

DOCTOR OF PHILOSOPHY

Community engagement and its role in fire prevention in a West Midlands neighbourhood

Hastie, Chris

Award date:
2017

Awarding institution:
Coventry University

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of this thesis for personal non-commercial research or study
- This thesis cannot be reproduced or quoted extensively from without first obtaining permission from the copyright holder(s)
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Community engagement and its role in fire prevention in a West Midlands neighbourhood

Hastie, C.

Submitted version deposited in Coventry University's Institutional Repository

Original citation:

Hastie, C. (2017) *Community engagement and its role in fire prevention in a West Midlands neighbourhood*. Unpublished PhD Thesis. Coventry: Coventry University

Copyright © and Moral Rights are retained by the author. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

The article included at Appendix B is c Elsevier Ltd 2016. Chris Hastie is the primary author and retains the author rights. The article is reproduced here with permission of Elsevier Ltd. The original article is available at <http://doi.org/10.1016/j.firesaf.2016.07.002>.

Further permissions information can be found on page iii

Community engagement and its role in fire prevention in a West Midlands neighbourhood

by
Christopher Mark Hastie

March 2017



*A thesis submitted in partial fulfilment of the University's
requirements for the Degree of Doctor of Philosophy*

Abstract

In this thesis I investigate inequality in the way in which fires are distributed through society, in particular exploring the role played in this by community engagement and the relationship between public service providers and the communities that they serve.

The thesis begins with an extensive, quantitative investigation of the distribution of accidental dwelling fires in the West Midlands. By analysing service data from the West Midlands Fire Service, together with a range of socio-economic and demographic data, I establish that there is considerable inequality in the way in which fire is distributed, with economic status, ethnic make-up and household structure in an area all being predictive of rates of fire.

Conceptualising this inequality as an inequality in the delivery of fire prevention work, I then focus in on one socially disadvantaged area with high rates of fire. In the second part of the thesis I use an intensive, interpretivist approach to explore perceptions of, and attitudes towards, public services, and whether these hamper the ability to deliver effective fire prevention initiatives. Residents rarely thought about the fire service directly, with fire not perceived as a priority. However, the fire service was often associated with other services in people's minds, and I found a number of factors that disinclined people from interacting with public services in general. These include disillusionment, a sense of feeling judged, a fear of adverse consequences and a lack of awareness of the services available.

Building on these findings I argue that for engagement to take place community members must feel that there is a space available for dialogue that is safe, comfortable and rewarding. In an area characterised by multiple, heterogeneous communities, many different spaces will be needed to ensure dialogue with the widest range of people. The work both updates knowledge of inequality in the distribution of fire and contributes to understanding of the way in which access to public services can be restricted by the taken-for-granted assumptions of service providers.

Acknowledgements

This thesis could not have happened without the help and co-operation of the residents of Manor Farm, Henley Green, Wood End and further afield who took time to speak with me, welcomed me into their groups and their homes, and plied me with tea, cake and bacon sandwiches. Thank you to all of you. I hope I have done your stories justice.

The creation of this thesis has been ably supported by all those who have been part of my somewhat eclectic supervision team over the past three and a half years—Kevin Broughton, Fern Elsdon-Baker, Frens Kroeger and Rosalind Searle. They have all brought distinct and valuable skills to the team and without any one of them this thesis would have been very different. My thanks go to each of them for their continued support and encouragement.

I am indebted to the staff of the West Midlands Fire Service, who have helped me in many ways, providing and explaining data, brokering meetings and discussing findings. I would particularly like to extend my thanks to Ben Brooks for his ongoing support and enthusiasm for this project.

I am grateful to Coventry University for funding this work, and to the many members of staff and students at Coventry University who have helped me along the way. I would particularly like to thank Tim Sparks for his help with all the numbers, Nick Henry for his invaluable feedback, and Samima Hussain for her constant support and advocacy as I navigated the administrative and academic jungles. Special mention should also go to the relentlessly collegiate Eveleigh Buck-Matthews, who pointed out the adversarial nature of the term ‘front-line’, and with whom many a problem has been talked through over a cup of tea. Your turn soon Eve!

I dedicate this thesis to the most important person in my life—my wife, Sophie. None of this would have happened without her belief in me and her unwavering support in many, many ways. She has been widowed to my PhD for far too long. Sophie, thank you.

Credits, licences and permissions

Except as noted below, this thesis, 'Community engagement and its role in fire prevention in a West Midlands neighbourhood', is © Chris Hastie 2017.

The work contains National Statistics and Ordnance Survey data © Crown Copyright and Database Right 2013 – 2016, used under the terms of the Open Government Licence.

Figures 4.1, 5.1 and 8.1 contain map data that are © OpenStreetMap contributors. The data are used under the Open Data Commons Open Database License, see www.openstreetmap.org/copyright.

Figure 7.1 depicts a trade mark of the West Midlands Fire Service. It is © WMFS and is used with permission of the WMFS.

The link icon used in Figure 8.2 is © iconoci / The Noun Project and is used under the terms of the Creative Commons Attribution License.

Photo 8.2 is by Chris Hastie. The registered trademark of Keepmoat Ltd included in the photograph is acknowledged. The image is used here in accordance with the provisions for criticism and review under Section 30 of the Copyright, Designs and Patents Act 1988.

Figure 9.1 is based on a figure from O'Mara-Eves et al. (2013). The original work is © The Queen's Printer and Controller of HMSO 2013. The original work permits reproduction with acknowledgement providing it is not associated with any form of advertising.

Figure 9.3 is based on a figure from Schim and Doorenbos (2010). The original image was published by and is © Taylor & Francis Ltd and is reprinted with their permission.

The article included at Appendix B is © Elsevier Ltd 2016. Chris Hastie is the primary author and retains the author rights. The article is reproduced here with permission of Elsevier Ltd. The original article is available at <http://doi.org/10.1016/j.firesaf.2016.07.002>.

The leaflet at Appendix D includes an image of fire fighters that is © Crown Copyright 2008 and reproduced under the terms of Open Government Licence.

Table of contents

Abstract	i
Acknowledgements	ii
Credits, licences and permissions	iii
Lists of figures, photographs, tables and boxes	x
List of figures	
List of photographs	
List of tables	
List of boxes	
 Chapter 1: Introduction	 I
1.1 Why fire prevention?	1
1.2 Why community engagement?	2
1.3 An overview of the research design	4
1.4 Geographical context	6
1.4.1 Extensive: the West Midlands county	
1.4.2 Intensive: the 'WEHM' area	
1.5 An overview of the thesis	7
 Chapter 2: The philosophy and design of the research	 13
2.1 Positivism and interpretivism	13
2.2 Complexity and the social world	16
2.3 Mixing methods and methodologies	18
2.4 Multiple methodologies and this study	21
2.4.1 Do different communities experience different levels of accidental dwelling fire?	
2.4.2 What is the nature of the relationship between the fire service and communities experiencing high rates of fire?	
2.5 Conclusion	24
 Chapter 3: Inequality in the distribution of fire: evidence in the existing literature	 26
3.1 Introduction	26
3.2 Research methods, data and their challenges	27
3.2.1 The limitations of fire and rescue service data	
3.2.2 Operationalising deprivation	
3.2.3 Level of analysis	
3.2.4 Quantifying loss	
3.3 The distribution of fire and fire loss in society	36

3.3.1	Deprivation	
3.3.2	Household structure	
3.3.3	Age	
3.3.4	Ethnicity	
3.3.5	The role of smoking and alcohol	
3.3.6	Social cohesion and social capital	
3.4	Conclusion	43
Chapter 4:	Inequality in the distribution of fire: analysis of data from the West Midlands	45
4.1	Introduction	45
4.1.1	Geographic context: the West Midlands County	
4.2	Overview of the approach and data used	47
4.2.1	Choice of geography	
4.2.2	Representing rates of fire	
4.2.3	Predictor variables	
4.2.4	Deprivation	
4.3	Spatial visualisation	54
4.4	Correlation analysis and its results	54
4.4.1	Visualisation of correlation results	
4.5	Principal component analysis and its results	60
4.6	Regression analysis and its results	63
4.7	Limitations	67
4.8	Conclusions	67
Chapter 5:	Fieldwork: generating qualitative data	70
5.1	Introduction	70
5.2	The choice of neighbourhoods	71
5.2.1	Manor Farm Estate, Coventry	
5.2.2	Benmore Estate, Birmingham	
5.2.3	Windmill Lane Estate, Smethwick	
5.2.4	Focusing in on Manor Farm and Wood End	
5.3	Recruiting participants	78
5.3.1	Leafleting	
5.3.2	The prayer group	
5.3.3	Snowballing	
5.4	Types of data generated	82
5.4.1	Conversations and field notes	
5.4.2	Participant observation	
5.4.3	Conversations with professionals	

5.4.4	Documentary evidence	
5.4.5	The extent of the data generated	
5.5	The data generation process as findings	90
5.5.1	The failure of the big conversation	
5.5.2	The importance and the limitations of gatekeepers	
5.5.3	Engaging with solo-livers	
5.5.4	The impact of austerity	
5.6	Ethical considerations	99
5.6.1	Informed consent	
5.6.2	Impromptu conversations—agency and implied consent	
5.6.3	Disclosure of information	
5.6.4	Confidentiality, names and places	
5.7	Conclusion	106
Chapter 6:	Deskwork: analysing the data	108
6.1	Introduction	108
6.2	Working with audio	109
6.2.1	Theoretical considerations	
6.2.2	The process in practice	
6.2.3	Practical considerations	
6.2.4	The necessity for transcription	
6.2.5	Conclusion	
6.3	Coding, review and memo writing	118
6.4	Concept mapping and refining the themes	120
6.5	Writing	121
6.6	Conclusion	123
Chapter 7:	Attitudes towards the fire service	124
7.1	Introduction	124
7.2	The work of the WMFS	125
7.2.1	Response and prevention	
7.2.2	Home fire safety checks	
7.2.3	Safe and Well visits	
7.2.4	Collaboration and expansion into health and social care	
7.2.5	Wider prevention work	
7.3	Out of sight, out of mind	129
7.3.1	Positive perceptions focus on response	
7.3.2	Fire is not a priority	
7.3.3	‘Tucked away’ —the invisible service	

7.3.4 Summary	
7.4 Part of something bigger	137
7.4.1 Uniform and authority	
7.4.2 The problem with being associated with the police	
7.4.3 Summary	
7.5 Conclusion	144
Chapter 8: Barriers to engagement	146
8.1 Introduction	146
8.2 Feeling judged	146
8.2.1 Judged for where they live	
8.2.2 Judged for needing help	
8.2.3 Being told what to do	
8.2.4 When there is no judgement	
8.3 Disillusionment	156
8.3.1 Broken promises	
8.3.2 Services that do not deliver	
8.3.3 Not being listened to	
8.3.4 Is it all bad?	
8.4 Fear of consequences	164
8.4.1 Fear of other agencies	
8.4.2 Older people: fear of being conned	
8.4.3 The African community	
8.5 Unaware of the service	168
8.6 Communication and interaction	169
8.6.1 Community diversity: one size does not fit all	
8.6.2 The nature of meetings	
8.6.3 Language and communication	
8.6.4 Geographic focus	
8.6.5 Taken-for-granted assumptions of public services	
8.7 Conclusion	180
Chapter 9: Space and dialogue	183
9.1 Introduction	183
9.2 Engagement as dialogue	183
9.2.1 Community participation	
9.2.2 Community engagement	
9.2.3 Service access	
9.2.4 Community engagement and its meaning in this study	

9.3 Spaces of dialogue	187
9.3.1 Safe space	
9.3.2 Comfortable space	
9.3.3 Rewarding space	
9.3.4 Summary	
9.4 Making spaces more attractive	198
9.4.1 Go where people are	
9.4.2 Outsource engagement	
9.4.3 Using gatekeepers	
9.4.4 Examples from the field	
9.5 Individuals and dialogue	205
9.5.1 Flexibility and discretion	
9.5.2 Diversity	
9.5.3 Capacity building	
9.5.4 Organisational challenges	
9.6 Conclusion	211
Chapter 10: Implications for fire prevention	213
10.1 Introduction	213
10.2 Safe and Well visits	214
10.3 Embedding fire safety	215
10.4 Workforce diversity	215
10.5 Delivering fire safety through other organisations	216
10.5.1 The FRS is trusted	
10.5.2 The FRS has the necessary technical knowledge	
10.5.3 The FRS has the capacity to do prevention work	
10.5.4 Protecting the service	
10.5.5 A possible example	
10.6 Pitfalls of joined-up working	221
10.6.1 Guilty by association	
10.6.2 Getting out more—creating good impressions	
10.6.3 Working more closely with the police	
10.7 Conclusion	225
Chapter 11: Conclusion	227
11.1 Reflecting on the research	227
11.1.1 Should I have done the research?	
11.1.2 Starting fieldwork earlier	
11.1.3 Writing and reflexivity in field notes	

11.2 Key findings and their contribution to knowledge	230
11.2.1 Inequality in the distribution of fire	
11.2.2 The relationship between public services and disadvantaged communities	
11.2.3 Spaces of dialogue	
11.2.4 Methodological contributions	
11.3 Limitations	235
11.4 Future research directions	236
11.4.1 Inequality and fire	
11.4.2 Test the spaces of dialogue framework in other contexts	
11.4.3 The nature of distrust of public agencies	
11.4.4 FRS organisational culture	
11.4.5 Joined-up working	
11.5 Final thought	239
References	240
Glossary	259
Appendices	261
Appendix A: Ethics approvals	262
Appendix B: Article in the <i>Fire Safety Journal</i>	269
Appendix C: Ethnic groups included in the quantitative analysis	277
Appendix D: Recruitment leaflet	278
Appendix E: Initial topic list	279
Appendix F: Summary fieldwork log	280
Appendix G: Verbal consent prompt sheet	284
Appendix H: Post hoc participant information sheet	286
Appendix I: Code groups used for focused review	287

Lists of figures, photographs, tables and boxes

List of figures

Figure 3.1: Trends in fire fatalities and incidents of accidental dwelling fire (ADF) in Great Britain	27
Figure 4.1: Area served by the West Midlands Fire Service	47
Figure 4.2: Distribution of rates of accidental dwelling fire	55
Figure 4.3: Distribution of employment deprivation	55
Figure 4.4: Box plots showing association between ADF rates and key variables	59
Figure 4.5: Histogram of standardised residuals, with normal distribution curve superimposed	66
Figure 5.1: Map of the study area showing main features	77
Figure 6.1: The analytic process	109
Figure 6.2: Relationship between code groups and themes	119
Figure 6.3: Concept map of the 'feeling judged' theme	121
Figure 7.1: WMFS badge	139
Figure 8.1: Ward extent compared to resident perceptions of neighbourhood	176
Figure 8.2: Factors inhibiting community engagement	181
Figure 9.1: Relationship between aspects of engagement	185
Figure 9.2: The three characteristics of spaces of dialogue	188
Figure 9.3: Cultural congruence as a fit between service provider and service user	193

List of photographs

Photo 5.1: Architecture of Manor Farm	73
Photo 8.1: Being told what to do: signs around Manor Farm	153
Photo 8.2: "Promise. Delivered." A sign in Wood End	157

List of tables

Table 4.1: Summary of census variables used	52
Table 4.2: Notable correlations between predictor variables and the ADF index ($ r \geq 0.4$)	56
Table 4.3: Correlations between fire rates and number of single person households of various age groups	57
Table 4.4: Regression coefficients	64
Table 4.5: Collinearity diagnostics	65
Table 5.1: List of audio recordings of conversations with residents	89
Table 5.2: Summary of events generating field notes	90

Table 5.3: Interviews with professionals	91
Table 6.1: Notation used in quotations	117
Table 9.1: Links between key findings and the characteristics of spaces of dialogue	198

List of boxes

Box 1: Reflections and grey boxes	11
Box 2: Availability and the choice of predictor variables	53
Box 3: On judgement and statistics	68
Box 4: Introversion—my Achilles heel	95
Box 5: Selectivity and field notes	116
Box 6: Talking to the police—the impact on the research process	142
Box 7: Do I talk differently with different people?	174
Box 8: Welcoming the community in	178

Chapter 1: Introduction

This thesis explores the broad territory of inequality in access to public services, and the role of the relationship between public services and communities in propagating such inequality. To investigate these broad areas I focus initially on a narrow topic—that of fire prevention. Fire prevention is a major public service activity, with the West Midlands Fire Service spending the majority of its time on prevention (West Midlands Fire and Rescue Authority 2013). I found significant inequalities in the way in which fire is distributed through society, a phenomenon which can be conceived of as an inequality in the outcomes of fire prevention work. What then interested me was whether the way in which the fire service engages with those communities most affected by fire somehow hampers its ability to deliver fire safety work effectively. Concentrating on a small group of disadvantaged neighbourhoods in Coventry, I set out to understand how people living there viewed their local fire and rescue service, the West Midlands Fire Service (WMFS), and the work that it does. As we shall see, the fire service was not generally seen in isolation from the other public services, and so engagement between the communities living in the area and public services in general became the topic on which a large part of the study focused.

I will begin this introductory chapter with a brief explanation of the policy importance of fire prevention work before going on to discuss the reasons why I chose to focus on community engagement as a topic of investigation. I will then present an overview of the research approach, followed by a plan of the layout of the thesis itself.

1.1 Why fire prevention?

Fires in the home are a major cause of both injury and economic loss. The most recent UK government attempt to estimate the total cost of fire in England put it at £8.3bn in 2008 (Department for Communities and Local Government 2011a). In 2015–2016 two thirds of all building fires attended by fire and rescue services (FRSs) in England were in dwellings (Home Office 2016a: Tbl. 0102), with dwelling fires accounting for 75% of the 303 fire related deaths, and a similar proportion of the 7,644 casualties (Home Office 2016a: Tbl. 0502). In the same period, over 90% of dwelling fires were considered to be accidental (Home Office

2016a: Tbl. 0202). Accidental dwelling fire (ADF¹) is thus an important policy concern; considerable resources are expended each year in an attempt to bring rates of ADF down and minimise the number of casualties and the economic loss resulting from ADF. In the last twenty years the work of FRSs has increasingly focused on prevention (Matheson et al. 2011), and promoting fire safety has been a statutory duty for them for over a decade (Fire and Rescue Services Act 2004). Furthermore, fire prevention has taken on an added dimension in recent years. Since the financial crisis of 2008 public services across the globe have had to look hard at the way in which they provide services and to seek ways to achieve sustainable reductions in costs. Strong arguments have been made by policy think-tanks for achieving this through an increasing focus on managing demand (Staite 2012, Randle and Kippin 2014). Fire prevention has an important role to play in managing the demand for emergency response, and can thereby contribute to the need to find sustainable cost reductions across the emergency services.

1.2 Why community engagement?

Rates of building fire in England fell by 39% in the decade to 2012 (Knight 2013) and have continued to fall since (Home Office 2016a). Yet there is strong evidence, detailed in Chapters 3 and 4, that the way in which fire is distributed through society is not even; fire is concentrated amongst more disadvantaged groups. There are many reasons why this inequality in the distribution of fire might exist—older or badly maintained electrical equipment, a higher incidence of smoking, or poorer quality housing, to name but a few. The area I chose to focus on, though, is that of community engagement. I am interested in understanding how the relationship between the communities that are most affected by fire and those who seek to prevent fire might affect efforts to promote fire safety.

There are two complementary reasons why I chose to focus on community engagement. The first is that most fires are the result of human activity (Merrall 2002), of the choices, decisions and actions of people. In order to influence those choices and decisions, agencies that seek to promote fire safety must engage on some level with those they hope to influence. Fire safety

1 An explanation of many of the terms and abbreviations used in this thesis can be found in the [Glossary](#) on page 259.

is not something that can be done to a community, it is something that the community must play a large part in doing themselves—fire safety, in effect, is co-produced. Agencies cannot themselves cease smoking in bed—that is something that only citizens can do. Community fire safety is the result of the interaction between communities and the agencies that seek to improve fire safety. Influencing citizens to change behaviour inevitably requires engagement between agencies and citizens, thus an understanding of engagement is central to understanding fire prevention. Agencies that seek to promote fire safety are often part of the state, usually an FRS, and there is evidence to suggest that some of the same communities that experience high levels of fire also show a disinclination to engage with state services (Canvin et al. 2007). I am interested in understanding if this disinclination to engage with the state also applies to the FRS, and if so, in understanding why engagement is difficult and what might be done to improve it.

The second reason for looking at community engagement is the belief that those experiencing high levels of fire may well have a good understanding of why this is the case. This is knowledge that is of great value to those who wish to promote fire safety, but it is knowledge that may not be available to them if engagement with affected communities is poor. Improving community engagement, facilitating the interaction between communities and agencies, has the potential to facilitate the co-production of further research and the co-creation of solutions that both meet the needs of the community, and the desire of the state to reduce the incidence of fire.

Although fire prevention is the starting point for this study, the research does not restrict itself to the relationship between communities and the FRS. This is partly because the FRS is not necessarily the only body that has an interest in promoting fire safety. It is also because there are clear links between the question of fire inequality and the wider health inequality agenda, particularly given the role that smoking plays in fire initiation (see [3.3.5](#)). It is, however, mainly because it became clear during the research that the way in which the FRS is perceived is influenced by residents' experiences and perceptions of other state agencies, a finding I will discuss in Chapter 7. Thus in order to understand issues of community

engagement as they pertain to the FRS it became necessary to explore engagement between communities and state agencies more generally.

1.3 An overview of the research design

The research reported in this thesis incorporates both positivist, quantitative approaches and interpretive, qualitative ones. The philosophical basis for incorporating two very different epistemologies in a single study is dealt with in some detail in Chapter 2. In essence, the study as a whole addresses two distinct, but related empirical questions, and each of those questions is addressed from a different epistemic paradigm. The findings from these two empirical questions are then synthesised to address a third practical question. The first question is:

- do different communities experience different levels of accidental dwelling fire?

This is a question well suited to positivist inquiry and one which I address through an extensive statistical analysis of secondary data—principally incident data provided by the West Midlands Fire Service (WMFS). These data are analysed alongside census and other socio-economic data to answer not just the question posed, but the sub-question of ‘which communities experience higher levels of accidental dwelling fire?’.

Having established that there are, indeed, significant inequalities in the way in which fire is distributed, and identified the characteristics of areas experiencing high rates of fire, I move on to consider the second question. This question was to change during the course of the research and I will return to discuss that change a little later, but it began as:

- what is the nature of the relationship between the fire service and communities experiencing high rates of fire?

This is a question far better suited to interpretive investigation. It concerns people’s perceptions, the meanings that they attach to the words and actions of others. It is a question which I address through an intensive interpretive study that focuses in on one small area of the West Midlands, an area identified through the statistical analysis carried out earlier. The

area chosen has a significantly higher rate of ADF than would be expected were fire evenly distributed, together with demographic characteristics that are strongly associated with elevated rates of ADF. The approach to research for this interpretive part of the project was one of gathering people's stories through conversations with them, and of overt participant observation. The data were generated over eight months of what Geertz (1998) has referred to as "deep hanging out" in one small area in north east Coventry, talking to people, getting my face seen, and trying to build a relationship with residents that would allow me to gain an understanding of their perceptions of public services.

As I describe in Chapter 5, this was far from an easy process. Many of the difficulties that I faced, as a White, middle-class researcher from a publicly-funded university, were the same issues that state agencies face in reaching some of the communities living in the area, and consequently the process of carrying out the research, and especially the failures that I experienced, became as important to the findings as the conversations I had with the people that I met in the field. The difficulty of finding gatekeepers, the reluctance of people to give up time to talk, the sense that I was always an outsider, all tell us as much about the problems faced by public services trying to reach people in the area as they tell us about the problems of carrying out research there. Interpretive research is not fixed from the beginning, but responsive and flexible (Schwartz-Shea and Yanow 2012) and some of the findings I will present relate to the ways in which I had to adapt my planned approach to the realities of the field.

I said earlier that the question for this part of the research began as 'what is the nature of the relationship between the fire service and communities experiencing high rates of fire?'. It is not just research design that must be responsive and flexible, but even the research question may change as a result of experiences in the field (Schwartz-Shea and Yanow 2012). One point to emerge strongly from the research is that many people have no direct relationship with the fire service. The way in which they view the service and construct expectations of engagement with it is bound up with their experiences of other public services, and thus the question for this part of the research mutated during the research process to become:

- what is the nature of the relationship between public services and communities experiencing high rates of fire?

The greater part of the empirical work of the study is guided by this question. Additionally, however, the thesis seeks to have practical value and this is achieved by synthesising the findings of the two empirical questions to address a third question:

- what are the implications of these findings for fire prevention work?

It is hoped that through addressing this question the thesis will bring real practical benefit to fire and rescue services and others involved in promoting fire prevention, and thereby improve the lives of those most at risk from fire.

1.4 Geographical context

The two distinct parts of this thesis operate at very different geographical scales and it is useful at this point to outline the spatial bounds of the study and give some brief context for the two areas.

1.4.1 Extensive: the West Midlands county

The extensive, positivist and quantitative part of the study is based on analysis of data provided by the West Midlands Fire Service (WMFS), and its geographic extent is thus defined by the operating area of the WMFS. The WMFS provide a fire and rescue service to the residents of the former West Midlands Metropolitan County in England. Although the metropolitan counties were abolished in 1986, the West Midlands Metropolitan County continues to form the geographic basis for organising several services, including fire, police and public transport. It is therefore useful in the context of discussing the WMFS to refer to the West Midlands county, an area which should not be confused with the geographically larger West Midlands region. The county area, illustrated in [Figure 4.1](#) (page 47) includes seven local authorities: the cities of Birmingham, Coventry and Wolverhampton, and the metropolitan boroughs of Dudley, Sandwell, Solihull and Walsall. Situated in central England, it is a densely urban area, consisting of two conurbations, the larger of which is the

second largest urban area in England (Medland 2011). I will discuss the characteristics of the county in more detail in section [4.1.1](#).

1.4.2 Intensive: the 'WEHM' area

The intensive, interpretive and qualitative part of the study focuses on a group of neighbourhoods in the north east of Coventry: Wood End, Henley Green, and Manor Farm (WEHM). These three neighbourhoods, along with a further one (Deedmore), were together part of a New Deal for Communities (NDC) neighbourhood regeneration programme, a scheme that saw £54m invested in the area between 2001 and 2011 (Homes and Communities Agency 2012). In policy circles the neighbourhoods are often collectively referred to by the acronym WEHM, an acronym coined to describe the scope of the NDC programme. They are, however, distinct neighbourhoods, each with a strong sense of identity, and as I highlight later (see [8.6.4](#)) residents do not perceive them as a single entity.

The neighbourhoods are characterised by high density housing, much of it managed by a single social landlord which took the stock over from Coventry City Council. There is evidence of considerable social and economic disadvantage in the area, with high levels of unemployment and poor quality housing. Recent years have seen some significant redevelopment through a public-private partnership, particularly in Wood End, a project which has replaced much of the older housing. The financial crash of 2008 has significantly slowed progress on this redevelopment, however, and Manor Farm has yet to see benefit from it. I will describe the area in more detail in section [5.2](#), and a map can be found at [Figure 5.1](#) (page 77).

1.5 An overview of the thesis

In this section I outline how the thesis is structured and how the chapters within it fit together. Throughout the thesis I have made use of boxes to discuss points that can stand outside the main narrative, and positioned within this section you will find the first of these, “[Reflections and grey boxes](#)” ([Box 1](#), page 11), in which I discuss their use in more depth. The mixing of both positivist and interpretive epistemologies, together with the iterative nature of interpretive research, have dictated that the layout of the thesis deviates at times from

what might be considered 'traditional'. I will therefore also use this overview to highlight how the chapters relate to the accepted elements of a thesis.

Chapter 2 begins the thesis proper with a discussion of the ontological and epistemological underpinnings of the work. Drawing on a range of methodological literature I argue that the complexity of human society demands that we not restrict ourselves to a single approach to generating knowledge. Rather, different questions demand different paradigms. As I have already outlined (section 1.3), this single study addresses two related but different questions, one of which is considered by adopting a positivist stance, the other by taking an interpretive stance.

In Chapter 3 I turn to the question of the way in which fire is distributed through society, beginning with a discussion of the problems and pitfalls involved in undertaking statistical investigation of this question. I then review the existing literature addressing the issue of inequality in the distribution of fire. Because there is some evidence that the question is context dependent (which I discuss in section 3.3.1), and because rates of fire are declining so rapidly (see Figure 3.1, page 27), I focus on more recent literature from the UK. The findings are broadly consistent—fire is not distributed evenly, but is markedly more prevalent amongst the more disadvantaged in society. Unemployment, in particular, emerges as strongly associated with rates of fire, with links also present to a number of other indicators of material deprivation.

Many of the existing studies are relatively old, and even some quite recent studies use data that dates from a decade or more ago (e.g. Corcoran et al. 2013). Given the rapid change in rates of fire in recent years there is a need to revisit the question of inequality in the distribution of fire and establish whether the social gradient seen in the past continues to exist. In Chapter 4, therefore, I present the results of my own analysis of recent data from the West Midlands Fire Service. This ecological investigation confirms that there continue to be striking associations between rates of ADF in an area and a range of socio-economic and demographic factors. I particularly highlight the relationship between fire rates and three characteristics: the proportion of residents who have not worked for over five years; the

proportion of residents of Black African or Black Caribbean heritage; and the proportion of single-person households where the resident is aged under 65. This last association is one that has not been seen in previous studies, and given that the number of people falling into this group is growing (Smith et al. 2005, Bennett and Dixon 2006) it is an important finding. The work presented in chapter 4 has been published in the *Fire Safety Journal* (Hastie and Searle 2016) and a copy of that article can be found in Appendix B.

Having established that inequality in the way in which fire is distributed continues to exist I move on to investigate the notion that engagement between the worst affected communities and those public services interested in reducing rates of fire may play a role in this inequality. This second phase of the research takes an intensive, interpretive approach. In writing up this qualitative part of the work I have followed the advice of Wolcott (2001) and have woven consideration of the existing literature throughout the text, rather than present it in a stand-alone literature review chapter. Discussion of the qualitative work thus begins with methodology, which I consider in Chapters 5 and 6. Chapter 5 deals with generating data in the field, whilst Chapter 6 is concerned with the analysis of that data.

I begin Chapter 5 by outlining the process by which I chose the area that would become the focus of this phase of the study, a decision which was informed by the results of my earlier statistical analysis. I then discuss the fieldwork in detail, considering the ways in which data were generated, how participants were recruited, some of the ethical issues which I faced and how I overcame them. Whilst Chapter 5 is focused on the process of fieldwork, that process itself produced pertinent findings about the difficulty of engaging with hard-to-reach groups. Because these findings are so strongly linked to the process of fieldwork, rather than being the end result of fieldwork, I present them in this chapter.

Chapter 6 rounds off the discussion of the research process by looking at how I set about making sense of the data generated in the field, a process which began almost as soon as I had started fieldwork. Data analysis was an iterative, recursive and messy activity. It involved repeated review of the data, each review deepening my understanding as it converged towards a point at which I was satisfied that further review would not bring

significant additional insights. Though I have, through the necessity of setting out a legible thesis, broken this process down into neatly bounded blocks, I hope that in Chapter 6 I also manage to convey something of the fuzziness of the reality of data analysis, a process that was rarely as clearly defined or sequential as the subheadings in the chapter might suggest.

Chapters 7 and 8 are my main findings chapters, setting out the principal themes that emerged from my time in the field and from the analysis of the data. Chapter 7 focuses on attitudes towards the fire service specifically and identifies two important topics. Firstly, the fire service is out of sight and rarely thought about. When specifically prompted people often think positively about the fire service's response to fires, but the service's prevention work is rarely considered. People are far more likely to think about other public services with which they have regular contact, or upon which they depend. Secondly, when not specifically bringing the fire service's response work to mind, people tend to associate the service with the wider state, often with the police. Taken together, these two findings suggest that in order to understand the challenges that the fire service faces in trying to engage with the communities in a disadvantaged neighbourhood it is necessary to look at the challenges of community engagement for public services more broadly.

Chapter 8 thus takes the scope of the discussion wider and considers barriers to engagement with public services more generally, reflecting the shift that occurred in the second research question during the course of fieldwork (see 1.3, and further discussion at 2.4.2). In this chapter I identify a number of themes that emerged as discouraging people from engaging more closely with public services. A sense of disillusionment, having seen little come of previous engagement, is one such theme, as is the sense of feeling judged for needing help, both by public servants and by neighbours. There is also evidence that people fear negative consequences from engaging—that they believe that contact with one service will lead to unwanted contact with others. Finally, I find evidence that services tend to try to engage on their own terms, rather than on the terms of those that they wish to reach, resulting in ineffective communication and a lack of awareness in the community of what help is available.

Box 1: Reflections and grey boxes

Undertaking a study of this magnitude is inevitably an experience which changes the researcher and the researcher's understanding of himself, and reflecting on these changes is an important part of learning from them, no matter what the theoretical basis of the study. When a large part of the study is founded in an interpretive epistemology, however, reflection becomes all the more important. From an interpretive perspective, data are not lying around waiting to be discovered, but are generated through the intersubjective interactions of the researcher and the participants (Yanow 2007). The researcher's role in setting the context in which data are created is one that must be acknowledged; the way in which their background and personality affect who they speak to and what is said is important. This requires attention to reflection.

Throughout the research process and the writing of this thesis I have tried to reflect on my role in shaping the way in which the research unfolded. I have included a number of grey boxes like this one in the text in which I discuss particular aspects of the study. I originally conceived these as a way to mark a clear delineation between reflection, and theory and evidence. The distinction is artificial, however. My reflections often relate back to theory. Reflections are both part of the process of generating data, and help to deepen understanding of the context in which those data arose. There are, then, reflexive thoughts in the main text, and theory in the grey boxes. Yet the boxes do seem to serve a useful purpose. They often contain thoughts that are worth giving space to, but which do not comfortably fit in the flow of the overall narrative. The text can be read without reading the boxes and although something will be missing, it will still make sense. So whilst they do not quite fulfil the purpose I originally conceived for them, I have kept the grey boxes.

In Chapter 9 I present a conceptual framework that can help us to understand the barriers I have found. Drawing on the existing literature on community engagement, I argue that the essence of engagement, taken in its broadest sense, is dialogue. Using a metaphor of spaces I suggest that people are unlikely to enter into dialogue unless the space in which that

dialogue is taking place is seen as being safe, comfortable and rewarding. A general distrust of public services will make spaces of dialogue feel unsafe; spaces created following the norms of bureaucratic behaviour will feel uncomfortable to communities not accustomed to such ways of working; and the lack of perceived benefits, whether because fire is not considered a risk, or more generally because engagement with services in the past has not brought the hoped for results, will mean that spaces are not seen as rewarding. Whilst I can only test this conceptual framework against the data I have from the specific context of this study, it is a framework which may transfer well to other contexts. What will change, however, is the detail of what a safe, comfortable and rewarding space looks like. Engaging with other communities in other contexts will require spaces for dialogue that look quite different, which are aligned to needs of that specific community. Thus, I argue, community engagement in a diverse society requires public agencies to be prepared to occupy a wide range of different spaces and to adopt a wide range of different strategies. This, in turn, requires public agency workers to be flexible and innovative in the ways in which they work.

I rein the focus back in to fire prevention in Chapter 10 and discuss some of the implications of my findings for the work of promoting fire safety. I argue that FRSs need to diversify their approach to promoting fire safety to take greater account of the diversity of the communities that they serve. I suggest that it is time to reconsider the view that FRSs are best placed to deliver fire safety. Rather, fire safety should be embedded more generally in other activities. I also question whether the Home Fire Safety Check, the mainstay of fire prevention work for the last 20 years, is always the best instrument for the job.

Finally, in Chapter 11 I offer some final reflections on the research process and recap the findings, highlighting the contribution to knowledge that the work makes. I finish with a discussion of some of the study's limitations and of the opportunities for future research that it presents.

Chapter 2: The philosophy and design of the research

Human society is complex—almost inconceivably so. The interactions that people are involved in on a daily basis form an intricate web of physical, economic, social, political, cultural, environmental and other relationships, each affecting the others in myriad ways (Sterman 2006). Faced with this complexity, how do we set about understanding the social world? How can we generate knowledge about it?

This study seeks to understand the way in which a largely human made phenomenon, fire, is distributed through society, and to identify inequalities in that distribution. It is further concerned with how a public service provider and its communities relate to each other and how that relationship affects equality. As such it is very much a study of human society and must be concerned with questions of knowledge generation in the realm of human society. In this chapter I consider some of the debates about knowledge generation in the social sciences and set out the stance that I adopt in undertaking this research. I argue that something as complex as the social world can not be known through the adoption of a single epistemology. Rather, different aspects of that world lend themselves to understanding through different epistemological approaches built on different ontologies. Even within this one small study there are areas of the subject that are best suited to one approach and areas best suited to another. This chapter, then, will make a case for adopting not just multiple methods, but multiple epistemologies in this research.

2.1 Positivism and interpretivism

The question of how we know the social world is hotly contested and encompasses a plethora of nuanced ontological and epistemological positions almost as complex as society itself. However, it can broadly be seen as falling into two camps: positivism and interpretivism (Haverland and Yanow 2012). This is clearly something of an over simplification, with an array of divergent philosophical positions being found in each camp, but it is a typology which serves a purpose here. In adopting it I situate myself very much in the world of the social sciences rather than that of the natural sciences, perhaps at the risk of doing a disservice to natural scientists and philosophers of science. The view of the natural

sciences that I will sketch out in this argument is perhaps not one that would be recognised by modern natural scientists, who are far from uncritical of positivism, but it does nevertheless represent a popular view of the nature of science held in wider society, and one which therefore exerts an influence on the way in which knowledge production is viewed.

With its roots in the natural sciences, positivism is built on an ontology that considers reality to have a fixed existence independent of the observer (Potter 2000). This reality is seen as being discoverable through the application of methods from the natural sciences (Grix 2002) —experimentation, impartial, controlled observation and logical reasoning—to create objective, verifiable knowledge. Positivism is often associated with the use of quantitative methods, of measurement and statistical analysis, although it is not clear that the use of such methods is necessarily derived from positivism. Michell (2003), for example, has argued that a strong attachment to the quantitative imperative in Western culture can be traced back to Pythagorean ideas, considerably pre-dating the emergence of positivism as a distinct philosophical position.

The application of positivism has an impressive track record in creating knowledge about the natural world. Much of what is known in this sphere derives from positivist inquiry, from the orbit of the planets to the making of the computer on which I am typing these words. Perhaps because of this, for many this approach to knowledge generation is almost a *de facto* standard, widely and unquestioningly accepted, providing science with a high degree of rhetorical authority (Potter 2000). This can be seen, for example, in a previous UK administration's unequivocal assertion that "randomised controlled trials (RCTs) are the best way of determining whether a policy is working" (Haynes et al. 2012: 6). However, the question of whether or not approaches to inquiry that work for the natural world can be legitimately used in the context of the social world remains one that is widely contested, with many arguing that there are fundamental differences between the two realms (Bryman 2004).

One of the key differences between the natural and the social worlds is that the social world has meaning for those people who are part of it, and indeed for those people who study it. As Alfred Schutz puts it:

The world of nature, as explored by the natural scientist, does not 'mean' anything to molecules, atoms, and electrons. But the observational field of the social scientist—social reality—has a specific meaning and relevance structure for the beings living, acting, and thinking within it. By a series of common-sense constructs they have pre-selected and pre-interpreted this world which they experience as the reality of their daily lives. It is these thought objects of theirs which determine their behaviour by motivating it.

(Schutz 1962: 59, cited in Bryman 2004: 13–14)

If social reality is in part made up by the meaning that actors themselves attach to the social world, then that reality is not fixed and independent of the actors, but is constructed by them and varies from actor to actor. Furthermore, those observing are themselves part of that world and attach their own meaning to it. In this view, creating objective knowledge becomes impossible—all knowledge of the social world is essentially subjective, or rather it is intersubjective, a shared reality constructed by the interactions between actors (Berger and Luckmann 1971).

