded Crime Prevention. *Canadian Journal of Criminology and Criminal Justice*, 47(2), 271-292.

- Brantingham, P.J. & Faust, L. (1976). 'A Conceptual Model of Crime Prevention'. *Crime and Delinquency*, 22, 284-96.
- Brillon, Y. (1987). *Victimization and Fear of Crime Among the Elderly*. Toronto: Butterworths.
- Bromley, R. D. F., Tallon, A. R., & Thomas, C. J. (2003). Disaggregating the Space - Time Layers of City-Centre Activities and Their Users. *Environment and Planning A*, 35(10), 1831-1851.
- Brown, D., Sherman, J., & Asthana, A. (2011, August 13). Judge Asks: Where are the Parents of Rioters?; Half of Defendants in Court Were Under 18. Judge Asks Why the Mother of Looting Suspect is Not in Court. *The Times*, pp. 1, 4.
- Brown, S. (2005). *Understanding Youth and Crime: Listening to Youth? (2nd Ed.)*. Maidenhead: Open University Press.
- Brunton-Smith, I. (2011). Untangling the Relationship Between Fear of Crime and Perceptions of Disorder Evidence from a Longitudinal Study of Young People in England and Wales. *British Journal of Criminology*, 51(6), 885-899.
- Brunton-Smith, I., & Sturgis, P. (2011). Do Neighborhoods Generate Fear of Crime? An Empirical Test Using the British Crime Survey. *Criminology*, 49(2), 331-369.
- Brunton-Smith, I., Jackson, J., & Sutherland, A. (2014). Bridging Structure and Perception on the Neighbourhood Ecology of Beliefs and Worries About Violent Crime. *British Journal of Criminology*, 54(4), 503-526.
- Bunyan, S., & Collins, A. (2013). Digital Exclusion Despite Digital Accessibility: Empirical Evidence from an English City. *Tijdschrift Voor Economische En Sociale Geografie*, 104(5), 588-603.
- Bunyan, S., Collins, A., & Duffy, D. (2016) Concern and Helplessness: Citizens' Assessments of Individual and Collective Action on the Provision of Environmental Public Goods in a Coastal City at Risk of Inundation. *Environmental Management*. Advance online publication. doi:10.1007/s00267-016-0730-2
- Bunyan, S., Collins, A. & Torrisi, G. (2016). Analysing Household and Intra-urban Variants in the Consumption of Financial Services: Uncovering "Exclusion" in an English City. *Journal of Consumer Policy*, 39(2), 199-221.

Burney, E., & Gelsthorpe, L. (2008). Do We Need a 'Naughty Step'? Rethinking the Parenting Order After Ten Years. *The Howard Journal of Criminal Justice*, 47(5), 470-485.

Burrows, A. H. (1946). The Problem of Juvenile Delinquency. *Journal of Educational Sociology*, 19(6), 382-390.

Bursik Jr, R. J., & Grasmick, H. G. (1993). Neighborhoods and Crime: The Dimensions of Effective Community Control.

Byrne, D. (2002). *Interpreting Quantitative Data*. London: Sage.

Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics: Methods and Applications*. Cambridge: Cambridge University Press.

Cannabis Seized In Southsea Drugs Raid (2007, September 19). *The News*. Retrieved from <http://www.portsmouth.co.uk/news/local/cannabis-seized-in-southsea-drugs-raid-1-1284982>

Carvalho, I., & Lewis, D. A. (2003). Beyond Community: Reactions to Crime and Disorder Among Inner-City Residents. *Criminology*, 41(3), 779-812.

Casey, R., & Flint, J. (2007). Active Citizenship in the Governance of Anti-Social Behaviour in the UK: Exploring the Non-Reporting of Incidents. *People, Place and Policy Online*, 2(1), 69-79.

Cattell, R. B. (1966). The Scree Test for the Number of Factors. *Multivariate Behavioral Research*, 1(2), 245-276.

Centre for Housing Research. (2007). *Framework and Guidance for Completing Supporting People Outcomes for Short Term Services, May 2007 – March 2008: For use with the Short Term Outcomes Form Version 1 (31/05/07)*. St Andrews: University of St Andrews.

Centre for Housing Research. (2008). *Supporting People Client Records & Outcomes: Annual Report 2007-2008*. St Andrews: University of St Andrews.

Centre for Housing Research. (2012). *Guidance for Completing Supporting People Outcomes for Long-Term Services April 2012 – March 2013: For use with the Outcomes Form for Long-Term Services Version 6 (01/04/12)*. St Andrews: University of St Andrews.

Chadee, D., & Ditton, J. (2003). Are Older People Most Afraid of Crime? Revisiting Ferraro and Lagrange in Trinidad. *British Journal of Criminology*, 43(2), 417-433.

Cherney, A. (2003). Crime Prevention/Community Safety Partnerships in Action: Victorian Experience. *Current Issues in Criminal Justice*, 15, 237-252.

Cherney, A. (2004). Contingency and Politics the Local Government Community Safety Officer Role. *Criminal Justice*, 4(2), 115-128.

Chiricos, T., Hogan, M., & Gertz, M. (1997). Racial Composition of Neighbourhood and Fear of Crime. *Criminology*, 35(1), 107-132.

Christie-Mizell, C. A., & Erickson, R. J. (2007). Mothers and Mastery: The Consequences of Perceived Neighborhood Disorder. *Social Psychology Quarterly*, 70(4), 340-365.

Clarke, A. H., & Lewis, M. J. (1982). Fear of Crime Among the Elderly - An Explanatory Study. *British Journal of Criminology*, 22(1), 49-62.

Clarke, R. V. G., & Mayhew, P. (1980). *Designing Out Crime*. London: HMSO.

Clemente, F., & Kleiman, M. B. (1977). Fear of Crime in the United States: A Multivariate Analysis. *Social Forces*, 56(2), 519-531.

Coleman, A. (1985). *Utopia on Trial*. London: Hilary Shipman.

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, S95-S120.

Coleman, J. S. (1990). *Foundations of Social Theory*. Cambridge: Harvard University Press.

Collins, A. (2007). Making Truly Competitive Cities - On the Appropriate Role for Local Government. *Economic Affairs*, 27(3), 75-80.

Collins, A., Cox, J., & Leonard, A. (2015). 'I Blame The Parents': Analysing Popular Support For The Deficient Household Social Capital Transmission Thesis. *The Howard Journal of Criminal Justice*, 54(2), 135-156.

Cops, D., & Pleysier, S. (2011). 'Doing Gender' in Fear of Crime: The Impact of Gender Identity on Reported Levels of Fear of Crime in Adolescents and Young Adults. *British Journal of Criminology*, 51(1), 58-74.

Covington, J., & Taylor, R. B. (1991). Fear of Crime in Urban Residential Neighbourhoods. *Sociological Quarterly*, 32(2), 231-249.

Cox, D. R. (1972). Regression Models and Life-Tables. *Journal of the Royal Statistical Society. Series B (Methodological)*, 187-220.

Crawford, A. (1997). The Genesis of the 'Partnership' Approach and Appeals to 'Community' in Crime Control. In A. Crawford (Ed.), *The Local Governance of Crime : Appeals to Community and Partnership*. Oxford: Oxford University Press.

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

Crawford, A. (2009). *Crime Prevention Policies in Comparative Perspective*. Cullompton: Willan.

Damm, A. P., & Dustmann, C. (2014). Does Growing Up in a High Crime Neighborhood Affect Youth Criminal Behavior? *American Economic Review*, 104(6). 1806-1832.

Denscombe, M. (2007). *The Good Research Guide*. Berkshire, CA: Open University Press.

Department for Communities and Local Government. (2007). Indices of Deprivation 2007. Retrieved from <http://webarchive.nationalarchives.gov.uk/http://www.communities.gov.uk/communities/neighborhoodrenewal/deprivation/deprivation07/>

Department for Communities and Local Government. (2008a). *Housing Strategy Statistical Appendix: Count of Total Dwellings*. Retrieved from <http://www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/localauthorityhousing/dataforms/hssa/hssadata200708/>

Department for Communities and Local Government. (2008b). *Research Into the Effectiveness of Floating Support Services for the Supporting People Programme: Final Report*. London: The Stationary Office.

Department for Communities and Local Government. (2008c). *Research Into the Financial Benefits of the Supporting People Programme*. London: The Stationary Office.

Department for Communities and Local Government. (2009). *Statistical Release, 22 December 2009, Local Authority Revenue Expenditure and Financing, England 2009-10 Budget (Revised). Annex A: R09 General Fund Revenue Accounts Budget Estimate 2009/10*.

Department for Communities and Local Government. (2010). *Supporting People*. Retrieved from www.communities.gov.uk/housing/supportandadaptations/supportingpeople/

Department for Communities and Local Government. (2012). *Housing for Older and Vulnerable People*. Retrieved from <http://www.communities.gov.uk/housing/housingolderpeople/>

Department for Communities and Local Government. (2013). *How the Troubled Families Programme Will Work*. Retrieved from <https://www.gov.uk/government/policies/helping-troubled-families-turn-their-lives-around/supporting-pages/how-the-troubled-families-programme-will-work>

Department for Education and Skills. (2003). *Every Child Matters*. London: The Stationary Office

Drakeford, M., & McCarthy, K. (2000). Parents, Responsibility and the New Youth Justice. In B. Goldson (Ed.), *The New Youth Justice*. Lyme Regis: Ashford Press.

Dohmen, T., Falk, A., Huffman, D. and Sunde, U. (2012). The Intergenerational Transmission of Risk and Trust Attitudes. *Review of Economic Studies*, 79(2), 645-677.

Duncan, G., Kalil, A., Mayer, S., Tepper, R., and Payne, M. (2005). The Apple Does Not Fall Far from the Tree. In S. Bowles, H. Gintis, & M. Osborne Groves (Eds.), *Unequal Chances: Family Background and Economic Success*. (pp. 23-79). Princeton: Princeton University Press.

Dustmann, C., & Fasani, F. (2015). The Effect of Local Area Crime on Mental Health. *Economic Journal*, 126(593). 978-1017.

Eck, J. (2003). Police Problems: The Complexity of Problem Theory, Research and Evaluation. In J. Knuttsson (Ed.), *Problem Oriented Policing: From Innovation to Mainstream, Crime Prevention Studies* (Volume 15, pp. 79-113). Monsey, NY: Criminal Justice Press.

Edwards, A., & Hughes, G. (2008). *Inventing Community Safety: Representation and Performativity in the Criminological Imagination*. Working Paper 105: Cardiff School of Social Sciences.

Edwards, A., & Hughes, G. (2009). The Preventative Turn and the Promotion of Safer Communities in England and Wales: Political Inventiveness and Governmental Instabilities. In A. Crawford. (2009). *Crime Prevention Policies in Comparative Perspective* (pp. 62-85). Devon: Willan Publishing.

Ehrlich, I. (1973). Participation in Illegitimate Activities: A Theoretical and Empirical Investigation. *Journal of Political Economy*, 81(3), 521-65.

Ehrlich, I. (1996). Crime, Punishment, and the Market for Offenses. *The Journal of Economic Perspectives*, 10 (1), 43-67

Elliott, C. (2011). Criminal Responsibility and Children: A New Defence Required to Acknowledge the Absence of Capacity and Choice. *The Journal of Criminal Law*, 75(4), 289-308.

Eriksson, K. H., Hjalmarsson, R, Matthew J. Lindquist, M. J., & Sandberg, A. (2016). The Importance of Family Background and Neighborhood Effects as Determinants of Crime. *Journal of Population Economics*, 29(1). 219-262.

Farrington, D., & West, D. (1993). Criminal, Penal and Life Histories of Chronic Offenders: Risk and Protective Factors and Early Identification. *Criminal Behaviour and Mental Health*, 3, 492–523.

Felson, M. (1995). Those Who Discourage Crime. In J. E. Eck & D. Weisburd (Eds.), *Crime and Place: Crime Prevention Studies*, (Volume 4, pp. 53-66). Monsey, NY: Criminal Justice Press.

Felson, M. (2002). *Crime and Everyday Life* (3rd ed.). Thousand Oaks, CA: Sage.

Ferraro, K. F. (1995). *Fear of Crime: Interpreting Victimization Risk*. New York: State University of New York Press.

Ferraro, K. F. (1996). Women's Fear of Victimization: Shadow of Sexual Assault? *Social Forces*, 75(2), 667-690.

Figgie, H. E. (1980). The Figgie Report on Fear of Crime: America Afraid; Part 1: The General Public. ATO-Inc., Ohio.

Flatley, J., Moley, S., & Hoare, J. (2008). *Perceptions of Antisocial Behaviour: Findings from the 2007/08 British Crime Survey. (Home Office Statistical Bulletin 15/08)*. London: HMSO.

Flint, J., & Nixon, J. (2006). Governing Neighbours: Anti-Social Behaviour Orders and new Forms of Regulating Conduct in the UK. *Urban Studies*, 43(5), 939-955.

- Forrest, R., & Kearns, A. (2001). Social Cohesion, Social Capital and the Neighbourhood. *Urban Studies*, 38(12), 2125-2143.
- Freeman, R. (1999). The Economics of Crime. In D. Card & O. Ashenfelter (Eds.), *Handbook of Labor Economics, Volume 3C* (pp. 3529-3571). Holland: Elsevier.
- Garland, D. (1985). *Punishment and Welfare: A History of Penal Strategies*. Aldershot: Gower.
- Garland, D. (1996). The Limits of the Sovereign State: Strategies of Crime Control in Contemporary Society. *British Journal of Criminology*, 36, 445-471.
- Garland, D. (2001). *The Culture of Control: Crime and Social Order in Contemporary Society*. Oxford: Oxford University Press.
- Geis, K. J., & Ross, C. E. (1998). A New Look at Urban Alienation: The Effect of Neighborhood Disorder on Perceived Powerlessness. *Social Psychology Quarterly*, 232-246.
- Giles-Sims, J. (1984). A Multivariate Analysis of Perceived Likelihood of Victimization and Degree of Worry About Crime Among Older People. *Victimology*, 9(2), 222-233.
- Gilling, D. (1994). Multi-Agency Crime Prevention in Britain: The Problem of Combining Situational and Social Strategies. *Crime Prevention Studies*, 3, 231-248.
- Gilling, D. (1997). *Crime Prevention: Theory, Policy and Politics*. London: UCL Press.
- Gilling, D. (1999). *Community Safety: A Critique*. Paper Presented at The British Criminology Conference, Queens University, Belfast.
- Gilling, D. (2007). *Crime Reduction and Community Safety: Labour and the Politics of Local Crime Control*. Devon: Willan Publishing.
- Godfrey, C., Eaton, G., McDougall, C., & Culyer, A. (2002). *The Economic and Social Costs of Class A Drug Use in England and Wales, 2000, Home Office Research Study 249*. London: Home Office.
- Goldson, B. (1999). Youth (In)Justice: Contemporary Developments in Policy and Practice. In B. Goldson (Ed.), *Youth Justice: Contemporary Policy And Practice*. Aldershot: Ashgate.
- Goldson, B. (2000). *The New Youth Justice*. Dorset: Russell House.