This is the view of the broad collection of research philosophies that come under the umbrella of interpretivism. Interpretivism conceives the social world as one that is socially constructed, having no existence independent of the observer. Interpretive research accepts that knowledge of the world can only be subjective and seeks to explain the reasons for social phenomena through interactions with those involved. There may be multiple, intersubjective social realities and both the researcher and the research participants play a role in creating these (Schwartz-Shea and Yanow 2012). In contrast to the objectivity that is so fundamental to positivist inquiry, interpretivist approaches explicitly acknowledge the position and influence of the researcher, reflecting on this as part of the research process. Interpretivism is most commonly associated with qualitative research, though it is important to note that not all qualitative research is interpretive and not all interpretive research is qualitative. Haverland and Yanow (2012), for example, point out that Yin's (2003) oft cited work on case studies is not interpretive as it assumes that reality exists and can be known independently of the observer, whilst Bryman (2004) notes a number of examples that he suggests use quantitative approaches to uncover the meaning that participants construct.

This is a point that it is worth stressing because it is one that is often missed or fudged over, with scholars seemingly conflating methodology and epistemology. Whilst interpretive research often adopts a qualitative methodology and positivist research often adopts a quantitative methodology, there is no clear, hard and fast relationship between methodology and epistemology. A particular methodology does not in itself imply a particular epistemology or vice versa. As Grix (2002: 64) notes, “methods themselves should be seen as free from ontological and epistemological assumptions”. Ontology, epistemology and methodology are all separate and although clearly related, the nature of one does not determine the others.

2.2 Complexity and the social world

I began this chapter by noting that human society is almost inconceivably complex. This complexity is itself a challenge to the rationality of positivism, with Herbert Simon questioning whether or not the human capacity for rational thought could ever untangle it:

The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problem whose solution is required for objectively rational behavior in the real world or even for a reasonable approximation to such objective rationality.

(Simon 1957: 198)

Sterman (2006) has argued that the complex interactions of humans are in a state of constant flux, with each interaction affecting how similar interaction will play out in the future. The relationship between cause and effect in the social world is rarely straightforward and linear. Whilst we may build models of such complexity, these are necessarily simplifications of reality (Cilliers 2005). A positivist and quantitative approach to understanding the world attempts to operationalise a small number of variables and in doing so assumes that other factors remain static. In human society this is unlikely to be more than a gross approximation. This need to operationalise variables for quantitative research necessarily bounds the information gathered, potentially limiting the areas considered and leaving important themes unnoticed (Thomas 2006). It forces a complex reality into a predetermined, structured and simplified data set (Gummesson 2006). These considerations seem to point

away from the utility of a positivist stance in understanding the social world, despite its success in developing knowledge of the natural world.

Part of the purpose of a study such as this, which investigates the outcomes of a public service and the process by which those outcomes are realised, is to inform the development of policy. As the world of policy and politics is a part of the social world it should be no surprise that it too is characterised by complexity and meaning. The phrase 'evidence-based policy' has received considerable attention in recent years, growing to particular prominence during the New Labour administration (Wells 2007, Powell 2011), with their philosophy of "what counts is what works" (Labour Party 1997). The second term of the New Labour administration, in particular, relied heavily on quantitative data to measure performance and focus policy direction (Wells 2007). Yet the idea that policy and the assessment of policy effects can be reduced to objectively measurable variables is widely contested. Drawing heavily on Schön (1983), Parsons (2002) argues that the field of policy is a messy, complex swamp where reality is difficult to know. Within the swamp may be areas of higher, drier ground, but it is of limited consequence. It is in the swamp that the important questions are found, and they are often the political ones. Evidence-based policy, however, focuses on the high ground, where the questions are perhaps easier, but of less consequence. It avoids the politics of the swamp. At its heart, politics is about assigning meaning to social problems (Fischer 1998) and meaning is created by the actors involved. Even if there are objectively discoverable facts, the views of policy makers on how to respond to those facts are based on subjectively held values. Indeed, even their view on what constitutes evidence is essentially subjective (Kisby 2011).

Furthermore, in the world of policy it is rare that an effect is caused by a single intervention. There may be multiple initiatives running at the same time to address some strategic aim or "wicked problem", with multiple agencies involved. The political or economic environment may shift and influence outcomes in unexpected ways. Consequently it is rare that an intervention's efficacy can be reliably measured and attributed (Hallsworth et al. 2011). Understanding policy and the effects of policy can thus not be achieved using positivist approaches alone.

The wholesale rejection of a position, however, is unhelpful and denies the progress that has been made in building knowledge of the social world through positivist endeavours. Oakley (1998) notes, for example, that positivism and quantitative research have revealed areas of considerable importance in promoting social justice, for example through the work of reformers such as Florence Nightingale, Harriet Martineau and Beatrice Webb. Rather than reject one position in favour of another, there is a need to accommodate knowledge building from diverse approaches.

2.3 Mixing methods and methodologies

It may seem that two such different ontological and epistemological positions as positivism and interpretivism could not possibly co-exist. Indeed, this is often how things have been presented, with a deep divide perceived between positivists and interpretivists, between those favouring quantitative methodology and those favouring qualitative (Oakley 1998, Clark 1998). However, it is increasingly accepted that the very complexity of society demands that knowledge is built in multiple ways, that complex social questions need complex evidence to answer them (Dixon-Woods et al. 2005). Both broad approaches have something to offer.

Bryman (2004) suggests that the principal argument against combining qualitative and quantitative strategies is that each is built on separate and incompatible ontological and epistemological assumptions. This he argues, as I have done, is not the case—although each strategy is commonly associated with a particular philosophical stance the relationship is not hard and fast. Even the distinction between qualitative and quantitative can be seen as forced. Operationalising variables for quantitative research often involves subjective judgements and meaning making—what is an ‘adequate’ pension, or a ‘good’ GCSE (Hallsworth et al. 2011)? Qualitative research may well be influenced by quantity through being sensitive to the frequency with which themes and topics are seen in the data. As Dupré (2007) argues, there is no easy line to draw between fact and value.

To build an argument for multi-method research on the basis of dismissing the idea that each strategy is derived from a specific epistemology seems, however, to imply that it is not

possible to accept multiple epistemological positions. Yet in practice knowledge building is an iterative process, developing understanding incrementally by synthesising the findings of multiple studies, sometimes crossing epistemological boundaries (Denyer and Tranfield 2006). Whilst this often happens organically, various methods have been proposed for synthesising disparate studies in systematic reviews (Dixon-Woods et al. 2004, 2005, Pawson and Bellamy 2006, Sandelowski et al. 2012). If knowledge may be built from studies grounded in different philosophies, is it possible to ground a single study in multiple philosophies?

Haverland and Yanow (2012) argue that what is important is that the approach chosen should fit the question at hand. Some questions are well suited to objective study based in a positivist epistemology, others are better suited to an interpretative stance. A similar point is made by Glasby (2011) in arguing against the idea of a fixed hierarchy of evidence, instead suggesting that the best evidence for the job depends on the nature of the question, whilst Soss (2006) notes that the distinction between interpretive and positivist research may be one of practice in a particular project, rather than one that underlies the whole identity and world view of the researcher.

Whilst they acknowledge the value of all ways of knowing, Haverland and Yanow (2012) are clear that a single question is unlikely to be amenable to multiple approaches. Indeed, they argue persuasively that the very way the question is phrased is itself dependent on the stance being taken. Interpretive research questions tend to adopt more general terms, as being too specific may hide unforeseen meaning. Positivist research questions, on the other hand, are much more specific, often defined in terms of dependent and independent variables and couched in a way that facilitates operationalising those variables. The argument that a single question cannot be addressed from multiple stances is explored further by Schwartz-Shea and Yanow (2012), who question whether it is ever possible to combine data produced by approaches that assume different versions of reality. However, they make the point that a given research *topic* may encompass several research *questions*, each requiring a different approach. They give the example of a project looking at changes to social welfare policy which seeks both to measure the economic impact on welfare recipients (a positivist,

quantitative question) and to understand, from the recipients' perspectives, the impact on their daily lives (an interpretive, qualitative question).

Ontologically, the argument that different questions are suited to different approaches would seem to suggest that there are elements of the social world that have a fixed, independent existence, and other elements that are socially constructed and given meaning by the actors. On the face of it this is not an unreasonable or difficult position, particularly since humans inhabit and interact with the natural world, which can therefore be seen as being a subset of the social world. The existence, or not, of a tree close to my house is a matter of fact, a reality that exists independently of me. Whether I see the tree as a pleasant feature of the environment, or a nuisance bringing shade and autumn leaves, is a reality constructed by me. But at another level the question of whether there is a tree close by is itself imbued with meaning. How far is 'close'? Even the question of what a tree is is socially constructed, and, indeed, contested (where is the line between shrub and tree?). Whilst these difficulties may muddy the water, they are in many ways practical problems to be overcome in operationalising the notion of a 'close tree'. This process may well involve making subjective judgements, it may involve social constructs, but this does not take away from the fact that the existence of the thing that we now define as a tree, at a distance that we now define as close, happens independently of the observer. Whilst there are socially constructed elements to the question of the tree, the dominant element is one of independent existence. This interconnectedness of fact and value is one explored by Dupré (2007), who shows that it is a common feature of questions, particularly of those that have an impact on people and society. For any given question, then, it would seem that there is not a right and a wrong approach, but approaches that are more or less suited. It is, as Oakley (1998) has noted, more of a continuum than a dichotomy.

Not only can questions contain a mix of objective and subjective elements, but independent and socially constructed realities may influence and affect each other. On the one hand, how I construct my view of the tree close to my house may depend on the independent reality of how big it is. On the other, if I view the tree as something beautiful (a socially constructed reality) I may water it during a drought and prolong its existence (an independent reality),

whilst if I dislike the shade it casts I may take out my chainsaw and bring its existence to a premature end. This interplay between different views of reality suggests that not only is it possible to combine ontological and epistemological stances in one study, but in a study that is concerned with that interplay it may be a necessity.

2.4 Multiple methodologies and this study

In undertaking this study I have adopted a mix of philosophical stances on much the basis that Schwartz-Shea and Yanow (2012) suggest. The broad research *topic* is an investigation of inequality in outcomes of the fire service. Within that topic are two main empirical questions that will be addressed using quite different approaches, built on different epistemological assumptions. The findings from these investigations will then be synthesised to address a third question concerning the practical implications of the study. I will outline here the two empirical questions and the epistemologies and methodologies to be adopted for each. A detailed account of methods will be dealt with in later chapters.

2.4.1 *Do different communities experience different levels of accidental dwelling fire?*

The first broad question is ‘do different communities experience different levels of accidental dwelling fire?’. This is a question that can be approached from a positivist, quantitative perspective. The word ‘levels’ immediately suggests quantities and measurement. A house fire can comfortably be conceived of as having an existence independent of those observing it, as being a matter of fact. This is not to say that there are not elements of the question that are not socially constructed—there are considerable difficulties to be found in operationalising the variables involved and some of the concepts involved in that process are undoubtedly socially constructed. A more detailed discussion of these issues can be found in Chapter 3 but it is worth exploring some of the broader issues here.

Whilst it may be possible to clearly define and count fires (although even that has its problems), the concept of a community is one that is both socially constructed and contested. Concepts such as a shared emotional connection, suggested by McMillan and Chavis (1986) as a defining feature of community, are given meaning by the members of the community themselves and have no independent existence. This might suggest that the question is not

amenable to positivist investigation. However, the fundamental aim is to count fires in different settings. How those settings are bounded is secondary and open to some manipulation. I have therefore taken a much simpler definition of community for the purpose of this question. Focusing in on just one of the elements of community identified by MacQueen et al. (2001)—sharing—I have assumed a community to be a group of people with a shared characteristic. Indeed, the question might usefully be rephrased as ‘do different groups experience different levels of accidental dwelling fire?’ The characteristic that groups people then becomes the independent variable.

Thus the first part of this study adopts a positivist, quantitative approach to investigating the relationship between a criterion variable, the prevalence of fire, and a series of predictor variables that characterise groups within society². It consists largely of secondary analysis of service data provided by the West Midlands Fire Service (WMFS), cross-referenced with a range of demographic data sets. It uses statistical techniques in order to identify if the presence of certain groups in an area is associated with changes in the expected rate of fire. It seeks to identify which groups are most associated with elevated fire rates in order to inform the approach to, and focus of, the second part of the study. The output of this part can be seen as objective knowledge about the distribution of accidental dwelling fire within society.

2.4.2 What is the nature of the relationship between the fire service and communities experiencing high rates of fire?

The second broad question began as ‘what is the nature of the relationship between the fire service and communities experiencing high rates of fire?’, although, as I will discuss later, this was to change during the course of the research. This is a question that lends itself far better to interpretive investigation. It concerns people’s perceptions, the meanings that they attach to the words and actions of others. It is influenced by subjectively and intersubjectively held values and beliefs that are constructed by the actors involved. It is also a question that is being asked because I am interested in whether it has a role in influencing the independent reality of the level of fire affecting each community.

2 I use the terms ‘criterion’ and ‘predictor’ rather than ‘dependent’ and ‘independent’ because the data used derive from observation, rather than from a controlled experiment in which the independent variables are manipulated

There may be directly observable, independent factors that have an impact on this relationship; specific actions by one party or another, the structure of an organisation or even the location or architecture of a fire station. What is of particular interest here, however, is the meaning that individuals attach to these factors, not the factors themselves. It is the interest in meaning that clearly marks this part of the project as being interpretive.

Interpretive research is an iterative process (Schwartz-Shea and Yanow 2012)—as ideas and concepts emerge from the work the researcher is led off in unexpected directions. Even the research question may change during the course of a project, as, indeed, it did in this project. As it became clear that few people have a direct relationship with the fire service, but that ideas and expectations of it are bound up with experiences of wider public services (see Chapter 7), the question would eventually widen out to become ‘what is the nature of the relationship between public services and communities experiencing high rates of fire?’. Not knowing how the research process will end up, however, does not mean that there is no need to clarify where it will start and to outline a broad strategy for how it will progress (Shenton 2004). The second part of the study focuses in on communities that have been identified in the first part as being particularly vulnerable to fire. It adopts an interpretive stance to try to understand how these communities view the fire service. Of particular interest is how, or even if, they hear the messages that the service wants to communicate about fire safety, how they make sense of those messages, and how they choose whether or not to act on them. It seeks to gather peoples’ stories and to interpret them in the context in which they arose to build a rich picture of the way in which communities most at risk of fire view the fire service and explore how the way in which the service acts might be changed in an attempt to improve outcomes. Whilst this is its focus, it is not constrained to those areas, but aims to be open to whatever emerges from the data (Corbin and Strauss 1990). Data comes from a mix of both in-depth and incidental conversations with people within the communities of concern and from overt participant observation.

Focusing in on a particular neighbourhood, this part of the study is bound to that context. Interpretive research cannot be generalised from (Shenton 2004), but by providing a detailed description of the context in which the findings arise it is possible to allow readers to identify

contexts to which they might be transferred (Firestone 1993, Spencer et al. 2003). A part of this context consists of my presence—a conversation between someone and me exists only in the context of me and is influenced by my actions and by that person's perceptions of me. Ensuring a full understanding of context thus requires constant reflection of my role in the research.

2.5 Conclusion

Building knowledge of the complex world of human society requires a diversity of approaches, not only in terms of method, but also in terms of ontology and epistemology. Despite their considerable differences, the broad camps of both positivism and interpretivism can contribute positively to developing understanding of the social world. Parts of that world can comfortably be conceptualised as having an existence independent of the actors and observers and are well suited to positivist enquiry. Other parts of the social world are socially constructed—being given meaning by the actors—and these areas are better suited to interpretive enquiry. The choice of philosophical position for any given question depends on the nature of the question and whether it relates to a reality that is independent and objective, or socially constructed and subjective.

Most questions contain both elements that are subjective and elements that are objective. For any given question there is not so much a right and a wrong approach, but approaches that are more or less suited. Nevertheless, combining data based on different views of reality in order to address a single question is problematic. Rather, a decision must be made as to which approach best suits the question. A single research project, however, may encompass several questions, and those questions need not necessarily be addressed from the same stance. Furthermore, each question may influence the other, and each reality may influence the other.

This is the approach that I take in this project. The broad research topic is an investigation of inequality in outcomes of the fire service, but that topic encompasses two main strands of enquiry, each of which is approached from a very different epistemological position. The first phase of the project takes a positivist approach and uses quantitative methods to address the

question 'do different communities experience different levels of accidental dwelling fire?'. This first phase will assist in identifying areas that experience poorer outcomes from the fire service so that the second phase can focus on the relationship between the service and the communities living there. The second phase then adopts an interpretive stance to address the question 'what is the nature of the relationship between the fire service and its communities?'. In this phase what is of interest is how people within the communities being focused on perceive the service and what role this plays in the way in which they respond to the service's attempts to reduce the incidence of fire.

By employing multiple epistemologies the project is able to build knowledge both of aspects of the social world that have independent existence and aspects that are socially constructed. It aims to build a nuanced picture not only of the way in which views of the fire service are constructed, but also of the way in which this socially constructed part of reality ultimately impacts on a reality with independent existence by influencing the levels of fire affecting communities. Finally, it seeks to synthesise these findings to address a question of practical importance: "what are the implications of these findings for fire prevention work?"

Chapter 3: Inequality in the distribution of fire: evidence in the existing literature

3.1 Introduction

This study explores the relationship between a public body, the West Midlands Fire Service, and the communities that it serves, in an attempt to understand if, and how, that relationship affects outcomes related to fire safety for those communities. In order to inform the focus of this work I begin by looking at the evidence relating to inequality in outcomes to identify if inequality exists, and if so which communities are most adversely affected by it. In this chapter I review the existing literature on inequality and fire, whilst in Chapter 4 I will present evidence from an analysis of contemporary data from the West Midlands Fire Service (WMFS) that clearly demonstrates the existence of inequalities in the WMFS area today and identifies where those inequalities lie.

Whilst the literature on inequality and fire cannot be described as extensive there are a growing number of studies that have sought to understand the way in which incidents of fire and loss from fire are distributed across society. Although there are differences associated with context and with methodology, the top-level findings from these studies, at least from those published in English, are broadly consistent—those who are most disadvantaged in society are also at the highest risk of suffering loss from fire.

Jennings (2013) provides a useful overview of the state of the existing literature on socio-economic determinants of fire, reviewing studies from across several disciplines, although specifically excluding the public health literature. His review is restricted to studies from the English speaking world and acknowledges that it emphasizes the United States. As there is evidence that context has some bearing on the association between socio-economic factors and fire—a point that I will touch upon later (see 3.3.1)—I do not intend to repeat what has already been done. Rather, I will explore in more detail those studies that focus on the UK, extending my review to include pertinent elements from the public health literature.

The incidence of fire in the UK is in decline, with the number of building fires attended by UK fire and rescue services having dropped by 39% in the decade to 2012 (Knight 2013) and continuing to fall since (Home Office 2016a), a point illustrated in [Figure 3.1](#). Given this changing environment I also propose to give greater weight to more recent studies, although these are in practice limited in number. Even some studies published very recently rely on data that is over a decade old (e.g. Corcoran et al. 2013). Like Jennings, my focus is on dwelling fires, since in the UK these contributed 76% of fire fatalities and 81% of non-fatal fire casualties in the period 2000-2012 (Department for Communities and Local Government 2012a), and accounted for two-thirds of all building fires attended by fire and rescue services in England in 2015-16 (Home Office 2016a Tbl. 102). Before considering the existing research, however, it is worth reviewing some of the difficulties involved in studying inequality and fire.

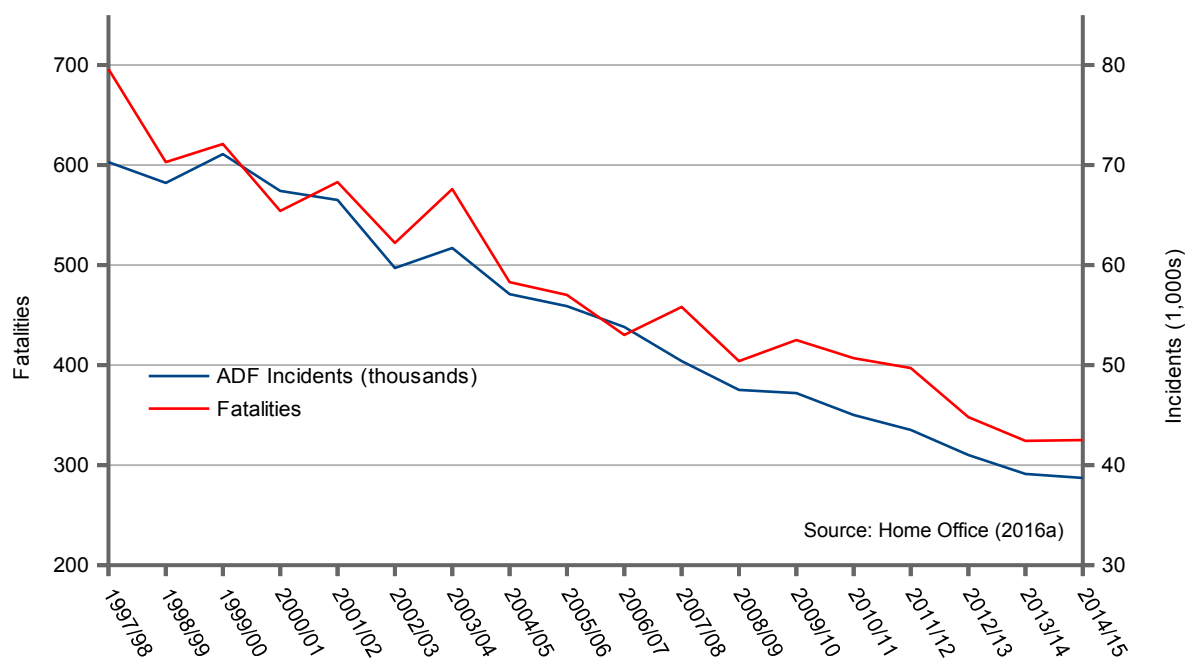


Figure 3.1: Trends in fire fatalities and incidents of accidental dwelling fire (ADF) in Great Britain

3.2 Research methods, data and their challenges

3.2.1 The limitations of fire and rescue service data

Many of the studies into fire incidence in the UK have relied on operational data supplied by fire and rescue services (FRSs). FRSs have long kept records of the call outs that they attend, and these figures have been routinely reported to, and collated by, central government,

providing a valuable dataset. Since 2009 a standardised, electronic Incident Recording System (IRS) has been used to provide consistency in the data recorded by FRSs across Great Britain. The IRS also ensures timely reporting of incidents to the relevant central government department³ (Department for Communities and Local Government 2009, 2012b).

These records, however, relate only to fires that are attended by an FRS, and there is evidence that a significant number of fires never come to the attention of an FRS. Until March 2003 the British Crime Survey (BCS) included questions about fire in the home. The BCS is a large, continuously rolling and nationally representative survey of around 35,000 participants, principally focused on understanding crime against adults in England and Wales. An analysis of the fire related questions for 2002/3, and comparison with data from FRSs, estimated that only 22% of fire incidents occurring in the home were reported to an FRS (Ford 2004). In England, post March 2003 the questions relating to fire were moved from the BCS to the Survey of English Housing (SEH) (Ford 2004), which itself merged with the English Housing Survey in 2008 (Department for Communities and Local Government 2014). Respondents to the SEH in 2004/5 reported contacting the FRS for 22% of fires (Corcoran et al. 2007), while the 2010/11 sample of the English Housing Survey had 274 respondents reporting at least one fire in the last twelve months, of which 68 (24.8%) said that they had called the FRS for the most recent fire (Department for Communities and Local Government 2013).

Thus in terms of understanding the actual incidence of accidental fire in the home the use of data supplied by the FRSs has clear limitations. Nevertheless, it is reasonable to assume that those incidents that involved an FRS are the more serious and are the ones most likely to result in substantial loss to those experiencing them. It is also the case that it is these incidents that are of the greatest importance to the FRS in terms of resource planning, and they are the incidents on which there is the greatest need for FRSs to focus in order to manage demand. Even if these contacts with the FRS do not fully represent the extent of accidental dwelling fires, there is considerable value in understanding how they are distributed throughout society.

3 Currently the Home Office. The Department for Communities and Local Government prior to January 2016

3.2.2 Operationalising deprivation

In studies of inequality in fire service outcomes one of the principal factors to have been investigated is the link between the incidence of fire and social deprivation. The concept of social deprivation, however, is far from straightforward and different approaches to operationalising it have been taken by different authors.

In England, the Department of Communities and Local Government periodically publishes indices of deprivation for small areas, although since 2010 the frequency of these publications has reduced dramatically, with only one new release, in 2015, since the start of the Coalition administration. These indices are founded in the assumption that deprivation is a broader concept than simply poverty, encompassing a general lack of access to both resources and opportunities (Department for Communities and Local Government 2011b). The 2010 indices⁴ are built from 38 indicators covering seven broad domains. Separate indices are available for each of the seven domains (income; employment; health and disability; education, skills and training; barriers to housing; crime; and living environment), and for several sub-domains. The index most commonly used, however, is the Index of Multiple Deprivation (IMD). The IMD combines values from all seven domains, applying different weights to each, in order to produce a composite indicator of the relative level of deprivation in an area (Department for Communities and Local Government 2011c).

There are several points that need to be borne in mind about these indices, and particularly the IMD. The first is that they are area based. They describe the prevalence of deprivation in an area, they say nothing about any particular resident of that area. The second is that, with some notable exceptions, the indices are ordinal, not scalar. That is, if area A has an index twice that of area B it is possible to say that area A is more deprived than area B, but not that it is twice as deprived (Department for Communities and Local Government 2011b). An important consequence of this is that the indices are not suitable for use with parametric statistical tests. The exceptions to this are the employment domain and the income domain,

4 I focus on the 2010 indices because these were the indices used for the analysis presented in chapter 4, being the most recent available at the time of that analysis.

where the indices are scalar, representing the proportion of residents in an area experiencing deprivation from this issue.

Another issue is that the IMD, in particular, is a multi-dimensional measure and as such needs to be treated with some caution. With any multi-dimensional measure there is a danger that changes in one dimension may be masked by changes in the opposite direction in another dimension. Whilst the IMD has considerable value as a policy tool for planning resource allocation, its value for statistical analysis is much more limited. Finally, whilst the indices can be used to compare areas within one country of the UK (e.g. England), they can not be used to compare areas across the countries. This is because each country's administration has adopted slightly different methods for calculating the figures that they publish (Office for National Statistics 2013a).

Some studies (e.g. Corcoran et al. 2007, 2013) have chosen to use the Townsend Index in preference to the official indices of deprivation because it is possible to apply it consistently across the countries of the UK. The Townsend Index is based on four census variables: households without a car, overcrowded households, households not owner-occupied and persons unemployed (Townsend et al. 1988). As such it too suffers from the problem of being multi-dimensional, although it is more singularly focused on material deprivation than the IMD. Indeed, Townsend et al.'s original conception of the index set out to clearly separate material from social deprivation.

Over a quarter of a century on from its first use it could be argued that shifts in society make aspects of the Townsend Index of less relevance today. For example, over the last decade the proportion of owner-occupied households has begun to fall nationally (Office for National Statistics 2013b). Whether this represents an increase in deprivation generally, a social change in attitudes towards accommodation, or a combination of the two remains unclear. The assumption that lack of car ownership is necessarily associated with material deprivation is also questionable. Townsend et al. (1988) argue that car ownership is a valuable proxy for lack of income because of the high proportion of a person's income that is taken up by owning a car. However, this ignores the fact that it is easier to go without a car

in the city, with good access to public transport, than it is in a rural area with poor transport connections. Thus the use of car ownership as an indicator of material deprivation may tend to mask the existence of rural deprivation. It is also known to have produced some spurious results in areas that include student halls of residence, where large numbers of residents with no car result in apparent high levels of deprivation (Warwickshire Observatory 2005).

Another area-based approach to operationalising deprivation is the use of geodemographic classification such as the commercially available ACORN (CACI 2014) and MOSAIC (Experian Ltd 2009) and the census based Output Area Classification (OAC) (Vickers and Rees 2006). Geodemographics classifies areas into similar groups on the basis of analysis of the demographic characteristics and lifestyles of residents. As some of the characteristics used may have little to do with deprivation this cannot strictly be seen as a way of operationalising deprivation. Furthermore, geodemographic classifications are categorical rather than ordinal or scalar and are therefore not amenable to statistical tests such as regression analysis or correlation. Nevertheless, a number of studies have explored their use to help inform and illustrate understanding of the uneven distribution of fire in society, or as an operational tool to aid FRSs in targeting interventions.

Geodemographic classifications have not, however, been without significant criticism. As multi-dimensional classifications they are subject to the same problems as other multi-dimensional systems, such as the IMD, in that changes in one dimension may be masked by changes in another. They hide heterogeneity within an area (Slingsby et al. 2011), often consisting of overlapping classes, with one assessment going so far as to suggest that “the differences between classes are generally smaller than the differences found within a particular class” (Voas and Williamson 2001: 74). Voas and Williams have further argued that general purpose, nationwide classifications are of less value than those that are tailored to a specific purpose and to the geography of a particular area. This is a challenge taken up by Higgins et al. (2013), who describe the creation of a geodemographic classification system specifically focused on identifying areas at high risk of fire in Merseyside.

A further approach to operationalising deprivation is the use of occupation as a proxy for deprivation. Unlike the area based approaches considered already, this is clearly linked to the individual, or more accurately to the household, with a decision being taken as to which member of the household should be considered. This approach is found most often in the public health literature, such as the study by Edwards et al. (2006) looking at child fatalities, which uses the National Statistics Socio-economic Classification (NS-SEC) of a parent (the father if available). A difficulty with the NS-SEC is that only at the top level of categorisation can it be considered ordinal, and at this level it divides occupations into only three classes. At other levels it is categorical (Office for National Statistics 2010), precluding the use of much statistical analysis. Another important problem lies in the assumption that it is the father's occupation that most defines the socio-economic status of a household. Furthermore, whilst occupation may identify a group of people within society who are likely to experience deprivation, it cannot be said to represent deprivation itself (Townsend et al. 1988).

3.2.3 *Level of analysis*

Jennings' (2013) review of the literature on socio-economic determinants of fire emphasises the importance of being clear about the level at which analysis is carried out, whether that be individual, household, property or neighbourhood, and it is worth considering this in more detail.

It is evident from the discussion of operationalising deprivation that many of the studies in this field have been conducted at an area or neighbourhood level. Such studies are vulnerable to bias—ecological fallacy—because they do not directly link the variables investigated together (Greenland and Robins 1994). That is, for example, whilst the number of incidents of fire in an area may be compared to the area's level of unemployment, individual incidents of fire are not linked to the employment status of those affected by the fire. The existence of some association at an area—or ecological—level can not be taken to imply that an association necessarily exists at an individual level (Robinson 1950). It is important to keep in mind exactly what is being tested—fire may be more prevalent in areas with higher unemployment, but this does not in itself mean that unemployed individuals are more likely to experience fire. This is not to say that area-based studies have no value—there

are marked operational benefits in understanding how the characteristics of areas affect the number of fires that start in those areas, both in terms of the geographic targeting of interventions and the positioning of response resources. However, some considerable caution is needed in interpreting such studies and avoiding the temptation to extrapolate from the collective to the individual.

When considering area based studies the size of the area used as a unit of analysis is of importance. Larger areas are likely to be more heterogeneous and their use will mask the considerable internal variation. On the other hand, small areas, whilst exhibiting less heterogeneity, may encounter too few fire incidents for useful analysis, or a change by a single incident may represent a very large proportion, giving rise to extreme outliers in the data. This may result in associations appearing stronger at larger area levels as the impact of outliers is lessened. One study in particular has noted that associations at local authority level are considerably stronger than at the much smaller Lower Super Output Area (LSOA) level (Smith et al. 2008). When considering the size of area for an ecological study the availability of data may also be an important factor—some data are not available at small area levels in order to protect privacy.

In England and Wales the basic unit for census output since 2001 has been the Output Area (OA). Output Areas aim to cover around 125 households and are published after the census in order to allow census data to be used to produce OAs that are relatively homogeneous (Office for National Statistics 2011a). OAs are then aggregated to Lower Super Output Areas (LSOAs) with a population of between 1,000 and 3,000, and Middle Super Output Areas (MSOAs) with a population of between 5,000 and 15,000 (Office for National Statistics 2011b). The smallest area at which indices of deprivation data are available is the LSOA. An alternative unit of analysis chosen by some studies is the local authority electoral ward. Whilst OAs and SOAs are designed specifically to facilitate statistical analysis, electoral wards are primarily designed to ensure electoral equality (Local Government Boundary Commission for England 2013) and are therefore likely to be more heterogeneous. There is also considerable variation in electoral arrangements between local authorities (e.g.

differences in the ratio of councillors to electors and differences in the number of councillors per ward), making comparisons across local authorities challenging.

Traditional area based analysis is constrained to fixed boundaries which may not relate to the data being analysed. As Jennings (2013) notes, there has been a general trend in recent years towards greater use of Geographical Information Systems (GIS) for studying fire risk. This has facilitated alternative approaches and Corcoran et al. (2007) have made use of Kernel Density Estimation (KDE) to produce maps of concentrations of fire incidents that are unconstrained by administrative boundaries. In essence KDE works by passing a 'kernel' of a known size across a map and counting the number of incidents within the kernel at multiple points. A problem that Corcoran and his colleagues identify with this is that it effectively makes physical area the denominator (e.g. incidents per km²), whilst for most studies of risk a more appropriate denominator is the population at risk. When considering incidents of property fire this is more properly either buildings or dwellings than area (e.g. incidents per thousand buildings), or for fire casualties, population. Since both building and population density can vary enormously KDE has a tendency to identify hotspots that are more densely populated or developed. Corcoran et al. suggest that for property fires it would be possible to adapt the KDE technique to make use of detailed data on the location of buildings, such that rather than use a kernel of fixed size it uses a kernel that covers a fixed number of buildings. However, as of yet no studies appear to have been published that adopt this approach.

In the UK, studies that take an individual, rather than an ecological, approach are most commonly found in the public health literature. As such their interest is in people who have been injured or killed as a result of fire and their data sources may include records from the health services or the coroner. The lack of individual studies outside the public health literature may reflect a lack of data on the predictor variables of interest for fires that do not involve casualties. Critically, whilst the IRS collects data on household composition, impairment due to alcohol or drugs, and, where someone is rescued or injured, age, gender and ethnicity, it does not collect data on socio-economic status (Department for Communities

and Local Government 2012b). Furthermore, where FRSs do hold such information they may be reluctant to share it with researchers because of privacy concerns.

There is also a conceptual difficulty in considering incidents, rather than casualties, at an individual level. An incident of accidental dwelling fire is best seen as affecting a dwelling rather than a person. Whilst it is clear that people are affected by a fire in their home, to try to count persons affected becomes problematic. Does a fire in a dwelling affect the head of the household, the entire household normally resident, those present at the time (both household members and visitors), the neighbours, the extended family, or some other group of people? Even if this question could be satisfactorily resolved, taking this approach would tend to skew any results towards dwellings that habitually have high numbers of occupants and away from those with low numbers. As such, risk factors such as being single and elderly might be hidden. However, to consider an incident as affecting a dwelling is also problematic because socio-economic and demographic attributes attach to people rather than dwellings. Pragmatically, the most promising approach would appear to be to consider the characteristics of a household, and to assume that in most cases there is a one-to-one relationship between dwelling and household.

3.2.4 Quantifying loss

Jennings (2013) is careful to draw a distinction between the risk of a fire starting and the risk of suffering loss as a result of that fire. This is a distinction that can be found in UK public policy on risk. The Health and Safety Executive distinguishes between hazard—the likelihood of an event with potential to cause harm—and risk—the likelihood of someone or something being harmed as a result of the hazard (Health and Safety Executive 2001), whilst the Cabinet Office (2011) draws a broad distinction between risk events and the consequences of risk events.

Jennings notes that loss can be quantified in many ways—by injuries, by fatalities or by financial loss for example. Within the UK literature on fire, where loss is considered it is most usually in terms of casualties or fatalities. One notable exception is the attempt by the UK government to establish a financial cost of fire (Department for Communities and Local Government 2011a), although beyond establishing slight differences in costs on a regional

basis this does not explore how the cost is distributed through different sectors of society. An additional potential metric of loss is the size of the area damaged, and the IRS collects information on this, though no published studies were found that explored these data.

Such things as numbers of casualties, area damaged, or costs of insurance claims are relatively easy to measure but neglect the complexity of wider societal costs. Fire can impact on long-term costs of health and social care, on the local economy, on the psychological health of those affected and more, and measuring these wider consequences is fraught with difficulty. Indeed, the very concept of measuring implies the ability to place an objective value on consequences which applies irrespective of context. Yet the long term impact of a fire on the lives of a family struggling to make ends meet, who have let their home insurance lapse to keep up with the mortgage payments, may be very considerably greater than the impact of a similar fire on a more affluent family. The difficulties in assessing these wider and more subjective aspects of loss from fire does not appear to have been considered in the literature.

3.3 The distribution of fire and fire loss in society

Having considered some of the challenges involved in researching the question of inequality in the distribution of fire, I will now look at some of the main findings in the existing literature. A number of factors emerge as being associated with variation in the distribution of fire and I will consider each in turn.

3.3.1 Deprivation

Whilst deprivation is a broad concept and not always straightforward to operationalise, in one form or another it emerges as one of the most consistently identified factors associated with risk of fire. In his review, Jennings (2013) notes that poverty and housing quality repeatedly appear as significant risk factors. Similar findings emerge in the UK from a government commissioned study exploring social exclusion and accidental dwelling fire risk. Some association was established between the IMD and incidence of fire at electoral ward level, but the association was considerably stronger when looking at the individual domains that make up the IMD (Arson Control Forum 2004). The housing domain was particularly

noted as having a strong association with ADF rates, with education and health also strongly associated in England, though not in Wales. The weaker association found with the IMD perhaps reflects the problem already noted of using multi-dimensional measures—effects from one dimension may be masked by an opposite effect from another.

A later government sponsored study by Smith et al. (2008) used regression analysis to investigate links between fire incidence and both the IMD and a number of census variables. The authors concluded that deprivation, living alone and never having worked are consistently associated with fire risk at an ecological level. The IMD explained less variance than the model based on census variables, but again, the multi-dimensional nature of the IMD may contribute to this finding. There must also be some questions about the validity of using regression analysis with an ordinal variable such as the IMD. Whilst a more appropriate, non-parametric test such as Spearman's correlation coefficient may have revealed an association between IMD and fire incidence, results from such a test could not be compared to results from the regression analysis used for census variables.

The link found by Smith et al. between fire incidence and never having worked is reflected in work in the public health arena by Edwards et al. (2006). Their study of death from injury amongst children found that children of parents who had never worked or were long-term unemployed were around 26 times more likely to die as a result of fire than children of parents in higher managerial and professional occupations. They also note that a general trend towards fewer child deaths from injury has not affected children in families experiencing long term unemployment, a point reflected by Mulvaney et al. (2009), who found that the social gradient of fire casualties has not changed despite a general reduction in the rate of injury. Within occupational classes in employment, Edwards et al. found a moderate social gradient (in as much as it is possible to order the NS-SEC classes), but the major difference is between children whose parents are employed and those whose parents are unemployed.

Corcoran et al.'s (2007) analysis of data from the South Wales FRS found a positive relationship between property fires (including non-domestic property) and the Townsend

Index, albeit marked by a high number of outliers. Using negative binomial regression with a number of census variables, and working at electoral ward level, they also found that wards with lower levels of educational attainment experienced higher levels of call-outs to property fires, a result that it is interesting to compare to the Arson Control Forum's (2004) findings on the difference between England and Wales with respect to the influence of the education deprivation domain on fire rates. Later work by Corcoran et al. (2011) using the same dataset, but this time analysed at the census Output Area level and restricted to the Cardiff urban area, again found the level of educational achievement to be a predictor of property fire. They also found type of accommodation, tenure and levels of car ownership to be predictors. A further study by Corcoran et al. (2013) looked at the relationship between call-outs for property fires and the Townsend Index at Output Area level and found a strong positive relationship.

Whilst it is not strictly possible to operationalise deprivation on the basis of geodemographic classifications, some subjective interpretation of such classifications is of value in illustrating the links between fire incidence and deprivation. Ford (2004) made use of the proprietary ACORN system (CACI 2014) in her analysis of British Crime Survey results and found that the risk of fire was highest in ACORN types described as 'council estates, greatest hardship' and 'council estates, high unemployment', descriptions that clearly suggest some level of material deprivation. Interestingly, however, the third ranking ACORN type in terms of fire risk was 'better-off executives, inner-city areas'. This finding is to some extent reflected in the more recent work by Corcoran et al. (2013) (although based on fire incident data from 2000-2004) using the census based Output Area Classification (Vickers and Rees 2006). They found that although the 'city living' super-group ranked fourth out of seven in terms of deprivation (as measured by the mean Townsend Index), the range of rates of fire in Output Areas falling within this category tended to be high. The 'city living' super-group is made up of two groups, 'transient communities' and 'settled in the city' and although Corcoran et al. do not present data for the component groups specifically for property fires they do indicate that when all incident types in their study are considered together (property, secondary, vehicle and malicious false alarms) it is the transient communities that experience the high rates.

Although the influence of deprivation in one form or another is a relatively consistent finding, there is also some evidence that it is sensitive to context. Corcoran et al. (2011) compared Cardiff to Brisbane, Australia, and found very marked differences in the association between fire rates and accommodation type. The Arson Control Forum (2004) found differences in associations between England and Wales (though differences in the way in which official deprivation indices are calculated may partly explain these), and Smith et al. (2008) note that there are considerable variations between FRS family groups within the UK. This suggests that some caution is needed in attempting to generalise, and that findings must be set in the social context in which studies were carried out.

3.3.2 Household structure

The question of the influence of household structure on fire risk is one that is rather less clear cut than that of deprivation. Jennings' (2013) discusses his own findings that a four variable model that included the proportion of single parent households explained 83% percent of variation in fire rates between census tracts in Memphis, Tennessee, whilst in the UK, Smith et al. (2008) found both single parent households and households consisting of a single adult to be significant predictors of fire incidence at the local authority level. In terms of casualties, around one third of people killed in ADFs in London in a five year period either lived alone or were alone at the time of death (Holborn et al. 2003), although no data are presented as to the proportion of the population living alone at the time.

On the other hand, however, Corcoran et al.'s (2011) comparative study of Cardiff and Brisbane found family type had little influence on the incidence of building fires in either city. A multiple linear regression has been used to develop a statistical model of the risk of ADF in Merseyside, based on data from the FRS and several other agencies. Using data aggregated at the census Lower Super Output Area (LSOA) level, the model developed found adults living alone to be an important predictor, but notably assigns a negative factor to lone parents, suggesting that high numbers of lone parents in an area are associated with lower numbers of ADFs (Higgins et al. 2012, Taylor et al. 2012). It is worth noting that the model appears to rely on most inputs being given as absolute numbers, rather than the proportion of the population. Although LSOAs are intended to have similar populations, in

reality there is some considerable variation. Such variations may have had an unexpected influence on the development of this model.

3.3.3 Age

In terms of casualties, an analysis of deaths from ADF in London over a five year period (1996 – 2000) found 57% of deaths were of people over 60 and 24.9% of people over 80. The rate of death per million for the over 80s was seven times higher than the rate for all ages, whilst that for the 60-79 age range was 2.4 times higher than the all ages rate (Holborn et al. 2003). Similarly in Merseyside, over the six year period to March 2012 60% of all fatalities involved people over 60 (Higgins et al. 2013). Nationally, Mulvaney et al. (2009) found fatality rates in the period 1994-2005 to be higher for both men and women over 60, although in the case of men non-fatal injuries were more common in the 15-59 age range. Official statistics for England for 2014-15 report that 41% of all fire related fatalities were aged 65 years or older, with this figure rising to 49% when only dwelling fires are considered (Gaught et al. 2016). DiGuseppi et al. (2000) found that of those injured by fire in inner London, a higher proportion of children under 15 and adults over 64 were hospitalised as a result.

Higher rates of fatality and hospitalisation might be expected in the elderly even if the incidence of fire were not elevated, as they may be less able to evacuate promptly and less able to recover from injury. Whilst Smith et al. (2008) did find a moderate univariate association between the proportion of residents over 70 years old and rates of fire, this was less clear cut when using multiple regression. They postulate that the observed association with age may be the result of co-linearity with other factors, with living alone, being disabled and experiencing deprivation possibly being more common amongst the elderly. It is also worth noting that since the study is based on FRS incident data there may be some selection bias. It is entirely conceivable that elderly people are less inclined to attempt to tackle a small fire themselves, and are therefore more likely to call the FRS.

Qualitative work undertaken by the Greater Manchester FRS has begun to provide a possible explanation for higher rates of fire amongst the elderly, suggesting that increasing forgetfulness with age may lead to increased fire risk as a result of, for example, forgetting

that food has been put in the oven (Smith and Clark 2013, University of Salford Manchester and Greater Manchester Fire and Rescue Service 2014).

3.3.4 *Ethnicity*

As with age, there is some evidence that although certain ethnic groups do experience more fire this is the result of co-linearity with other factors. One of the several studies by Corcoran and his colleagues (2007) found that the proportion of non-White people in a ward was positively correlated to rates of fire, whilst their more recent work with geodemographic classifications noted a particularly high incidence of fire amongst the 'Afro-Caribbean communities' OAC group (Corcoran et al. 2013). Smith et al. (2008), however, found that although a positive association exists between Afro-Caribbean population and dwelling fire rates when considering only two variables, in a multiple regression model the size of the Afro-Caribbean population was actually negatively correlated with fire incidence. Their analysis suggests that the reason that areas with high Afro-Caribbean populations have high rates of fire is because they also have high rates of deprivation, high numbers of single parents and a high proportion of people who have never worked. No clear relationship to any other ethnic group was found.

3.3.5 *The role of smoking and alcohol*

Smoking is a major cause of fire casualties. Holborn et al.'s (2003) investigation of deaths caused by fire in London found that over the five-year study period almost half the ADFs that resulted in fatalities had been started by smokers' material, with 15.8% involving ignition of furniture by smokers' material and 13.9% involving the ignition of bedclothes. DiGuseppi et al. (2000) found that of fires resulting in injury, 18% were started by cigarettes or lighters, second only to cooking (31%) as a source of ignition. More recent data suggests that 7% of ADFs are caused by smokers' material (a figure which has declined by nearly one third in a decade), but those fires account for 34% of fatalities and 10% of non-fatal casualties (Department for Communities and Local Government 2012a).

Merrall (2002), whose study focused on fires caused by human behaviour, found that sources of ignition varied with IMD, with smoking and the activities of children being prevalent in more deprived areas, whilst misuse of electrical appliances was more common in less

deprived areas. This is perhaps an unsurprising finding given that smoking is considerably more prevalent amongst more deprived communities. In 2007 rates of smoking amongst those in routine occupations were around two and half times the rate of those in professional and managerial occupations (Marmot et al. 2010). Estimates of mortality from smoking related causes amongst men suggest that it is nearly five times higher amongst those in unskilled manual occupations than amongst those in professional, managerial and technical occupations (Jha et al. 2006). The role of smoking in causing fires is thus clearly tied to questions of inequality in the distribution of fire, a fact that itself binds fire inequality more tightly into the broader question of health inequality.

Similar observations can be made for alcohol misuse. Holborn (2003) reports that 40% of victims of fatal fires who were tested had blood alcohol levels above the legal limit for driving, equating to at least 25% of all fire fatalities, whilst more recent evidence from Merseyside suggests that binge drinking is an important risk factor in ADF (Taylor et al. 2012). Although alcohol consumption is generally higher amongst those who can more readily afford it, alcohol dependence and problem drinking patterns are more prevalent amongst more deprived communities, with hospital admission rates for alcohol related problems in men in the most deprived quintile of LSOAs being more than two and half times those in the least deprived (Marmot et al. 2010).

3.3.6 Social cohesion and social capital

Finally, although now over 30 years old, it is worth mentioning an early study by Chandler et al. (1984) which synthesises results from a number of studies looking at fire incidence in London, Newcastle and Birmingham. The main thrust of their findings, as with studies since, was that fire incidence is associated with higher levels of material deprivation. However, they note that there is some evidence of a pattern amongst certain outliers. A number of wards with high levels of deprivation had unexpectedly low levels of fire incidence, and these tended to be areas which, at the time of writing, had either been spared wholesale redevelopment, or where communities had been kept together when redevelopment came. They suggest that the cohesion and social identity of the communities may contribute to the lower rates of fire.

This is a concept that has received little attention since. One study by Andrews and Brewer (2010) has considered questions of social capital, although it has a very different focus, being less concerned with relationships within communities and more with relationships between communities and public agencies. The ecological study at a very large area level (US states) found that engagement with public affairs and high levels of social trust were both associated with lower rates of fire deaths. The authors suggest that political engagement by communities leads to fire services that are more aware of, and responsive to, the communities' needs, whilst high levels of social trust enable public managers to focus resources on service provision rather than appeasing citizens. It is worth noting that there are marked differences in context between the USA and the UK, notably that the US fire service is largely voluntary. As such, higher levels of social capital may contribute to improved fire service outcomes simply because it is easier to recruit and retain volunteer fire fighters. Nevertheless, the role that social cohesion and social capital plays in improved outcomes is worthy of further investigation.

3.4 Conclusion

There are a host of challenges involved in exploring the way in which fire and loss from fire are distributed throughout society, not least of which is the sensitivity to context that the question appears to have. Nevertheless, despite variation in both context and method, a broadly consistent finding in the existing literature is that in the UK fire is not distributed evenly through society, and those who experience the greatest disadvantage in society also experience more fires and suffer greater loss as a consequence of fire. There is some evidence that this situation is not changing, despite the general decline in incidents of fire. Of the many aspects of social deprivation the one identified most clearly as associated with fire in the UK is unemployment. Both material deprivation and education also emerge as important, and clearly there are strong links between these three aspects of disadvantage. This points to a need to develop knowledge of the relationship between the fire service and communities experiencing high levels of unemployment and material deprivation in order to better understand how that relationship affects the efficacy of fire safety initiatives and, ultimately, outcomes.

There is some limited evidence to suggest that the effect of deprivation on fire outcomes may be mitigated by community cohesion and social capital. This is an area that merits further investigation but sits somewhat outside the scope of this study, which is concerned more with the relationship between communities and the fire service than with relationships within communities. It is nevertheless a factor that it is important to be sensitive to in collecting and analysing data.

Family structure, age and ethnicity are not themselves indicators of deprivation, but may identify groups within society that are more or less likely to experience deprivation. Evidence of the role played by each of these factors in predicting fire risk is less clear cut, and in the case of age and ethnicity there is some evidence that it is the deprivation experienced by particular groups that is important, not the demographic attribute itself. From a practical perspective, however, there is still value in targeting community safety initiatives towards particular age or ethnic groups, not least because this provides an opportunity to frame the interaction in a way that is most likely to be heard and acted upon by the particular group. There is therefore benefit in developing a greater understanding of how these groups view the fire service and how this affects initiatives.

The question of fire safety can be seen as a public health issue simply by virtue of the injuries and death that result from dwelling fires. However, the role played by smoking in fire ignition and the strong social gradient present in smoking rates tie fire safety even more closely to the public health agenda. Inequality in the way in which fire affects people is another part of the well acknowledged problem of health inequality and should be considered alongside it. In exploring the role played by relationships and perceptions in developing or perpetuating fire inequality it will be important to look beyond the relationship between communities and the fire service, and to consider relationships to the wider state, including to health and social services.

Chapter 4: Inequality in the distribution of fire: analysis of data from the West Midlands

4.1 Introduction

Many of the studies considered in [Chapter 3](#) are relatively old, or they rely on older data. As can be seen in [Figure 3.1](#) (page 27), the incidence of dwelling fire in Great Britain has declined rapidly in recent years, with the Knight report into fire and rescue service (FRS) efficiency noting a 39% drop in building fires in the decade to 2012 (Knight 2013). Against this changing landscape it is important to establish whether or not the inequalities in the distribution of fire that have been reported in the past continue to exist. Furthermore, given evidence of some context sensitivity in the way in which fire is distributed through society (see [3.3.1](#)) it is prudent to assess how any inequality manifests in the current context of the West Midlands.

In this chapter I address these issues by presenting an analysis of service data from the West Midlands Fire Service (WMFS). In carrying out this analysis I sought to establish how accidental dwelling fires (ADF) are distributed through different sectors of society in the WMFS area, and to identify socio-economic and demographic factors which may predict rates of dwelling fire. I looked at WMFS data for the three year period from September 2010 to August 2013, that is, the most up-to-date data available at the time that I commenced this PhD in September 2013. The period investigated spans the date of the most recent UK census in March 2011, and this census provided most of the comparison data used in the analysis. The work was carried out early in the project in order that results could inform decisions made regarding the later stages of the research. Inevitably, given the length of time it takes to undertake a PhD, these data will themselves be slightly dated by the time this thesis is completed. Nevertheless, this analysis represents the most recent available investigation of the distribution of fire through society and as such updates our understanding of fire inequality. In particular, the analysis highlights an issue that has not previously been reported—that the association between fire rates and single person households is strongly

age dependent. A version of this chapter has been published in the *Fire Safety Journal* (Hastie and Searle 2016), and that paper is included as [Appendix B](#).

4.1.1 Geographic context: the West Midlands County

Based on data provided by the WMFS, the analysis I present in this chapter is set very much in the context of the area served by the WMFS, which is the area of the former West Midlands Metropolitan County. This area, shown in [Figure 4.1](#), covers seven upper-tier local authorities: the cities of Birmingham, Coventry, and Wolverhampton, and the metropolitan boroughs of Dudley, Sandwell, Solihull, and Walsall. Although the county no longer exists as an administrative entity⁵, it is useful when discussing the area served by the WMFS to refer to the West Midlands county. I set out here a brief description of the county in order to illustrate the context in which these data arise.

The county covers an almost entirely urban area of 902 km² (348 miles²) in central England and consists broadly of two conurbations, the larger of which is the second largest urban area in England, surpassed only by London (Medland 2011). As of the 2011 census the county was home to 2.74 million people, around 5.2% of the population of England (Office for National Statistics 2011c).

The county demonstrates considerable diversity in both economic and demographic terms. In 2010, three of the county's seven local authorities had more than half their population living in the most deprived neighbourhoods in England (Department for Communities and Local Government 2011d) whilst elsewhere there are areas of considerable affluence. In 2015 Birmingham was ranked as the 11th most deprived top-tier authority of 152 in England, whilst Solihull (the only local authority in the county with substantial rural areas) is one of the least deprived, ranked 122 (Department for Communities and Local Government 2015a). The wider West Midlands region has the highest proportion of all the English regions of people of working age who have no qualifications, and is the region with the highest proportion of non-White population outside of London (Medland 2011).

5 The core 'constituent' members of the new West Midlands Combined Authority are, however, the same seven authorities

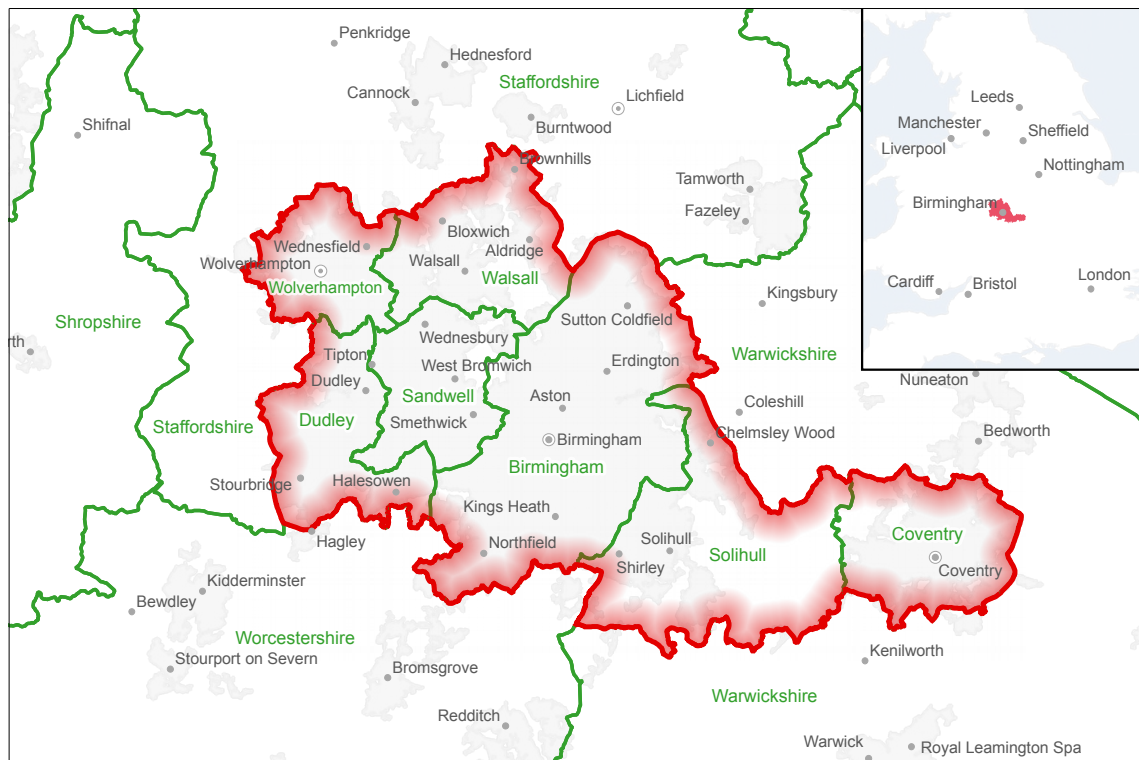


Figure 4.1: Area served by the West Midlands Fire Service

Overall, 66% of the county's population considered themselves White British at the 2011 census, with 6.7% identifying as Indian, 7.3% Pakistani, 1.8% Bangladeshi, and 6% Black African or Caribbean (Office for National Statistics 2011c). These diverse communities are often found concentrated in particular geographical areas, and there are neighbourhoods where each of these non-White groups exceeds 40% of the population. Whilst many of these communities are long established a more recent development, following the enlargement of the EU, has been the growing number of migrant workers from eastern Europe (Longhi and Rokicka 2012). As of 2011 the greatest number of these people were from Poland (Krausova and Vargas-Silva 2013).

4.2 Overview of the approach and data used

This phase of the study was an area based, or ecological, examination of rates of ADF across the area served by the WMFS. The WMFS provided anonymised data on incidents of ADF attended by them between September 2010 and August 2013. These data were analysed with reference to a range of socio-economic and demographic data available from other sources, principally from the UK census of 2011 (Office for National Statistics 2011c) and the

Department of Communities and Local Government's (DCLG) indices of deprivation for 2010 (Department for Communities and Local Government 2011e). The choice of predictor variables used was based on the review of existing literature that is detailed in Chapter 3.

Analysis was undertaken using SPSS 22⁶ and began with an exploration of correlation between rates of accidental dwelling fire and each of the potential predictor variables. A major problem facing those analysing the distribution of fire is the potential for collinearity between some of the predictor variables used, and this was a problem that I encountered here. To address this issue I used principal component analysis to identify the main components explaining the difference between areas. I then selected suitable variables that loaded heavily on the identified components. These variables were used in multiple regression analysis, using the ordinary least squares method, to develop a model that was able to explain 32% of the variance in ADF rates using just three predictor variables, with very low levels of collinearity between them.

4.2.1 Choice of geography

As I highlight in section 3.2.3, when undertaking an area based study the size of the area used as a unit of analysis can have a considerable bearing on the results. The use of larger, more heterogeneous areas will mask internal variation, whilst smaller areas may see too few incidents of fire to facilitate useful analysis. Using small areas may also lead to the presence of extreme outliers, which will tend to reduce the apparent strength of associations.

For this study I adopted the census Lower Super Output Area (LSOA) as the unit of analysis as it is the smallest unit at which meaningful numbers of ADF incidents occur, with a mean of 3.17 incidents per LSOA ($n=1,680$) across the three year period from which the data were drawn. LSOAs are intended to have similar populations, and those in the study area had a median population of 1,579, with a minimum of 1,012 and a maximum of 4,965. The 5th and 95th percentile were at 1,308.05 and 2,098.90 respectively.

6 IBM Corporation: <http://www.ibm.com/analytics/us/en/technology/spss/>

LSOAs are made up by combining Output Areas (OAs), the basic unit of census reporting, and OAs themselves are defined after the census has been conducted in order to maximise their homogeneity. As a result, the boundaries of OAs and LSOAs can vary slightly from one census to the next. Whilst the census data used in this study derive from the 2011 census and use the 2011 LSOA boundaries, some of the other variables used, notably the DCLG indices of deprivation (see section 3.2.2) were only available using boundaries from the previous census in 2001. Where boundaries differed figures based on 2001 boundaries were converted to 2011 boundaries by taking a simple average where two or more LSOAs had been merged, or allocating the original score to all the new LSOAs where a single LSOA was split into more than one, following an approach adopted by Bywaters et al. (2014). Of the 1,680 LSOAs following the 2011 boundaries 67 had their indices of deprivation populated in this way.

4.2.2 Representing rates of fire

The WMFS incident data were first aggregated using the QGIS⁷ open source geographic information system to provide counts of ADF incidents for each LSOA. An index of ADF was then calculated for each LSOA using an approach adapted from Corcoran et al. (2013). This index represents the rate of accidental dwelling fire per household expressed as a percentage of the rate that would be expected were incidents evenly distributed. The advantage of using an index, rather than expressing a rate per 10,000 households for example, is that it gives an instant indication of how the rate of fire in each area compares to the average. That is, areas with an index above 100 experienced higher than average rates of ADF and vice versa.

To calculate the index the expected number of incidents (E_{LSOA}) was established for each LSOA by dividing the number of households in that LSOA (HH_{LSOA}) by the total number of households for all LSOAs across the study area, then multiplying by the total number of ADF incidents across the study area (equation 1). Next, the number of actual ADF incidents in the area ($fire_{LSOA}$) was divided by the expected value and multiplied by 100 to generate the ADF index (I_{LSOA}) (equation 2).

⁷ QGIS Development Team: <http://www.qgis.org/>

$$E_{LSOA} = \frac{HH_{LSOA}}{\sum HH} \times \sum fires \quad (1)$$

$$I_{LSOA} = \frac{fires_{LSOA}}{E_{LSOA}} \times 100 \quad (2)$$

The resulting ADF index immediately revealed wide differences in the rates of fire across the 1,680 LSOAs in the WMFS area. Indexes ranged from 0 to 562, with 170 of the 1,680 LSOAs having an index of greater than 200. That is, slightly over 10% of areas experienced a rate of fire in excess of twice that which would be expected if fire were evenly distributed. The distribution of the ADF index is further illustrated in [Figure 4.2](#) (page 55).

The use of the number of households in this calculation merits some further comment as it differs from Corcoran et al.'s (2013) approach, which employed household population (i.e. total population living in households). In considering the rate of incidents an appropriate choice of denominator is the population at risk. In the case of accidental dwelling fire this is, strictly speaking, the number of dwellings in an area rather than the number of people. In the UK census data the number of households in an area is closely related to the number of dwellings, with figures for the latter being derived from the former. The main difference between the two comes from unoccupied dwellings, which count as a dwelling but not as a household. The number of households was chosen as the denominator for ADF rates as this value was already included within the dataset as the denominator for several other statistics (see section 4.2.3). Across the county the mean difference between the number of households and the number of dwellings per LSOA is 3.1% and the Pearson's correlation coefficient between the two figures is 0.991.

A further point of note is that ideally the nominator and denominator should match, so the number of dwellings affected by fire should be used to calculate a rate, rather than the number of fire incidents affecting dwellings. Data relating to the number of dwellings affected were, however, not available. Most recorded incidents affect only a single dwelling and whilst it is possible that some affected more than one dwelling these are likely to be relatively few and to have little impact on results. Most fires remain relatively contained—

nationally, in 2014/15 only 4.9% of incidents of ADF spread beyond the floor on which they started (Home Office 2016a: Tbl. 0203).

4.2.3 Predictor variables

Variables related to each of the factors which I identified in the literature review in Chapter 3 were identified in data from the 2011 UK census (Office for National Statistics 2011c). Census data were obtained showing counts of either people or households in each LSOA and for analysis purposes these were converted to proportions to enable comparison across LSOAs of different sizes. Table 4.1 shows a summary of the variables used, along with the denominator used to convert counts to proportions. In order to keep this table legible individual ethnic groups have not been listed, but a full list of these can be found in Appendix C.

4.2.4 Deprivation

As I highlight in section 3.2.2, the issue of operationalising deprivation is far from straightforward. A number of census variables that represent specific, distinct aspects of deprivation were included in all stages of the analysis. For example, the proportion of people not having at least a level 2 qualification is an indicator of educational deprivation, whilst the proportion of people who have not worked for at least 5 years is an indicator of employment deprivation. The overcrowding index, which relates to housing deprivation, represents the difference between the number of bedrooms in a dwelling and the number of bedrooms that the household needs, based on a standard formula.

In order to try to capture the multi-dimensional nature of deprivation I adopted two different approaches. However, these were only used for correlation analysis, not for principal component or regression analysis, as using multi-dimensional variables in these procedures is problematic (see 3.2.2 for a discussion of the problems). The first of the two approaches is a statistic published as part of the UK census that represents the number of households in an LSOA experiencing 0, 1, 2, 3, or 4 dimensions of deprivation. The dimensions used in calculating this statistic are employment, education, health and disability, and housing. Notably, income is not considered directly in this statistic.

<i>Variable</i>	<i>Denominator</i>
Population	
Number of households	
Population density	
Lone parents households	Households
Households with social landlords	Households
People with poor or no English	Population aged 3 years or over
People for whom English is not their first language	Population aged 3 years or over
Ethnic groups (data for 18 groups, see Appendix C)	Population
People who have never worked	Population aged 16-74
People who have not worked for over 10 years	Population aged 16-74
People who have not worked for over 5 years	Population aged 16-74
People with no qualification	Population aged 16 years or over
People without at least a level 2 qualification	Population aged 16 years or over
Households experiencing 0, 1, 2, 3 or 4 domains of deprivation (5 variables)	Households
One person households	Households
One person households, aged 65 or over	Households
One person households, aged under 65	Households
One person households, various age groups (3 additional variables, see Table 4.3, page 57)	Households
Overcrowding index (6 variables)	Households
Households without central heating	Households
People who are limited a little or a lot by disability	Population
People whose health is bad or very bad	Population
People who were unemployed and seeking work in the week prior to the census	Population aged 16-74
People who were long term sick or disabled (economically inactive)	Population aged 16-74

Table 4.1: Summary of census variables used

The second approach to representing the multi-dimensional nature of deprivation was to use the indices of deprivation published by the DCLG (see section 3.2.2 for a discussion of these indices). Indices for each of the seven domains considered by the DCLG statistics were used, i.e. income; employment; health and disability; education, skills and training; barriers to housing; crime; and living environment. In addition, the index of multiple deprivation (IMD)

Box 2: Availability and the choice of predictor variables

I was prompted to reflect on the use of official statistics after teaching a quantitative methods seminar to a group of PhD students. The work of one of these students is focused on South Africa and she pointed out that there is some controversy about the accuracy of South African census data. Whilst I am not aware of serious issues with the UK census my reflections did throw up some realisations that are worth recording.

If my choice of predictor variables had strictly followed those identified in the literature I would have been unlikely to find any new associations with fire rates. One pattern that I did find, however, did not turn up in the literature—that the association between people living alone and fire rates is age dependent. So why did I include the variables that allowed me to find this? The answer is essentially because it was easy. When I looked for data on people living alone I was offered the option of breaking this down by age, so I took it. The discovery that the age of those living alone is important can be seen as the result of serendipity (Merton 1948), but it is also the result of the way in which census data are presented. Their presentation has, in effect, influenced my results by influencing the choice of variables that I investigated.

Another area in which the availability of data has influenced results relates to smoking. Despite the evidence for the role of smoking materials in fire initiation I did not include a predictor related to smoking prevalence. This was because I could not find one that was suitable. The only data I was able to find on smoking prevalence was not actually measured, but predicted based on socio-economic data and a known relationship between smoking and socio-economic factors. As such, it would not have usefully revealed an association that was not already being considered.

was included in the analysis. Of the eight indices only those for employment and income are scalar (Department for Communities and Local Government 2011b) and therefore the other six could only be used in non-parametric tests.

4.3 Spatial visualisation

My first step in getting familiar with the data was to use QGIS to visualise it spatially. I created maps of the West Midlands county showing the variation of key variables, beginning with the ADF index itself. [Figure 4.2](#) shows the distribution of the ADF index by LSOA through the seven local authorities that make up the WMFS area. [Figure 4.3](#) shows the distribution of the DCLG index of employment deprivation, again by LSOA. Reviewing these two maps it is clear that there are similarities in the spatial distribution of the two indices, ADF and employment deprivation, with higher values for each tending to concentrate around inner city areas. This immediately suggests the existence of an association between rates of fire and employment deprivation.

4.4 Correlation analysis and its results

To further explore the relationship between the ADF index and the range of potential predictor variables, two simple bivariate correlations, Pearson's r and Spearman's ρ , were calculated. As Pearson's r is a parametric test it was not calculated for those indices of deprivation that are ordinal rather than scalar, as ordinal variables are not suitable for use with parametric tests.

Due to the number of LSOAs considered ($n=1,680$) the threshold for testing the significance of both Pearson's r and Spearman's ρ was extremely low, rendering significance a poor discriminator of the importance of identified correlations. Using a one-tailed test, only four of the predictors considered had correlations that were not significant at the 0.01 level, and of those one was significant at the 0.05 level. In order to keep the results table manageable I have adopted a cut-off for r of 0.4, which is the lower limit of the range which Evans (1996) considers to represent moderate correlation, and those predictors with an absolute value of either correlation coefficient exceeding 0.4 are shown in [Table 4.2](#). From these results it can be seen that three identifiable groups of factors emerged as being strongly and positively associated with rates of ADF.

The first group of important factors concerns multiple aspects of deprivation. Whilst income, health and housing feature in this group worklessness is the aspect of deprivation which

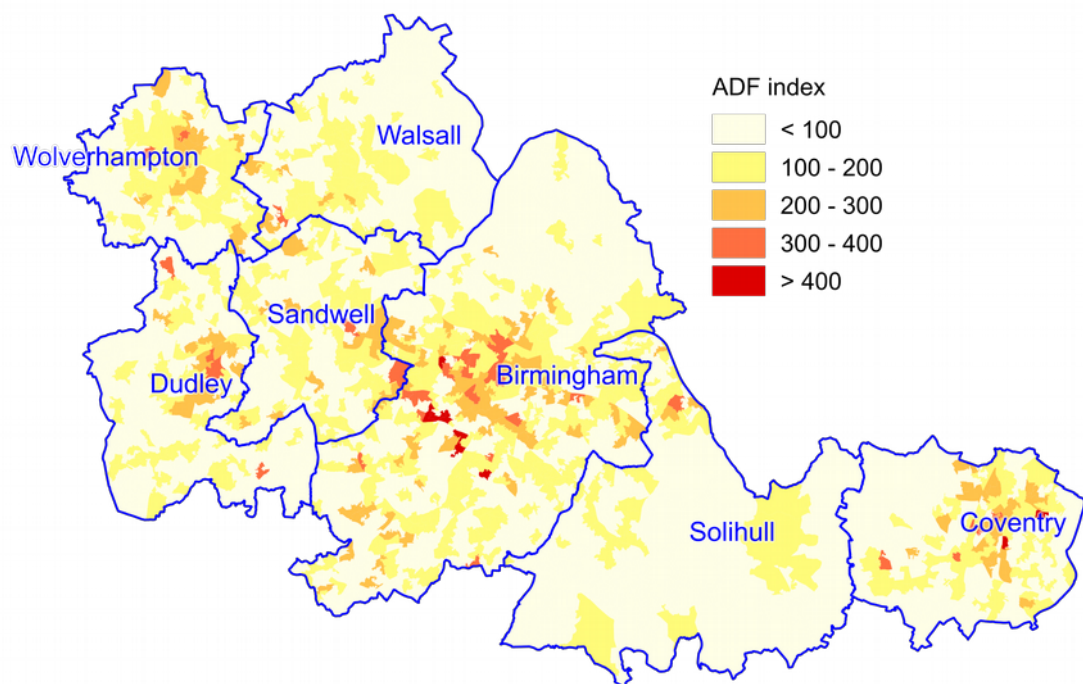


Figure 4.2: Distribution of rates of accidental dwelling fire

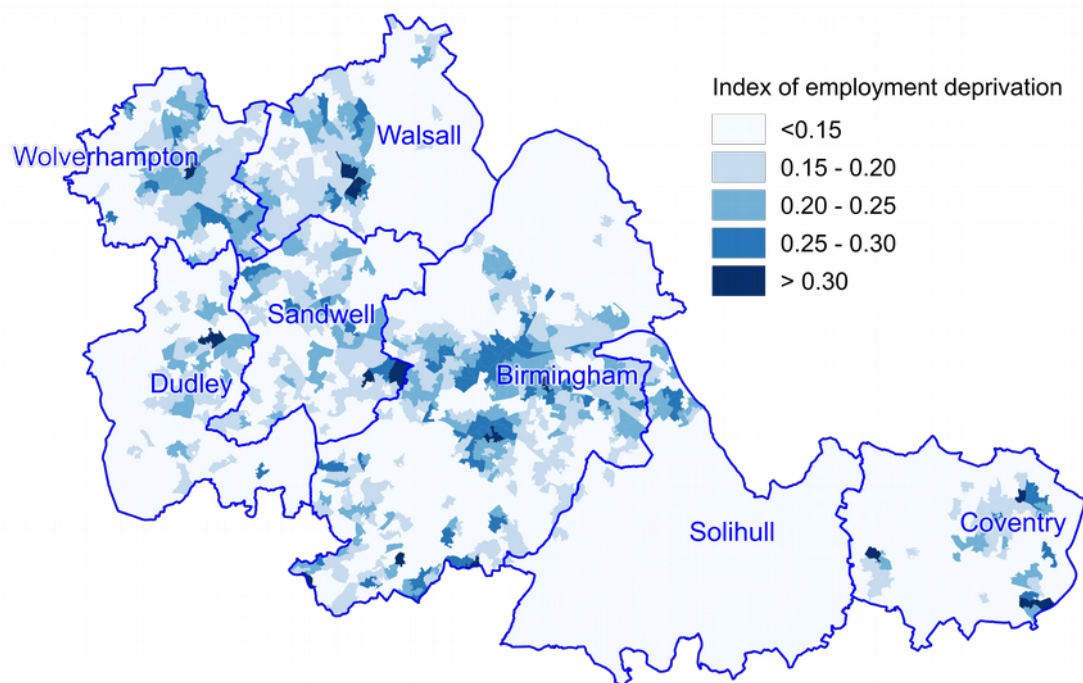


Figure 4.3: Distribution of employment deprivation

appears most strongly associated with high accidental dwelling fire rates. This result is consistent with previous UK based studies, which have noted populations with high levels of those never having worked as a predictor of fire at an ecological level (Smith et al. 2008), and have strongly linked parents' unemployment to child fatalities from fire (Edwards et al. 2006).

<i>Predictor</i>	<i>Spearman's ρ</i>	<i>Pearson's r</i>
Households with social landlords	0.425	0.440
Black African	0.449	0.461
Black Other	0.405	0.409
Black, all	0.440	0.467
Never worked	0.480	0.429
Not worked for over 5 years or never worked	0.420	0.407
Not worked for over 10 years or never worked	0.448	0.425
Households with 0 dimensions of deprivation	-0.439	-0.426
Households with 3 dimensions of deprivation	0.464	0.478
Households with 4 dimensions of deprivation	0.459	0.468
Households with 2 or more dimensions of deprivation	0.423	0.417
Households with 3 or more dimensions of deprivation	0.475	0.478
Single person households aged < 65	0.379	0.408
Single person households aged 35 – 54	0.359	0.408
Index of multiple deprivation	0.482	N/A
Index of income deprivation	0.477	0.475
Index of employment deprivation	0.459	0.465
Index of health deprivation	0.442	N/A
Overcrowding ≤ -1	0.472	0.396
Overcrowding index ≥ 2	-0.496	-0.476
Overcrowding index 0	0.506	0.510
Overcrowding index -1	0.471	0.417
Unemployed and seeking work in week prior to census	0.476	0.492
Long term sick (economically inactive)	0.410	0.397

Table 4.2: Notable correlations between predictor variables and the ADF index ($|r| \geq 0.4$)

A second group of associations comprised areas with a high proportion of the population identifying as Black African, Black Caribbean or Black Other. This confirms earlier UK

observations (Corcoran et al. 2013, Smith et al. 2008), although Smith et al. contend that the association was a result of collinearity with other factors. To test for the possibility of such collinearity in the present study I also undertook a partial correlation, controlling for income deprivation, employment deprivation, lone parents, households with social landlords and never having worked. Although controlling for these factors did considerably reduce the correlation coefficient it did not eliminate it (Black, all $r=0.204$), suggesting that whilst collinearity with other factors relating to deprivation and household structure does play a part it is insufficient to fully explain the relationship.

The final set of associations relates to areas with high concentrations of single person households. Links between fire rates and household structure have been noted before, including links to single person households (Higgins et al. 2012, Taylor et al. 2012) and to both single person households and lone parents (Smith et al. 2008). At an individual level fire fatalities have also been strongly linked to living alone (Holborn et al. 2003). However, such findings are not universal and other studies have found family type to have little association with fire rates (Corcoran et al. 2011). An important factor emerging from this study which has not been noted before is the influence of the age of individuals living in single person households. People living alone and under 65, and in particular those in the 35-54 age bracket, appear to be a group whose presence is strongly linked to higher rates of accidental dwelling fire. In contrast, a high concentration of those living alone and 65 or over shows a negative association with rates of fire. These results are presented in more detail in [Table 4.3](#).

<i>Age range</i>	<i>Spearman's ρ</i>	<i>Pearson's r</i>
Under 35	0.376	0.334
35-54	0.359	0.408
55-64	0.174	0.202
65 and over	-0.158	-0.134
All under 65	0.379	0.408
All ages	0.271	0.326

Table 4.3: Correlations between fire rates and number of single person households of various age groups

It is unclear why such a difference exists between working age (i.e. under 65) and older single person households. In general, those living alone under 65 are more likely to be men,

and more likely to have come to solo-living as a result of relationship breakdown, whilst those over 65 are more likely to be women and to have outlived a partner (Bennett and Dixon 2006). People living alone and of working-age are also known to have lower rates of economic activity than the general population, and to be more likely to smoke or drink (Smith et al. 2005). With a considerable proportion of dwelling fires attributable to smoking material (Gaught et al. 2016) or associated with drinking (Holborn et al. 2003, Taylor et al. 2012) this may be one mechanism linking the younger group to increased rates of fire. Indeed, there is good evidence that alcohol is an important factor in fire related deaths of those under 60 in particular (Bruck et al. 2011). It is clear, though, that with the number of people of working age living alone rising rapidly in Britain in recent years (Bennett and Dixon 2006, Smith et al. 2005) this finding has important policy implications and merits further investigation.

The weak but negative association seen between the over 65 group and rates of fire is interesting because it stands in contrast to findings elsewhere that older people are more likely to be fire casualties (Holborn et al. 2003, DiGuseppi et al. 2000, Higgins et al. 2012, Mulvaney et al. 2009). This suggests that older people are no more likely to experience a fire, but if they do then the consequences are likely to be more severe. Difficulty effecting an escape, greater physical vulnerability to injury and poorer recovery may be important factors in this.

4.4.1 Visualisation of correlation results

Figure 4.4 shows box and whisker plots which illustrate the relationship between rates of ADF and three of the variables identified as strongly and positively correlated with the ADF index: proportion of population identifying as Black (combined), the index of employment deprivation, and the proportion of single-person households aged under 65. For comparison, the proportion of single-person households aged over 65 is also included.

Box and whisker plots give an idea of the distribution of individual cases within the population. The categories (x-axis) represent deciles for the relevant variables, i.e. each category includes 10 percent of the LSOAs (168), ordered from least to highest. The line in the centre of each box indicates the median ADF index for that decile. The box extends from

the first to the third quartile. The ‘whiskers’ extend away from the box for 1.5 times the box’s height (i.e. 1.5 times the inter-quartile range), or to the edge of the distribution. Beyond the whiskers individual outliers are indicated. The orange line represents the rate of ADF that would be expected for all LSOAs were ADF distributed evenly.