- Goldstein, P. J. (1985). The Drugs/Violence Nexus: A Tripartite Conceptual Framework. *Journal of Drug Issues*, 39, 143-174.
- Goodey, J. (1997). Boys Don't Cry Masculinities, Fear of Crime and Fearlessness. *British Journal of Criminology*, 37(3), 401-418.
- Gordon, L., Tinsley, L., Godfrey, C., & Parrott, S. (2006). The Economic and Social Costs of Class A Drug Use in England and Wales, 2003/4. In N. Singleton, R. Murray, & L. Tinsley (Eds.), *Measuring Different Aspect of Problem Drug Use: Methodological Developments, Home Office Online Report 16/06*. London: Home Office.
- Gordon, M. T., Riger, S., Lebailly, R. K., & Heath, L. (1980). Crime, Women, and the Quality of Urban Life. *Signs*, S144-S160.
- Gottfredson, M., & Hirschi, T. (1990). *A General Theory of Crime*. Stanford, CA: Stanford University Press.
- Graham, J., & Bowling, B. (1995). Young People and Crime, Home Office Research Study 145. *London: Home Office*.
- Gray, E., Jackson, J., & Farrall, S. (2011). Feelings and Functions in the Fear of Crime: Applying a New Approach to Victimisation Insecurity. *British Journal of Criminology*, 51(1), 75-94.
- Gregory, N. (2004). Crime and the Family: Like Grandfather, Like Father, Like Son? *British Journal of Forensic Practice*, 6(4), 32-6.
- Greve, W. (1998). Fear of Crime Among the Elderly: Foresight, Not Fright. *International Review of Victimology*, 5(3-4), 277-309.
- Grossman, S. J., & Hart, O. D. (1983). An Analysis of the Principal Agent Problem. *Econometrica*, 51, 7-45.
- Guadagnoli, E., & Velicer, W. F. (1988). Relation to Sample Size to the Stability of Component Patterns. *Psychological Bulletin*, 103(2), 265-275.
- Haines, K., & Drakeford, M. (1998). *Young People and Youth Justice*. Basingstoke: Macmillan.

- Hale, C. (1996). Fear Of Crime: A Review of the Literature. *International Review of Victimology*, 4(2), 79-150.
- Halsey, M. A. (2001). An Aesthetic of Prevention. *Criminal Justice: International Journal of Policy and Practice*, 1(4), 385-420.
- Hamermesh, D.S. (1999). Crime and the Timing of Work. *Journal of Urban Economics*, 45(2). 311-330.
- Hampshire Constabulary. (2008). Force/OCU Performance Summary End of Year 2007/08 and Force/OCU Performance Figures – March 2007. Retrieved from <http://www.hampshire.police.uk/internet/rightinfo/foi/informationclasses/performancefigures.htm>
- Haapasalo, J. & Pokela, E. (1998). Child Rearing and Child Abuse Antecedents of Criminality. *Aggression and Violent Behaviour*, 4(1), 107–27.
- Hartnagel, T. F. (1979). The Perception and Fear of Crime: Implications for Neighborhood Cohesion, Social Activity, and Community Affect. *Social Forces*, 58(1), 176-193.
- Hay, G., Gannon, M., Macdougall, J., Millar, T., Eastwood, C., Williams, K., & Mckeganey, N. (2008). *Estimates of the Prevalence of Opiate Use and/or Crack Cocaine Use (2006/07) South East Region* Glasgow: The Centre for Drug Misuse Research, University of Glasgow.
- Hayden, C., & Jenkins, C. (2014). ‘Troubled Families’ Programme in England: ‘Wicked Problems’ and ‘Policy-Based Evidence’. *Policy Studies*, 35(6), 631-49.
- Hayton, K., & Shaw, L. (2008). *Focus Groups with the Public to Support the Review of the National Antisocial Behaviour Strategy*. Edinburgh: Scottish Government.
- Hedayati Marzbali, M., Abdullah, A., Razak, N. A., & Maghsoodi Tilaki, M. J. (2012). The Influence of Crime Prevention Through Environmental Design on Victimization and Fear of Crime. *Journal of Environmental Psychology*, 32(2), 79-88.
- Helms, G. (2007). Municipal Policing Meets the New Deal the Politics of a City-Centre Warden Project. *European Urban and Regional Studies*, 14(4), 290-304.
- Hensher, D., & Johnson, L. W. (1981). *Applied Discrete Choice Modelling*. London: Croom Helm.

Her Majesty's Inspectorate of Constabulary. (2011). 2010/11 Value for Money Police Workforce. Full-Time Equivalent Workforce by Function, Annual Data Request Definition. Retrieved from <http://www.hmic.gov.uk/data/value-for-money-data/>

Hjalmarsson, R., & Lindquist, M. J. (2012). Like Godfather, Like Son: Exploring the Intergenerational Nature of Crime. *Journal of Human Resources, 47*(2), 550-582.

Hjalmarsson, R. & Lindquist, M. J. (2013). The Origins of Intergenerational Associations in Crime: Lessons from Swedish Adoption Data. *Labour Economics, 20*(C), 68-81.

Hoare, J., & Flatley, J. (2008). *Drug Misuse Declared: Findings from the 2007/08 British Crime Survey*. London: HMSO.

Hollingsworth, K. (2007). Responsibility and Rights: Children and Their Parents in the Youth Justice System. *International Journal of Law, Policy and the Family, 21*(2), 190-219.

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

Home Office (1998). *Guidance on Statutory Crime and Disorder Partnerships*. London: HMSO.

Home Office. (2008). *Crime in England and Wales 2007/08. Home Office Statistical Bulletin 07/08*. London: HMSO.

Home Office. (2009). *Anti Social Behaviour Order Statistics 2007*.

Hope, T. & Shaw, M. (Eds). (1988). *Communities and Crime Reduction*. London: HMSO.

Hope, T. (2001). Community Crime Prevention in Britain: A Strategic Overview. *Criminology and Criminal Justice, 1*(4), 421-439.

Horn, J. L. (1965). A Rationale and Test for the Number of Factors in Factor Analysis. *Psychometrika, 30*, 179-185.

Hubbard, P., & Colosi, R. (2015). Taking Back the Night? Gender and the Contestation of Sexual Entertainment in England and Wales. *Urban Studies, 52*(3), 589-605.

Hughes, G. & Edwards, A. (Eds). (2002). *Crime Control and Community: The New Politics of Public Safety*. Cullompton: Willan.

Hughes, G. & Gilling, D. (2004). Mission Impossible? The Habitus of the Community Safety Manager and the New Expertise in the Local Partnership Governance of Crime and Safety, *Criminal Justice*, 4(2), 129-149.

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

Hughes, G. (2002), Crime and Disorder Reduction Partnerships. In G. Hughes, E. Mclaughlin, & J. Muncie (Eds), *Crime Prevention and Community Safety: New Directions*. London: SAGE.

Hughes, G. (2007). *The Politics of Crime and Community*. Basingstoke: Palgrave Macmillan.