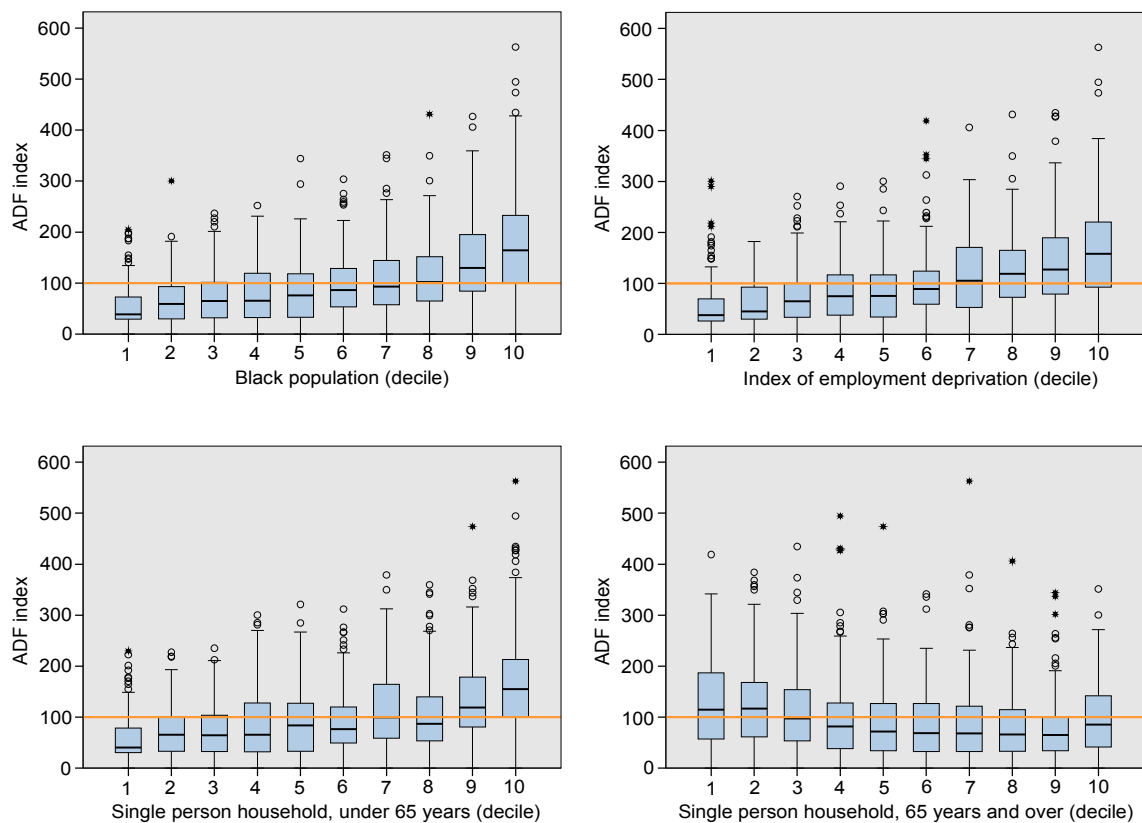


Figure 4.4: Box plots showing association between ADF rates and key variables

Two things stand out from these graphs. Firstly, the positive correlations are clear, with the median ADF index steadily increasing as the value of the predictor variable increases. Secondly, there is a great deal of variation within this. Looking at the graph for employment deprivation, for example, we can see that even in the lowest decile there are some LSOAs with a rate of fire that is around three times the expected rate, whilst nearly one quarter of the LSOAs in the highest decile have a rate of fire less than the expected rate. The implication is that whilst there is a clear relationship between the identified factors and rates of accidental dwelling fire, this relationship is far from simple and there are other factors exerting considerable influence.

4.5 Principal component analysis and its results

Many of the predictor variables used in the analysis measure similar concepts and there was clear evidence of collinearity between them. Unsurprisingly, for example, the proportion of residents with bad or very bad health correlates strongly with the proportion who are limited a lot by disability ($r=0.905$). In other cases a strong correlation was seen between predictors that measure quite different things, such as between high levels of overcrowding and high numbers of residents with poor or no English ($r=0.827$). These results pose a problem for carrying out multiple regression analysis as one of the underlying assumptions behind the method is that there is no collinearity between the predictor variables (Rogerson 2006). In order to address this problem I turned to principal component analysis (PCA).

PCA is a method for simplifying complex data sets. It seeks to reduce the number of dimensions in a data set by identifying the directions along which variance is greatest—the principal components (Ringnér 2008). In effect, PCA extracts a small number of variables, the principal components, which are not related to each other, each of which represents some combination of the input variables. Since these principal components are not related to each other PCA is valuable in addressing problems of collinearity in predictor variables (Graham 2003). The principal components themselves may have no obvious relationship to real world variables, sometimes making them difficult to interpret and limiting their practical application. This problem can be largely addressed by rotating the components such that the individual input variables load heavily on one component and very little on any other component—effectively aligning components to input variables (Field 2009).

I used PCA in an attempt to identify the important and unique components contributing to the differences between LSOAs. The identified components were then rotated using varimax rotation in an attempt to align real world variables to the components extracted. Of the several possible rotation methods varimax was chosen as it tends to ensure that each component has only a small number of variables with large loadings and many variables with small or zero loading (Abdi and Williams 2010) and is thus well suited to the purpose of identifying real world variables that link well to principal components.

The process of extracting useful results from the principal component analysis involved multiple iterations (see also [Box 3](#) on page 68). Initially all the available predictor variables were included in the PCA, other than the multi-dimensional variables representing deprivation and those variables that are ordinal, rather than scalar in nature. These were excluded because they are not suited for use in PCA. Later iterations used some composite variables formed by combining related ethnic groups that had loaded on the same component in earlier iterations; in particular, Asian Pakistani and Asian Bangladeshi were combined (i.e. the two variables were summed into a single new variable), as were Black Caribbean, Black African and Black Other. White British was excluded because of its tendency to load negatively on any component against which another ethnic group loaded strongly.

Finally, smaller ethnic groups were excluded in later iterations, leaving Asian Pakistani and Bangladeshi, Asian Indian, Black, mixed Black / White and other White. This decision was taken somewhat pragmatically because including a large numbers of smaller groups tended to lead to poor convergence in the varimax rotation. The decision on which groups to retain was not based on any particular arithmetic threshold, but rather on a mixture of observing which groups had loaded strongly against components with high eigenvalues in earlier iterations, reference to descriptive statistics and existing knowledge of the demographics of the West Midlands county.

I based the decision on how many components to extract on interpretation of the scree plot (Cattell 1966). This is a slightly subjective approach and varimax rotation is known to be somewhat sensitive to both over and under extraction (Wood et al. 1996). The advice of Costello and Osborne (2005) was followed, testing with one or two factors either side of the apparent point of inflection. Wood et al. (1996) advise erring on the side of over extraction, but also caution that this can result in factor splitting. They recommend including a number of dummy variables containing random numbers to protect against this and help identify break points. This advice was heeded and in some iterations 12 such variables were added and populated using the SPSS function `RV.UNIFORM(0,1)`. Scree plots generally suggested that five components be extracted, and the use of dummy random variables confirmed this.

The results of the PCA were somewhat sensitive to both the variables included, and to the number of components extracted. Nevertheless, some clear trends were evident. Two identifiable components consistently emerged as amongst those with the highest eigenvalues. The first of these loaded strongly on Asian Pakistani and Asian Bangladeshi population, overcrowding, and people who have never worked, with these variables not loading strongly against any other component. This component also tended to load strongly against high numbers of people with poor English and high numbers of people who have not worked for some years (but not necessarily never having worked), although these latter variables were less discriminatory, also loading against other components. It is worth noting in particular that the numbers of people of Asian Indian origin did not load highly on this component, but often loaded strongly on a separate component. The marked link seen between numbers of Pakistani and Bangladeshi residents and people who have not worked for some time may be at least partly connected to the very low levels of economic activity amongst Pakistani and Bangladeshi women in the UK, a factor that is not seen so strongly amongst Indian women (Dale et al. 2002). It is notable that a measure of unemployment, which only considers those who are seeking work, loaded only moderately against this component and also exhibited moderate loadings against several other components. This lends weight to the idea that it is the number of people making a cultural decision to stay at home, rather than those seeking but unable to find work, which is a unique feature of this component.

The second component to emerge consistently across iterations of PCA loaded highly on measures relating to poor health and limiting disability, and on measures relating to poor educational achievement. Why the two apparently quite different issues of health/disability and educational attainment seem to combine remains unclear but moderate (although not discriminant) loading against this component of single person households aged over 65 may offer a clue. Older people are both more likely to suffer ill health and disability, and, given the marked changes in educational patterns in the UK since the mid twentieth century (Bolton 2012), to have lower educational achievement.

A number of other components were found during the process. As I mentioned earlier, a component loading on the Asian Indian population was found to be distinct from the Asian Pakistani and Asian Bangladeshi population. A component loading on Black population (African, Caribbean and Other) was evident in several iterations, as was one loading on single person households aged under 65. This latter variable consistently loaded on a different component to single person households aged 65 and over, reinforcing the idea that these are groups with very different characteristics. Other variables that loaded highly and discriminately on principal components in several iterations were the number of lone parents and the number of people whose ethnicity was mixed White / Black. Notably, there was little evidence of a single component that encompassed all the factors often thought of as related to deprivation. Furthermore, the measure of income deprivation consistently loaded moderately on at least two components, making it a poor choice for discriminating between them. Thus it would seem that it is not possible to represent deprivation with a single measure, and that poverty can not be usefully separated from other factors.

4.6 Regression analysis and its results

Having identified a smaller number of variables that could describe the differences between LSOAs I moved on to using ordinary least squares regression in an attempt to build a model that could explain as much of the variance in rates of ADF as possible. The criterion variable for the regression was the ADF index. I used the forced entry method in SPSS, as this approach leaves the investigator to make decisions on which predictor variables to include or exclude, rather than relying on the software to make these decisions on a mechanistic basis.

As with the PCA, this process was iterative. The choice of initial predictor variables was based on the outcomes of the PCA. Subsequently, variables that had no significant impact upon the regression were removed; additional variables that had loaded highly in some of the PCA runs were introduced and tested; potential signs of collinearity were monitored, in particular the Variance Inflation Factor (VIF), and adjustments made where collinearity became evident. As a final check, because of the apparent lack of normality in the variables, bootstrapping was used to confirm results, using 5,000 samples and a confidence interval of 95%.

The first run of the multiple regression analysis used the following predictor variables: Asian Pakistani and Bangladeshi population (combined), Black population (combined), Asian Indian population, mixed White / Black population, people limited a lot or a little by disability, and single person households aged under 65. Asian Indian population proved not to be significant and for the second run that variable was removed and the number of single parents was added. At this point mixed White / Black stopped being significant, possibly because of collinearity with the single parent measure. I then removed mixed White / Black and tested the model with a qualifications measure. This proved not to be significant.

For the next iteration I added a measure related to long term worklessness (number of people who have not worked for over five years). The effect of this was to make the disability measure and that related to the number of Asian Pakistani and Bangladeshi no longer significant, whilst these two measures also showed signs of collinearity with the new worklessness variable. The value of R^2 also increased, rising to 0.326 from 0.311. Removing the variables related to disability and Pakistani and Bangladeshi heritage had no effect on R^2 , but improved the Variance Inflation Factors. Whilst still significant, the influence of the lone parents measure was considerably reduced. Finally, removing lone parents left only three variables in the model and had very little effect on the value of R^2 .

	Unstandardised coefficients		Standardised coefficients	VIF
	B	SE B	β	
(Constant)	-31.619	6.716		
Black population	249.165	30.440	0.211	1.638
Single person household < 65 years old	264.061	20.785	0.285	1.243
Not worked > 5 years or never	256.233	22.541	0.266	1.357

Notes: $R^2 = 0.323$; all coefficients $p < 0.001$

Table 4.4: Regression coefficients

The final model used as predictor variables the proportion of people of Black descent, the proportion of single person households aged under 65, and the proportion of people who had not worked for more than 5 years or had never worked. Together, these three variables

explained nearly one third of the total variance in the rate of ADF ($R^2 = 0.323$, adjusted $R^2=0.322$), with coefficients shown in [Table 4.4](#).

The standardised coefficients are all positive and are all of a similar magnitude, suggesting that the three predictor variables exert roughly similar levels of influence over the criterion variable. The Variance Inflation Factors (VIF) for all predictors are relatively low, indicating low levels of collinearity. This is supported by additional collinearity diagnostics, which can be seen in [Table 4.5](#). The highest variance proportion of a secondary variable on any particular component is 0.29, low in comparison to the primary variables on each dimension (shown in bold).

Although the standardised residuals fail formal tests of normality ($D(1,680)=0.63$, $p<0.001$) this is unsurprising given the large sample size ($n=1,680$) (Field 2009), and visual inspection of the distribution reveals a reasonable approximation to normality ([Figure 4.5](#)). Taken together these factors suggest that the model can be considered to be valid.

Dimension	Eigenvalue	Condition index	Variance proportions			
			(Constant)	Black popn.	Single person HH < 65yr	Not worked > 5 years
1	3.451	1.000	0.00	0.02	0.00	0.01
2	0.392	2.966	0.02	0.67	0.01	0.01
3	0.128	5.194	0.02	0.02	0.012	0.78
4	0.029	10.922	0.95	0.29	0.87	0.20

Table 4.5: Collinearity diagnostics

The proportion of variance explained by the model is less than has been found in some previous studies. Smith et al. (2008), for example, developed models explaining up to 69% of variance in rates of dwelling fires. There are a number of possible reasons for these differences. Most of Smith et al.'s models used much larger geographic units than in this study. The aggregation of data will tend to suppress the impact of outliers, resulting in greater explanatory power. Indeed, Smith and colleagues note that the one regression that they conducted at the same geographic level as that used here, LSOA level, explained

considerably less variation, and they postulate that the number of LSOAs experiencing no fires contributes to this effect. It is also possible that Smith et al.'s models are affected by collinearity. The variables used for the regression conducted at LSOA level were all from the DCLG indices of deprivation and covered employment, crime and disorder, education and living environment. An inspection of the same variables for the WMFS area reveals evidence of collinearity between the employment and education domains. Additionally, three of these variables are non-scalar, making their use in parametric statistical tests such as ordinary least squares regression questionable.

Notwithstanding the greater explanatory power reported by some authors, given the large number of potential influences on rates of fire, that three factors can explain nearly one third of the total variance is noteworthy. The strong role of human activity and behaviour in domestic fire initiation (Merrall 2002) suggest that a high proportion of random, unpredictable variance is to be expected. In this context, the explanatory power of this model must be viewed as considerable.

It is important to stress that the three predictors used in this model are not the only predictors that could be used to build a reasonable model. Each in effect

represents a single complex component and other predictors that load highly on the same component are likely to give similar results. The model presented is thus only one of several possible models, but it is nevertheless of value in understanding the uneven distribution of fire incidents within the West Midlands county and predicting the distribution of future incidents.

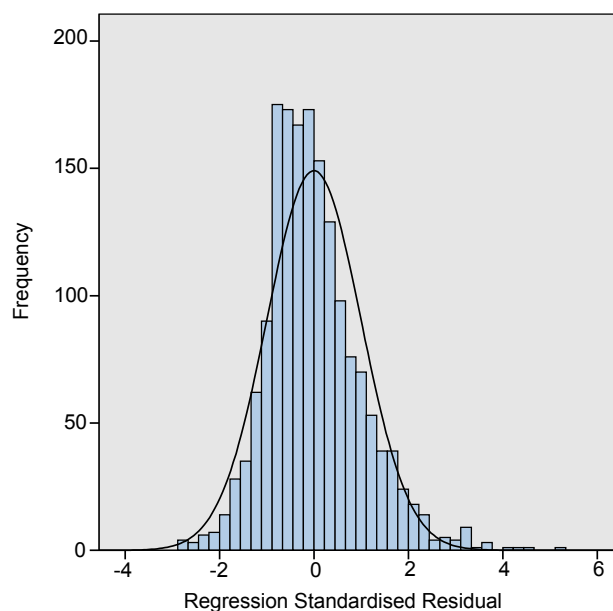


Figure 4.5: Histogram of standardised residuals, with normal distribution curve superimposed

4.7 Limitations

There are a number of important limitations that must be borne in mind when looking at these data. Firstly, the investigation was area based, and as I discuss in section 3.2.3 such studies are vulnerable to ecological fallacy (Greenland and Robins 1994). The fact that areas with high numbers of under 65s living alone have high rates of fire does not necessarily mean that it is those solo-livers who are experiencing the fires, merely that they are living in the same area.

A further limitation comes from the fact that this study effectively involves a whole population. As the cases included do not represent a sample taken from some wider population it is not strictly possible to generalise to a wider population from these results—the results are specific to the West Midlands county. Whilst similar predictors may be found in similar populations, any attempt to transfer these findings to other areas should be qualified by a careful consideration of cultural context and demographic make-up. This is not merely a theoretical caution as there is existing evidence that predictors of fire rates can be sensitive to context, which I have discussed earlier (see 3.3.1).

The study considered only dwelling fires attended by the WMFS. However there is evidence that a relatively small percentage of fires occurring in the home are reported to the fire and rescue services (Ford 2004, Department for Communities and Local Government 2013)⁸. It is important to be clear, therefore, that what is investigated here is a subset of all domestic fires. However, it is reasonable to assume that those fires that do result in calls to the FRS are the more serious ones and the ones most likely to result in substantial loss or injury. They are also the incidents that are of the greatest importance to FRSs in terms of resource planning, and those upon which services need to focus to manage demand.

4.8 Conclusions

Despite a substantial reduction in rates of fire in the UK in recent years it is clear that in the large urban area that formed the basis for this investigation there continues to be considerable inequality in the way in which accidental dwelling fires are distributed through

⁸ See section 3.2.1 for a more detailed discussion of this topic

society. Whilst many socio-demographic factors correlate with rates of ADF, their high levels of collinearity make it difficult to discern, on the basis of correlations alone, which factors are most useful in understanding the distribution of fire and targeting future interventions.

Box 3: On judgement and statistics

One of the important things that I learned in carrying out this investigation was that statistical analysis is not as black and white as it is sometimes portrayed to be. It is not a purely mechanistic and technical process involving the following of pre-determined, objective procedures and guidelines. Principal component analysis and regression analysis in particular proved to be sensitive to which variables were included and I had to exercise considerable judgement in making choices. As Costello and Osborne (2005: 1) note about exploratory factor analysis, of which PCA is an example, it “is a complex procedure with few absolute guidelines and many options”. Getting to the results presented here involved many iterations and a great deal of trial and error. PCA in particular was a process which required me to spend a lot of time working with the sizeable data set, getting to know the data and how the variables interacted. As my familiarity with the data increased the judgements that I made became more informed, each iteration building on the learning from previous iterations. It is perhaps the nature of a process which aims to simplify complex data that there is often more than one answer—more than one possible simplification. Deciding on which one to use is a judgement call.

A few authors dealing with method acknowledge that judgement, or even intuition, is a part of statistical analysis (e.g. Costello and Osborne 2005, Field 2009). Gorard (2006) goes further, arguing that subjective judgement is inherent in most analysis—even the choice of the level to use to test for significance is a judgement call. This is something which is rarely acknowledged in writing up studies, however. Statistical analysis is often presented as an objective activity following clearly defined rules. Consequently, discovering the extent to which I had to make judgements when working with these data, judgements based on building a deep familiarity with them over time, came as something of a surprise to me.

Principal component analysis provides a useful tool to help understand the links between the many potential predictors available and to identify a small number of these that act in relative independence. By combining PCA with linear regression it is possible to produce a model that uses a small number of predictor variables whilst explaining around a third of the variance in rates of fire at a small neighbourhood level.

In line with earlier work, this quantitative part of my study confirms that in the West Midlands the ethnic make-up of an area, particularly the proportion of Black African and Black Caribbean residents, and the economic deprivation present in an area, most notably levels of worklessness, are strongly indicative of rates of fire. In addition it reveals a clear, and previously unreported, link to the proportion of people in middle age groups living alone in an area. This is an insight that is of considerable value to fire and rescue services, made all the more important by the fact that this latter group is growing in numbers in the UK.

The findings reported in this chapter have considerable practical value in helping FRSs and other agencies to understand where best to target future fire safety interventions. Furthermore, an understanding of which communities are most affected by elevated rates of fire can assist in directing further research which addresses the question of how best to reach and engage with affected communities and effect changes in behaviour within those communities. The second phase of my research begins to address this point by focusing in on one group of neighbourhoods to investigate the nature of the relationship between the communities living there and both the FRS and the wider state, and to identify some of the barriers that stand in the way of effective engagement. Whilst the second phase is rooted in the earlier phase, which informed the choice of neighbourhoods, it took a very different approach to investigation, one of intensive, interpretive and qualitative research. It is to this work that I now turn.

Chapter 5: Fieldwork: generating qualitative data

5.1 Introduction

Having established the continued existence of inequality in the distribution of dwelling fires in the West Midlands, the second phase of my research focused in on one neighbourhood to explore the nature of the relationship between people living in the area and the West Midlands Fire Service (WMFS). It sought to understand how people perceive the service and make sense of their interactions with it, and to establish whether those perceptions hamper the ability of the service to effectively engage with communities and work together with them to improve fire safety. In doing so it hoped to highlight one possible mechanism by which the inequalities uncovered in the first phase are perpetuated.

This second phase of the work was thus concerned with perceptions, with the meaning that people attach to the things they experience in the world. As such, I shifted to using an interpretive approach, to seeing those perceptions as being intersubjective realities that are constructed by those involved. This move in epistemological position brings with it a change in the nature of the data—the second phase of the research was primarily concerned with qualitative data. In this phase my main focus was on gathering peoples' stories through informal conversations with them, supplementing those stories with a mixture of field observation and some documentary evidence to build a picture of the context in which those stories arise.

Interpretive research is emergent in its nature (Schwartz-Shea and Yanow 2012), with the methodology constantly being refined in response to the realities found in the field. Inevitably then descriptions of the methods used become complex, and are bound up with accounts of the field and the impact that working in the field had on the development of methods. For this reason my account of my methodology spans two chapters, this one and Chapter 6, and is in places interwoven with findings that arise from the process of fieldwork or had an important influence on the approach to fieldwork. Chapter 6 deals principally with the approach to analysing the data, whilst in this chapter I address the process of generating the data in the field. I begin by outlining the way by which the locus of research was chosen,

a process which links the positivist, quantitative approach of the first phase of the research to the interpretive, qualitative approach of this phase. I then move on to outline the approach to recruiting participants, before describing the types of data that were generated in the field and the ways in which their generation was facilitated. As many of those I wished to engage with were from groups which have often been considered 'hard to reach' by state agencies (Flanagan and Hancock 2010), with evidence that group members consciously avoid engaging with the state (Canvin et al. 2007, Mathers et al. 2008), I will highlight some of the ways in which I sought to avoid being seen in the same light as state agents in an attempt to facilitate engagement. The process of data generation was far from straightforward and my experience of that process itself contributes valuable findings to the study. I will consider some of these in this chapter, as well as reflecting on how my own character affected the process. Finally, I will discuss some of the ethical issues involved in a study such as this, particularly with regard to informed consent and confidentiality.

5.2 The choice of neighbourhoods

In the earlier phase of the research an extensive data set was used to explore the distribution of fires across the whole of the West Midlands Fire Service area. This second phase takes a much more intensive approach to data collection, and practically it was therefore necessary to focus in on a much smaller area. Principal amongst the aims of the research was to develop an understanding of how the relationship between communities and the WMFS may affect the ability to reduce the identified inequalities in the distribution of fire. To that end, this intensive phase focused on a neighbourhood that has both higher than expected rates of accidental dwelling fire (ADF), and several of those characteristics associated with high rates of fire that were identified in the extensive phase, and detailed in Chapter 4.

An initial selection of possible areas of focus was based on the proportion of the population identifying as Black African or Black Caribbean, the proportion of the population living in single person households and aged under 65, and the proportion of the population that had not worked for over 5 years or had never worked. From the 1,680 Lower Super Output Areas (LSOAs) a 'long list' was drawn up of 68 LSOAs which had all three of these characteristics in the top quintile. These were then mapped using the QGIS open source geographic

information system and compared to areas having a rate of accidental dwelling fire in excess of twice the expected rate. This allowed areas that have both high rates of fire and characteristics associated with high rates of fire to be quickly identified.

LSOAs are designed for statistical analysis and although they are intended to be as homogeneous as possible in terms of household tenure and dwelling types (Office for National Statistics 2011a) their boundaries do not necessarily reflect those of neighbourhoods as perceived by the residents. Having identified LSOAs that had suitable characteristics the next step was to begin to refine this into neighbourhoods that have some meaning to those living there. The initial aim was to find several areas that were relatively compact and appeared to have easily definable boundaries. To begin to develop a sense of neighbourhood extent I used a mix of examining maps, speaking to those who know the areas, including fire service staff and colleagues who have lived or worked there, and visiting and walking around the areas. At this stage, however, nothing was set in stone. This was firstly because how an outsider perceives neighbourhood bounds and how a resident perceives them may be very different. Sense of neighbourhood itself forms part of what I am interested in, and, indeed, asking people to talk about their perceptions of neighbourhood formed part of the conversations I was to have with participants. Ultimately the bounds of neighbourhood that are most relevant here are not the ones that I perceive and define, but the ones that those who live there perceive.

The second reason to not set boundaries in stone at this point was rather more pragmatic. As Schwartz-Shea and Yanow (2012: 71) note, “interpretive research designs must be flexible due to field realities, stemming from participants’ agency”. If finding participants was to prove particularly difficult in one area, but an opportunity arose in an area nearby that met the selection criteria just as well, then flexibility on boundaries would allow that opportunity to be taken. The reality of fieldwork was to prove time and time again the relevance of Schwartz-Shea and Yanow’s advice.

Through the process outlined three neighbourhoods were initially identified as potential areas to form the focus of the interpretive phase of the research, one in Coventry, one in Birmingham and one in Sandwell. Each of these three areas is briefly described below.

5.2.1 Manor Farm Estate, Coventry

Manor Farm was an obvious choice for the study. The estate falls entirely within LSOA E01009709 and the estate and LSOA boundaries correspond well. 30.7% of the LSOA's population identified as Black at the time of the 2011 census, 42.1% had not worked for at least five years and 28.7% of households were single people aged under 65, placing it in the top decile for all three factors. The Index of Multiple Deprivation of 51.68 falls in decile 9 and with an ADF index of 427 it has the sixth highest rate of accidental dwelling fire of all LSOAs in the WMFS area.



Photo 5.1: Architecture of Manor Farm

During the initial map review the distinctive layout of the houses and the walkways between them immediately stood out as being a clearly identifiable area. My first visits confirmed this — the estate has a characteristic layout and architecture that differs markedly from surrounding areas, giving a strong sense of where it begins and ends, the majority of the buildings being low rise and timber clad ([Photo 5.1](#)).

Although distinctive, Manor Farm is not isolated. It is close to the areas of Wood End and Henley Green, both of which have similar demographic characteristics and high rates of accidental dwelling fire, providing the opportunity to expand the study to neighbouring areas if need be. These three areas, together with Deedmore, formed part of a New Deal for Communities (NDC) neighbourhood regeneration programme which invested £54m between 2001 and 2011 (Homes and Communities Agency 2012). The NDC area is often referred to, in policy circles at least, as the WEHM area, an acronym of Wood End, Henley Green and Manor Farm. The active resident involvement in the former NDC programme and in its successor, the Moat House Community Trust (MHCT), provided one route for gaining initial access to longer-term residents of the area.

5.2.2 Benmore Estate, Birmingham

The initial map review identified as a possible site for research a large area made up of several LSOAs around Birmingham's Balsall Heath area. Walking this area in an attempt to get a feel for the extent of the neighbourhood it became clear that it was impractically large and diverse, with no clear boundaries or centre. Rather, the area appeared to consist of several distinct neighbourhoods of markedly different character. One such neighbourhood was the Benmore Estate, situated just outside what is generally seen as Balsall Heath, to the west of the Pershore Road.

Benmore makes up a large part of LSOA E01008995, the LSOA with the highest rate of accidental dwelling fire in the WMFS area, with an ADF index of 562. The LSOA also falls in the top decile for population identifying as Black, for single person households aged under 65 and for the Index of Multiple Deprivation. It is in the ninth decile for people who haven't worked for over five years. A largely self contained estate bounded both east and west by major roads, Benmore consists of a mix of low rise and high rise blocks of flats and maisonettes built in the 1960s. An initial search suggested that there was an active residents' association on the estate, but this turned out to have ceased functioning. The estate is largely owned and managed by Optima Community Association, whose Resident Involvement Officers provided a potential initial point of contact.

5.2.3 *Windmill Lane Estate, Smethwick*

The Windmill Lane Estate was the least well defined of the three areas initially considered. It forms part of LSOA E01010063, an area with an ADF index of 373 (13th highest in the WMFS area), top decile figures for IMD, Black population and people not having worked for over 5 years, and 9th decile figures for one person households under 65. Much of the LSOA's area is commercial and a walk around identified the Windmill Lane area as the only clearly residential zone. It consists of a mix of post-war low rise blocks of flats with some earlier terraced houses and one tower block. An active social enterprise focused on community building and supporting vulnerable residents provided a potential initial point of contact for recruiting participants. A relatively new community building, the CAP Centre, was identified as another potential route in to the area, particularly as the building's history appeared to lie in supporting the African and Caribbean communities. However, further investigations revealed that the Centre's activities have been refocused as a result of funding constraints, and now concentrate on income generation through hospitality and a small number of specific community activities for which funding is still available.

5.2.4 *Focusing in on Manor Farm and Wood End*

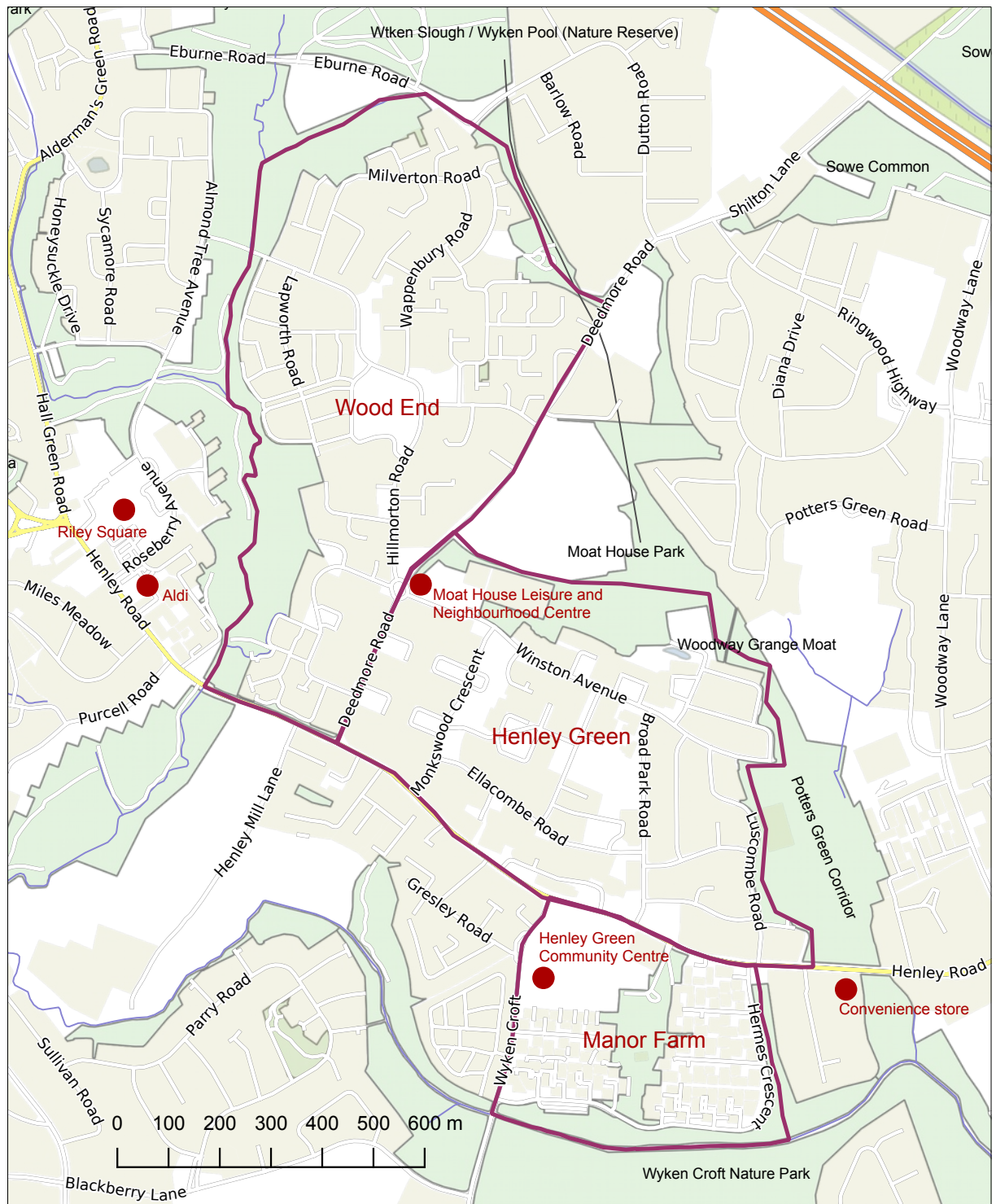
The initial plan was to conduct studies in all of the three areas described. However, it quickly became clear that there were significant practical problems with this. With the neighbourhoods and groups identified being amongst those traditionally considered 'hard to reach' it was never going to be straightforward for me to make contact with people and recruit participants, but the process proved to be slower and more difficult than expected. It became evident that it was going to be necessary to spend a lot of time in the areas in order to build up recognition and trust (Miller 2004). With the three areas being geographically separated it was not possible to sustain the sort of presence necessary across all of them—I was simply spread too thinly.

Reflecting on my choice of areas I realised that there was no particular methodological reason for choosing three. The aim was not to conduct a comparative study, but rather to develop an in-depth understanding of issues of engagement for communities affected by high rates of fire. Whilst there might be some benefit in drawing participants from different

parts of the county in terms of exposure to a broader spread of participants, this was outweighed by the practical difficulties involved and by the fact that the depth of my research would be diminished if I tried to cover too many areas. After several weeks of attempting, with limited success, to recruit participants across all three areas I decided that it would be more productive to concentrate my efforts on one area, enabling me to spend more time there and to develop a deeper understanding of it.

The area chosen was Manor Farm, a choice that would eventually be expanded to include nearby Wood End and Henley Green. The choice was partly pragmatic. I had had a better response from potential gatekeepers in Manor Farm, receiving warm welcomes from a local residents' group and from the Moat House Community Trust (MHCT), a third sector organisation involved in community engagement in the area and the successor body to the NDC board. In contrast, I had had very limited success with reaching gatekeepers in Benmore Estate or Windmill Lane. The Benmore Estate Residents' Association had disbanded and the Resident Involvement Officers at the housing association managing the estate were able to offer me limited help, whilst advising that engagement on Benmore Estate was particularly problematic for them. With no gatekeepers identified at all after several weeks pursuing Benmore Estate further seemed pointless.

In Windmill Lane, I had a lengthy and interesting conversation with a member of staff at the CAP Centre from which I learned that the Centre had had to scale back its activities considerably and was unlikely to be able to help me reach residents. Several contacts I had initially made in Sandwell all directed me towards a single social enterprise and I made contact with this organisation and attended a drop-in event that they ran. It was clear, though, that the group was primarily focused on engaging with elderly residents, most of them White, with its main aim being to provide support for senior citizens. With all enquiries about community groups in the area pointing me back to the same group and that group having a clear and narrow focus it seemed unlikely that I would be able to reach a spread of potential participants in Windmill Lane.



In addition to Manor Farm having produced the best early results in my attempts to identify gatekeepers, of the three areas originally identified it was also the easiest for me to travel to. Furthermore, I had gained some useful background from a colleague who grew up on the estate. The area's very clear boundaries also meant that it lent itself well to a more focused

approach. There were, however, difficulties with Manor Farm. Principal amongst these was the lack of any clear neighbourhood focal point. Within the estate itself there are no shops, no cafés, no community centre—in short, nowhere to just ‘hang out’ and meet people. There is a small supermarket just outside the estate, and Henley Green Community Centre also sits just outside. Whilst this latter is the focus of several events, notably a weekly ‘Tea and Talk’ drop-in social event, it does not facilitate casual social contact. The café that was once housed within the community centre has closed and access to the centre is necessarily tightly controlled because a nursery shares the building (see [Box 8](#), page 178 for further reflections on this). Because of these factors, having narrowed my focus down to Manor Farm I was eventually to widen it again to include nearby Wood End and Henley Green and the adjacent shopping precinct at Riley Square. Significantly, this wider area takes in the well-used Moat House Leisure and Neighbourhood Centre, which includes a spacious and welcoming café, as well as another café within Riley Square that is run by a local activist and bills itself as a ‘community café’. Spending time in these two venues proved to be a valuable way of getting known at least amongst the groups frequenting them. A map of the study area, indicating the location of some of these features, is shown in [Figure 5.1](#). The neighbourhood boundaries shown in this map derive from conversations with residents, which are discussed in more detail in section [8.6.4](#).

5.3 Recruiting participants

The recruiting strategy which I adopted can be characterised as a hybrid of purposive and opportunistic approaches (Ritchie et al. 2003). The aim was to engage with people resident in the target area, and specifically to focus on reaching residents who represented the three groups which had formed the selection criteria for the target area—people of Black African and Black Caribbean descent, solo-livers under 65 years of age, and the long term unemployed. As will be seen as I describe some of the difficulties encountered in accessing these groups, and the decisions taken to work around those difficulties, the reality of field work meant that the approach had to be tempered by a great deal of flexibility. I had to accept that fieldwork was messy and rarely under my control, to respond to and make the most of opportunities as they arose. That is, I had to adopt an opportunistic sampling strategy (Ritchie et al. 2003).

The process of recruiting participants began with approaching organisations working with the communities living in each of the three areas initially targeted. These were identified through a mixture of internet searches, conversations with colleagues familiar with the areas, networking at events, and by walking the areas. Organisations identified included community centres, registered social landlords, and a Community Interest Company focused on providing community sourced, co-produced care for elderly and vulnerable residents. In two areas the organisations initially contacted ran drop-in social sessions for residents and I took up invitations to attend these. This proved to be a valuable way to ‘get my face known’ and begin building relationships. A community centre co-ordinator who ran one such session also proved helpful in brokering introductions to other groups using the community centre. It became clear, however, that the people attending the drop-in sessions represent a particular sub-set of the areas’ populations and I needed to seek alternative ways to reach other groups. In particular it is notable that those attending the drop-in events tended not to be those who are reticent to engage with public services, perhaps since the organisations involved are both third sector organisations with close ties to public services. It was also evident that whilst I had some interesting conversations with those attending the drop-in events, and received the invitation to join a community Facebook group, none of them were keen to take those conversations further. It was at this point that I made the decision to focus on Manor Farm.

5.3.1 Leafleting

My next big drive at recruiting participants involved delivering a leaflet to all the low rise dwellings on the Manor Farm estate. A copy of the leaflet is included at Appendix D, and I delivered a total of around 400. I did not anticipate an overwhelming response to the leaflet. This was in many ways not the point. I delivered all the leaflets myself and deliberately chose a couple of warm summer days to undertake the task. This gave me an excuse to spend two days walking around the estate at a time when I hoped people would be more likely to be out and about—I was seeking to engineer some informal conversations with residents that I could use as a way in to asking them to arrange a longer conversation.

The approach was less successful than I had hoped. Despite the relatively high rate of unemployment on the estate, for much of the day there were few people around and my interactions with residents were limited. The number of people about did pick up considerably towards the end of the day when people came home from work. I chatted briefly with a few, and generally found people were happy to take the leaflet, even occasionally coming out to take it from me as I walked up the garden path. I again found, though, that those who did stop and talk to me on the street were not keen to commit to longer conversations later.