Hughes, G., Mclaughlin, E., & Muncie, J. (Eds.). (2002). *Crime Prevention and Community Safety: New Directions*. London: SAGE.

Hunter, A. (1978). *Symbols of Incivility: Social Disorder and Fear of Crime in Urban Neighborhoods*. Paper Presented at The Annual Meeting of the American Criminological Society, Dallas.

Hutchinson, T., Parada, G., & Smandych, R. (2009). "Show Me a Bad Kid and I'll Show You a Lousy Parent": Making Parents Responsible for Youth Crime in Australian and Canadian Contexts. *Australasian Canadian Studies*, 26(2), 49-86.

Innes, M. (2004). Signal Crimes and Signal Disorders: Notes on Deviance as Communicative Action. *The British Journal of Sociology*, 55(3), 335-355.

Innes, M., & Jones, V. (2006). *Neighbourhood Security and Urban Change*. London: Joseph Rowntree Foundation.

Innes, M., & Weston, N. (2010). *Re-Thinking the Policing of Anti-Social Behaviour*. London: HMIC.

Ipsos-MORI. (2007). *Portsmouth Residents' Survey 2007*.

Ipsos-MORI. (2008). *Portsmouth Residents' Survey 2007 Final Report*.

Ipsos-MORI. (2011). *Quality and Transparency at Ipsos-MORI*. Retrieved from <http://www.ipsos-mori.com/quality.aspx>

Jackson, J. (2004). Experience and Expression: Social and Cultural Significance in the Fear of Crime. *British Journal of Criminology*, 44(6), 946-966.

Jackson, J., & Gray, E. (2010). Functional Fear and Public Insecurities About Crime. *British Journal of Criminology*, 50(1), 1-22.

Jackson, J., & Stafford, M. (2009). Public Health and Fear of Crime: A Prospective Cohort Study. *British Journal of Criminology*, 49(6), 832-847.

Jail for Man who was Helping at Cannabis Farm (2009, July 31). *The News*. Retrieved from <http://www.portsmouth.co.uk/news/local/jail-for-man-who-was-helping-at-cannabis-farm-1-1235401>

Janke, K., Propper, C., & Shields, M. (2013). Does Violent Crime Deter Physical Activity? IZA Discussion Paper 7545.

Jaycox, V. (1978). The Elderly's Fear of Crime: Rational or Irrational. *Victimology*, 3(3-4), 329-334.

Jeffords, C. R. (1983). The Situational Relationship between Age and the Fear of Crime. *International Journal of Aging & Human Development*, 17(2), 103-111.

Johnson, B. (2007, May). GQ Magazine.

Jones, B., & Norton, P. (2010). *Politics UK*. Harlow : Longman.

Jones, B., Kavanagh, D., Moran, M., & Norton, P. (2001). *Politics UK, Edition 4*. Essex: Pearson Education Limited.

Jones, G. (1995). *Leaving Home*. Open University Press Buckingham.

Jones, G. (2002). *The Youth Divide: Diverging Paths to Adulthood*. York: Joseph Rowntree Foundation/York Publishing Services.

Jones, G., & Bell, R. (2000). *Balancing Acts: Youth, Parenting and Public Policy*. York: Joseph Rowntree Foundation/York Publishing Services.

- Jones, G., & Wallace, C. (1992). *Youth, Family and Citizenship*. Maidenhead: Open University Press.
- Kaiser, H. F. (1970). A Second Generation Little Jiffy. *Psychometrika*, 35(4), 401-415.
- Kaiser, H. F. (1974). An Index of Factorial Simplicity. *Psychometrika*, 39(1), 31-36.
- Kanan, J. W., & Pruitt, M. V. (2002). Modeling Fear of Crime and Perceived Victimization Risk: The (In) Significance of Neighborhood Integration. *Sociological Inquiry*, 72(4), 527-548.
- Kara, M., & Upson, A. (2006). Crime in England and Wales: Quarterly Update to September 2005. *Home Office Statistical Bulletin*, 26.
- Kennedy, L. W., & Silverman, R. A. (1985). Significant Others and Fear of Crime Among the Elderly. *International Journal of Aging & Human Development*, 20(4), 241-256.
- Kershaw, C., Nicholas, S., & Walker, A. (2008). *Crime in England and Wales 2007/08*. Home Office Statistical Bulletin 07/08. London: Home Office.
- Kilmer, J. R., Walker, D. D., Lee, C. M., Palmer, R. S., Mallett, K. A., Fabiano, P., & Larimer, M. E. (2006). Misperceptions of College Student Marijuana use: Implications for Prevention. *Journal of Studies on Alcohol*, 67(2), 277-281.
- Kim, D. H., & Schneider, B. (2005). Social Capital in Action: Alignment of Parental Support in Adolescents' Transition to Postsecondary Education. *Social Forces*, 84(2), 1181-1206.
- Kinsey, R., Lea, J., & Young, J. (1986). *Losing the Fight Against Crime*. Oxford: Basil Blackwell.
- Kitchen, T., & Schneider, R. H. (2002). *Planning for Crime Prevention: A Transatlantic Perspective*. London: Routledge.
- Kitchen, T., & Schneider, R. H. (2007). *Crime Prevention and the Built Environment*. Oxon: Routledge.
- Kling, J. R., Ludwig, J., & Katz, L. F. (2005). Neighborhood Effects on Crime for Female and Male Youth: Evidence from a Randomized Housing Voucher Experiment. *The Quarterly Journal of Economics*, 120(1), 87-130.
- Knafo, A., & Plomin, R. (2006). Parental Discipline and Affection and Children's Prosocial Behavior: Genetic and Environmental Links. *Journal of Personality & Social Psychology*, 90(1), 147-164.

Koskela, H., & Pain, R. (2000). Revisiting Fear and Place: Women's Fear of Attack and the Built Environment. *Geoforum*, 31(2), 269-280.

Kruttschnitt, C., Uggen, C., & Shelton, K. (2000). Predictors of Desistance Among Sex Offenders: The Interaction of Formal and Informal Social Controls. *Justice Quarterly*, 17(1), 61-87.

Lacey, N. & Zedner, L. (1995). 'Discourses of Community in Criminal Justice', *Journal of Law and Society*, 22 (3), 301-325.

Lagrange, R. L., & Ferraro, K. F. (1989). Assessing Age and Gender Differences in Perceived Risk and Fear of Crime. *Criminology*, 27, 697-720.

Lagrange, R. L., Ferraro, K. F., & Supancic, M. (1992). Perceived Risk and Fear of Crime: Role of Social and Physical Incivilities. *Journal of Research in Crime and Delinquency*, 29(3), 311-334.

Lamb, M. E. (2010). *The Role of the Father in Child Development*. New Jersey: John Wiley And Sons.

Lane, W. R., Looney, S. W., & Wansley, J. W. (1986). An Application of the Cox Proportional Hazards Model to Bank Failure. *Journal of Banking & Finance*, 10(4), 511-531.

Lawson, C. L., & Katz, J. (2004). Restorative Justice: An Alternative Approach to Juvenile Crime. *Journal of Socio-Economics*, 33(2), 175-182.

Le Sage, L., & De Ruyter, D. (2008). Criminal Parental Responsibility: Blaming Parents on the Basis of Their Duty to Control Versus Their Duty to Morally Educate Their Children. *Educational Philosophy and Theory*, 40(6), 789-802.

Lee, M. (2001). The Genesis of Fear of Crime. *Theoretical Criminology*, 5(4), 467-485.

Lewis, D. A., & Maxfield, M. G. (1980). Fear in the Neighborhoods: An Investigation of the Impact of Crime. *Journal of Research in Crime and Delinquency*, 17(2), 160-189.

Llewellyn, D. (1999). *The Economic Rationale for Financial Regulation*. London: Financial Services Authority.

Local Government Management Board. (1996). *Survey of Community Safety Activities in England and Wales*. Luton: LGMB.

Lupton, D. (1999). Dangerous Places and the Unpredictable Stranger: Constructions of Fear of Crime. *Australian & New Zealand Journal of Criminology*, 32(1), 1-15.

Mackenzie, S., Bannister, J., Flint, J., Parr, S., Millie, A., & Fleetwood, J. (2010). *The Drivers of Perceptions of Anti-Social Behaviour*. London: Home Office.

Matthews, R., & Young, J. (2003). *The New Politics of Crime and Punishment*. Cullompton: Willan.

Mcauley, M., & Macdonald, K. I. (2007). Russia and Youth Crime: A Comparative Study of Attitudes and Their Implications. *British Journal of Criminology*, 47(1), 2-22.

Mccord, E. S., Ratcliffe, J. H., Garcia, R. M., & Taylor, R. B. (2007). Nonresidential Crime Attractors and Generators Elevate Perceived Neighborhood Crime and Incivilities. *Journal of Research in Crime and Delinquency*, 44(3), 295-320.

Mcneal Jr, R. B. (2001). Differential Effects of Parental Involvement on Cognitive and Behavioral Outcomes by Socioeconomic Status. *The Journal of Socio-Economics*, 30(2), 171-179.

Miethe, T. D., & Lee, G. R. (1984). Fear of Crime Among Older People: A Reassessment of the Predictive Power of Crime-Related Factors. *Sociological Quarterly*, 397-415.

Millie, A. (2007). Looking for Anti-Social Behaviour. *Policy & Politics*, 35(4), 611-627.

Millie, A., Jacobson, J., Mcdonald, E., & Hough, M. (2005). *Anti-Social Behavioural Strategies: Finding a Balance*. Bristol: The Policy Press.

Mitchell, C. U., & Lagory, M. (2002). Social Capital and Mental Distress in an Impoverished Community. *City and Community*, 1(2), 199-222.

Moon, D., Walker, A., Murphy, R., Flatley, J., Parfremment-Hopkins, J., & Hall, P. (2009). *Perceptions of Crime and Anti-Social Behaviour: Findings from the 2008/09 British Crime Survey*. (Home Office Statistical Bulletin). London: HMSO.

Mooney, J., & Young, J. (2006). The Decline in Crime and the Rise of Anti-Social Behaviour. *Probation Journal*, 53(4), 397-407.

- Morgan, S. L., & Sørensen, A. B. (1999). Parental Networks, Social Closure, and Mathematics Learning: A Test of Coleman's Social Capital Explanation of School Effects. *American Sociological Review*, 64(5), 661-681.
- Morrow, V. (1999). Conceptualising Social Capital in Relation to the Well-Being of Children and Young People: A Critical Review. *The Sociological Review*, 47(4), 744-765.
- Muncie, J. (2000). Pragmatic Realism? Searching for Criminology, in the New Youth Justice. In B. Goldson (Ed.), *The New Youth Justice*. Lyme Regis: Ashford Press.
- Muncie, J. (2004). *Youth and Crime: A Critical Introduction* (2nd Ed.). London: Sage.
- Murray, C. (1990). *The Emerging British Underclass*. London: Institute of Economic Affairs.
- Myhill, A., & Beak, K. (2010). *Public Confidence in the Police*. London: NPIA, Research Analysis And Information.
- Nagin, D. S., Piquero, A. R., Scott, E. S., & Steinberg, L. (2006). Public Preferences for Rehabilitation Versus Incarceration of Juvenile Offenders: Evidence from a Contingent Valuation Survey. *Criminology and Public Policy*, 5(4), 627-651.
- Newman, O. (1973). *Defensible Space: People and Design in the Violent City*. London: Architectural Press.
- Northern Ireland Community Safety Unit (n.d.) Retrieved from <http://www.communitysafetyni.gov.uk/>
- Nunnally, J. O. (1978). *Psychometric Theory*. New York: Mc Graw-Hill.
- O'Malley, P. (1992). Risk, Power and Crime Prevention. *Economy and Society*, 21(3), 252-275.
- Office for National Statistics. (2000). *Concern Over the Public Reaction to Questions on Income has Resulted in Their Omission from the 2001 Census in the United Kingdom*. Retrieved From <http://www.ons.gov.uk/census/2011-census/2011-census-project/2007-test/income-evaluation>
- Office for National Statistics. (2001). *2001 Census – Household Composition, Dependent Children, Living Arrangements*. Newport: Office for National Statistics.

Office for National Statistics. (2007a). *Annual Population Survey 2007: Unemployment Rate Ages 16–64, Jan 2007 – Dec 2007*. Newport: Office for National Statistics.

Office for National Statistics. (2007b). *Annual Survey of Hours and Earnings 2007*. Newport: Office for National Statistics.

Office for National Statistics. (2007c). *Mid-2007 Population Estimates: Resident Population by 5 Year Age Bands*. Newport: Office for National Statistics.

Office for National Statistics. (2010). *Mid-Year Population Estimates 2007: 13/05/10*. Retrieved from <http://www.statistics.gov.uk/statbase/product.asp?vlnk=15106>

Office for National Statistics. (2011a). *2011 Census: Standard Tables*. Newport: Office for National Statistics.

Office for National Statistics. (2011b). Open Geography. Retrieved from <https://geoportal.statistics.gov.uk/geoportal/catalog/main/home.page>

Office for National Statistics. (2011c). Past Estimates – Population Estimates by Ethnic Group Mid-2001-2008 (Experimental). Retrieved from <http://www.statistics.gov.uk/statbase/product.asp?vlnk=14238>

Office for National Statistics. (2013a). *Benefit Payments – Income Support – Lone Parent*. Newport: Office for National Statistics.

Office for National Statistics. (2013b). *Claimant Count – Proportion of Resident Population Aged 16–64 Estimates – Total Claimants*. Newport: Office for National Statistics.

Office for National Statistics. (2013c). *Guidance and Methodology*. Retrieved from <http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/postal/index.html>

Office of the Deputy Prime Minister. (2004a). *What is Supporting People?* London: The Stationary Office.

Office of the Deputy Prime Minister. (2004b). *Safer Places: The Planning System and Crime Prevention*. London: Home Office.