A further problem concerned Caradoc Hall, the single high rise block that is situated in the centre of the estate. Access to this block is controlled and I was unable to get in to deliver any leaflets there. Indeed, I never succeeded in gaining any access to Caradoc Hall, and discovered later in the research, when I spoke with a local police officer, that even the police have difficulty gaining access. This is particularly significant because most of the low rise dwellings are houses and bungalows with multiple bedrooms, and therefore unlikely to be occupied by people living alone. Caradoc Hall includes a large number of single bedroom flats, and is thus likely to represent a high proportion of those on Manor Farm who live alone.

5.3.2 The prayer group

Through my contact with the co-ordinator of a local Community Centre it was suggested that an approach to a prayer group that used the Centre might prove a useful road into the local African community, the prayer group being largely made up of Tanzanians. The Centre co-ordinator introduced me to the group's pastor, who was amenable and said that he would ask any members of the congregation who were interested to contact me. After some weeks I had heard nothing, so popped back into the Centre at a time I knew some of the group's leaders would meet. The Pastor was unable to get there that evening but I had a useful conversation with another group leader, staying on for some of the prayers. This led to an invitation to come along to the social gathering following Sunday prayers, which in turn led to a number of useful conversations.

5.3.3 *Snowballing*

As access through organisations and gatekeepers was unlikely to take me directly to those least likely to engage with public services I set out to use a snowballing approach (Atkinson and Flint 2001), asking existing participants for suggestions of further participants, extending outwards and away from organisations first brokering contact. This approach is not without its difficulties, an important one of which is that suggestions for future participants are likely to remain within the current participant's existing social network, and so may tend to exclude some groups (Browne 2005, Schwartz-Shea and Yanow 2012) and limit exposure. Noy (2008) has suggested that this in itself may lead to a valuable understanding of social networks, a point echoed by McLean and Campbell (2003), who particularly note that different ethnic groups appear to respond best to different approaches to recruitment. With this in mind I was careful to record the way in which each participant was recruited.

The reality proved to be somewhat different. Suggestions for future participants were not so much restricted to the current participant's social networks as they were simply absent. Reasons for this seemed to vary. A couple of older people recruited through the leaflet drop simply said that they did not know anyone, and in one case isolation was a theme that had come up at several points during our conversation. Indeed, it is tempting to suggest that isolation may have been part of the motive for responding to my leaflet coming through the door. In other cases, there appeared to be a degree of self censorship involved. One young man from Manor Farm told me that no one he knew would open up to me because "you're not from 'round here", whilst others ran through a list of possibilities, discounting each one – too much going on in his life, not the sort you want to speak to and so on. It felt at times as if there might be a reticence to suggest anyone for fear of being seen to have helped me or talked to me.

On the other hand, whilst most of my active requests for further contacts came to nothing, a number of people did introduce me to others unprompted. When I arrived at the home of Robert, a community activist in Wood End, he had invited two neighbours round to join in the conversation, and later took me on a tour of the area, visiting another family in their home, stopping to chat with people on the street and introducing me to several shopkeepers.

At my first visit to the Tanzanian prayer group's Sunday prayers the man I had originally made contact with introduced me to a woman who he thought would be interested in talking to me (based, I suspect, on the fact that she herself was preparing a PhD proposal), who in turn introduced me to several other members of the congregation. Even here, though, I struggled to persuade people to arrange further meetings and had to rely largely on short conversations over masala tea during the social gathering that followed Sunday prayers each week.

5.4 Types of data generated

5.4.1 *Conversations and field notes*

The conversations that I had with people in the field, and the recordings and field notes that arose from those conversations, made up the most important of the data generated in the qualitative phase of the research. I set out into the field seeing the principal research instrument for this part of the project as being the lightly structured, focused conversation. The use of the term 'conversation' is deliberate. Whilst a focused conversation on a specific topic is, to all intents and purposes, an interview (Qu and Dumay 2011), the term 'interview' potentially carries more negative overtones for some. McLean and Campbell (2003) note that several of their participants approached meetings with an expectation of very formal, structured interviews born of past experience of the social security system. The term 'interview' might also be associated with police interviews by some potential participants. In an attempt to avoid association with the state and authority then, the term 'conversation' was used throughout the process of conducting research, and that convention is continued here.

I adopt the term 'lightly structured' to position the conversations towards the less structured end of the broad spectrum of approaches encompassed by 'semi-structured' (Bryman 2004). The intention was to create a comfortable, informal atmosphere that felt non-threatening. Questions were as open-ended as possible, leaving ample space for participants to recount their stories. Conversations were, as Alvesson (2003: 13) puts it, "loosely structured and open to what the interviewee feels is relevant and important to talk about, given the interest of the research project". Such conversations do not assume that the investigator knows at the outset what all the relevant questions are (Qu and Dumay 2011). Rather, they follow the iterative

nature of interpretive research, allowing new topics to emerge from the data as research progresses and for those topics to be explored further (Schwartz-Shea and Yanow 2012), an approach with some links to grounded theory (Corbin and Strauss 1990). Even when research may go off in unexpected directions, though, it is important to have a sense of where it will start (Shenton 2004) and I therefore entered into conversations with a clear, albeit evolving, set of topics that I wanted to explore, summarised in Appendix E. One important way in which the evolution of topics took place relates to the way in which the research question for this interpretive phase of the project evolved, broadening from an early focus on the community's engagement with the fire service to encompass community engagement with public services more generally (see section 2.4.2). Alongside that move a shift in the way in which I brought up questions about the fire service became necessary, a point that I will discuss in more detail as I look at the findings and why the change was needed (see in particular section 7.3.1).

At the outset of fieldwork my intention was that conversations would be face-to-face and one-to-one. This decision was driven largely by a desire to ensure confidentiality by conducting conversations in a setting where they were unlikely to be overheard, helping to create an environment in which people might perhaps reveal things that they would not want widely known. This approach does have an important down side in that by setting apart time and space to conduct the conversation data are gathered outside of the everyday lives of participants (Soss 2006). The context of the conversation itself becomes something different and may form part of the way in which both I and those I am talking with view the interaction. This in turn makes it more difficult to interpret the conversations in the context of the lives of those involved. In an attempt to compensate somewhat for this effect the choice of setting was left entirely up to the participant, so that that setting would be as comfortable and familiar as possible. This could be a room in a community centre, a café, at home, or walking around the neighbourhood, and since both the decision on setting and the process of reaching it can contribute to understanding some of the context of stories, I made field notes of conversations around this topic.

The reality of fieldwork, however, proved to be considerably more messy. I found that whilst people I met were often happy to talk to me informally and in the moment about issues I was interested in, few were willing to set aside a block of time to meet separately and continue the conversation in the kind of context I had originally envisaged. Even with those who did set aside time, the realities of life in the communities in which I was working meant that conversations were rarely one-to-one. A partner was present, a neighbour popped round and was drawn into the conversation, or I was taken round to meet other neighbours whom the person I had set up the meeting with thought I should talk to. It soon became clear that my carefully laid plans would have to be amended in favour of the flexibility that Schwartz-Shea and Yanow (2012) counsel.

The reality, then, was that conversations took place with several people at once and in groups; they took place in crowded cafés, and on the street outside people's homes; they were sometimes planned, but more often took place on the spur of the moment; they lasted a couple of hours or they lasted a couple of minutes. Those unplanned, spur of moment chats became important data, as did the way in which people negotiated taking part or not. The study moved from the original intent of being focused, lengthy, one-to-one conversations to become a mix of such conversations with much shorter interactions and overt participant observation. This shift also necessitated revisiting some of the questions of ethics, a point I will consider in more detail later in this chapter (section 5.6.2).

Wherever possible, and when participants agreed to it, conversations were recorded using a portable audio recorder. Audio recording enabled me to focus on listening and engaging in the conversation, rather than note taking. It is also more complete in its record and captures much more of the nuance of intonation and expression than do notes. However, the focus that emerged on informal and impromptu conversations made the use of audio recording problematic. I considered it important to gain explicit consent to record, a process which can be facilitated for pre-arranged conversations. With more spontaneous conversations, however, it is not possible to negotiate questions of consent in advance of a conversation that you do not yet know will take place. Once it becomes evident that the conversation is taking place, steering it away from its main topic towards a conversation about audio recording and

consent risks interrupting its flow and changing its context, thus weakening the value of the data generated. In these circumstances the portable recorder was instead used to dictate field notes as soon as possible after the conversation, with a discussion about the use of the conversation in research being introduced towards the end of the interaction. I will return to discuss the ethical implications of this approach in section [5.6.2](#).

5.4.2 Participant observation

An additional source of data in this phase of the study inevitably came from participant observation. As I spent time in the area, walking around, attending events, or having lunch in one of the cafés, I observed people's interactions and behaviour and these observations influenced the way in which I formed views of the areas and their residents. My conversations with participants took place in a particular context and it is important to acknowledge this and to understand and describe that context as thoroughly possible (Shenton 2004). Throughout my visits to the areas studied I recorded field notes of my observations there, either by dictating them at the earliest opportunity, or by noting them in a field note book. My notes have covered such topics as the layout and architecture of an area, interactions I have had with residents there, interactions I have observed between residents, and reflections on how I make sense of what I encounter. Field notes have sometimes also been supplemented by photographs of scenes that illustrate the context of life in the areas studied.

One of the primary drivers behind the decision to focus on Manor Farm and Wood End was to allow me to maximise the amount of time I spent in the area. During the course of the research I routinely attended the weekly 'Tea and Talk' social drop-ins in Manor Farm and Henley Green, I attended residents' association meetings, helped out at events such as the community bonfire night celebrations, spent many hours drinking tea and discussing local politics with the proprietor and regulars of one of the cafés in Riley Square, and even took to doing my shopping in the local Aldi. I usually travelled to and around the area by bicycle, a mode of transport that facilitates closer engagement with an area than driving, whilst allowing a reasonable amount of ground to be covered (it is a fair walk from Manor Farm to

Riley Square). The time I have spent in the area has contributed to a picture of life for the communities living there.

Participant observation in the modern age extends beyond the real and into the virtual. I was invited to join a Facebook group focused on Manor Farm almost as soon as my fieldwork there began—an invitation which I gladly took up. Interactions on social media thus became part of the evidence which has fed into the views I have formed.

Research of this type must be predicated on forming honest and open relationships between the researcher and participants and with that in mind I sought throughout the project to be clear about why I was there and what I was doing—my participant observation was always overt, never covert. This approach is not without its issues, and as I will highlight later (section 7.3) exactly how I revealed my interest in the fire service did affect the responses I received. At this point, though, it is worth reflecting on one particular decision relating to openness and social networking. We are often cautioned to be careful about how much we reveal on social media, and Coventry University's own advice on researcher safety, whilst not addressing social media, does suggest that personal phone numbers should never be given to participants (Coventry University 2011). With this in mind I considered creating a separate Facebook profile for use in the context of my research. I decided, however, that to hide the reality of who I am whilst asking research participants to reveal much about their lives would be to create an imbalance in the power relationships between us and to introduce a degree of dishonesty which would be unethical and would do little to build trust with potential participants. In the end my social media interactions with those who were part of my research took place using the same profiles as I use for friends and family. Perhaps paradoxically, however, I did heed the advice not to give out my personal phone numbers, and used disposable numbers on recruiting and consent paperwork.

5.4.3 *Conversations with professionals*

As I highlighted in section 5.3, recruiting participants from amongst the communities of most interest proved to be very challenging. Faced with this difficulty an additional strategy which I adopted was to try to fill in some of the gaps by talking with people who had worked with those communities for some time. The objective here was two-fold. On the one hand I sought

to gather information about how these professionals set about interacting with the communities that they serve, how they deliver the service and how, or indeed whether, they attempted to engage with people in those communities. This would serve as a point of comparison and triangulation to the perspectives that residents expressed regarding the services which they accessed.

At the same time I sought to tap in to the wealth of knowledge about the local communities that these professionals had acquired over the years that they had been working in the neighbourhoods. As funding and academic regulations both conspire to limit the amount of time that I was able to spend getting to know the area studied, accessing this knowledge, built up over a much longer time period and through interactions with many more residents, was a valuable supplement to direct contact with people from the communities themselves, contributing additional evidence to the study and helping to build a richer picture of the nature of the relationships between residents and service providers. Nevertheless, there is a need to treat these data with some caution. They represent a view of the communities seen through a particular lens, situated in the professional relationship that those talked with have with the communities. That relationship, along with the professionals' training and the prevailing attitudes within their own organisation, are all likely to exert influence on the way in which people interpret their experience of working with members of the community, and this influence needs considering when analysing data acquired in this way.

An interesting illustration of how a professional's role may influence their view came from a conversation I had with Lisa. Lisa is an African woman from Tanzania who has lived in the UK for some time. In the UK she has worked as a social worker involved in fostering and adoption of children. During our conversation she seemed to take quite different perspectives on the relationship between public services and the Black African community, depending on whether she was speaking from her experience as a social worker, or her experience as an African woman. As a social worker she identified clear structural problems as being behind the difficulty that services had in recruiting Black African foster parents—social housing is allocated on the basis of number of bedrooms needed for the existing family, so few Black African families, most of whom live in social housing, have the spare

bedroom needed to foster. When she spoke as a member of the African community, though, she talked of lack of knowledge of services, cultural differences in expectations, and of the ways in which services attempted to reach people, urging them to “get out of your office and go where people are”.

5.4.4 Documentary evidence

In addition to the data generated directly from my interactions with the residents of the area and professionals who work with them, I also sought out documentary evidence that helps in understanding some of the background to the neighbourhoods, such as accounts of recent local history and redevelopment. Conversations sometimes turned to the way in which past major interventions, such as the New Deal for Communities (NDC), had been conducted and an understanding of such interventions from multiple perspectives was of considerable help in making sense of these topics. The types of documentary evidence consulted included Housing and Communities Agency documents related to the NDC, evaluation reports and academic studies of the NDC programme (e.g. Shaw et al. 2004, Pearson 2014), local history websites (e.g. Coventry Society n.d.), reports in the local paper, and the websites of organisations serving the area, such as Whitefriars Housing, the Moat House Community Trust and Spirit Quarters⁹.

5.4.5 The extent of the data generated

Describing the extent of the data that was generated in the field is made tricky by the shifts in approach that took place during my time in the field and the often indistinct boundaries between types of data. In practice drawing a distinction between the focused, in-depth conversations that I originally conceived and the less formal, impromptu conversations that evolved as an important source of data is not straightforward. One thing that is clear, however, is whether or not I have audio recordings of conversations. All of my in-depth conversations were recorded whilst few of the more impromptu conversation were. In terms of summarising data generated with residents, rather than professionals, I have found it useful to draw a distinction between audio recordings of conversations and field notes. I made audio recordings of conversations with 13 individual residents and one group of

9 www.wmhousing.co.uk, www.moathousecommunitytrust.co.uk, www.spiritquarters.co.uk

between five and eight Tanzanian church members. These recordings were made across 10 occasions and a list, with brief details, is given in [Table 5.1](#).

<i>Residents¹⁰</i>	<i>Length</i>	<i>Description</i>
Keith, Maria	1h 58	Long conversation with elderly couple in their home on Manor Farm
Tilly, Anna	1h 23	Conversation at Tilly's home on Manor Farm, joined by her neighbour Anna later
Mickey	0h 13	Conversation with a young man who approached me on the street in Manor Farm
Lenny	1h 26	Conversation with a Manor Farm resident which took place in a fast food restaurant out of the area
Mickey	0h 05	Partial recording of a second conversation with Mickey (field notes were made of the rest of the conversation)
Robert, Craig, Cynthia, Pat	2h 56	Visit to Robert's home in Wood End. Craig and Cynthia joined us. We then moved to Pat's home.
Hamisi	0h 06	Brief conversation with Tanzanian man at a Tanzanian church group gathering.
Group of younger Tanzanian women	0h 44	Conversation with group of younger congregation members at a Tanzanian church group gathering.
Edith	0h 09	Partial recording of a conversation with a Tanzanian woman before a prayer group meeting (field notes cover the rest of the conversation).
Sean	0h 58	Conversation with a young Wood End resident at a café

Table 5.1: List of audio recordings of conversations with residents

Field notes include details of participant observation and notes on conversations for which I was unable to make audio recordings. Sometimes these conversations involved individuals that I got to know and have identified in writing up my findings—such as Lisa (see page 168) or Karl (see page 177). At other times conversations were brief interactions with people I would not see again, whilst at other times I made general notes on discussions that involved multiple people, particularly at ‘Tea and Talk’ sessions. I made field notes of 28 occasions on which I visited the Manor Farm and Wood End areas and a summary of these is given in [Table 5.2](#). As I reflect later (see [Box 5](#), page 116) field notes are necessarily selective and the strategy which I adopted in making them was one of salience (Wolfinger 2002), of recording

¹⁰ Names given are not real. See section [5.6.4](#)

only details that struck me at the time as being relevant to the topic of inquiry. As I spent much time in the field simply hanging out and being seen there, there were many times when I visited and did not make any notes. To provide an idea of the extent of the field work I have included a weekly summary of field research undertaken between June 2015 and February 2016 in Appendix F.

<i>Type of activity</i>	<i>Number of field notes</i>
'Tea and Talk' drop-in sessions	11
Residents' Associations and Ward Forums	5
Café visits and coffee mornings	5
Visits to church groups	3
Bonfire night events	2
Others (conversations whilst leafleting; funeral procession)	2

Table 5.2: Summary of events generating field notes

The conversations that I had with professionals who worked in the area were usually recorded, although in a few cases this was not so. I have summarised these conversations in [Table 5.3](#), together with an indication of the role that each professional played and the length of the conversation. Once again, boundaries are not clear and I have included in the table only conversations that took place on a largely one-to-one basis. Thus a formal interview with Connie is listed, but another conversation that took place at a coffee morning, and thus forms part of the field notes for that event, is not. Similarly, several conversations with housing officers and ward councillors are not listed as they took place at 'Tea and Talk' drop-in sessions (see, for example, the conversation with Rachel on page [171](#), and my reflections on that conversation in [Box 7](#), page [174](#)). On the other hand, the impromptu conversation with Andy is listed here as it involved just the two of us, despite taking place in a café (see page [135](#)).

5.5 The data generation process as findings

An important part of this study concerns the way in which communities and public services engage with each other. The field work itself focused on engaging with groups that have often been considered 'hard to reach' — those living in deprived areas, the long term

<i>Professional</i>	<i>Length</i>	<i>Role</i>	<i>Notes</i>
Bill	1h 02	WMFS senior manager	Scoping conversation
Deborah	3h 13	Community organisation manager	Manager from a community organisation working in the WEHM area
Clarissa	1h 17	Community organisation manager	Manager at a community development organisation focusing on clients with Black African and Black Caribbean backgrounds
Ward councillor	(notes)	Ward councillor	Long (approximately 1h 30) telephone conversation with one of the local ward councillors
Patrick	(notes)	WMFS middle manager	Middle manager in the WMFS with particular knowledge of the WEHM area
Group of fire fighters	1h 43	Fire fighters	Round table conversation with seven fire fighters in the mess room at the fire station
Bob	2h 27	Police officer	Police Constable on neighbourhood team dealing with Henley Ward.
Connie	1h 54	Community development worker	An earlier conversation with Connie was also noted in field notes
Andy	(notes)	Police Community Support Officer (PCSO)	Impromptu conversation at a local café
Ellen	1h 00	Social worker	Social worker who had run a project to improve knowledge of fire safety amongst sex workers
Bill, Mark	1h 18	WMFS senior managers	Feedback of findings and discussion around implications

Table 5.3: Interviews with professionals

unemployed, Black African and Black Caribbean people (Flanagan and Hancock 2010). Given this, the process of data collection itself, and its success or otherwise, contribute to the study's findings and it is appropriate to discuss here what can be learnt from the experience. That experience was far from overwhelmingly positive. I have struggled, and in some cases failed to reach those that I wished to speak with. The process was intensive and challenging and rather less rewarding than I had hoped. Whilst some of those challenges were personal (see [Box 4](#), page 95), many of them are the same challenges that are faced by any service provider trying to engage with the community. Both my successes and my failures can thus

help deepen understanding of the relationship between communities and public services and illuminate some of the barriers that stand in the way of successful engagement. The findings I discuss in this section might equally have been placed in Chapter 8, ‘[Barriers to engagement](#)’, but I look at them here because they arise from the *process* of fieldwork, from seeking out and negotiating engagement with those in the field. In the main findings chapters (Chapters 7 and 8) I will look at findings that emerged from the interactions that took place *as a result of* successfully negotiating engagement.

5.5.1 *The failure of the big conversation*

As I describe in section 5.4.1, I set out with the intention of engaging in a series of in-depth, one-to-one conversations. Whilst I did not fix a length, I envisioned these conversation lasting for in the region of an hour and a half. In practice, those ‘big conversations’ that I did have lasted from between just under one and a half hours up to nearly three hours.

However, there were few of these. People were, on the whole, quite happy to talk to me when I met them, but not at all keen to put a large chunk of time aside and make a special effort of sit down and talk to me. This was asking a big commitment of people, and I had little to offer in return. The way in which I had to adjust my approach to data collection in response to this was to make much more use of incidental conversations along the way. This did not generate quite the type of data I had hoped for, but it generated data, and more than I would have been able to generate had I stuck rigidly to the original plan. And this, itself, became an important finding. Engaging with this community required flexibility, it required me to be prepared to work on their terms. It required me to think about what I was asking of people, and how that balanced with what I was able to give back. An hour and a half, a home visit, these were too much. People rarely begrudged me a few minutes in passing, but the time commitment and intrusion into their lives that a lengthy interview entails involved asking more of them than they were prepared to give. This is a particularly important finding in the context of fire prevention because a lengthy home visit is the mainstay of community fire safety work. I will return to discuss the implications of this finding for those delivering fire safety work in section 10.2, where I will suggest that FRSs need to reconsider

the nature of the Home Fire Safety Check if they wish to improve engagement with communities such as those that I worked with.

5.5.2 The importance and the limitations of gatekeepers

Finding gatekeepers has been crucial to the process. In attempting to reach people who are disinclined to engage for whatever reason, having an introduction from someone who is trusted and can vouch for the researcher can do a great deal to ease matters and to overcome initial resistance (Emmel et al. 2007). Suitable gatekeepers are also invaluable for their ability to identify exactly where more hidden groups can be found, for their knowledge of the communities that they work with and how best to approach them. As Emmel et al. (2007) note, the networks of those living in socially disadvantaged communities can be close knit and difficult for a researcher from a very different background to penetrate. Gatekeepers, particularly those with a more formal, professional role, whose cultural values are perhaps closer to those of researchers such as myself, can play an important role in bridging the cultural gap between researcher and residents (Eide and Allen 2008). Additionally, as I reflect later (see [Box 4](#), page 95), for me personally using gatekeepers tends to create a more structured initial interaction that I feel more comfortable with.

Yet gatekeepers have their limitations and disadvantages. No gatekeeper holds a gate for an entire neighbourhood and its diverse populations. Rather they tend to provide access only to a limited group of people, and where the gatekeeper is closely associated with public services that group of people is unlikely to include those who engage with services the least. I found that I was running into the same residents repeatedly and struggling to break out of that circle. I needed to find more gatekeepers, and more varied gatekeepers, but I had great difficulty in doing so. One of the more valuable was Robert, who I was put onto by a local journalist who had written an article about the area. Robert was a resident and passionate local community activist who had fallen out with the more mainstream community organisations in the area. He presented the impression of having the confidence of a good number of people who were disenchanted with the mainstream groups, an impression which was to a considerable extent validated by my experiences in the area. He proved a valuable resource for me, introducing me to several participants who I would otherwise have been

unlikely to encounter. It is interesting to note, then, that as a result of his clashes with the more mainstream community groups in the past, those groups were generally unwilling to engage with him. Whilst they continued to reach the same groups of people, their reluctance to deal with Robert effectively reduced their ability to reach outside of their current networks. I have listened to people from both sides of those historic disagreements talking about them, and whilst I do not intend to pass any judgement on them it does appear that a clash of cultural values between the two sides had a role to play. To the extent that this is the case, it seems that the cultural capital that makes more formal gatekeepers such a useful bridge for researchers also serves at times to inhibit their effective engagement with some in the communities which they serve. Taylor (2011) has argued that a focus on consensus and tendency to avoid conflict can inhibit the value of community partnerships and disempower citizens, and this is perhaps an example of the process in practice.

Robert represents what Emmel et al. (2007) describe as an ‘informal’ gatekeeper—someone from within the community itself who is largely unconnected to formal services. The process of snowballing can be seen as an attempt to shift existing participants into the role of informal gatekeeper. The problems that I had in using snowballing as a recruitment technique may, then, tell us something about issues involved in accessing informal gatekeepers. A gatekeeper’s role is to control access to people and there can be many reasons why they might choose to deny that access. In some cases it was clear that those people whom I asked for suggestions of further participants were relatively isolated and simply knew no-one. In other cases, though, motives appeared different. A great advantage of gatekeepers for the researcher is their role in vouching for the character of the researcher, and at times it was clear that there was an unwillingness to do this. Gatekeepers have a strong interest in maintaining their credibility with their own communities (McAreavey and Das 2013) and whilst this reticence may have been because the participant felt unable to recommend me for some reason, at times it felt as much to do with the fear of being judged for talking to me. This perception fits with other evidence uncovered that there is a strong sense of not wishing to be seen to be engaging with public services, for a number of reasons which I will deal with in more detail in later chapters (see [7.4.2](#) and [8.2](#)).

Box 4: Introversion—my Achilles heel

Logging on to a well known academic social networking site one morning I was presented with a question:

Do your peers have these skills?

A D Payne: Audacity

I immediately recognised the skill in that particular colleague, an accomplished qualitative social researcher—of course, it takes a certain amount audacity to list audacity as one of your skills. I also recognised that it is not a skill that I can claim for myself, and this has perhaps been my biggest challenge in undertaking this work. I am not audacious, I am cautious, wary of offending, and shy. I am uncomfortable asking things of people that I do not feel I have a right to ask, uncomfortable assuming that they will willingly give me things, and this includes their time and their stories. Approaching strangers is an challenging experience for me and this is a huge disadvantage when undertaking this type of research. There are things that can make it easier, one of which is having a structure around which interactions are built. Throw me into a room full of people and ask me to talk to someone and I will freeze, unable to decide who to talk to or what to say. Ask the whole group to each turn to their neighbour and talk about their journey here today, and I am fine, perhaps because I have been given permission to approach someone. This makes gatekeepers all the more important to me. An introduction from a gatekeeper often provides the sort of structure to an initial interaction with someone that enables me to engage with them without facing my fear. It gives me permission, helps me over that first hurdle, after which I am able to continue much more comfortably.

My character is not entirely disadvantageous in the field however. As an interviewer I am a good listener and allow those I am talking with plenty of space to tell their stories their way. I believe that to many people I do not come across as threatening or pushy, and this seems to allow people to open up to me. Whilst I have often struggled to set up interviews, I have never struggled to get people talking. Sometimes getting them to stop talking has been a challenge though.

5.5.3 Engaging with solo-livers

One group that was identified in the quantitative work is missing from the list of those often considered to be hard to reach given at the beginning of this section—solo-livers under 65 years old. A look through some of the grey literature targeted at practitioners on the subject of reaching hard-to-reach groups reveals little mention of this particular population. A UK Department for Education publication, for example, describes hard-to-reach groups as consisting of “members of ethnic minorities or people with physical or mental disabilities, low levels of literacy or low economic status” (Department for Education 2010: 1). A Department of Health publication includes a more extensive list, suggesting that “groups who suffer from social exclusion include homeless people, travellers, asylum seekers, refugees, people with disabilities, those living in deprivation and prisoners”, as well as discussing gender issues at some length (Department of Health 2002: 1). A wide ranging review of the literature by Flanagan and Hancock (2010) concludes:

The ‘hard to reach’ groups most commonly identified in the literature are sex workers, drug users, people living with HIV and people from lesbian, gay, bisexual, transgender and intersex communities, but there are a number of other groups to which the description applies including asylum seekers, refugees, black and minority ethnic communities (BME), children and young people, disabled people, elderly people and traveller families.

(Flanagan and Hancock 2010: 2)

Solo-livers in middle-age are conspicuous by their absence from this list, a pattern that is repeated throughout the literature on hard-to-reach groups.

Discussions of hard-to-reach groups tend to be framed in a specific context in which a need to engage with a particular population has been identified—as Flanagan and Hancock note, the meaning of the term is “largely dependent upon the context of the organisation doing the reaching” (2010: 2). The absence of solo-livers from the literature, then, is perhaps more to do with the group not having been identified as one in need of targeting, rather than any indication that those within it are not hard to reach.

My experience of recruiting participants for this study has been that the those living alone and under 65 are, in fact, particularly difficult to engage with. A major reason for this is that no-one is trying. Throughout my conversations with professionals, when I asked about their efforts to engage with local communities I was told about activities intended to engage with young families, with single parents, with older people, with people from minority ethnic backgrounds, but never with people living alone or in middle-age. The fact that I was not able to identify any organisation targeting this population made it particularly difficult for me to identify potential participants from within it. The group seems almost forgotten, off the radar of most agencies, and yet it is a group associated with particularly high rates of accidental dwelling fire, and as such it is a group that the fire service has a clear need to reach.

Of course, there is no particular reason to assume that those who live alone constitute a homogeneous collection of people. The evidence uncovered in the quantitative work shows a clear difference between different age groups, and many other factors are likely to exist that together make for a very diverse community for which no single strategy for engagement could be devised. It does seem clear, however, that at present a large group that continues to expand in size (Smith et al. 2005, Bennett and Dixon 2006) is being missed by those agencies which attempt to engage with communities.

5.5.4 The impact of austerity

The bulk of the fieldwork for this study took place between July 2015 and February 2016, over five years into the 'era of austerity' that was ushered in by the election of the Coalition Government in the UK in May 2010 (Lowndes and Pratchett 2012). Austerity had very much started to bite and whilst, since this was my first major research project, I have little to compare things to pre-austerity, I am left with the overwhelming impression that access to potential participants has been made more difficult by the wide ranging public spending cuts that have dominated recent UK fiscal policy.

In Coventry, the City Council undertook a significant restructuring of community and neighbourhood services in 2013. This led to the cutting of 59 full time equivalent (FTE) Neighbourhood Warden posts, and 7.8 health development and nutritionist posts, to be

replaced by a 15 strong Community Development Service, and a further 15 posts involved in neighbourhood working and place based working (Coventry City Council 2013). This change represented a saving of £820,000 per annum and a 55% reduction in staff resources. The new Community Development Service is focused on facilitating and supporting community co-production of services and was, at the time of field work, principally engaged in an asset mapping exercise. Although perhaps an obvious potential gatekeeper, or at least a source of gatekeepers, multiple attempts to contact them came to little. Their activity in the area on which I was focused was limited and they offered only the suggestion that I contact the Moat House Community Trust (MHCT). This same advice came up time and time again—from local Councillors, from Council officers, from the Citizens' Advice Bureau, and from people working for the main social landlord in the area. The dominance of a single organisation within the area in which I worked has hampered efforts to extend the reach of the research and must raise questions about the extent to which the diverse communities that exist in the area are being served. For all that MHCT aspire to be an organisation with universal reach, and for all that they have been extremely helpful, the reality appears to be that they are successfully engaging only a relatively narrow group of residents.

The situation in Windmill Lane was similar, with several contacts, including some of Sandwell Borough Council's community development workers whom I met at a networking event, pointing me to the same third sector organisation working in the area. As I describe earlier (section 5.2.4), this single organisation has a narrow focus and whilst it is an excellent example of co-production of elderly care services it did not facilitate engagement with broader groups. The situation in Windmill Hill was exacerbated by the fate of the CAP centre. This purpose built community centre at first appeared as if it would be an excellent potential gateway to the Black African and Black Caribbean communities who were at the heart of its establishment (CAP Centre n.d.). However, enquiries revealed that it is currently providing very little in the way of community based services, focusing instead on corporate hospitality to pay the bills, together with a nursery and elderly day care.

Whilst there may well be other, perhaps less formal organisations or networks working with communities in these areas, they are often hidden and have proved difficult to locate. The

rolling back of state provided community development services in recent years has removed an important link between such groups and more visible gatekeepers.

5.6 Ethical considerations

I turn now to discussing some of the ethical issues that are pertinent to this study, and the approaches taken to try to ensure that the work was done in a demonstrably ethical way whilst avoiding procedures that might discourage participation by some.

5.6.1 *Informed consent*

Although there are those who have argued that in certain contexts covert research is necessary and acceptable (Homan 1992, Scraton 2004) this approach has been heavily criticised (e.g. Herrera 1999). It is widely accepted that participants in social research should freely consent to taking part and that they should do so from a position of understanding what is involved and what the possible consequences to them are—that is, they should give informed consent. The nature of informed consent, however, and the way in which informed consent is demonstrated, are not always straightforward questions. An approach commonly used is to present potential participants with a ‘participant information sheet’ containing information about the study, and once they have had a chance to read this and ask questions about it they are asked to sign a consent form to indicate their consent to participation (Coomber 2002). However, there are a number of problems with this process.

Formal written consent processes do not necessarily guarantee that informed consent has been obtained (Wiles et al. 2006). By providing too much information and over bureaucratising the process of gaining consent the likelihood of potential participants actually reading and understanding the information and truly being informed is severely reduced (Crow et al. 2006). We all tick the box to say we have read the terms and conditions each time we order something on the internet, but when was the last time any of us really did read the terms? The formal written consent process is rooted in potentially harmful medical research (Wiles et al. 2015) and arguably has little relevance to community research, where it may serve to hinder research by distancing communities from researchers (Beebejaun et al. 2015). The process has become less about protecting and respecting

participants than about providing an audit trail to protect the researcher and the institution. The apparent dichotomy that is implied between informed and ignorant, between consenting and coerced, has strong positivist overtones that ignore the complexity and nuances of human relationships and understanding (Alderson and Goodey 1998). At best, the formal written consent process ensures that consent existed at a point in time, at the commencement of research (Emmel et al. 2006). In the ongoing dialogue between researcher and participant that takes place in interpretive research, however, the understanding of the participant continually evolves. In such a context it is important to see consent as an ongoing process, continually renegotiated and reaffirmed, rooted in the development of mutual respect.

Whilst consent is something bigger than a signature on a form, there does remain a need to be able to demonstrate that consent was obtained should disputes arise later. The written consent process may serve this purpose well, but in the context of this study, which seeks to engage with some of the most deprived communities in the West Midlands, it also has the potential to adversely affect the research process and hinder my ability to reach people.

Previous work has identified a disinclination amongst some living in deprived communities to engage in any way with the state and public services (Canvin et al. 2007). Clearly it is important to try to access such people and to hear their stories. However, coming from a publicly funded university, and working in collaboration with the West Midlands Fire Service, puts me on the back foot when trying to gain the trust of people who avoid public services. Being White and middle-class are also unlikely to help, as this may be seen as the demographic most common amongst public servants (Matthews and Hastings 2013). The already considerable difficulty of accessing participants in the communities being studied is likely to be exacerbated by any attempt to gain consent in written form. The use of forms and participant information sheets can be associated with state bureaucracy and has been seen to discourage participation amongst the socially excluded (Emmel et al. 2007). It may be perceived as mimicking processes of access to service provision (Emmel et al. 2007), an activity itself sometimes seen as risky in poorer communities (Canvin et al. 2007, Mathers et al. 2008).

In the context of those who have low trust of public services that low trust is likely to extend to me. They may therefore not believe assurances of anonymity, and, as a defence strategy, some participant's may prefer not to reveal real names. Such a decision is clearly in conflict with requiring a signature on a consent form; indeed, to require a signature from a participant who wishes to remain anonymous is arguably an unethical breach of confidentiality itself (Coomber 2002). This is most likely to be a problem where participants perceive some significant risk in talking to me, such as if their economic circumstances have led them to survival strategies that are not strictly legal and they fear disclosure to the police or other agencies.

Another potential problem with reading participant information sheets and signing consent forms relates to literacy. During the development of the study, informal discussions with teachers working in deprived communities in Birmingham suggested that poor adult literacy is not uncommon. Furthermore, those teachers I spoke to had noticed a considerable embarrassment amongst people with literacy problems, and one mechanism used to cope with this was to avoid any situation in which they may be asked to read or write, and therefore have to admit to finding reading and writing difficult.

A further issue concerns the effect that the formalised consent process has upon the data itself. The conversations that I have with participants take place in a specific context which stands outside of the normal lives of the people I am talking with. Formalised, traditional consent procedures, however, change the context further and push it further away from normal life. In doing so the value of the data gathered is diminished (Crow et al. 2006).

Whilst certainly less common, the use of verbal confirmation of consent in appropriate circumstances is well established and acknowledged by the Economic and Social Research Council (ESRC) as a legitimate alternative to written confirmation of consent (Economic and Social Research Council 2010). In the light of all the potential problems with written consent it was decided to rely instead on obtaining a verbal indication of consent, where possible using audio recordings to demonstrate that consent had been given. For the more formally arranged conversations which were originally envisaged, the provision of information about

the study to participants was accomplished by a dialogue between the participant and me. To keep things informal nothing was read from a script, but I made use of a prompt sheet to ensure that I had covered everything (see Appendix G). The process of engaging in dialogue about what is involved in taking part in the research meant both that the issues were more likely to be understood, and that any difficulty in understanding was more likely to become evident and could be addressed. Towards the end of each conversation I checked again that the participant was still happy to be involved, as by this time they should have had a much clearer idea of what it is they were actually consenting too, and knew what they had revealed.

One significant problem with this process surrounds the need to ask for consent twice in quick succession. It was necessary to gain consent to record the conversation first, then start the recorder and move on to talking about consent to participate. This felt rather clumsy and interfered considerably with the flow of natural conversation. However, the effect was probably less than would have been experienced using written information sheets and consent forms and represented a reasonable compromise between low key informality and maintaining an audit trail.

5.6.2 Impromptu conversations—agency and implied consent

As field work developed it became clear that setting up more formally arranged conversations was a significant challenge and that there was much valuable data in spur of the moment conversations that took place along the way. I had, then, to reflect further on the nature of informed consent and to consider under what circumstances such impromptu interactions could be incorporated into the study, returning to the Faculty Ethics Committee to update my ethics approval.

My work was always overt. When I attended groups I introduced myself and explained my motives for being there. When I found myself involved in a conversation that felt to me to be pertinent to the research I would explain why the subject interested me. Given this openness about my aims, continued involvement in a conversation can be seen as constituting implicit consent, since participants in the conversation have agency and may choose to withdraw from it at any point.

To be completely clear I also explicitly sought verbal consent to include the conversation in my research, usually as the conversation itself was being wound up. Making this explicit request at the end of the conversation had two advantages. Firstly, by the end the participant is likely to have a much clearer idea of what they are agreeing to, and of just what they have revealed. Secondly, the discussion about consent interferes less with the flow of the conversation when held off to the end. It proved in practice to be relatively easy to bring into a conversation the nature of my interest in a topic, but questions of explicit consent often lie outside of what might be perceived as normal conversation. As such, they fitted more comfortably into parting comments.

To go along with these impromptu conversations I prepared what could be described as a 'post hoc' participant information sheet which was handed to people at the end of the conversation (see Appendix H). The main purpose of this sheet was to clearly set out that if people changed their minds about being included they could let me know and I would delete any records relating to our talk, a point also stressed when asking for verbal consent to include them. The most important information on the sheet was therefore my contact details. The opportunity was also taken to include some other key points, particularly emphasising that what had been said would be treated as confidential and anonymous. I was keen to avoid an impression of being overly bureaucratic, so the sheet itself was brief, covering only one side of A5, and written in plain English.

5.6.3 Disclosure of information

A further ethical dilemma which became apparent during the design of this stage of the research concerns the issue of disclosure of information imparted by participants. On the face of it this is a simple question—participants have an absolute right to privacy and all information must be treated in the strictest confidence (Qu and Dumay 2011). However, the question becomes more complex when information relating to criminal activity, harm to self or harm to others is revealed, with moral, or even legal, obligations to disclose arising (Wiles et al. 2008).

One approach to dealing with this identified by Wiles et al. (2008) is to be clear that such information is 'off-topic' and make every effort to avoid conversations drifting into the area

of criminality. However, two related considerations militate against this approach. Firstly, to restrict the direction in which a conversation can go goes against the underlying approach of using lightly structured conversations that give freedom to the participants, risking missing data that may be of importance. Secondly, since the topic of interest is the relationship with public agencies, it seemed highly likely, as Canvin et al. (2007) have found, that involvement in criminal activity would colour a participant's willingness to engage with those agencies. A participant's past criminality was thus relevant to this study.