- Ortega, S. T., & Myles, J. L. (1987). Race and Gender Effects on Fear of Crime: An Interactive Model with Age. *Criminology*, 25, 133.
- Pain, R. (2001). Gender, Race, Age and Fear in the City. *Urban Studies*, 38(5-6), 899-913.
- Pain, R. H. (1995). Elderly Women and Fear of Violent Crime: The Least Likely Victims? A Reconsideration of The Extent and Nature of Risk. *British Journal of Criminology*, 35(4), 584-598.
- Pain, R. H. (1997). 'Old Age' and Ageism in Urban Research: The Case of Fear of Crime. *International Journal of Urban and Regional Research*, 21(1), 117-128.
- Pallister, D. (1987, January 16). Yard Scorned on Race Attacks: Police Campaign Against 'Social Evil' in Two London Boroughs Too Little, Too Late, Says Councils. *The Guardian (London)*.
- Pantazis, C. (2000). 'Fear of Crime', Vulnerability and Poverty. *British Journal of Criminology*, 40(3), 414-436.
- Pantazis, C., & Gordon, D. (1997). Poverty and Crime. In D. Gordon & C. Pantazis (Eds.), *Breadline Britain in the 1990s*. Aldershot: Avebury.
- Pantazis, C., & Gordon, D. (1998). Do Poor People Experience More Crime and Greater Fear of Crime than the Rich? In D. Dorling & L. Simpson (Eds.), *Statistics in Society*. London: Arnold.
- Parcel, T. L., & Menaghan, E. G. (1993). Family Social Capital and Children's Behavior Problems. *Social Psychology Quarterly*, 56(2), 120-135.
- Parcel, T. L., & Menaghan, E. G. (1994). Early Parental Work, Family Social Capital, and Early Childhood Outcomes. *American Journal of Sociology*, 99(4), 972-1009.
- Park, B. E., Burgess, E. W., & Mckenzie, R. D. (Eds.). (1925). *The City*. Chicago: University of Chicago Press.
- Parker, K. D., & Ray, M. C. (1990). Fear of Crime: An Assessment of Related Factors. *Sociological Spectrum*, 10(1), 29-40.
- Parmar, M. & Machin, D. (1995). *Survival Analysis: A Practical Approach*. Chichester : John Wiley
- Paskell, C. (2007). 'Plastic Police' or 'Community Support'? The Role of Police Community Support Officers within Low-Income Neighbourhoods. *European Urban and Regional Studies*, 14(4), 349-361.

- Patterson, G. R., & Dishion, T. J. (1985). Contributions of Families and Peers to Delinquency. *Criminology*, 23(1), 63-79.
- Patterson, G. R., DeBaryshe, B., & Ramsey, E. (1990). A Developmental Perspective on Antisocial Behaviour. *American Psychologist*, 44, 329-335.
- Payne, B. K., & Gainey, R. R. (2007). Attitudes about the Police and Neighborhood Safety in Disadvantaged Neighborhoods: The Influence of Criminal Victimization and Perceptions of a Drug Problem. *Criminal Justice Review*, 32(2), 142-155.
- Pearson, G. (1994). Youth, Crime and Society. In M. Maguire, R. Morgan, & R. Reiner (Eds.), *The Oxford Handbook of Criminology*. Oxford: Clarendon Press.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated analysis*. New York: Taylor and Francis Group.
- Perkins, H. W. (2002). Social norms and the prevention of alcohol misuse in collegiate contexts. *Journal of Studies on Alcohol, Supplement*, 14, 164-172.
- Perkins, H. W., Meilman, P. W., Leichliter, J. S., Cashin, J. R., & Presley, C. A. (1999). Misperceptions of the Norms for the Frequency of Alcohol and Other Drug Use on College Campuses. *Journal of American College Health*, 47(6), 253-258.
- Pitts, J. (2001). *The New Politics of Youth Crime: Discipline or Solidarity?* Basingstoke: Palgrave Macmillan.
- Plaster Carter, S. (2002). Community CPTED. *The Journal of the International Crime Prevention Through Environmental Design Association*, 1(1), 15-24.
- Police Busted a Cannabis Factory Growing up to 250 Plants in a Raid this Morning. (2007, March 8). *The News*. Retrieved from <http://www.portsmouth.co.uk/news/local/police-raid-huge-cannabis-factory-1-1270900>
- Police Storm Cannabis Factory (2007, April 27). *The News*. Retrieved from <http://www.portsmouth.co.uk/news/local/police-storm-cannabis-factory-1-1278318>

Poortinga, W., Dunstan, F. D., & Fone, D. L. (2007). Perceptions of the Neighbourhood Environment and Self Rated Health: A Multilevel Analysis of the Caerphilly Health and Social Needs Study. *BMC Public Health*, 7(1), 285.

Portes, A. (2000). The two Meanings of Social Capital. *Sociological Forum*, 15(1), 1-12.

Portsmouth City Council. (2010a). *Portsmouth Population Profile: A Profile of Portsmouth's Population Using Output Area Classification*. Portsmouth: Portsmouth City Council.

Portsmouth City Council. (2010b). *Types of Support and Who Can Get Help*. Retrieved from <http://www.portsmouth.gov.uk/living/14736.html>

Portsmouth City Council. (2012). *How To Get Support*. Retrieved from <http://www.portsmouth.gov.uk/living/14738.html>

Posner, R. A., & Rasmusen, E. B. (1999). Creating and Enforcing Norms, with Special Reference to Sanctions. *International Review of Law and Economics*, 19(3), 369-382.

Poyner, B. (1983). *Design Against Crime: Beyond Defensible Space*. London: Butterworths.

Roberts, J. V. (1992). Public Opinion, Crime, and Criminal Justice. *Crime and Justice*, 16, 99-180.

The Riots Communities and Victims Panel. (2012). *After the Riots: The Final Report of the Riots Communities and Victims Panel*. London.

Rosenfeld, R., & Messner, S. F. (2009). The Crime Drop in Comparative Perspective: The Impact of the Economy and Imprisonment on American and European Burglary Rates. *The British Journal of Sociology*, 60(3), 445-471.

Ross, C. (2000). Neighborhood Disadvantage and Adult Depression. *Journal of Health and Social Behavior*, 41(2), 177-187.

Ross, C. E., Reynolds, J. R., & Geis, K. J. (2000). The Contingent Meaning of Neighborhood Stability for Residents' Psychological Well-Being. *American Sociological Review*, 581-597.

Ross, C., & Jang, S. (2000). Neighborhood Disorder, Fear, and Mistrust: The Buffering Role of Social Ties with Neighbors. *American Journal of Community Psychology*, 28(4), 401-420.

- Ross, C., Reynolds, J., & Geis, K. (2000). The Contingent Meaning of Neighbourhood Stability for Residents' Psychological Well-Being'. *American Sociological Review*, 65, 581-597.
- Rountree, P. W., & Land, K. C. (1996). Perceived Risk Versus Fear of Crime: Empirical Evidence of Conceptually Distinct Reactions in Survey Data. *Social Forces*, 74(4), 1353-1376.
- Rubin, D. B. (1977). Formalizing Subjective Notions about the Effect of Nonrespondents in Sample Surveys. *Journal of the American Statistical Association*, 72(359), 538-543.
- Safer Portsmouth Partnership. (2007a). *Strategic Assessment 2006/7 (Covers Data from October 2006 to September 2007)*. Portsmouth: Portsmouth City Council.
- Safer Portsmouth Partnership. (2007b). Statistical Briefing: Priority – Reduce Harm Caused by Illegal Drugs.
- Safer Portsmouth Partnership and Portsmouth Police Operational Command Unit. (2009). *Joint Strategic Assessment of Crime, Disorder, Drug and Alcohol Misuse December 2008*. Portsmouth: Portsmouth City Council.
- Sagatun, I. J. (1991). Attributions of Delinquency by Delinquent Minors, their Families, and Probation Officers. *Journal of Offender Rehabilitation*, 16(3-4), 43-58.
- Sampson, R. J. (2009). Disparity and Diversity in the Contemporary City: Social (Dis)Order Revisited. *The British Journal of Sociology*, 60(1), 1-31.
- Sampson, R. J., & Groves, W. B. (1989). Community Structure and Crime: Testing Social-Disorganization Theory. *American Journal of Sociology*, 94(4), 774-802.
- Sampson, R. J., & Raudenbush, S. W. (1999). Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighborhoods. *American Journal of Sociology*, 105(3), 603-651.
- Sampson, R. J., & Raudenbush, S. W. (2004). Seeing Disorder: Neighborhood Stigma and the Social Construction of "Broken Windows". *Social Psychology Quarterly*, 67(4), 319-342.
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. *Science*, 277(5328), 918-924.

Sampson, R., Morenoff, J., & Gannon-Rowley, T. (2002). Assessing "Neighborhood Effects": Social Processes and New Directions in Research. *Annual Review of Sociology*, 28, 443-478.

Sanderson, I. (2002). Evaluation, Policy Learning and Evidence-Based Policy Making. *Public Administration*, 80(1), 1-22.

Sarkissian, W., & Perglut, D. (1994). *The Community Participation Handbook (Second Edition)*. Sydney, Australia: Impact Press.

Sarkissian, W., & Walsh, K. (1994). *The Community Participation in Practice Casebook*. Perth, Australia: Institute for Science and Technology Policy, Murdoch University.

Sarkissian, W., Walsh, K., & Cook, A. (1997). *Community Participation in Practice: A Practical Guide*: Institute for Science and Technology Policy, Murdoch University.

Saville, G. J. (1994). *Crime Problems, Community Solutions: Environmental Criminology as a Developing Prevention Strategy*. Port Moody, BC: AAG Incorporated.

Sawyer, K. (1980, April 3). Kennedy Sees Budget Cuts Adding to Urban Crime. *The Washington Post*.

Saxe, L., Kadushin, C., Beveridge, A., Livert, D., Tighe, E., Rindskopf, D., . . . Brodsky, A. (2001). The Visibility of Illicit Drugs: Implications for Community-Based Drug Control Strategies. *American Journal of Public Health*, 91(12), 1987-1994.

Scott, H. (2003). Stranger Danger: Explaining Women's Fear of Crime. *Western Criminology Review*, 4(3), 203-214.

Shaw, C. R., & Mckay, H. D. (1931). *Social Factors in Juvenile Delinquency: A Study of the Community, the Family, and the Gang in Relation to Delinquent Behavior*: National Commission on Law Observance and Enforcement.

Shaw, C. R., & Mckay, H. D. (1942). *Juvenile Delinquency and Urban Areas*. Chicago, Illinois.

Simon, H. A. (1957). A Behavioral Model of Rational Choice. In H. A. Simon (Ed.), *Models of Man, Social and Rational: Mathematical Essays on Rational Human Behaviour in a Social Setting*. New York: Wiley.

- Simon, R., & Altman, D. G. (1994). Statistical aspects of prognostic factor studies in oncology. *British Journal of Cancer*, 69(6), 979–985.
- Skogan, W. (1986). Fear of Crime and Neighborhood Change. *Crime and Justice*, 203-229.
- Skogan, W. (1987). The Impact of Victimization on Fear. *Crime & Delinquency*, 33(1), 135-154.
- Skogan, W. (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Cities*. New York: Free Press.
- Skogan, W. G. (1988). Community Organizations and Crime. *Crime and Justice*, 39-78.
- Skogan, W., & Maxfield, M. G. (1981). *Coping with Crime: Individual and Neighborhood Reactions*. Beverly Hills, CA: Sage Publications.
- Smith, C. A., & Stern, S. B. (1997). Delinquency and Antisocial Behavior: A Review of Family Processes and Intervention Research. *Social Service Review*, 71, 382-420.
- Smith, R. (2003). *Youth Justice: Ideas, Policy, Practice*. Cullompton: Willan
- Smith, S. J. (1987). Fear of Crime: Beyond a Geography of Deviance. *Progress in Human Geography*, 11(1), 1-23.
- Smithson, H., & Flint, J. (2006). Responding to Young People's Involvement in Anti-Social Behaviour: A Study of Local Initiatives in Manchester and Glasgow. *Youth and Policy*, 93, 21-39.
- Spelman, W. (2004). Optimal Targeting of Incivility Reduction Strategies. *Journal of Quantitative Criminology*, 20(1), 63-88.
- Squires, P. (1999). *Criminology and the 'Community Safety' Paradigm: Safety, Power and Success and the Limits of the Local*. Paper Presented at the British Criminology Conference, Queens University, Belfast.
- Squires, P. (2008). Conclusions: The Future of Antisocial Behaviour? In P. Squires (Ed.), *ASBO Nation: The Criminalisation Of Nuisance*. Bristol: The Policy Press.
- Stafford, M. C., & Galle, O. R. (1984). Victimization Rates, Exposure to Risk, and Fear of Crime. *Criminology*, 22(2), 173-185.

Stats Wales (2012). *Revenue Outturn Expenditure Summary, By Service (£ Thousand), (Welsh UAs, Service)*. Retrieved from

<http://www.statswales.wales.gov.uk/tableviewer/tableview.aspx?reportid=2633>

Stevens, J. (1996). *Applied Multivariate Statistics for the Social Sciences* (3rd Edn.). Mahwah, NJ: Lawrence Erlbaum.

Stinchcombe, A. L. (1963). Institutions of Privacy in the Determination of Police Administrative Practice. *American Journal of Sociology*, 69(2), 150-160.

Such, E., & Walker, R. (2004). Being Responsible and Responsible Beings: Children's Understanding of Responsibility. *Children & Society*, 18(3), 231-242.

Supporting People Programme. (2011). Retrieved from

http://webarchive.nationalarchives.gov.uk/+www.direct.gov.uk/en/disabledpeople/homeandhousingoptions/supportedhousingschemes/dg_4000297

Sutton, R. M., & Farrall, S. (2005). Gender, Socially Desirable Responding and the Fear of Crime: Are Women Really More Anxious About Crime? *British Journal of Criminology*, 45(2), 212-224.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using Multivariate Statistics*. London: Pearson.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics*. London: Pearson.

Taub, R., Taylor, D., & Dunham, J. D. (1981). Crime, Fear of Crime, and the Deterioration of Urban Neighborhoods. *National Opinion Research Center, University Of Chicago*.

Taylor, J., Twigg, L., & Mohan, J. (2010). Investigating Perceptions of Antisocial Behaviour and Neighborhood Ethnic Heterogeneity in the British Crime Survey. *Transactions of the Institute of British Geographers*, 35(1), 59-75.

Taylor, R. (1996). Neighborhood Responses to Disorder and Local Attachments: The Systemic Model of Attachment, Social Disorganization, and Neighborhood Use Value. *Sociological Forum*, 11(1), 41-74.

Taylor, R. B. (1999). The Incivilities Thesis: Theory, Measurement, and Policy. *Measuring What Matters*, 65-88.

Taylor, R. B., & Hale, M. (1986). Testing Alternative Models of Fear of Crime. *The Journal of Criminal Law and Criminology*, 77(1), 151-189.

Taylor, R. B., Gottfredson, S. D., & Brower, S. (1984). Block Crime and Fear: Defensible Space, Local Social Ties, And Territorial Functioning. *Journal of Research in Crime and Delinquency*, 21(4), 303-331.

Teachman, J. D., Paasch, K., & Carver, K. (1997). Social Capital and the Generation of Human Capital. *Social Forces*, 75(4), 1343-1359.