Given that avoiding topics that might lead to moral or legal obligations to disclose is undesirable it was necessary to consider under what circumstances confidential information would be disclosed, and how this would fit with notions of informed consent. As Fontes (1998: 53) notes, there is a dearth of guidance on this subject and "many ethical decisions will be based on the amount of overnight tossing-and-turning that a researcher can tolerate". Whilst there are clearly situations when it would be morally indefensible not to breach confidentiality, it was extremely important in the context of this study to allow participants to feel confident that they can talk freely without fear of repercussions. To facilitate this the bar for disclosure was set relatively high, with the project ethics application describing the circumstances that might result in disclosure as

- where a participant indicates a credible intention to cause physical harm to another person this will be reported to the police or to social services, whichever is most appropriate
- where a participant discloses past involvement in a **serious** crime any further action will initially be discussed with the Director of Studies and the Faculty Ethics Governance Leader. If necessary, legal advice will also be sought

Clearly it would be unethical not to advise participants that these circumstances might result in disclosure. These points were therefore discussed with participants of formally arranged conversations as part of the process of ensuring that they understood what was involved in taking part in the research. With impromptu conversations, where discussions of what is

involved were often left to the end, the situation was potentially more tricky, but in reality the issue did not arise.

5.6.4 Confidentiality, names and places

Throughout this thesis I have used names to identify the people I met in the field, rather than give them impersonal numbers, or describe them solely in terms of their role or position. Names make people real and avoid depersonalising participants. Names help to bring the narrative to life, encouraging the reader to engage more thoroughly with the data. To maintain confidentiality, however, the names that I have used in the text are not the real names of the people concerned. Indeed, in some cases I do not know the real names of people—I explicitly offered those I spoke with the option of remaining anonymous. I often asked participants if they had a preferred name by which they would like to be referred in any written work, but only two people chose to pick their own pseudonym, both opting for names with which they had a long association.

I have reflected long and hard over the question of place names. Whilst there has been some critical challenge (e.g. Moore 2012), maintaining the anonymity of individuals is widely accepted as an ethical necessity when reporting research. The question of changing the names of places is less clear cut however, with different authors taking different approaches. For example, a study of home-school relations by Crozier and Davies (2007) uses pseudonyms to refer to the towns considered, and in their account of participation in the New Deal for Communities (NDC) programme, Mathers et al. (2008) indicate only that the neighbourhood in which research took place was in the West Midlands. On the other hand, another study of participation in a neighbourhood regeneration scheme by Jarvis et al. (2012) explicitly identifies the locus of their research in the title of the article, an approach also taken by Mckenzie (2012) in her ethnographic study of life on an inner city estate in Nottingham. Despite these marked differences in approach, though, few authors make clear how they reached their decision as to whether or not to identify the places which they study. The topic is considered in some detail by Nespor (2000), who suggests that on a practical level it is near impossible to provide the sort of detail of context that good qualitative research requires without identifying the place. Furthermore, anonymisation, he argues, brings with it an

implied ability to generalise from the study that is unlikely to be warranted. Qualitative research is both spatially and temporally situated and this must be acknowledged. Such acknowledgement requires that areas be identified.

In the end I decided that I would identify the neighbourhoods for the practical reasons highlighted by Nespor (2000). If I describe the context of the study in sufficient detail to facilitate interpretation of the findings anyone with a reasonable knowledge of the West Midlands would quickly identify the neighbourhoods. Furthermore, having identified the neighbourhoods, the same practical considerations extend to some, but not all, of the organisations that I have referred to. Although I have not used pseudonyms for organisations, where practical I have been circumspect about their identity. In a number of cases, however, providing sufficient context to ground the discussion makes it clear which organisation I am referring to, and in such cases I have named the organisation.

These are decisions with which I remain somewhat uncomfortable. There is a slight concern that knowing the area it may be possible to guess who some of the individuals are, despite the use of pseudonyms. A bigger concern, however, centres around the issue of stigma. I cannot escape being explicit that part of the reason for choosing the area in which I carried out my fieldwork was that it is economically disadvantaged. Yet one thing to emerge very clearly from my fieldwork is that many of those who live there are sick of the area being labelled as such, angry at being judged for where they live (see [8.2.1](#)). I have no wish to contribute further to their distress at this label or to add to the stigma attached to the area. I am aware, though, that much as I intend no judgement when I describe the area, it is likely that some judgement will be perceived. All I can do in the circumstances is to apologise to those residents—I am truly sorry if I cause offence with this work.

5.7 Conclusion

In this chapter I have outlined the process of identifying study sites for the second, interpretive phase of the research, and for recruiting and talking with participants. The evidence gleaned from analysis of the West Midlands Fire Service data pointed strongly towards selecting sites for this phase of the project that experience considerable deprivation

and have high populations of often hard-to-reach groups. This brought with it considerable challenges. With evidence that some of these groups are reticent to engage with any part of the state, efforts were made in the research design to avoid being associated with the state or public agencies. Wary of the potential associations of traditional written consent forms, a path was explored and negotiated with the Faculty Ethics Committee that enabled a more fluid approach to ethics to be adopted, using verbal means to confirm consent. Despite this, engaging with and recruiting potential participants proved to be extremely challenging and a good deal of flexibility was needed in order to keep the research moving forward. The challenges of conducting field work in this context themselves tell us something about the problems faced by public services, including the fire service, in engaging with communities. Good gatekeepers who have the confidence of the target community are of huge benefit, but are often difficult to locate. Communities are diverse and no single gatekeeper offers access to all those living in an area, yet identifying and building relationships with multiple gatekeepers is both difficult and time consuming. The reduction in recent years of public sector agencies engaging directly with communities has made this job even more difficult. Later chapters will look in more depth at some of the reasons that engaging with these communities is so difficult, with Chapter 7 considering attitudes to the fire service in particular and Chapter 8 discussing the more general barriers to engagement that emerged from the research. First, however, I will outline the process I went through to analyse the data generated in the field.

Chapter 6: Deskwork: analysing the data

6.1 Introduction

Deskwork (Yanow 2000) is the process by which sense is made of the messy data that are generated in the field. In an interpretive study the process of analysis is an iterative one, and one that begins with research design and continues through to the end of writing up (Yanow 2007). The emergent nature of interpretive research (Schwartz-Shea and Yanow 2012) dictates that analysis must take place before and during fieldwork as well as afterwards, as it is by making sense of the data so far generated that shifts in the approach to future data generation are planned. I use the term 'deskwork' to describe the more formal part of the analytic process, that part which takes place back at the desk, as opposed to the ongoing sense-making that takes place during every interaction in the field. In Chapter 5 I touched upon some of the analysis that fed into the research design, and how the research design changed in response to the realities found in the field. I turn in this chapter to look in more detail at the desk-based process of data analysis, in which I include writing-up.

I have referred to the messiness of the data that were generated in the field. Not only were those data messy however, but so was the process of analysing them. A written thesis inevitably presents things in a linear fashion that cannot really reflect the highly iterative nature of that process. Neat headings cannot reflect the fuzzy boundaries between activities, or the overlapping nature of the codes and categories used to classify data. The process of analysis was one that went back and forth between activities, one of constant refinements, of many iterations in which each iteration deepened my understanding of the data. With each step ideas converged; the extension in understanding that each new iteration brought became less and less until I reached the point where continuing did not advance my knowledge further. Whilst this complex, messy process of moving from raw data to the written thesis can not really be adequately described with a series of linear headings I hope that I am able to go some way towards conveying the realities of the process by being clear about the difficulties of describing it.

Initial analysis began as soon as data were available and consisted of reviewing field notes and audio recordings, reflecting on them and making further notes in the form of analytic memos recording my thoughts and observations. All the data were loaded into the NVivo 10¹¹ software package in order to help manage them and to facilitate coding. An overview of the process of data analysis is shown in Figure 6.1, highlighting the highly iterative nature of the process, and the way in which each step fed back into others. The use of clearly bounded boxes in the diagram fails to properly convey the blurred boundaries between the activities that existed in reality. These were rarely discrete steps taking places at separate times; rather than stopping one activity and starting another, the emphasis would shift from one to the other as analysis progressed. In the following sections I will consider some of these analytic activities more closely, but I begin with a detailed discussion of one of the important and unusual choices that I made, one that had an important impact on the nature of data that I worked with during the deskwork stage—the decision not to transcribe.

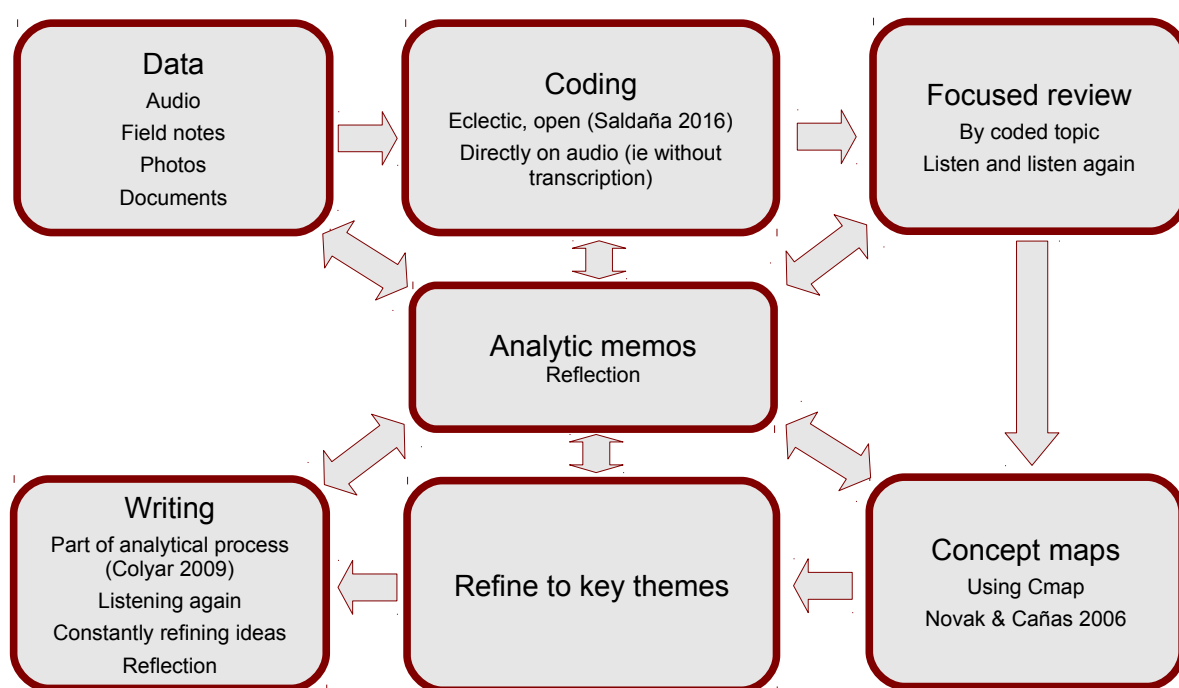


Figure 6.1: The analytic process

6.2 Working with audio

I took a decision early on in the process not to transcribe audio data, but to work directly with audio recordings. Whilst there is a considerable literature on the nature of transcription,

11 QSR International. See <http://www.qsrinternational.com/>

on differing approaches to transcription, and on their influence on the research process (Davidson 2009), my search found little on the question of *why* we transcribe. That audio should be transcribed appears to be a taken-for-granted assumption in much of the literature on qualitative research; Oliver et al. (2005), for example, cast transcription as central to qualitative research, whilst a more critical reflection on transcription describes it as a “‘knee-jerk’ response to data creation” (Wainwright and Russell 2010: 1). This assumption that transcription must be done perhaps comes down to historic requirements connected to coding, the process of attaching labels to small sections of the data.

Although Saldaña (2016) is at pains to stress that coding is not the only way to analyse qualitative data, it is often seen as a crucial part of analysis (Basit 2003). Until relatively recently, however, it was not practically possible to code qualitative data unless it was in the form of written text. Whether coding was to be done on paper with coloured pens and post-it notes, or using a Computer Assisted Qualitative Data Analysis (CAQDAS) programme on computer, audio data had to be transcribed in order to transform it into text that could be coded. Recent technical advances mean that this is no longer the case, however, and using NVivo, or other CAQDAS packages, it is now possible to code directly on digital audio files, leaving the assumption that audio must be transcribed open to question.

6.2.1 *Theoretical considerations*

Transcription is a representation of the spoken word, filtered through the perceptions of the transcriber. The process of transcription necessarily leads to some loss of the information originally present in the conversation. The tone of voice, the pauses, the stresses, the speed and pitch of speech, all help to convey the meaning that the participants intended, and to convey something of the context in which that meaning arose. There is a wide range of transcription approaches, characterised by Oliver et al. (2005) as occupying a continuum from naturalistic to denaturalistic. Naturalistic transcription attempts to preserve as much as possible of the original information through the use of complex notation. Whilst it seeks to remain true to the original spoken word it can prove difficult to read, cluttered with symbols that distract from the flow of the text. At the opposite end of the continuum, denaturalistic transcription attempts to translate the spoken word into a form more associated with

writing, producing a transcript which is easily read, but which lacks many of the nuances found in the original conversation. Whichever approach is adopted, however, ultimately the act of transcription requires a transcriber, be it the researcher or someone else, to make choices about what to include and what not to include in the transcript (Sandelowski 1994). These choices, made, as they are, relatively early in the analytic process, will inevitably affect later analysis.

There are times when the loss of information may be desirable. Oliver et al. (2005), for example, made a conscious decision to remove indications of accent in transcriptions in order to preserve confidentiality and avoid the possibility that members of the research team would make assumptions about the interviewees based on their accent. In this study, since I was party to the original conversation and I alone carried out the analysis, such consideration did not arise. In theoretical terms there seemed little to gain by losing information, and much to lose.

A number of advantages of transcription have been proposed by Evers (2011), drawing on both her own experience and a small survey of other researchers. All the main advantages that she reports assume that researchers transcribe their own data, and these advantages include the opportunity to reflect on the interview process, and getting close to the data as a result of the process of transcription. These advantages, however, are framed in opposition to the downsides of transcription (e.g. time-consuming, dull), rather than suggesting that they are factors that are not present when working directly with audio. There is little reason to believe that working with audio prevents reflection on the interview process, and good reason to think that it does bring the researcher close to the data. Working directly with digital audio greatly reduces the losses that transcription introduces and overcomes many of the problems of transcription. All the nuances of speech are retained. The difficulties of reading the complex notation used in naturalistic transcription are avoided. All the information conveyed in such notation is present in the audio, and more besides, but it is in a form with which we are familiar and which we are instinctively able to decipher. Whilst audio recordings are themselves not without loss of information, with the greatest loss perhaps being body language and facial expressions, the loss is very much less than when

recordings are transcribed. Working directly with audio recordings enables a far deeper immersion in the data in a way which remains much closer to the form in which it was originally generated. Whilst there will be times when transcription remains an important part of qualitative data analysis, in the context of this study the ability to carry out analysis whilst working directly with the original recordings offered considerable benefits.

6.2.2 The process in practice

It is not the role of this thesis to provide a detailed 'how to' manual on working directly with audio in NVivo, a role which is well served by NVivo's online manual (QSR International 2012) and several tutorials. However, it may be helpful to the reader unfamiliar with the process if I give a brief explanation of how it works.

Digital audio files can be loaded into NVivo in much the same way as text documents are. They are displayed on the screen as a time line, optionally with a representation of the audio waveform. They can be played in NVivo, with the useful ability to adjust the speed of playback without altering the pitch. Just as codes (nodes, in the language of NVivo) can be applied to sections of text, they can be applied to sections of audio. In the case of audio, codes are applied to a particular part of the time line. For example, in one recording, of a conversation with a Community Development Worker, the code "Feeling judged" was applied to the section of the conversation between 24 minutes 37s and 25 minutes 1s from the start.

Once codes have been applied to the audio they can be used in much the same way as if they were applied to text. One of the main ways in which I used NVivo was to facilitate a focused review of all data with the same code. Selecting the code of interest in NVivo opens a screen in which all sections of data with that code are displayed, be they audio or text (or, indeed, video or photograph). It is then possible to review all instances of the code together, listening through all the audio relating to that code.

6.2.3 Practical considerations

On the face of it a major practical advantage of working directly with audio is the saving in time, and therefore cost, of not transcribing. Sandelowski (1994) suggests that it takes an

experienced typist around 3½ hours to transcribe each hour of audio, whilst researchers doing their own transcription will often take considerably longer than this. There are, however, a number of considerations that may offset the benefit of this time saving, and it is worth looking briefly at these. Practical considerations will depend on the context—on both the study's requirements and on the abilities and inclinations of the researcher. I am particularly conscious of the fact that in discussing some of the practical issues surrounding working with audio I do so from the position of a researcher who has no significant impairment to either sight or hearing, albeit one who is somewhat hampered by an unusually slow reading speed.

The first point to note is that when working with audio the process of coding and reviewing data may be slower than it is with text, as most people are able to read considerably faster than they can listen to audio. This issue is not one which was so significant for me, however as I tend to sub-vocalise when I read, and therefore read very slowly. With audio, though, I found that I miss very little when I play it back at up to 140% of the original speed, so the difference in the time taken to work with each medium was not great in my case.

There is perhaps an argument to be made that slowing down the process of reviewing data may itself contribute positively to the analysis, encouraging the researcher to focus more on the data. My own experience may question this argument however. One significant problem that I found, particularly in the first cycle of coding, was that when listening to stretches of audio that contained little of interest I would find myself losing focus, perhaps undertaking some other task that needed doing at the time, and thus running the risk of missing something important. It is difficult to do something else whilst reading, but quite possible whilst listening, and I sometimes struggled in the early part of the process to keep myself focused on the data through long sessions of coding.

The actual process of applying a code to audio is also somewhat slower than it is with text. In order to associate a code with a section of data that section must first be selected in the software. Selecting sections of text by clicking and dragging with a mouse is a process that is familiar to most people these days, a task routinely undertaken when using a word

processor. Selecting sections of audio is rather more difficult. Whilst it is possible in NVivo to click and drag on the audio's time line on the screen this is rarely a useful approach. The screen provides visual feedback about the content of a data source (be it text or audio) at a particular point. Visual feedback is of considerably less use with audio than it is with text, however. In practice I found that selecting sections of audio had to be done by listening and using the keyboard, pressing a key (F9) at the appropriate moment to start the selection, and another key (F10) to end it. This, in turn, required a lot of rewinding, as I would hear a statement that I wished to code and then had to rewind to the beginning of the statement to commence selection. Although this process was slower than would have been the case with a transcript I quickly became adept at navigating around audio using the keyboard, and the approach had the advantage of causing me to listen for a second time to sections I wished to code, deepening my familiarity with them.

Searching for and retrieving sections of material can also be a more difficult and time-consuming process with audio. A recording feels less tangible (Wainwright and Russell 2010) and must be listened to in a very linear way, whereas eyes can quickly scan over a page or a screen searching for patterns. As Evers (2011) notes, one of the advantages of transcription is the ability to easily search for specific words in a text document, something that is not yet possible with audio. The difficulty of locating specific sections of a recording or document becomes less of an issue as the process of working with data progresses, however. As well as applying codes to sections of audio, NVivo allows annotations and notes on content to be made, each associated with a particular segment of the recording. All of these codes, annotations and notes can be used to quickly identify a relevant section of the recording. This process of indexing is a new skill which must be learnt when working directly with audio, but it is conceptually not far from the traditional activity of writing notes in the margin. Of course, the process may itself result in a degree of selectivity about what is annotated. Ultimately though, data analysis is about condensing themes out of a large corpus of data and that process inevitably involves a degree of selection of information (Graneheim and Lundman 2004). An advantage of working directly with audio is that much of that selection can be delayed to a later stage in the analytic process than would be the case with transcription, reducing the risk of important points being missed. In my deskwork I listened

through each recording initially without coding or annotating, beginning to code only on the second listening so that I could be sure to have listened to each recording in its entirety at least twice.

6.2.4 The necessity for transcription

Ultimately, some transcription is difficult to avoid. Throughout the chapters that follow I have used quotations taken from the conversations I had in the field, both to illustrate my arguments, and in an attempt to bring the data to life for the reader. Whilst, as Gibson et al. (2005) note, it may be technically possible these days to produce reports that include audio, several factors prevent this in practice. Perhaps the most important in the context of this thesis is that academic regulations require that a thesis be a written work. Another important reason for transcription is confidentiality. The transcription process removes any possibility that the participant's voice may be recognised and thereby significantly reduces the chance of participants being identified. Some limited transcription, then, was necessary, even though I worked primarily with audio.

On the whole I left selecting quotations until late in the process, during writing up. In one or two areas I did transcribe short sections during the first coding cycle, where they appeared to be particularly pertinent. In practice, though, I often found that by the time I came to writing up the findings my view on what would best illustrate them had changed as my understanding of the data had developed. Where I did undertake some transcription early on I did so purely on the basis of anticipating future need. The transcriptions were then put to one side and not used at all during analysis. Transcription in this study is, then, something which was largely carried out at the end of the process of analysis, rather than at the beginning. As with any transcription, some information is lost in the process, but that loss came after the analysis was complete.

In transcribing the quotations which illustrate my findings I have tried to strike a balance between being as true as possible to the original data and producing a thesis that is readable and engaging. I have used the words that those I spoke to used, including dialect, and have occasionally written words phonetically. On the other hand, I have tried to keep quotations succinct and to keep notation to a minimum. This means that I have sometimes missed out

Box 5: Selectivity and field notes

The process of writing about transcription has led me to reflect on the nature of my field notes. These, too, were largely in the form of audio recordings as I often dictated them into my recorder, and they include, amongst other things, notes on the many shorter, incidental conversations that I did not record. Although I have a handful of written notes made during interactions, mostly at residents' association meeting, I generally left making notes until later in order to keep interactions as natural as possible. I tried to record my observations as soon as practicable; sometimes I would go for a walk in the nature reserve across the river from Manor Farm to gather and record my thoughts; often my notes are recorded on the journey home, with the recorder fixed to my dashboard with Blu Tack, or held in my hand as I cycled across Coventry. These notes are, however, by their very nature selective. By the time I recorded them, shortly after the interactions themselves, I had already made decisions about what I thought was important from those interactions, what I considered worthy of recording, and what I did not. These decisions are themselves an interpretive act informed by my tacit knowledge (Wolfinger 2002), one made very early in the analytic process.

The strategy I adopted in taking field notes was one of salience—I noted what I thought was important. When I look back at how my understanding of the longer, recorded conversations developed as I worked with the data, and how what I saw as important changed as my understanding developed, I cannot help but think that there must have been important things that were said or seen in those unrecorded conversations that I did not recognise as important at the time, and so did not include in my notes. There is certainly a richness in the fully recorded conversations that is absent in my field notes. In many ways, of course, this is an inevitable consequence of relying on field notes, and it seems clear that where it is practically and ethically possible, direct recording of conversations will produce much richer data. Had I used a more comprehensive strategy for note taking I might have lessened the impact, but as Wolfinger (2002) highlights, even with comprehensive note taking choices of what to record are made based on existing understanding. Field notes are filtered through the perceptions of the note taker right from the beginning.

passages that veered away from the point I am illustrating, and I have sometimes had to insert words that were clearly implied in the original context, but are not obvious outside of that context. I have been careful to indicate when this has been done, and to be consistent in the way in which I have done this. A summary of the minimal notation that I have used is given in [Table 6.1](#).

<i>Notation</i>	<i>Meaning</i>
...	An ellipsis denotes a passage that has been edited out of the quotation in order to keep the focus on the point being illustrated
[word]	Words in square brackets were not spoken. Often they are words that were clearly implied from the original context. Another use is where a name was spoken and the name given in the transcript has been altered to preserve confidentiality
[p]eople	Square brackets around the initial letter of a word indicate that the capitalisation has been changed to fit the position in the text. This is used only for quoted written material (since there are no capital letters in speech)
((action))	Indicates some non-verbal action, or specific tone. Where the action or tone continued for a time the end of that period is indicated with ((action ends))
—	An em dash is used to indicate that one speaker interrupted or cut across another

Table 6.1: Notation used in quotations

6.2.5 Conclusion

Modern technology makes it possible to work directly with audio recordings without the need to convert them into text by transcription. Working with text in computers is a familiar process for many people, with word processors being an everyday part of the modern office environment. Working with audio is much less familiar and for many it will involve a steep learning curve. Even with practice, the process is somewhat slower than working with text. Once the basics have been mastered, however, the disadvantages of working with audio are relatively few and it brings some significant benefits. Apart from the considerable time saved in transcription, working with audio keeps the researcher closer to the data than is possible with transcription, allowing the researcher to more thoroughly relive the experience of the original conversation and to pay attention to meaning conveyed through intonation, stress and pauses. Whilst the pros and cons of working with audio need to be reflected upon for each research project, I felt that for this project it was an approach which would work well. My experience through the project bears this out. With the use of NVivo 10 working directly

with the audio has proven to be a manageable and practically achievable process which has enabled me to retain a close engagement with the data.

6.3 Coding, review and memo writing

Having discussed the reasons for working primarily with audio data during the deskwork stage I turn in the coming sections to the process of moving from those audio data to a written thesis. That process was one that was both iterative and convergent (Eisenhardt 1989), going back over each step multiple times as ideas developed and moved towards a coherent and stable framework. The first step in the process was to code the data, followed by a focused review to refine codes and prompt reflection.

Coding began using an eclectic strategy (Saldaña 2016) which applied codes to the data based on first impressions gained. The approach was very much exploratory, akin to open coding (Corbin and Strauss 1990) in the way that it drew codes from the data, rather than applying a preconceived list. Codes were sometimes based on the topic of the conversation (e.g. 'Fire service', 'NDC'), called descriptive coding by Saldaña (2016), sometimes on more conceptual ideas (e.g. 'Community and neighbours', 'Broken promises'). Often more than one code was applied to a particular segment of talk or text. The resulting list of codes was extensive (over 130) and I then began to group related codes together to reach a more manageable list for focused review (see Appendix I).

In the focused review phase of the analysis I looked at each code group, other than those that included only a single reference. I listened to all the audio coded to that group again, often several times, reviewed any text coded to the group, and wrote analytic memos recording my thoughts and observations and reflecting on what I had heard. The activity of writing memos often led to further reflections on codes and the relationship between codes, leading to further refinements. Through this iterative process a number of themes began to emerge. These themes then went on to form the basis of a concept map through which they were refined further (see section 6.4).

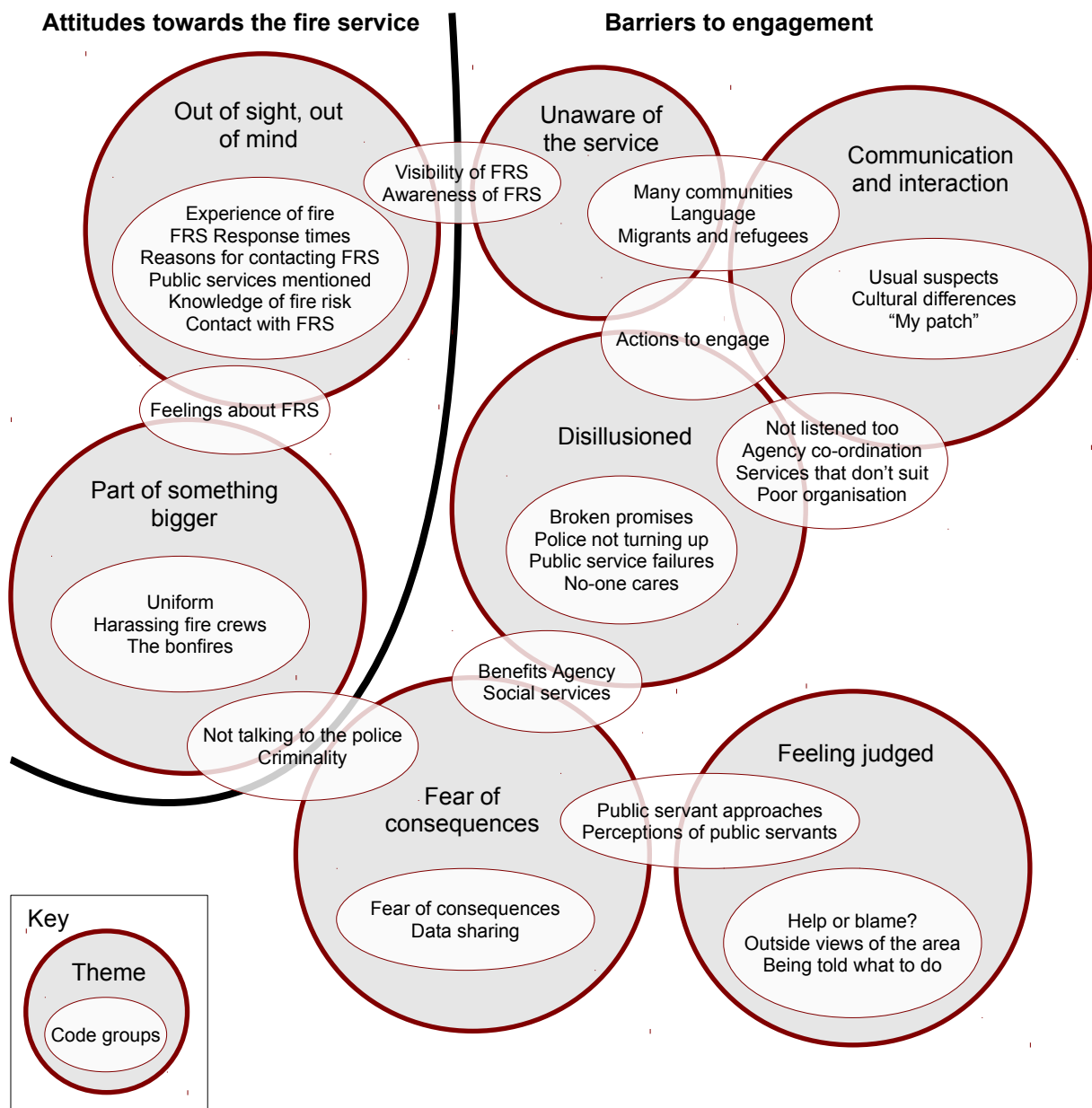


Figure 6.2: Relationship between code groups and themes

The relationship between themes and code groups was one that was somewhat complex, developed over several iterations by considering multiple connections. The link between codes and themes is often portrayed as a simple many-to-one relationship in which each theme is derived from many codes, but each code related to only one theme (Saldaña 2016, see also an example in Dacin et al. 2010). As Saldaña (2016) further notes, however, reality is usually more complex. It is quite possible for one code to relate to more than one theme (Graneheim and Lundman 2004) and that was certainly the case in this study. Figure 6.2 illustrates the relationship, showing the principal themes which form the basis for the

discussion in the coming chapters, along with the main code groups which informed the development of each theme. As can be seen, many code groups fed into two or even three themes.

There are several reasons why a single code may relate to more than one theme. Codes label the data, identifying the content or meaning of a particular datum (Saldaña 2016) and many of the codes used were descriptive rather than conceptual. For example, 'Social services' merely describes the topic of conversation, but some talk of social services related to the perceived failings of the service, whilst at other times talk of social services was around the fear of children being taken into care. Each of these topics relates to a different theme and so in reviewing data coded to 'Social services' notes were made on each theme.

A second reason that a single code may relate to more than one theme is that there are often links between the themes themselves. For example, one of the consequences that is feared from engaging with public services is being harshly judged, giving a clear link between the 'Fear of consequences' themes and that of 'Feeling judged'. Similarly, one of the reasons that social services are feared is because people are disillusioned with what they perceive as bad decisions, forming a link between 'Fear of consequences' and 'Disillusioned'.

6.4 Concept mapping and refining the themes

Concept maps are a visual way of organising knowledge in which concepts are represented as boxes and the relationship between concepts as lines (Novak and Cañas 2008). The relationship lines feature 'linking words' which describe the nature of the relationship between the two linked concepts. Each concept may be linked to several other concepts, forming a network of interlinking ideas. As I moved through the process of review I used the Cmap¹² software to create a concept map of emerging themes and their relationships to each other. Using software for this purpose has the advantage that the space used can be endlessly extended, not being constrained to a sheet of paper. The resulting concept map was too large and complex to be meaningfully included here, but by way of an illustration a section extracted from it, dealing with the theme of 'feeling judged', is included at [Figure 6.3](#).

12 Institute for Human and Machine Cognition, <http://cmap.ihmc.us/>

The creation and review of the concept map led to further refinement of the themes identified until ideas eventually converged towards the main themes which form the basis for the discussion in the following chapters. Fully understanding how those themes worked, however, was something which ultimately came from writing about them.

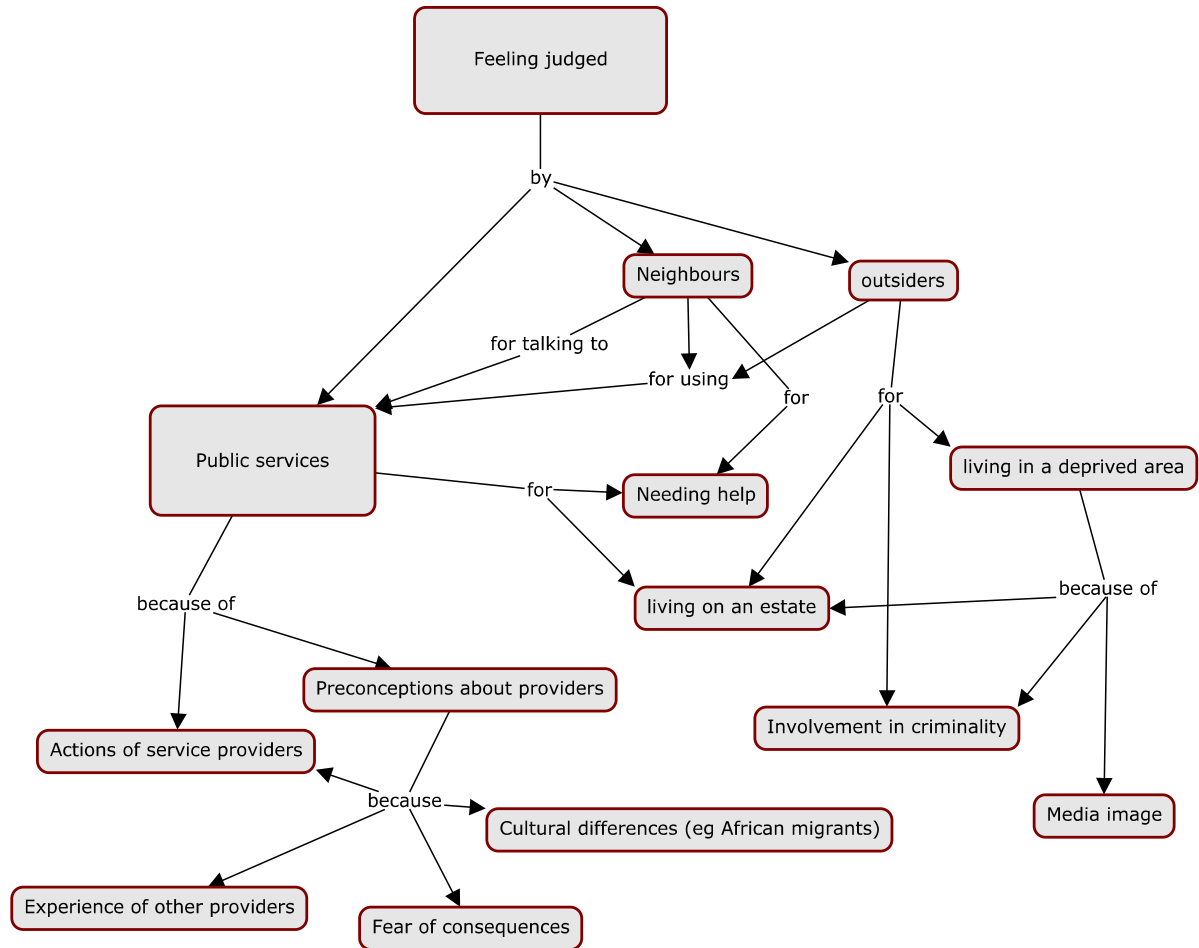


Figure 6.3: Concept map of the 'feeling judged' theme

6.5 Writing

Only in the narrowest sense is writing the endpoint of the analytic process. Rather, it sits at the very heart of it, it is in itself a method of inquiry (Richardson and St. Pierre 2005). Colyar (2009) sees writing as generative and sense-making, a way for the researcher to learn, both about the research topic and about themselves. For Colyar (2009: 431) "Writing is the thinking process I do before writing".

I put off writing for too long, convinced that I had to understand before I could write. The reality was that I had to write before I could understand. Whilst writing analytic memos

helped me to organise thoughts and develop my understanding, only when I really began the process of structuring and writing up my findings did my findings fully begin to make sense to me. Writing focused me in on my ideas, it forced me to think through them more carefully and to reflect more deeply on the process of generating them. Writing was an important part of the iterative process of analysis; it led to nascent ideas being revisited and revised once more. Writing, more than anything else, helped me to make sense of the messiness of my data. As I wrote my concept map was updated, my writing plan changed, new ideas came to me. Many of the more reflective parts of this thesis were not conceived until I began to write. My reflection on field notes in [Box 5](#) (page 116) is a good example. In some ways this reflection fits more with the chapter on fieldwork than with this chapter on deskwork, but I have placed it in this chapter because it is a product of writing this chapter—made up of thoughts that grew from writing about transcription. Because writing was so much a part of the process of data analysis, I put off writing this chapter until almost last. How could I write about analysis when the analysis was not yet complete? In retrospect, perhaps this was a mistake. Perhaps making a start on this chapter earlier would also have helped me to make sense of the analytic process.

Writing took me back to the data once more. This was partly a result of the decision not to transcribe. In writing up each of the main themes I once again reviewed all the data associated with that theme, listening back to recordings and finally identifying the quotations that I would use to illustrate those themes. Sometimes I came across something as I listened again that reminded me of a different theme. For example, I originally coded a comment by Anna about the ill-thought-out location of the children’s playground on Manor Farm to the theme of disillusionment with public services, as it represented a failure of the council. It was only when reviewing data on disillusionment during the writing process that I realised that her joking about it amounting to “ethnic cleansing” of estate kids spoke so strongly to her sense of feeling judged for living on an estate (see page 148).

Writing for me, then, was not an activity that took place once I had analysed my data, it was very much a part of the process of analysing data. It was an activity that brought me back to

the data, focused my thoughts on my findings and prompted reflection and self-learning. It was, as Richardson and St. Pierre (2005) so clearly put it, a method of inquiry.

6.6 Conclusion

Deskwork, the process of analysing data, of making sense of the messiness of data, was a messy process in itself. In contrast to more positivist, quantitative inquiry, analysis is woven throughout the interpretive part of this study, beginning as soon as data were available, and continuing until the end of writing up. Throughout the process I sought to remain as close to the data as possible, choosing to work directly with audio files rather than with transcription, constantly listening and relistening. There are no hard and fast rules for qualitative analysis, no formulae that can be followed (Bryman 2004). The process I used was both iterative and emergent. I have sketched out in [Figure 6.1](#) (page 109) and in the sections of this chapter what at first glance appears to be a series of discrete steps through which I moved from data to a final thesis, but in reality these steps often took place at the same time. I did not move neatly from one to the other, but shifted my emphasis between them; whilst ideas have converged towards a stable and coherent framework there was never a time when codes were not being refined further or concepts developed. Writing, in particular, has played a vital role in the creation of ideas. The analytic process has also been one of reflection and self-learning, one that has taught me much about myself and about my practice as a researcher. For that reason it is almost certainly a process that I will not repeat in quite the same way again, but that is not to say that it was not a good process and one which has resulted in the development of valuable new knowledge. It is to presenting that new knowledge that I now turn.

Chapter 7: Attitudes towards the fire service

7.1 Introduction

From the outset of this project, resident attitudes towards the fire service have been an important focus of investigation. I am interested in understanding what gets in the way of fire prevention work in those communities where rates of fire remain higher than elsewhere, and in understanding how approaches to fire prevention education can be improved in order to begin to address the inequalities uncovered earlier in the study. Whilst fire prevention should perhaps not be the sole preserve of the fire service, the fire service certainly does have a major role to play in it, and it forms part of their statutory duty (Matheson et al. 2011, Fire and Rescue Services Act 2004). Indeed, the West Midlands Fire Service Community Safety Strategy notes that:

Prevention occupies the majority of our work time and involves our day to day interaction with people in local communities, to inform and educate about the risks from fire, road accidents and other undesirable events.

(West Midlands Fire and Rescue Authority 2013: 13)

The nature of that day to day interaction will inevitably hinge around how the public perceive the fire service. Understanding attitudes towards the fire service, then, is important to understanding the ability of fire prevention work to reach the communities it most needs to reach. In this first chapter dealing with findings from the qualitative part of the study I will look at what I learned about those attitudes. Two broad themes emerged and are presented here. Previous studies have identified a tendency for residents to view all public services with the same scepticism (Canvin et al. 2007, Mathers et al. 2008), extending this at times to the fire service (Matheson 2012), so the theme which I shall come to later in the chapter was one that I was expecting—that the fire service is sometimes seen as part of some wider entity, something that political scientists might call ‘the state’, but those whom I talked with are more likely to just refer to as ‘authority’. The first theme, however, took me rather by surprise. That is that people just do not think about the fire service very much, it is tucked away out of sight and rarely thought about. Before going on to discuss these two themes,

though, it is useful to place the discussion in context by briefly describing some of the work that the West Midlands Fire Service (WMFS) undertakes.

7.2 The work of the WMFS

In this section I do not set out to provide a detailed account of every aspect of the WMFS's work, but rather I aim to provide sufficient context to assist in understanding the discussion of findings that will be presented in the coming chapters, and the discussion of implications presented in Chapter 10. As the concern of this study is fire and fire prevention I will focus here on fire, but it is important to note that a significant proportion of WMFS work is concerned with incidents other than fire, in particular with road traffic accidents (West Midlands Fire and Rescue Authority 2013).

7.2.1 *Response and prevention*

Throughout the discussion of the WMFS's work and of perceptions of the WMFS I will draw a distinction between response and prevention. Response is the 'blue light' work of the service, the rapid reaction to emergency incidents, whether they be fires, road traffic accidents or other events requiring immediate attendance. Although this study is primarily concerned with prevention, some consideration of response is necessary for several reasons. As will become clear later (see, in particular, section 7.3.1), response work is the most visible part of the work of the WMFS and tends to be most strongly associated with the service in people's minds. When I asked people directly about the fire service, perceptions of response almost invariably formed the basis for the answer. Response also has an important impact on the resource configuration of the service, and this affects the way in which prevention is carried out. The WMFS maintain a commitment to respond to high risk incidents within five minutes (West Midlands Fire and Rescue Authority 2013), a commitment that rests on a core principle of maximising survivability. It is largely this commitment which dictates the levels of staffing and equipment that the service requires. Response work, however, occupies only about 10% of a fire fighter's time (West Midlands Fire Service 2016a). Whilst some of the remaining time is spent on training and on carrying out station routines, a significant proportion is given over to prevention work.

In the context of this study I use the term ‘prevention work’ to refer to the proactive work that the WMFS undertakes to try to reduce the incidence of fire and minimise the consequences of fire. Technically there is a distinction between *prevention*, which seeks to avoid fire starting, and *protection*, which seeks to minimise the impact of fire if it does start. However, I am interested in community perceptions of the WMFS and this technical distinction is one that is unlikely to be made by community members. Prevention and protection in a community context are tightly bound to each other, with a single activity by the WMFS sometimes involving aspects of both. For example, the giving of advice to a resident may cover both not leaving cooking appliances unattended (prevention) and devising escape routes (protection). In my conversations with residents the most widely known aspect of the service’s community safety work was the fitting of smoke alarms. This is technically protection, as smoke alarms do not prevent fires from starting, but increase survival by providing early warning of a fire. It was clear, though, that smoke alarms are thought of as prevention by most residents. I will therefore use the term prevention to refer to all aspects of proactive community fire safety work.

7.2.2 Home fire safety checks

The Home Fire Safety Check (HFSC)¹³ has been the mainstay of community fire safety initiatives for over a decade. Consisting of a detailed assessment of a householder’s fire risk and advice on how to minimise this, often accompanied with the supply of smoke alarms, HFSCs were funded by central government between 2004 and 2008 (Knight 2013). Funding was mainstreamed into core fire and rescue service (FRS) budgets from 2008 (Matheson et al. 2011) but all FRSs have continued to provide HFSCs since that time, often moving to doing so in a more targeted way that focuses on households that are considered to represent a high risk. The number of HFSCs being carried out has seen some significant reduction since the coalition government came to office in 2010 and introduced financial austerity measures (National Audit Office 2015). Despite these reductions, however, the HFSC, together with its successor the Safe and Well visit (see 7.2.3), remain the flagship instruments of community fire safety policy.

13 The name varies from FRS to FRS and visits may sometimes be called Home Fire Safety Visits or Home Safety Checks.

Whilst the exact way in which HFSCs are carried out varies between FRSs, a common approach, and one used by the WMFS, is to make use of the latent capacity of on duty fire fighters. The need to respond rapidly to emergency incidents requires a particular number of fire fighters to be on duty, but much of their time is not spent on response work (see 7.2.1). Some of this spare capacity is utilised to deliver HFSCs. Since the fire fighters involved are part of the service's response resource they still need to be able to respond to emergencies. Visits are therefore usually conducted in uniform and travelling in response vehicles, and arranged visits may have to be cancelled at short notice, or even cut short during the visit.

There is a widespread assumption that HFSCs have made a contribution to the decline in rates of accidental dwelling fires (ADF), and in rates of fire related casualties, that have been seen in the past decade or so (see Figure 3.1, page 27), although this relationship is very difficult to prove and there is acknowledgement that other factors may have contributed to the observed improvements (Chief Fire Officers' Association 2015, National Audit Office 2015). HFSCs might reasonably be called the 'gold standard' of community fire safety interventions, providing bespoke assessments of an individual household's risk factors, and offering tailored advice and practical help on mitigating those risks. More recently, the scope of these interventions has been expanded with the introductions of the Safe and Well visit.

7.2.3 Safe and Well visits

Since 2015 the WMFS have shifted towards providing Safe and Well visits (Spencer 2015a), a more in-depth assessment that includes the former HFSC and adds consideration of a range of other factors, such as weight and healthy eating, mobility and falls, smoking, drug and alcohol use, and road safety. In addition to providing advice on general health and well being, fire fighters conducting Safe and Well visits are able to refer residents on to other agencies for further help. These detailed consultations can take well over an hour to undertake and, as with HFSCs, in the West Midlands they are delivered by uniformed fire fighters. Safe and Well visits are part of a wider partnership agreement between NHS England, Public Health England, the Local Government Association, Age UK, and the Chief Fire Officers' Association, who agreed a consensus statement on working together in April 2015 (NHS England et al. 2015).

7.2.4 Collaboration and expansion into health and social care

An emphasis on joined-up working and inter-agency collaboration became a significant part of public policy approaches to cross-cutting problems with the advent of the first New Labour administration (Ling 2002) and continued to dominate public policy throughout the New Labour era (Ferlie et al. 2011). Although FRSs came to the partnership table later than many other agencies (Matheson et al. 2011) they have been very much involved in inter-agency working in a number of areas. Perhaps the longest running of these is anti-social behaviour, where participation in the Crime and Disorder Reduction Partnerships saw them collaborating with other agencies, including the police, on tackling fire-setting behaviour.

More recently, the WMFS has expanded its role significantly, particularly into areas of health and social care. The widening of the scope of HFSCs into Safe and Well visits is a prominent example of this, but there are many others. In some areas the service has taken on response to the Telecare fall alarm system for elderly and vulnerable residents (Spencer 2015b), it gets involved in assisting with hospital discharges, and it has trained up specialist Vulnerable Persons Officers. Beyond these existing activities the WMFS is actively seeking commissions for further health related work (West Midlands Fire Service 2016b). Regular posts on the WMFS website and Facebook page proudly promote the collaborative work that the service is undertaking with agencies involved in health and social care and the service has been recognised with Marmot Partnership Status for this effort (Spencer 2015c). Collaboration with other agencies is also important to FRSs generally in gaining referrals for Safe and Well visits, and to enable such visits to be targeted to those most at risk from fire (Higgins et al. 2013).

The expansion of WMFS's work into areas of health and social care reflects a number of factors. Given the evidence that older and more vulnerable residents are more at risk of becoming casualties in a fire (see 3.3.3) the work has direct links to fire safety. Furthermore, the service has considerable spare capacity as a result of the need to configure resources around its commitment to a five minute response time. With most public services struggling to find the capacity to carry out all the work that they would ideally like to do, the fire service is in a unique position in this regard. Making use of latent capacity to provide

services to health and social care organisations both contributes to the wider public good and provides a valuable income stream for the WMFS. The desire to get involved in this area is further bolstered by a belief amongst many senior managers, echoed by the Chief Fire Officers' Association (2015), that the fire service brand is widely trusted and thus well able to undertake this work, although as I will highlight later in this chapter (see in particular 7.4.1), fire fighters at the coalface do not necessarily concur with this view.

7.2.5 Wider prevention work

The HFSC, and more recently the Safe and Well visit, are the mainstay of the WMFS's prevention work, but they are far from the only activities. There is an active programme of work with young people which includes delivering activities within schools, the distribution of teaching materials, a Fire Cadets scheme, and an intensive programme aimed at young people who have misused fire. WMFS have also invested in two 'Safeside centres' –bespoke units for facilitating experiential learning about safety for young people. Furthermore, recognising the role that unemployment plays in fire risk, WMFS works in partnership with others to deliver a programme of skills development to young people who are not in education, employment or training, providing work experience, mentoring and free training in areas such as first aid and fire safety.

In addition to this outreach work the service runs ongoing campaigns on social media and in the traditional media aimed at raising awareness of fire safety and at gaining referrals for Safe and Well visits. However, despite the heavy focus that WMFS have on prevention work and the innovative portfolio of outreach work, a key theme that emerged from this research is that the WMFS is rarely thought about by residents, and it is to this theme that I now turn.

7.3 Out of sight, out of mind

Given the importance of attitudes towards the fire service to this study, I began fieldwork talking with people about their experiences of the fire service. Indeed, this was my original research question for the interpretive part of the study. What very quickly became clear is that few people had any experience of the service. Keith, an elderly resident of Manor Farm, and the first person I sat down with for a long, formally arranged conversation, told me “we

don't have much to do with them... we can't say we know much about them" and went on to ask rhetorically "to be fair, how much experience do people have about the fire service?" Keith's point is well made of course—we go through life hoping never to need the fire service, and for most of us this hope is realised. Even with its elevated rate of accidental dwelling fires, nearly four and half times above the mean, in the period considered in my quantitative investigation there were an average of only three fires per year on Manor Farm. Fire is actually quite rare, and people's experience of the fire service, certainly of its response work, is consequently extremely limited.

7.3.1 Positive perceptions focus on response

When I asked direct questions about views of the fire service the reply was almost universally positive. "They do a brilliant job. Obviously they do a brilliant job" said Tilly, an older woman from Manor Farm, with the 'obviously' hinting that she thought it impossible that anyone might think otherwise. When pushed to clarify if this judgement applied to all aspects of the service's work she replied "Oh, I wouldn't know. I know they go out and give talks and what have you about safety and that". This mention of safety talks as almost an afterthought could suggest that the "brilliant job" verdict is based largely on the response side of the fire service's work, rather than on the prevention work that takes up the majority of its time. Others were more explicit about this. In a casual conversation during leafleting I was told that the fire service was great, putting fires out quickly; in a conversation at a 'Tea and Talk' drop-in session the West Midlands Fire Service (WMFS) was described as providing a "very good service" in the context of "having them out", whilst Pat, a woman from Wood End and one of the few people I spoke to who had actually experienced a fire said "they were pretty good. Quick response... no complaints about the Fire Brigade". Notably, speed of response came up several times, suggesting that the WMFS's continued commitment to a five minute response time is seen as important.

The only voices to clearly dissent from this positive view did not base their judgement on fire service response work. Keith disliked what he perceived as the dominance of the unions within the service, saying "what it is, they're run by the unions, that's the problem". His deep dislike of unions was supported by tales of his experiences of dealing with them in his

former role as a supervisor in the engineering industry, and when we spoke at his home he had copies of the *Daily Mail* and *The Sun* beside him on the sofa, neither paper being known for its supportive attitude towards trade unions (Downey and Fenton 2007). Another dissenting voice came from Ruby, a woman at the first ‘Tea and Talk’ drop-in session I attended. During my introduction, which stressed that I was interested in the fire service’s prevention work, she said simply “I wouldn’t let them in the house”, going on to explain that this was because they would tell her to stop doing things. This dislike of being told what to do relates both to a theme I will come onto later in this chapter (section 7.4) of seeing the fire service as agents of authority and control, and to a more general theme I will look at in the next chapter of feeling judged (section 8.2).

The strong focus on response work rather than prevention work when forming explicit views of the fire service is a clear indication that it is response that people associate with the service, despite the fact that the majority of its time is spent on prevention. In fact prevention work seemed relatively unknown. When I asked a group of younger, second generation African women, part of the Tanzanian church group I was in touch with, what they thought the fire service did their answers covered a range of different activities, but all essentially response work—putting out fires, breaking down doors, getting people out of crashed cars, even helping cats made the list. Prompted about prevention work these women did have some awareness of the fire service fitting smoke alarms, but little else. This was a common theme in my conversations—people often knew, when prompted, about the fire service’s involvement in fitting smoke alarms, sometimes accompanying their answer with a hand movement reaching up and miming attaching something to the ceiling, but more general awareness of prevention work was poor, with few mentioning the Home Fire Safety Checks or Safe and Well visits¹⁴ that form the mainstay of the WMFS’s approach. What is more, responses to questions about prevention work often saw it as unnecessary, with people considering that they already had a good understanding of fire prevention. As one woman put it, “I know how not to set fire to my house”.

14 For more detail about Home Fire Safety Checks and Safe and Well visits see section 10.2

This focus on response in people's minds poses a problem, as, on the face of it at least, it is attitudes towards prevention work that are of particular interest in this study. As Matheson (2012) has noted, there may be a considerable gap between residents' views of response work and their views of prevention work. Furthermore, at this point in the research I was seeing little evidence of the fire service being linked to other public services—something that existing literature had led me to expect (e.g. Canvin et al. 2007, Mathers et al. 2008, Matheson 2012). Reflecting on these points I wondered whether the approach of asking direct questions about the fire service, or indeed the explicit nature of the leaflet that I had used to recruit some of the earlier participants, was influencing the responses that I received. Interpretive research such as this is by its nature iterative and flexible and must respond to what emerges in the field (Schwartz-Shea and Yanow 2012). In an effort to address this potential problem, therefore, I decided to modify my approach to steering conversations. I began keeping questions much more generic in the early parts of my interactions with many people, exploring experiences of, and attitudes to, public services in general. Only later in my conversations did I start asking about the fire service directly.

7.3.2 Fire is not a priority

Two notable observations emerged from this shifted approach. One, a tendency to lump the fire service in with other services, I will return to later in the chapter (section 7.4). The other was that when asked about public services generally people tended not to mention the fire service at all. Indeed, one surprise for me was discovering that what the residents of this part of Coventry consider to be a public service differs somewhat from my own view, which comes not only from my academic interest, but from a career spent in local government. A very common first response to questions about public services was to berate the bus service in the area, a service largely provided by private contractors, albeit coordinated by a public body—at the time of my research the West Midlands Passenger Transport Executive, operating under the name of Centro¹⁵. Another common first response concerned Whitefriars, the registered social landlord to which Coventry City Council housing stock has been transferred, and the main housing provider in the area. For many people the bus

15 With the establishment of the West Midlands Combined Authority (WMCA), Centro was abolished in June 2016 and its functions taken on by the WMCA.

service and social landlord have far more impact on their daily lives than does the fire service, both being services that are heavily used in more deprived areas (Duffy 2000), so it is perhaps not surprising that these functions occupy people's minds rather more. This comes back to the point made earlier that fire is actually quite rare. What is more, most accidental dwelling fires are, fortunately, contained to the room in which they began (Home Office 2016a: Tbl. 0203), so only the household and close neighbours need ever know about them. Fire is rarely seen and remembered. One woman, to whom I had just handed a leaflet on Manor Farm, told me that she had been there for sixteen years and had only seen one house fire. Another long term resident of Manor Farm, Anna, told me that "our area can't be a high rate because we don't have that many". When I explained that the area actually ranked six out of 1,680 in the West Midlands the intonation that began her response was one of surprise and disbelief:

Fires? 'cause as I say like, I've been here thirty years and I can only remember two fires. Three fires—but that's this side. You know, in this street, which is probably sixty houses...Thirty years, that's what I mean, there's not been many fires that I can say I've seen. That's why I say I'm quite surprised when you say that we're sixth.

Lenny, who has lived on the estate for nine years, has also seen very few fires in his time there:

There ain't been many accidental fires that I know of, apart from the ones on bonfire night. I ain't witnessed many houses going up. I don't know, nothing. I've had a burnt out car going up behind me.

Intrigued by the low visibility of fire, when Karl, a Wood End resident, told me that he had had a small fire at home I asked him how many people knew about it. He responded "Two. If that", reinforcing the point that most contained fires go unnoticed by all but those immediately affected. As a fire fighter noted when I talked to a watch later in the research "it's only the large blazes that people remember". Clark et al. (2014) point out that perceptions of risk are constructed within a particular context. With fire a relatively rare and often hidden event, and with plenty more pressing problems to address, it would be

unsurprising for the risk of fire to be perceived as low and for it to take a back seat in people's minds.

I asked a group of fire fighters how they felt people prioritised issues of fire and they were under no illusions:

CH: So in the great continuum of things that people have got to think about, where does fire come on their range of importance?

DAVEY: Well it doesn't come very high at all really, because generally people don't have fires do they? It's the odd person that'll have a fire, and OK, it might be quite high on their priority list, but for the 99% of the general public who don't have fires and probably never had one in their life—

AL: —it's going to be way down on the list.

DAVEY: Of course it is.

Following up on this, I asked how the group thought people saw accidental dwelling fire in relation to all the other types of fire that they might encounter:

CARL: I don't think people think about it to be fair.

JIM: There's a lot of complacency isn't there?

CARL: Yeah, it's only when people have the fire that they actually think about it. Other than that, people forget we exist. From speaking to people in the public, all they care is that when they dial 999 we're there. They don't care—

JIM: —beyond that.

CARL: Yeah. They don't think of us at all until they need us.

7.3.3 'Tucked away'—the invisible service

The low visibility of fire, and the low importance attached to it by many people when compared to other issues they have to think about, does little to encourage engagement with the fire service. The fire fighters I spoke with were frustrated by the take up of their

campaigns, telling me that they could leaflet and door knock whole streets without finding anyone interested in a Safe and Well visit, or even managing to get anyone to open the door to them. The problem may lie not just in the visibility of fire though, but in the visibility of the service, as the fire fighters went on to explain:

JIM: Have a think about how many times you saw the copper on the beat or the police car or the ambulance or whatever. Our big problem is that we're not, kind of, out on the street all the time are we?

DAVEY: We're tucked away.

JIM: We're tucked away, like [Davey] says, we're tucked away until you need us, whereas you'll always see an ambulance up and down the street won't you? You'll always see a copper, you know, charging down their favourite routes to somewhere.

A similar point was made by Andy, a Police Community Support Officer (PCSO) I talked with during one of my frequent visits to a café in the area. Andy felt strongly that his regular, high visibility presence in the community, walking around the streets, taking his breaks in the local cafés, drinking tea with residents (and the occasional researcher of course), had done much to improve engagement between the police and communities. In contrast, he felt the fire service was not visible enough, not seen enough in the community, and that this led to the poor response that it experienced to its attempts to reach people. Deborah, a worker at Moat House Community Trust, supported this view:

They [the police] come, the PCSOs in particular, come and just sit in our coffee shop. They don't do anything, they just come and sit and write up their notes, or whatever it is they're doing at that point, but they're sitting there, so people know their faces, and so people will approach them because they're familiar. I wouldn't know one fire officer from another. I wouldn't know any really... they're definitely off everybody's radar.

Lenny echoed the point about visibility when he spent some time reminiscing about his childhood twenty years earlier in another part of Coventry, and how much more visible the fire service had been then. Like the fire fighters I spoke to, he used the phrase “tucked away” to describe the fire service of today:

We used to go to the fire open day for bonfire night, you know, and I used to see them [the fire service] at a lot of fêtes and stuff; it's weird the way it was over there because you could go in the fire station over there. I know cutbacks, and I'm talking like twenty years ago... but it was almost different, the fire service there. I don't know if it's because our fire service [here] is the one on Foleshill Road, which is like a little one... and they're just sort of tucked away, you know. The only time you ever see them doing anything is car washing. The open days are not as publicised as they were. I remember them being around in shops, saying "come down and watch the fireworks display", it was almost like you went in to the fire service there, you know... you used to see them training in Northmill Park, you know, and I used to play football with them... they were like "lad, do you want a game" and I used to have a kick around with firemen you know. I know it sounds stupid, but then when I used to walk by you'd recognise them and you'd wave at them when you went into town and they'd wave back, you know. I don't want to sound like a sort of Emmerdalesque sort of atmosphere, but it was just nice, you know, you'd wave at the firemen, and you don't get that round here. But I think that's because of the location if anything. I've been quite lucky that I lived near and that's where they used to chill out and stuff.

That Lenny remembers his early interaction with fire fighters twenty years on is interesting in itself and lends some additional weight to the idea that greater visibility and contact may facilitate improved relations between the service and communities, an idea which there is some evidence for in the context of the police (Bradford et al. 2009, Hawdon and Ryan 2003). There are some real practical problems in achieving a higher visibility though. As Lenny himself notes, proximity to the fire station may have played a role, and with only four stations now serving the City of Coventry inevitably many neighbourhoods will be at some distance from their nearest station. The question of how visibility might be improved is one that I will return to in Chapter 10 when I consider the implications of these findings for fire service practice.

7.3.4 Summary

Although responses to direct questions about the fire service are generally positive, the fire service does not occupy a prominent place in the consciousness of most people living in this part of Coventry. As fire is a relatively rare occurrence, few people have direct experience of the service's response activities, and they may not perceive fire as an important risk—other

issues in their lives are more pressing. The lack of consciousness of the fire service appears to be exacerbated by the service's low visibility, being "tucked away" until it is needed. What is more, although taking up the majority of the service's time, its prevention work is even less visible to people, with most associating the service strongly with response rather than prevention.

7.4 Part of something bigger

The second theme relating to attitudes to the fire service was highlighted by a number of the professionals I spoke with and, although more subtle than the first theme, is clearly seen with some residents. This was a tendency, when thinking generally, to lump the fire service in with other services, particularly the other emergency services, and to do so in a negative way. When asked about public services Craig, a young unemployed man from Wood End, clearly linked the three emergency services together, seeing them jointly as a controlling force involved in preventing people from doing what they needed to do to survive in an area with high levels of unemployment:

The thing is with like, as you've just said, public services, like police and fire brigade and ambulances, they just lead you round in a big circle. They don't, they want you to get up and work, but there's no jobs. They don't want you to sell drugs and sell stolen cars, but there's no jobs, so what can you do? Then they come and arrest us and put us in jail for a long time for doing stuff that we feel that we have to do to survive.

Later, though, when pressed about the role that the fire service play in this, he struggled to clearly link the service to the perceived control other than through a convoluted hypothetical scenario in which a drug dealer turf dispute descended into assault and arson, resulting in all three emergency services attending together. He then moved away from this link, turning instead to criticising the time it took the fire service to respond to an incident at his granddad's house, before softening his attitude altogether:

You see it's not even so much the fire service that are the bad ones, you know. Don't get me wrong, I've been and done like CPR¹⁶ courses in fire stations, 'cause they're the ones that teach you, you know. Like, I've got, certificates and that for my CPR. They do help, and they don't help. That's what I mean that they send you round in a big circle.

Craig seems to have two differing views of the fire service. On one level it is lumped in with other services, in particular the police, and seen negatively as an agent of authority and control. Yet when he thinks in more detail about the service he is able to separate it out and see it in a more positive light. It is also interesting that it is community outreach work carried out by the fire service, in the form of first aid training for young people, that he particularly identifies as positive. A challenge for the fire service, then, is to find ways to raise the prominence of these more positive experiences in people's minds.

7.4.1 Uniform and authority

Lenny, despite his fond memories of playing football with fire fighters, also felt that they were figures of authority. Although he felt he saw little of the fire service, he did highlight the fact that they routinely came and put out the bonfires on open spaces that are something of a tradition on Manor Farm on bonfire night, seeing this as spoiling people's fun and describing it as "ruining bonfire night". He also identified the uniform and blue lights as signalling authority:

You see they're [fire fighters] in a position of authority. It's always come across. I know they're a fireman but it's the uniform, the engine, the blue lights.

The group of fire fighters that I spoke to agreed that the uniform could be a problem. They felt that they were sometimes associated with the police because of it, and that this was a significant barrier to their attempts to engage with some communities:

JIM: Certainly since we've changed our uniform to a black uniform it's—

AL: —we look like the police.

16 Cardiopulmonary resuscitation, a first aid technique

JIM: Very similar to the police and because of that similarity I don't think they're answering the door.

AL: Because if you think about it, they don't actually read the badge. I mean, I can only just see 'West Midlands' from here. 'Fire Service' doesn't really stand out.

DAVEY: It's just authority isn't it? They just see us as an authority figure.

JIM: They just see a badge.

It is easy to see how the WMFS badge could be associated with the police. The logo on the uniform is based around a heraldic design set on the background of an eight pointed Brunswick star (Figure 7.1), and it is the shape of that background that first catches the eye. The Brunswick star is also widely used by UK police forces as the background for their badges. Although the West Midlands Police have moved away from its use in recent years, favouring an oval logo in much of their branding, the Brunswick star still appears as the background for the royal cypher on helmets and caps worn by West Midlands Police officers.



Figure 7.1: WMFS badge

In the early stages of the project I had several scoping conversations with senior managers in the fire service who clearly held the view that the service was seen as the 'good guys' and the uniform opened doors for them. The contrary view of those actually out knocking on doors was therefore particularly intriguing, and I asked the group what they thought of the idea of the uniform opening doors:

DAVEY: If you're talking to an everyday normal member of the public then it [the uniform] doesn't make any difference at all. It's not going to open any doors.

JIM: I think we've had more abusive comments and passing comments since we've been in this uniform than we ever did in the other uniform.

DAVEY: I mean if we're going to go and knock the door of a community centre it will probably get us into there because it's not a member of the public. It's just the members of the public that are in the high risk areas that look at us as people of authority I suppose. They put us in the same kind of group as the police.

Uniforms seem to be something that are of considerable concern to professionals, especially to those who wear them. A police officer I spoke with spent time talking about his uniform, expressing concern about the move to black shirts from white, which he felt appeared less approachable. Andy, the PCSO, highlighted the differences between his uniform and that of a police officer, suggesting that police officers sometimes hide behind their uniform and are less approachable because of them. Connie, a community worker, talked about the way uniforms are viewed amongst residents, identifying an interesting difference between young and old:

They see a uniform and they either think they're going to con them, or they've done something wrong. It's like [ID] badges. The Children's Centre. These young, we've asked them, we've asked these young mums... and they'll say "because if we see they've got a council badge or something like that, we'll think they're going to come and take our kids off us"... they're fearful of authority. And I think the older people are fearful of being taken in. You know, you hear of so many cons and schemes and scams and things like that.

Connie's observations about the fear associated with uniforms relate to a theme to which I will return in Chapter 8, that of fear of the consequences of engagement. What is curious to note here, however, is that although uniforms come up often when talking to professionals, mention of them is almost absent from my conversations with residents. Beyond Lenny's comments, noted above, there is nothing. Whether this is because of the questions I asked, the contexts of the conversations I had, the people I managed to reach, or simply because uniforms actually have less impact on people's perceptions than professionals believe, remains unclear. This is an area that would benefit from further research in the future.

7.4.2 The problem with being associated with the police

The difficulty that the fire fighters perceive in being associated with the police is much the same as we saw earlier with Craig's view—a combination of a general dislike of authority

together with negative experience of the police in an environment where some forms of criminal activity may be seen as a necessary survival strategy:

DAVEY: I think the relationship that the police have with any members of the public is different really. They're there for a different reason. We're there to help, they're there to, well they are there to help, but the public don't see them as there to help do they? They look at police differently to anybody else, and unfortunately the police do get treated differently to everybody else. But we sometimes get roped in on that, because of the uniform.

CH: Do you think all of the public sees the police as not there to help?

DAVEY: Not all. It's more in the down trodden areas and the poorer areas that obviously have more conflict with the police. The whole community is then going to be more against the police than say a better area... that never seems to have any problems.

JIM: To be fair, the police are in a really precarious position aren't they? The fact that they do help, you know, they do some real good things don't they? But, if you live in a poorer area and you're out nicking loaves of bread and stuff like that they've got to enforce the law haven't they? So we're in a privileged position that anything that we do is always perceived to be helping people, whereas the police help people but also they can make your life a lot worse, can't they? So if you've not got tax on your car, or insurance or an MOT or whatever, they've got to do you.

The reticence to engage with the police, or those who look like the police, may well extend beyond those who are directly involved in some form of criminal activity. Talking to the police was clearly seen as a taboo amongst some in the area, a point made strongly by Mickey, a young man from Manor Farm:

The only thing this estate can't ever, ever take is grasses. If you grass, you have to come off the area... if we're all outside having fun and that house there phoned the police on us, they wouldn't be able to live there very long.

Box 6: Talking to the police—the impact on the research process

The potential taboo about talking to the police was something that I had to keep in mind during my time in the field. Having realised that professionals working with the communities I was interested in were going to be an important source of information, the police and PCSOs were an obvious group to approach. I encountered a couple of PCSOs walking across the open space in the centre of Manor Farm one day and had an impulse to seize the opportunity and engage them in conversation. That impulse was swiftly followed, though, by the realisation that being seen talking to them had the potential to harm my credibility amongst some on the estate, an important element of maintaining access (Emmel et al. 2007). I decided to let the chance pass. This was not the only time I felt I had to pass up an opportunity to have a quick chat in an informal setting with police officers or PCSOs—whilst helping out at a community fireworks display, for example, I decided not to get into conversation with two police officers who were there. It was only towards the end of my fieldwork that I felt comfortable with approaching the police in public settings, and it was then that I seized the opportunity to have a very valuable chat with Andy, a PCSO.

This dilemma can be seen as part of negotiating what Cunliffe and Karunanayake (2013) term the ‘insider-outsider hyphen-spaces’. These spaces are not strongly bounded and a researcher’s position within them is constantly negotiated and renegotiated. I arrived in the field largely an outsider and, whilst that would always remain the case to some extent, I sought to move myself nearer to the inside by building up trust and rapport with local residents. To have gone against what some saw as an important social norm would have been likely to move me firmly back to the outsider camp.

Interacting with the police is only one example, albeit the most obvious one, of such dilemmas. Attempting to work with multiple groups—residents and professionals, those from Manor Farm and those from Wood End, long standing White British residents and newer Black African residents—made my dance around the insider-outsider hyphen-spaces all the more complex, with the ever present danger that an interaction that might move me further in with one group would push me out with another.

Rob, a police officer with whom I had a long conversation at the police station, saw residents as falling into three groups. Those, usually with a criminal background, who would never contact the police for any reason, but would sort out any issues or disagreements themselves. Those who, because of the community that they lived in and taboos about contact with the police, would rarely contact the police, but might, perhaps anonymously, “when things go too far”. And those who were on the phone to the police the whole time. Whilst Mickey was perhaps the only person I spoke to from the first group (on another occasion when I met him he was nursing an injured hand having just come from resolving a disagreement), several people mentioned worrying about the consequences of being seen talking to the police, and one of the area’s ward councillors suggested to me that this was a widespread issue. This is not to say that I ever had the feeling of dealing with a community living in fear (even if that is perhaps what Mickey would have liked), but there was an underlying sense that talking to the police was something that is best avoided.

Amongst the African migrant community there was also evidence of a strong desire to avoid the police, although its source seemed to be somewhat different. At one point I discussed organising a joint event with a charity working with African and Caribbean people and was told very clearly that if the police were there no-one would come. Edith, one of the women from the Tanzanian church group, told me that distrust of the police amongst her community was based on experience of the police in her home country, and suggested that her community may be slowly learning that the British police are not the same. Edith’s fear was very evident, and when a couple of other women from the congregation came into the room she spoke in hushed tones, clearly uncomfortable with the idea of them hearing what she was saying. Sensing this discomfort I wound the conversation up, feeling that it would be unethical to pursue it further.

7.4.3 Summary

In this theme, then, we see that views of the fire service are not always based on experience or knowledge of the fire service directly, but sometimes on seeing the service as part of a wider whole that exercises authority and control. This seems most commonly to involve an association with the police, and may be signalled by a similarity in the uniform or the use of

blue lights and sirens. The fire service's long-standing collaboration with the police through initiatives such as the Crime and Disorder Reduction Partnerships (see 7.2.4) may also contribute to this perceived link. The association between the fire service and the police may hamper the fire service's attempts to engage with some of the communities considered because the police are seen in a negative light, as an organisation with the power to make life difficult. Furthermore, a taboo about speaking to the police exists in some communities, resulting in a fear of the social consequences of interacting with them. Whilst there was little evidence that this taboo extends consciously to the fire service it is not unreasonable to assume that where there is an association in peoples' minds between the fire service and the police, taboos and attitudes will, at some level, also be transferred.

7.5 Conclusion

I have set out in this chapter two broad themes relating to attitudes towards the fire service. In the first I argue that by and large people do not think about the fire service or form particularly strong views about it at all. When asked directly, however, most people expressed positive opinions, almost invariably focusing on response work. In the second theme I argue that people associate the fire service with wider agents of control and authority and that because of this association they form negative views of the fire service, or are at least reticent to engage with it.

There appears at first view to be something of a tension between these two positions. One possible framework for explaining that tension comes from work on public attitudes towards the police, a considerably more widely researched topic. Skogan (2006) argues that the effect of contact upon peoples' attitudes to the police are strongly asymmetric—that the negative effects of bad experiences far outweigh the positive effects of good experiences. In the first theme there is, generally speaking, an absence of experiences on which to form any judgement. When thinking specifically about the fire service people have few experiences on which to base their judgement. The experiences that come to mind, even if they are not direct, tend to be experiences of response to an emergency, and are positive. There is little to lead to negative attitudes and perceptions are therefore good.

When not very specifically thinking about the fire service, but about services more generally, an association with negative experiences of other services takes over. These negative experiences have a stronger influence, thus we see negative views emerging. This shift between two apparently contradictory positions can be seen quite clearly in the way Craig talked about the fire service, at first very negative as he spoke in general terms about public services, but becoming more positive as the conversation became more focused on the fire service. The process can also be related to the way in which reflection can challenge taken-for-granted assumptions (Mezirow 1981, 1990). Within parts of these communities the taken-for-granted assumption is that uniforms mean authority and authority means trouble, but when people are challenged to think more specifically about the fire service and their experience and knowledge of the service, that reflection leads to a realignment of views to one based on their more positive experiences of the fire service.

There is a valuable implication of this for the fire service. If, as an organisation, it is able to broker greater contact directly it may be able to move to a position where views are formed more on the basis of experience of the fire service, rather than on the basis of other services. The fire service appears to be in the enviable position, compared to most public bodies, of not having to fight an uphill battle against past bad experience, and may therefore find that it is able to build a more positive reputation faster than most other services could. There is a danger, however—brokering more contact increases the chances of some of that contact resulting in negative experiences. It is therefore important that the service considers carefully how best to approach efforts to engage more directly with its communities and increase its visibility. This is a question that I will return to when I discuss the implications of these findings for the fire service in Chapter 10 (see in particular 10.6.2).

Chapter 8: Barriers to engagement

8.1 Introduction

In Chapter 7 we saw that the fire service does not occupy a particularly prominent place in the minds of residents, and in particular the service's prevention work is barely thought about. Few people in the area have direct experience of the fire service, and there is therefore little upon which to base a view of how effective the service's attempts to engage with the local community are. At the same time there was a tendency to think of the fire service as one part of the wider state, not clearly distinguished from any other public agency. These findings suggest that in order to understand some of the issues that face the fire service in trying to engage with communities in this part of Coventry, it is useful to look at community engagement with public services more generally. A number of barriers to engagement were evident in the data generated in the field, and these throw light on some of the challenges that are faced by the fire service, or any other agency, wishing to reach the various communities living in this disadvantaged area.

In this chapter I will discuss the evidence I found concerning barriers to engagement under five main themes. The first four of these, feeling judged, disillusionment, fear of consequences, and not being aware of services, can be categorised as perceptions or feelings held by residents. The fifth theme, however, is a little different. In this last theme I consider the way in which some of the engagement work in the area is undertaken, and suggest that the approaches to communicating and interacting with residents are only partly successful. This theme is more concerned with the actions of services than the perceptions of residents, but is closely linked to the theme of being unaware of services as it is one of its main causes. I begin, though, by looking at the way in which people perceive that they are being judged.

8.2 Feeling judged

A common theme amongst the people I spoke with was a sense of feeling judged, or a desire to avoid being judged. Judgement might come from many sources—from people outside of the area, from service providers, or from neighbours. Similarly, it could be for a number of reasons; it might be for needing help, for lifestyle choices, for living on an estate, or, as we

saw earlier (section 7.4.2), for talking to those in authority. This sense of being judged was always associated with negative feelings, often anger, and I argue here that if the sense of being judged is associated with engagement with public services it is likely that people will seek to avoid engagement in order to avoid feeling judged. Having already discussed being judged for speaking to those in authority, I will here look at three further important aspects, being judged for living in the area, being judged for needing help, and being told what to do.

8.2.1 Judged for where they live

The issue of being judged for living in the area was one which came up regularly throughout many of my conversations. This may have had something to do with timing. Whilst I was conducting fieldwork the Department for Communities and Local Government (DCLG) released a new set of indices of deprivation, the first to be issued for five years (Department for Communities and Local Government 2015b). One small neighbourhood within the wider study area was identified by these figures as having the highest index of multiple deprivation (IMD) in the West Midlands, and this fact was widely reported by the local media (e.g. Gilbert and Miller 2015). I went to one of the regular 'Tea and Talk' gatherings the day after the local paper ran the story and people were very upset by having their area branded as deprived. One ward councillor was particularly singled out for ire for his comment, reported in the paper, that "It's not a shock. Crime and other incidents have been well reported in the Telegraph in the past" (Gilbert and Miller 2015). Interestingly much of the criticism of the figures seemed to revolve around the idea that the statistics must be out of date and things had improved considerably in recent years. The fact that the ward councillor was quoted later in the same article pointing out the improvements that had been made in the last decade and a half seemed to have been missed by those keen to find a target for their anger at the slight on their neighbourhood.

When I visited Robert in his home in Wood End a few days later he was eager to dispel the reports and point out what was good about the area. Again, he was upset by having his neighbourhood labelled as deprived and emphasised the way things had changed in recent years, telling me "People live in the past when they're reporting about it, and it's not like that

at all now". Acknowledging the difficulties of the past, Robert's neighbour, Craig, a young unemployed man, explained:

When I was younger... there weren't one day that I didn't look out my window and hear sirens, see people getting chased by armed response and all of that, but now, you're lucky to get a pigeon on the field!

Later, Robert took me around the area and introduced me to Pat, whose views on what was clearly a hot local news story were clear:

Calling us a bloody deprived city—who the hell do they think...who do they think they are?! All my kids were brought up in Wood End. My grandkids are being brought up here every weekend in holiday time.

The release of the DCLG statistics and the media interest that surrounded that event may have heightened the sense of being looked down on from outside, but it was never absent. In a conversation somewhat earlier in the research Anna talked about the position of a children's play ground in Manor Farm, across the road from all the houses and adjacent to the river, giving a clear indication of how she felt outsiders view 'estate kids' when she joked:

That's ethnic cleansing, that is, in some form or another ((laughs)). Thinking, "these estate kids, we'll get rid of them somehow—knocked over or drowned".