The American Home Under Siege; Bells, Bolts and Lights Vs. Intruders. (1975, February 24). *U.S. News & World Report*, P. 41.

The South East Public Health Observatory. (2008). *Drug Treatment in the South East 2006/7*.

Thompson, A., Hollis, C., & Richards, D. (2003). Authoritarian Parenting Attitudes as a Risk for Conduct Problems. *European Child & Adolescent Psychiatry*, 12(2), 84-91.

Thurstone, L. L. (1947). *Multiple Factor Analysis*. Chicago: University of Chicago Press.

Tirbutt, S. (1986, March 17). Class Bias in Watch Schemes / Independent Report on Metropolitan Police Initiative. *The Guardian (London)*.

Tonry, M. & Farrington, D. (1995), *Building a Safer Society: Strategic Approaches to Crime Prevention, Crime and Justice: A Review of Research*, 19. Chicago: Chicago University Press.

Toseland, R. W. (1982). Fear of Crime: Who is Most Vulnerable? *Journal of Criminal Justice*, 10(3), 199-209.

Tseloni, A. (2007). Fear of Crime, Perceived Disorders and Property Crime: A Multivariate Analysis at the Area Level. *Imagination for Crime Prevention: Essays in Honour of Ken Pease, Crime Prevention Studies*, 21, 163-185.

Tseloni, A., Mailley, J., Farrell, G., & Tilley, N. (2010). Exploring the International Decline in Crime Rates. *European Journal of Criminology*, 7(5), 375-394.

Tyler, T. R., & Fagan, J. (2008). Legitimacy and Cooperation: Why Do People Help the Police Fight Crime in Their Communities. *Ohio State Journal of Criminal Law*, 6, 231-275.

- Upton, A. (2006). *Perceptions and Experience of Anti-Social Behaviour: Findings from the 2004/05 British Crime Survey. Home Office Online Report 21*. London: Home Office.
- Van Dijk, J. J., & De Waard, J. (1991, September). A Two-Dimensional Typology of Crime Prevention Projects: With a Bibliography. *Criminal Justice Abstracts*, 23 (3), 483-503.
- Vanderveen, G. (2006). *Interpreting Fear, Crime, Risk, and Unsafety: Conceptualisation and Measurement (Vol. 12)*, Boom Koninklijke Uitgevers.
- Vickers, D., & Rees, P. (2007). Creating the UK National Statistics 2001 Output Area Classification. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 170(2), 379-403.
- Villarreal, A., & Silva, B. F. A. (2006). Social Cohesion, Criminal Victimization and Perceived Risk of Crime in Brazilian Neighborhoods. *Social Forces*, 84(3), 1725-1753.
- Walker, M. A. (1994). Measuring Concern About Crime: Some Inter-Racial Comparisons. *British Journal of Criminology*, 34(3), 366-378.
- Walklate, S., & Mythen, G. (2008). How Scared Are We? *British Journal of Criminology*, 48(2), 209-225.
- Wallace, J., Jr., & Muroff, J. (2002). Preventing Substance Abuse Among African American Children and Youth: Race Differences. In Risk Factor Exposure and Vulnerability. *Journal Of Primary Prevention*, 22(3), 235-261.
- Warr, M. (1980). The Accuracy of Public Beliefs About Crime. *Social Forces*, 59(2), 456-470.
- Warr, M. (1982). The Accuracy of Public Beliefs About Crime: Further Evidence. *Criminology*, 20(2), 185-204.
- Warr, M. (1984). Fear of Victimization: Why Are the Elderly and Women More Afraid. *Social Science Quarterly*, 65, 681-702.
- Warr, M. (1985). Fear of Rape Among Urban Women. *Social Problems*, 238-250.
- Warr, M. (1990). Dangerous Situations: Social Context and Fear of Victimization. *Social Forces*, 68(3), 891-907.

- Watson, R. (2012, January 30). Parents Need Clearer Guidelines About Smacking, says Johnson. *The Times* (London), P.11.
- Weatheritt, M. (1993). 'Community Policing'. In H. Butcher, P. Henderson, J. Smith & A. Glenn (Eds). *Community and Public Policy*. Pluto Press.
- Wells, P. (2007). New Labour and Evidence Based Policy Making: 1997-2007. *People, Place and Policy Online*, 1(1), 22-29.
- West, B. (1979, November 15). Our Police are Now the Heroes of the Hour. *The Globe and Mail* (Canada).
- White, R. D., Sutton, A., & Cherney, A. (2008). *Crime Prevention : Principles, Perspectives and Practices*. Melbourne: Cambridge University.
- Wikstrom, K., & Loeber, R. (1997). Individual Risk Factors, Neighbourhood SES and Juvenile Offending. In M. Tonry (Ed.), *The Handbook of Crime and Punishment*. New York: Oxford University Press.
- Wikström, P.-O. H. (2009). Questions of Perception and Reality. *The British Journal of Sociology*, 60(1), 59-63.
- Wilcox, P., Quisenberry, N., & Jones, S. (2003). The Built Environment and Community Crime Risk Interpretation. *Journal of Research in Crime and Delinquency*, 40(3), 322-345.
- Wiles, P. & Pease, K. (2000). Crime Prevention and Community Safety: Tweedledum and Tweedledee? In S. Ballintyne, K. Pease, & V. McClaren, (Eds.) *Secure Foundations: Key Issues in Crime Prevention, Crime Reduction and Community Safety*. London: Institute Of Public Policy Research
- Will, J. A., & Mcgrath, J. H. (1995). Crime, Neighborhood Perceptions, and the Underclass: The Relationship Between Fear of Crime and Class Position. *Journal of Criminal Justice*, 23(2), 163-176.
- Williams, D., Greenwood, C., & Tozer, J. (2011, August 12). Contempt of the Girl Looter, Age 11, *Daily Mail* .
- Wilson, H. (1980). Parental Supervision: A Neglected Aspect of Delinquency. *The British Journal Of Criminology*, 20(3), 203-235.

- Wilson, J. Q., & Kelling, G. L. (1982). Broken Windows. *Atlantic Monthly*, 249(3), 29-38.
- Wolfson, S. (2000). Students' estimates of the Prevalence of Drug Use: Evidence for a False Consensus Effect. *Psychology of Addictive Behaviors*, 14(3), 295-298.
- Wood, M. (2004). *Perceptions and Experience of Antisocial Behaviour: Findings from the 2003/2004 British Crime Survey. (Home Office Online Report 49/04)*. London: HMSO.
- Wright, J. P., & Cullen, F. T. (2001). Parental Efficacy and Delinquent Behaviour: Do Control and Support Matter? *Criminology*, 39(3), 677-706.
- Yamamura, E. (2009). Formal and Informal Deterrents of Crime in Japan: Roles of Police and Social Capital Revisited. *Journal of Socio-Economics*, 38(4), 611-621.
- Yin, P. (1980). Fear of Crime Among the Elderly: Some Issues and Suggestions. *Social Problems*, 27(4), 492-504.
- Yin, P. (1982). Fear of Crime as a Problem for the Elderly. *Social Problems*, 30(2), 240-245.
- Young, J. (2002). Crime and Social Exclusion. In M. Maguire, R. Morgan, & R. Reiner (Eds.), *The Oxford Handbook of Criminology* (3rd ed.). Oxford: Oxford University Press.
- Ziegler, R., & Mitchell, D. B. (2003). Aging and Fear of Crime: An Experimental Approach to an Apparent Paradox. *Experimental Aging Research*, 29(2), 173-187.