This sense of judgement of the area was particularly evident amongst long-term residents—all those quoted so far in this section have been in this part of Coventry for most of their lives. Amongst these long-term residents there is a strong sense of pride in the neighbourhood, in the friendliness and down-to-earth nature of the people and the long established social connections, a sense that is sometimes contrasted with experience of other places:

I live this side because I like this side of Coventry, I like the people this side of Coventry... the other side, I've lived over there, I know what they're like, and I'd never go back there again.

The evident anger at the judgements being made of the part of Coventry that this study is concerned with is perhaps partly to do with a perceived attack on the focus of this pride, but for some there are more tangible effects of these views of the neighbourhood, with people talking about experiences of direct discrimination. Craig, together with Cynthia, a young single mother and another neighbour of Robert, both felt that jobs were not open to them because of where they lived:

CRAIG: I've been in different areas and they've said to me "oh, where are you from? Are you from Coventry?" and I've said "yeah, I'm from Wood End" and they're like "oooh".

CYNTHIA: When you say Wood End, don't put Wood End in your CV. You won't find a job with that.

CRAIG: Yeah, I went to Aldi, the superstore Aldi, handed in my CV, they've looked at it, "oh, you're from Wood End, we can't hire you".

Whilst Mickey felt that other doors were closed to him because of his address:

If I go to a night club in Nuneaton and on my provisional [driving licence] it says [postcode], "you're not allowed in mate"... in Nuneaton. "You're not allowed in mate". Because they know about Manor Farm. They know how notorious it is.

This sense of unfair treatment because of judgements of the area may contribute to a general disillusionment that inhibits engagement with public services (see section 8.3) and relates to the importance of procedural justice that is widely recognised as shaping trust in the police (Sunshine and Tyler 2003, Stanko et al. 2012). For part of my time in the area a strong focus of negative emotions about judgements relating to the neighbourhood was on the source of the perceived judgement being the state, producer of the indices of deprivation, and this association is also likely to serve to inhibit engagement with public services. The criticism of the area is perceived as coming largely from outside, and given evidence that public service workers are perceived as different and middle-class by those in working-class communities (Matthews and Hastings 2013) there is likely to be some expectation that interactions with services will result in negative judgement. For one elderly couple I spoke to this was clearly a

reality. Keith and Maria identified a sense of being judged because of where they lived and for them the people doing the judging were the employees of their social landlord:

KEITH: One of the biggest problems we find, when you're on an estate is how many people think they're superior to you. The people who are in the office up Bell Green, of Whitefriars, you know, they talk down to you, don't they?

MARIA: Of course there's a bad element on this estate. Everybody knows there is. But the people in Whitefriars, they treat you all the same. So we're classed as the same. Do you understand what I mean?

KEITH: They're superior. And all they are is bloody clerks.

MARIA: They talk down to you. Definitely talk down, because we've been up a couple of times now.

The experience of feeling judged when accessing public services, and the barrier that this perception creates, is something that has been reported in a number of studies. Roddy et al. (2006), for example, found fear of judgement to be a significant barrier to accessing smoking cessation services. Others have specifically identified area of residence as a source of judgement. Winkworth et al. (2010) found disadvantaged single parents cited experiences of feeling judged as a reason why they resisted engagement with services, with some particularly identifying the area in which they lived as being the basis for negative judgement. Similarly, Canvin et al. (2007: 986) note that their participants felt that "living on deprived housing estates meant that social welfare workers and others made negative assumptions about them". The evidence that I found suggests that such judgements are not limited to public service workers. Rather, in making judgements, or at least in acting in ways which are perceived as judgements, public service workers are reflecting a more pervasive attitude which is experienced by residents commonly, a point made strongly by McKenzie (2012, 2013) in her study of life on an estate in Nottingham.

8.2.2 Judged for needing help

The notion that people felt that they would be judged for needing help was particularly highlighted in my conversation with Connie, a community worker who had a strong interest

in Children's Centres and young mothers. She told me that in her current work trying to engage young mothers it was vital not to give the impression they were doing something wrong or that she felt they needed help. She believed that Children's Centres had fallen into this trap as a result of austerity. Originally intended to serve all children, financial constraints had led them to target children who were on the radar of social services. This in turn led to Children's Centres becoming stigmatised and closely associated with social services. The effect of this was made worse in the case of the local centre because of its location adjacent to a school, where other parents would gather to collect their children:

Mums were watching mums going in that way and they'd say "oh there's so and so" or "did you see who's going into the Children's Centre? Social services must have them on their list". So you've got the gossips and the ones that are troublemaking identifying who's going in here, and they know that it's only targeted families that are being done, they must be either social services or Family First. "Oh I know why she's in there — 'cause her old man knocked her about last week" or "I know why she's in there 'cause she's going to have her kids took off her"... So these families then are avoiding getting in contact, avoiding the Children's Centre. If they knock the door they won't open the door to them, because if people see them open the door it's "that's that woman from the Children's Centre, she's just gone in to Jo Smith's house round the corner" you know and straight away the Children's Centre instead of it being a place where people would go and have a coffee and just meet other mums and have a chat with somebody about any issues they've got, it becomes an extension of social services.

The negative connotations attached to social services came up repeatedly talking to people in the area, and indeed outside of the area. I asked Connie if being associated with social services was always a bad thing and she was clear about the reason why this was so:

Yeah, yeah. Well around here it is because if you're in social services you're failing as a parent. You're not doing something right.

One of the ward councillors, whose specific responsibilities included acting as the Cabinet Member for Children's Services, told me much the same thing:

To expect a young mother to fully engage with a social worker and open the door with open arms and welcome her in knowing that actually the reason that you're coming round here is because your judging me whether I've got the ability to look after my kid or not. I think most people would have concerns or reservations about, you know, actively working with local authorities.

Connie's observations are interesting because they highlight the issue of visibility and the potential publicness of engagement, and how this will work against engagement where it is perceived that neighbours will make judgements. McIntyre et al. (2003), pick up similar concerns about publicness when they describe young mothers' feelings at having to queue outside a food bank where they can be seen. With most of the fire service's prevention work being done by uniformed fire fighters (see 7.2.2) direct engagement with the fire service is likely to be perceived as highly visible, especially if, as is often the case, they arrive in a large, bright red fire appliance—a point highlighted by Matheson (2012). Requesting a Safe and Well visit may be seen as showing a need for help and advice, a need which is perceived as likely to result in negative judgements from neighbours who witness the arrival of fire crews.

8.2.3 *Being told what to do*

An issue closely related to that of being judged for needing help, or perhaps more to being judged for getting things wrong, is that of being told what to do. At a 'Tea and Talk' session early in the project Ruby talked specifically about the fire service and prevention work, telling me that she would not let fire crews in the house because they would tell her what she was doing wrong and that she needed to change things. At our first encounter Connie highlighted a similar point, telling me that to work in this community it is no good coming in and telling people what to do, rather there is a need to build empathy and trust. Craig, too, was not keen on being told what to do. Talking about people from outside the area he commented:

What they do is they come in, they think they know it all, and that winds people up. Don't come into this area and try and tell me what's what. I know what goes on in this area. I live here. And then that, as he's [Robert] just said, puts barriers up, starts making walls.

People living on Manor Farm are constantly reminded that the state wants to tell them what to do by the plethora of signs that cover the area. The photographs in the montage in [Photo 8.1](#) were all taken within 10 minutes of each other on my first visit to the estate. At one point during that first stroll I emerged from a walkway into an open area and found that looking around I could see four “No Ball Games” notices from that one spot. If, as seems to be the case, there is a strong dislike of being ordered about, then here we have a clear message that this is the likely consequence of engaging with the state. It should not be a surprise if people extend this to an assumption that a Safe and Well visit will result in being told what to do by fire fighters, as was seen with Ruby’s comments at a ‘Tea and Talk’ session (see page [131](#), section [7.3.1](#)).



Photo 8.1: Being told what to do: signs around Manor Farm

8.2.4 When there is no judgement

The evidence presented here that fear of judgement acts as a barrier to engagement with public services is further supported by a positive story that I was told by Ellen, a story which provided a glimpse of how engagement might be if there were no negative judgements. Now embarking on an academic career, Ellen had previously worked for a charity providing advocacy and support to women sex workers in Coventry. Although not specifically focused

on the geographical area that this study is concerned with, this was a scheme that sought to engage with a group that is often considered very hard to reach (Flanagan and Hancock 2010). What is more, she had run a project in conjunction with the West Midlands Fire Service (WMFS) that she considered to have been extremely successful.

The project was not part of a great plan, but more the result of a chance meeting. At a local drug recovery partnership meeting Ellen met a male fire fighter, Allan, whose approach impressed her. Although it was very unusual to have men come into the women's group that she ran she felt that with this particular man it might work, so invited him to come and talk to the women. The initial meeting went extremely well, a fact that Ellen attributed largely to Allan being completely non-judgemental of the women, along with the fact that he did not wear a uniform for the meeting. As a result of that success they were able to arrange a series of home visits, with Ellen accompanying Allan going in to women's homes to assess fire risks and find ways to help minimise these:

I think that [the home visit programme] was only possible because he came into this group session and they got to know him. I think they were quite chuffed that a fireman had come in and done some work with them, and they saw that he was non-judgemental, they saw that he could have a laugh, and they saw that he was genuinely interested in their safety.

Allan's non-judgemental attitude went beyond the initial meeting, and extended to an acceptance of lifestyle choices that meant that rather than telling the women what to do he found ways to work around their habits:

One woman that I worked with would smoke in bed, and obviously the fire service would say "don't do that", but actually this fire officer was very accepting of the fact that saying to somebody "don't do that" wasn't actually going to work, we're going to have to do something else. So for this particular woman, he got special bed sheets that were fire proof.

Ellen went on to list other ways in which Allan had avoided offering judgement, building rapport with the women, to the the extent that when he commented on how much he liked the décor in one woman's home her trust of him was sufficient that she admitted that most of

it was stolen and proceeded to list which stores various things had been taken from. Ellen was clearly both surprised and delighted at how well Allan had been able to work with the women, talking excitably about the project and describing herself as having been “flabbergasted”. I asked her to tell me more about why she felt the relationship between Allan and the women had worked so well:

It was about trust, but I think it was also about how he worked with the women... The women that I worked with, their involvement with professionals tends to be very poor. They have a huge fear of being judged, and actually that was realistic. So... a lot of the work I did was around advocacy, and actually it was really difficult to get these women the service that they deserved. Whereas I think when they saw somebody who was coming in say “actually I want to offer you a service, I want to work with you, and I’m going to treat you with respect”, they responded to that really well. And I think it is a big bit about them being respected and valued. I think, because of their experience—a lot of them had history of drug use, a lot of them had children that had been removed, a lot of them had been in prison—they had a real distrust for professionals, and had probably been in situations where their experience of professionals hadn’t been positive. Whereas meeting him, and him being really, you know, warm, non-judgemental, obviously expressing that he was bothered about their safety, they really took to him.

Ellen’s role as a gatekeeper was clearly important here. Had she not created a safe space for the women she worked with, and carefully managed Allan’s introduction to the group, it is unlikely that the relationship would ever have got off the ground. But it is Allan’s personal qualities that are really key here, stressing the fact that experience of organisations is strongly influenced by the interpersonal relationship between individuals accessing services and the individuals within those organisations who interact with them (Kahn et al. 1976). Through his easygoing, non-judgemental approach and his complete clarity that he was there to help, not to judge or punish, Allan managed to dispel any pre-conceptions that the women had about interacting with public services, whether that be fear of judgement, or indeed, the next topic—disillusionment at services not being delivered.

8.3 Disillusionment

Durose (2011) has noted that many communities in deprived areas have a long history of consultation related to interventions, observing that coalface workers that she spoke to felt that residents were fed up with the perceived failures of these attempts at engagement. I found strong evidence to support the idea that residents were disillusioned with the actions (or lack of actions) of public services, and that this disillusionment disinclined them to engage further. This sense of being disillusioned stemmed from three different, though overlapping, areas: broken promises, services that do not deliver, and not being listened to.

8.3.1 *Broken promises*

During an early 'Tea and Talk' session a lively conversation took place about the promises that had been made and broken over the years. Chief amongst these, and dominating the discussion, was the redevelopment of Manor Farm. The New Deal for Communities (NDC) programme and subsequent estate renewal scheme had promised large scale investment and complete redevelopment of Manor Farm, but based, as it was, on a public-private partnership and finance being raised from land and property sales, the plans were hit by the financial crisis of 2008 and had to be revised (Pearson 2014). The promised redevelopment never happened, and residents are now awaiting the commencement of work on a delayed and greatly scaled-down scheme which amounts to some landscaping, external decoration and upgrading the insulation in the existing houses. This was but one, albeit large, example in a whole litany of broken promises that were talked about, from a new swimming pool to a popular bus route being protected. Residents who attend 'Tea and Talk' are, in many ways, the more engaged, and several have a history of actively working with the NDC during its lifetime. Yet even these residents were clearly becoming increasingly disinclined to play an active role in future projects because they felt they had seen so little come from the time that they had given in the past. As Malcolm, a former NDC board member, put it "you just lose all hope".

The promised redevelopment is a particular issue for longer-term residents on Manor Farm, who feel especially aggrieved by the scheme falling through. In Wood End and Henley Green, other parts of the former NDC programme, attempts to redevelop were more

successful, and are continuing, but there is still a strong sense of promises having been made and broken. Deborah, from the Moat House Community Trust, the NDC's successor body, talked about this sense of being let down as something that would never be forgotten, finishing by suggesting that although historic issues were important, this sense of empty promises is an ongoing problem.

One of the biggest, the single biggest sore, is that they wanted that Community Centre and they feel that it's been given away, because all of the offices upstairs are council offices, and downstairs they've got the sports trust in running it, and, as I say, there are no concessions given to local people. There's nothing in there really for local people... the one thing they wanted was a swimming pool. The money was set aside, the council said no... and that is a running sore. And they still say that. You see people that haven't been engaged for ages and they say "oh well, we never got the swimming baths did we" and you're like "oh, move on" but they don't forget. They don't forget. And you heard them talking about the buses. They are so upset that a bus was rerouted without any consultation. And that's what happens. All the time.

The shifting goalposts that were perceived as characterising the NDC and associated regeneration projects came up time and time again in my conversations, and throughout the area. As well as comments about the swimming pool, people talked about the number of parks being reduced, the location of shops being changed, reductions in the amount of housing redevelopment being done and changes to the type of homes being built. Given the widespread sense of promises having been broken there is a certain amount of irony in the fact that the strapline of the consortium currently carrying out much of the redevelopment in Wood End, displayed on signs throughout the area, is "Promise. Delivered" (see [Photo 8.2](#)). Of course, for some people promises have been delivered, and in Wood End and Henley Green there are many who have benefited from the redevelopment programme and have been moved into new homes. I met some of these people at events at the Moat House Leisure and



Photo 8.2: "Promise. Delivered." A sign in Wood End

Neighbourhood Centre and whilst they certainly seemed in many ways happy with their new accommodation, there was still a sense that services were not delivering fully for them.

8.3.2 *Services that do not deliver*

The idea of services failing to deliver what is expected of them can itself be conceptualised as the breaking of an implicit promise, a promise to deliver a certain service. Amongst those I spoke with I found no shortage of examples of services falling short of what was expected. Whitefriars, the social landlord that manages most of the housing in the area, particularly came in for criticism, a fact that is perhaps not surprising given the importance of the organisation's role in so many people's lives. A topical frustration focused on the fact that Whitefriars had recently closed their local office and moved to a system based on a centralised call centre. People were finding it frustrating being unable to go and talk to someone, being left on hold for long periods when they called and being generally unable to get hold of anyone. During one heated discussion about the changes even one of Whitefriar's own housing officers admitted that she had been unable to get through to anyone that morning.

This particular issue was perhaps on top of people's minds because it was new, and maybe experiencing teething troubles. But underlying this was a general sense amongst many I spoke with that public services were failing them. Pat was blunt on the subject of Whitefriars specifically, telling me that "they don't give a shit". Mickey expressed a general frustration at all services, saying:

MICKEY: We ask for help, we don't get it for months. I don't understand why.

CH: That's your experience of public services is it? You ask for help and nothing happens.

MICKEY: Yeah. Yeah. Yeah. Ask for help and nothing happens. So you have to go out there and get it yourself.

Later in that conversation Mickey took up the theme again, with some passion, suggesting that he felt abandoned by public services:

Why you doing it? 'cos you care? Well I've heard that all my life. And I ain't seen no one care for me. I cared for myself.

Mickey was not alone in feeling that nobody cared. Sean, talking about his frustration in trying to deal with anti-social neighbours, said "I've tried to do everything by the book, and no-one seems to be helping, no-one seems to care". Sean's frustration was born in the inability of the services involved to bring about any effective resolution, something he attributed partly to incompetence and partly to powerlessness. This was a subject that one of the ward councillors also touched on, suggesting that for many residents there was a perception of public services as being impotent to bring about real change in people's lives. He asked rhetorically what you would think about the effectiveness of public services if you grew up in a dysfunctional family and saw social services coming round regularly, but Dad still beat Mum up? What is the point of reporting anything when nothing ever changes?

The related question of police response was picked up by a few people I spoke with. Mickey even suggested that we should try an experiment, dialling 999 in Manor Farm and timing the response, then repeating the exercise from the more affluent Potters Green. Naturally I declined the invitation, but though Mickey's approach to illustrating the point may have been a little extreme, he was not alone in commenting on police response. "The police don't bother to come now" said Kenneth, with Maria adding "You get a crime number, not a policeman". The ward councillor, who did not live in the area, recounted a tale of seeing some youths setting fire to bins whilst on his way to a meeting with residents not long after his election. He called the police and was told that they would not come out. When he arrived at his meeting he told the residents this and their only surprise was that he was surprised. Their expectation was that nothing would happen.

When I spoke to Rob, a Police Constable, he explained the logic behind the decision not to respond to some calls, and the need to carefully allocate resources, but he acknowledged that the approach might not be well received:

The public... will probably find that quite difficult to take to start with, because they're not used to us turning round and saying "no, we're not coming out to deal with that".

This issue highlights an important tension. With increasingly constrained finances public services have little choice but to look carefully at how they work and how they make use of their scarce resources. A number of commentators have suggested that there are benefits to those services in facilitating closer engagement with the communities they serve, whether through enabling greater co-production (Bovaird 2007, Boyle and Harris 2009) or through more effective demand management (Staite 2012). Yet if other approaches, such as limiting responses, or closing local offices and centralising call centres, serve to alienate and disillusion those communities there is a risk that the potential benefits of closer engagement will be lost to the need to save money quickly.

8.3.3 *Not being listened to*

A further factor contributing towards the sense of disillusionment in public services is the feeling of not being listened to. Some of the issues that I have discussed already relate to this — the swimming pool that was not included in the redevelopment programme despite widespread support, or the lack of consultation about the rerouting of buses for example. At other times a more general notion of not being listened to came out. Robert, for example, expressed frustration at not being heard by community organisations working in the area:

They dictate. They tell you. They just dictate. They know better than everybody else. And they don't. When we come up with ideas we just don't get listened too.

Robert himself seemed to have become an advocate for some people who felt that he was better at getting heard than they were. Craig, for example, explained:

If I feel like there's something wrong round here and I say it to him [Robert] he'll bring it forward, and he'll ((claps hands)) pinpoint and say "this is what needs..." you know. And that's why he helps, that's how he helps. So if I feel like I've got summut to say then I'll tell it [Robert] and then [Robert]'ll bring that point forward you know. So in a way, I do feel like I'm listened to, but not by as many people as what should be listening to me.

Craig particularly felt that his view as a young person was something that was ignored, or indeed simply not sought:

When they have like these big council meetings and all of that sort of stuff, they don't talk to us. They'd rather call people that are the age of 35-40 years old, that are going to say, you know ((whisper)) the little buggers, the little shits ((whisper ends)) ... that just... point the finger. But we're not. Come and speak to us and we can tell what it's like for us around this area.

I heard a similar story when I spoke to a group of young women congregation members at the Tanzanian church group:

I don't think we have that much to do with all the decisions that they make... I feel like [we] don't really have a say in what really goes on in the public services. But then it's a bit weird, because we're the ones that are most going to be affected by them, but we don't really have a say...it almost feels like we're a bit helpless in what really goes in the world, because we don't really have a say at all.

One woman particularly highlighted the use of consultations which might be categorised as 'tokenistic' or 'cynical' (Lowndes and Wilson 2001: 637):

They act like they're giving us the choice, but they're not, if that makes sense. Most of the time, they let us have a say, but they'll just do what they want to do anyway.

This use of consultation exercises to legitimise a decision which has already been taken is likely to lead to disillusionment and act to deter engagement in the future (Lowndes et al. 2001). As Andrews et al. (2006) note, consultation has little value unless citizen input is actually valued by the organisation. In fact, its value may be entirely negative.

I have noted how Robert has sometimes adopted an advocacy role for those who feel unable to make their voices heard. This was very much Ellen's role in her work supporting sex workers, and some of her observations on this are illuminating:

All of their engagement with local authority services was difficult. And actually, they didn't necessarily have the skills to navigate the system and articulate themselves. So I'd go into housing appointments, and the housing people would say that they didn't have priority banding, but actually, me being there, I was able to articulate that they had mental health problems, that they'd just fled domestic abuse, that they had all these complex issues going on for them, whereas when they went in

on their own, actually they found that very difficult to articulate, and, unfortunately, sometimes the professionals responded to me because I was a professional, which is not OK, but actually I could say exactly the same thing as the service user sitting next to me, but because I'm a professional I get listened to, whereas they don't get heard. So, you know, the women that I worked with had a history of voicelessness, of not being able to access services, of not being able to articulate them[selves] in a way that's heard.

Highlighting both the difficulty that some of the women that she supported found in navigating the complex realm of public services, and the fact the response of professionals to her was different to the response shown to the women themselves, Ellen's comments draw attention to the problem of a clash of cultural values between service users and service providers. Service providers are more likely to respond to voices that are raised in ways that their particular cultural background expects and are not necessarily well aligned to hearing voices expressed in other ways—one of the reasons why there is evidence of the ability of the middle-classes to get more out of public services (Matthews and Hastings 2013). This is a point to which I shall return later when I look at the way in which services communicate and interact with residents (section 8.6) and in considering the importance of cultural congruence to engagement (section 9.3.2).

8.3.4 *Is it all bad?*

In the section on disillusionment I have painted a fairly dismal picture of the way in which public services are experienced and perceived by the people I spoke with. Can views of public services really be so universally bad? The short answer is 'no'. I also found plenty of examples of people praising services. I discussed in Chapter 7 the positive attitude most people have towards fire service response work, and I found people praising, amongst other things, their doctor, their optician, the grass cutting and litter picking around Manor Farm, and the help they had received from adult social services. Despite the implication that many felt that agencies are powerless to change their lives, there was also widespread recognition that some things have changed, and for the better, in the last decade or so. Indeed, I did not encounter anyone who questioned this. So have I been disingenuous in highlighting the faults that the people I spoke with found?

The aim of this section is not to present a balanced and representative account of how people feel about public services. Rather, it is to explore disillusionment as a reason for avoiding engagement with public services, and to explore the ways in which people develop a sense of being disillusioned. For this reason the section focuses on the negative, on behaviour and experiences that give rise to negative perceptions of public services and form the foundation of barriers to future engagement. For all that, when prompted, people could bring to mind positive experiences of public services, what was often to the fore were the experiences that left people feeling let down. The £54m investment of the NDC has brought some positive changes to this part of Coventry, yet Malcolm still complains that “you just lose all hope”. It is the areas where the NDC and estate renewal plan are seen to have failed, the redevelopment of Manor Farm, the swimming pool, the constantly shifting plans, that seem to form people’s views of the schemes as a whole.

This is perhaps another example of the asymmetric impact of experiences of services that Skogan (2006) discusses with respect to the police. This asymmetry has also been reported applied to public services more generally, with Katz et al. (1974: 159) noting that “[i]t appears, then, that bad experiences with specific agencies lower the individual’s general appraisal of public offices, but good experiences do not raise it above the norm”. Baumeister et al. (2001) review a wide range of literature to show that the tendency to place higher weight on bad experiences than on good experiences is found across a great many spheres, noting that it is in the realm of impression formation that this has been most widely acknowledged, and observing that “[b]ad stereotypes and reputations are easier to acquire, and harder to shed” (Baumeister et al. 2001: 355). A further wide ranging review of this effect, often referred to as ‘negativity bias’, is provided by Rozin and Royzman (2001), who argue that negative experiences are both perceived of as stronger, and tend to dominate even when perceived as being equal to positive ones. This dominance and persistence of negative experiences is seen in Deborah’s comment that “communities like this never forget you know”. The implication for public services is clear—making mistakes is very expensive in terms of community engagement. If services are to avoid long term damage to engagement then promises must be deliverable and must be delivered, and consultations must be honest and meaningful.

There was little direct evidence of disillusionment with the WMFS. Indeed, as I highlighted in Chapter 7, there seems to be a high level of satisfaction with the WMFS and in particular with the ability to respond very rapidly. However, the tendency to associate the fire service with experiences of public services more generally (see 7.4) means that engagement with the fire service may be affected by general disillusionment with other agencies. The widespread disillusionment uncovered here, and the greater weight afforded to negative experiences, serve to highlight the point discussed in concluding Chapter 7. The low levels of contact between the WMFS and communities mean that it is other experiences that dominate people's decisions as to whether to engage or not. There may be considerable benefit for the WMFS in working to increase levels of contact.

8.4 Fear of consequences

Engaging with public services is not seen as being without risk. Some of those risks have already been discussed—that of being harshly judged, for example, or that of being targeted for having contact with authority. The perception of negative consequences of engagement goes wider than these issues, however. In particular it concerns the potential for contact with one agency to lead to less desirable contact with another agency. As such it is closely related to the topic of the fire service being seen as part of the wider state which I discussed in section 7.4 ([Part of something bigger](#)). Like that earlier topic, the evidence for fear of consequences being a barrier to engagement was particularly highlighted in conversations with professionals. As well as considering the fear of other agencies, in the following sections I will also look at evidence of a fear of being conned by those pretending to be from public services, and at some specific issues affecting the African migrant community.

8.4.1 Fear of other agencies

In discussing the association between uniform and authority (see 7.4.1) I mentioned something that Connie, the community worker, said:

So I think a lot of cases they know they're in and they won't answer the door because they're not sure what they've come for, they see a uniform and either think they're going to con them or they've done something wrong. It's like, badges, the children's centre, these young mums, we've asked them, we've said to these young mums "why

is it that you, you know, you pretend..." and they'll say "because if we see they've got a council badge on or something like that we think they're going to come and take our kids off us and we won't open the door". "But you've done nothing wrong". "Yeah, but you don't know what the neighbours might have said about you, you know". They just, they're fearful of authority.

The fear here is not just of authority, but of the power that authority has to bring about unwanted change in people's lives, in this case by taking children into care. Connie also highlighted another area where the fear of social services in particular seemed to have a negative impact. The Moat House Leisure and Neighbourhood Centre has social services offices upstairs, and she felt that there were people who simply would not come to events organised there, or use the café, because of the presence of the social services offices.

For some this fear seems to be heightened by a sense that social services are too ready to act on malicious accusations and too often reach the wrong conclusion. I heard detailed accounts of such situations on a number of occasions. Lenny certainly appeared disinclined to have anything more to do with social services when he finished an account of his brother's interaction with them by opining "So social services don't get a good review from me. Not from what I've experienced. I think I'd rather have the police round for a coffee!". This heightened fear of social services based on a perception that their judgements are not always fair relates strongly to the view that procedural justice is an important determinant of public confidence in the police (Sunshine and Tyler 2003). A particular fear of social services has also been seen in past studies, with one noting that "Participants' wariness of social services pervaded their perceptions of all public services, including health, because of the perceived risk of being referred to social services" (Canvin et al. 2007: 987).

Fear of contact with social services seemed to dominate conversations, but there was some evidence of fear of information being passed to other agencies, such as the police or the Benefits Agency. The fire fighters that I spoke with showed a particular awareness of this. With the shift in the West Midlands from the traditional, fire focused, Home Fire Safety Check to the broader Safe and Well visit, fire fighters are now asking questions about a much

wider range of topics when they visit people's homes as part of their prevention work. At times, they find they need to be careful about how they approach this, as Jim explained:

I think when you start asking about things, you know, like cars and things like that, you know, MOTs, insurance, things like that, then, because you've got the uniform on, are you co-habiting with the police? If you're going to refer to benefits are you saying that you think we're claiming more than we should? Or do you think we're cheating benefits? So...you've got to be very careful of how you ask the questions and who you ask the questions to.

It was clear that fire fighters exercised a degree of discretion over which questions they actually asked, and how they approached those questions, weighing up just how far to go with someone in the early stages of a visit. As one said "some of the questions get left off if [the fire fighter] thinks they'll get a wrong answer, or a disturbing answer, or an abrupt answer". The implication here is that fire fighters have experienced strong reactions to certain lines of questioning and have learnt that at times it is better to avoid these in the interest of preserving the relationship with the resident. The history of FRS collaborations with other agencies through such initiatives as the Crime and Disorder Reduction Partnerships (see 7.2.4), together with the increasing emphasis on working closely with health and social care agencies, may serve to exacerbate fears that the fire fighters will share information.

8.4.2 Older people: fear of being conned

An additional fear for some in engaging with public services was highlighted by Connie. She drew a distinction between the perceptions of younger people and those of older people, suggesting that for the latter there was often a fear of becoming the victim of a crime:

And I think the older people are probably fearful of being taken in, you know. You hear so many cons and schemes and scams and things like that, and they've become more, probably, isolated because of that, because they're frightened. People they would have opened the door to they're frightened to.

This problem was an issue that was at the front of the minds of several professionals I spoke to because two elderly sisters had recently fallen victim to a burglary by people posing as

workmen from the social landlord. In the aftermath of this incident some time had been spent supporting the sisters and advocating for them to try to secure all the services to which they were entitled—a process made all the more difficult by the women's understandable reluctance to deal with anyone with whom they did not have an established relationship.

8.4.3 The African community

I previously highlighted a strong fear of the police amongst some in the Tanzanian community, seemingly stemming from contact in their home country (see 7.4.2). Clarissa, an African woman working with a community development organisation largely focused on Black African and Black Caribbean clients, suggested that for many Africans contact with authority and public services was something that had only negative connotations:

Back home, you don't have direct contact with the police unless something tragic has happened and they have to be there. So there's no relationship, and that's the mindset. "I don't have a relationship with the police" and here, you only have a relationship with police if there's an immigration issue. You know, that kind of thing. So that mindset is there. "Oh, the police has called me, ((whispers)) why? Have I done anything wrong?". They first of all go and look for their passport and see...((giggles)). So there's that fear, in the first instance. "Fire service contacted me". First thing is they will ask themselves that question "what have I done wrong?". Because that's not how it is done in their countries.

I asked Clarissa whether the fear centred around immigration status. Her response suggested that whilst a sense of vulnerability connected to immigration lies at the core of things, this vulnerability is often perceived rather than real. The perceptions stem from stories and inaccurate information being circulated within the community:

It's the stories that people have heard from other people. For example, I had this lady, she didn't have any immigration restrictions, but she told me that [she heard] somebody got a parking fine and they revoked her British passport. So she lived with that fear, and she wouldn't engage with any public services at all. A parking fine! And that's something she'd heard from somebody... Stories get passed on like Chinese whispers isn't it?... And remember, a lot of these people, only very few are properly educated. A lot of these people, sometimes can't even read and write themselves to know the truth.

Several further anecdotes that Clarissa recounted painted a picture of a community in which there was a high level of information asymmetry and a reluctance to seek information from sources outside of the community. Instead people relied on often inaccurate information from other community members. The situation, she told me, was further exacerbated by the fact that being seen as a source of information gives some in the community power, and they therefore have an interest in discouraging their peers from seeking knowledge from elsewhere. This lack of access to accurate information relates strongly to the next theme, that of not engaging with a service because of a lack of awareness of the service being available.

8.5 Unaware of the service

We saw in Chapter 7 that there was generally low awareness of the fire service's prevention work, often limited to knowing only of the service's involvement in fitting smoke alarms. In addition to this there was some evidence of a more generalised lack of awareness of the types of services that are available to citizens. Whilst the lack of awareness of the fire service's prevention work was seen quite generally amongst those I spoke with, the evidence of poor knowledge of wider public services is stronger amongst new communities. Expanding on her comments about the the nature of the relationship that Africans have with public services (see 8.4.3), Clarissa observed:

One thing that stood out for us was lack of information. So first of all somebody wouldn't know even where to go... There's a reluctance to approach the different departments to even ask, because they would rather ask family and friends, and the information that they would get may not be correct. So that's one thing that you will hear a lot: "we don't even know where to go".

This point was echoed by Lisa, one of the Tanzanian congregation. Lisa, who has worked as a social worker in the UK (see 5.4.3), told me that the cultural norm for Tanzanians was very much that if someone needed help then the community would pick that up. People within this community are not used to the state providing help and have no expectation that it will. Consequently awareness of what is available from the state is very poor. A similar theme was touched upon by the fire fighters that I spoke with, who had observed that those from the

Eastern European communities were often unaware of many of the services available to them simply because such services had not been available in their home country.

Connie felt that not knowing about which services were available was only a part of the problem. Often people in the new communities did not understand how to access those services, even if they knew that they could. She gave an example of a man she had dealt with who had just turned up to drop his two children off at school, unaware of the need to register the children first. As we saw earlier with Ellen and the women for whom she advocated (section 8.3.3), struggling to navigate the complexities of public service bureaucracy is not unique to new communities, but it is perhaps more of an acute issue for those who have grown up in a very different culture.

8.6 Communication and interaction

The lack of awareness of services and how to access those services is, in part, attributable to problems in the way in which public services approach communication with those they serve. In this section I will look at a number of examples that highlight the need for public agencies to give greater attention to the ways in which they interact with communities if they wish to improve access to services. The range of issues includes the timing of meetings, the language used and the geographical focus of engagement activities. I begin, though, by highlighting the need to acknowledge that different communities need different approaches to communication.

8.6.1 *Community diversity: one size does not fit all*

For Connie, the problem of new communities finding it difficult to understand public services lay in the lack of places where people could get information—“there’s nowhere for them to come” she said, commenting on the loss of an advice centre in the area. Lisa’s view was slightly different, however. Drawing on her experience of trying to recruit African foster parents she was critical of the way in which public services attempted to reach some communities. She felt that different communities need to be communicated with in different ways and that this was not happening. “Come out of the office and go where people are” was her challenge. As an example she told me of the work she had done hanging out in

hairdressers frequented by African women in order to try to reach them, arguing that services needed to be more creative in their approach to reaching diverse communities and to make more use of those communities' own networks. The greater use of such networks was something that Clarissa, too, suggested was an important approach.

Lisa's criticism fits well with my own observations in the field. There is not a single community, but many different communities (Burns 2000) and engaging and motivating diverse communities is likely to require a range of different, targeted activities (Löffler et al. 2008, Lowndes and Wilson 2001). As I noted in the discussion of data collection earlier (see 5.5.4), in this part of Coventry much of the efforts to engage with these diverse communities are focused around a single organisation, the Moat House Community Trust (MHCT). The MHCT runs a programme of events aimed at drawing people in, and these are very successful at reaching some. However, attending several of these events, and talking to staff about others, I became aware that they were generally reaching the same groups. Attendance at 'Tea and Talk' sessions is almost exclusively older White English people, and mostly women. The residents' association had a similar make up. The bonfire night celebration that I helped out at was well attended by younger families, but disproportionately White English. In my conversations with MHCT staff members they would talk about events they were organising—trips out for pensioners, a pantomime, the fireworks—all of which appeared to be geared towards the majority White English population. This is not to say that there was no awareness of other communities, for there clearly was, and a desire to engage with those communities. There was even some success—I was told of a group of Asian women now regularly joining the pensioners' trips for example. However, there was little evidence of active efforts to organise events designed to appeal to newer communities, events that related to the culture of those communities. My feeling was that this was largely due to a lack of awareness of the need to specifically target activities—to an assumption that it is sufficient to make activities open to all, without appreciating that, for example, bonfire night is essentially an English tradition with little relevance to Poles or Tanzanians. In my conversations about activities, whilst I was told that "we do quite a broad thing, yeah... we try and reach every age group on different levels" there seemed to be a taken-for-granted assumption that each age group has homogeneous interests and that outreach activities

could be developed that would appeal to all of a particular age, irrespective of ethnicity, language, religion or gender.

During an interesting discussion about inclusion at a 'Tea and Talk' event I had a similar impression. The community centre at the edge of Manor Farm includes a café that is closed and the discussion turned to how to reopen it and make it financially viable. Given the large African population on Manor Farm, though, the lack of any discussion about offering food that would appeal more to that community was notable. In my field notes for that day I comment "I think for me there was a sense of a fairly small group trying to include more members of that fairly small group, but not really specifically trying to include the whole of the communities on Manor Farm". Again, this did not appear to stem from any conscious desire to exclude, but simply a lack of awareness that certain assumptions were rooted in a particular culture.

This was a subject I touched upon again in a conversation with Rachel, a housing officer from Whitefriars, at another 'Tea and Talk'. Rachel told me that Whitefriars had real difficulty in engaging with their African tenants in particular, but also their Polish tenants. Acknowledging the role that might be played by cultural differences she commented that the organisation did not have sufficient understanding of those cultural differences to try to develop engagement practices that would address them. There was something of a chicken and egg situation for Whitefriars—they needed to reach some within the African community in order to begin a dialogue and deepen their understanding of how best to reach others. Without that initial contact they are working in the dark. Whitefriars is part of a large housing group managing over 30,000 homes across the West Midlands and employing over 1,000 staff (WM Housing Group 2015). With an organisation of this size struggling to develop a good understanding of engagement across the diverse communities that it serves it should not be surprising if a small local charity such as the Moat House Community Trust has difficulties in finding the necessary expertise.

8.6.2 The nature of meetings

One area where a cultural difference was particularly evident was that of time keeping. When I first went to one of the community centres to be introduced to the Tanzanian pastor,

the centre co-ordinator warned me not to expect anyone to turn up at the time advertised, making reference to 'African time'. I heard this term used by English people on a good number of occasions, whilst also noticing that Africans did often arrive late, and sometimes quite happily acknowledged this. When I was invited to go along to the social event that follows Sunday prayers, for example, I was told what time it was expected to be, but warned that it would likely start late. I asked Clarissa about this, somewhat nervously as I was worried I might offend her by using the term African time. I need not have worried:

Yeah, Black Mean Time, I call it Black Mean Time ((giggles)). BMT. Terrible. It's like two hours behind. Everything. So you start an event at four o'clock. Everybody comes at six.

This has a practical implication for engagement. I attended a meeting of the Manor Farm estate residents' association one morning at which representatives of the social landlord and the landscape architects were presenting details of the proposed landscape improvements. The meeting had a defined start time and formal structure, and was well attended by White English residents. However, very few African residents attended, with those who did only arriving just as the chair was closing the meeting. Taylor (2011) suggests that formal meeting structures can be a significant barrier to engagement by some groups and this story illustrates one way in which that barrier may manifest. Interestingly, a later event about the redevelopment, which ran on a less formal 'drop-in' basis throughout the afternoon and early evening, did attract a good number of African residents, almost entirely during the latter part of the event.

8.6.3 Language and communication

The redevelopment drop-in provided another interesting observation. I noted one professional, a very personable young White English man, taking time to talk to an African woman about the proposals. The woman's first language was clearly not English and he was explaining, with some enthusiasm, what treatment was going to be applied to the gables, asking her if her roof had a pitch, and talking about different types of cladding. At times she looked somewhat bewildered and I found myself reflecting that although English is my first language, some of the words being used I quite possibly only understand because I have

spent much of my career working alongside town planners. It is often not easy for those who are engaged in a particular profession to step back from that sufficiently to recognise that the language that they are using may mean little to the person that they are speaking to.

This example may be extreme, involving, as it does, someone whose first language is not English. Technical or bureaucratic language can create barriers to engagement even for native English speakers though. Indeed, this may well be one of the reasons that Ellen noted that the women she helped sometimes struggled to access services (see [8.3.3](#)). When I attended the Henley ward forum, a large meeting for all residents from the local authority ward, at which a number of agencies were represented, I was struck by the difference in approaches to addressing residents. The police officer was low key and informal and appeared to appreciate the need to pitch his report to a non-specialist audience. By contrast, a presentation on the creation of the West Midlands Combined Authority, a controversial proposal being debated at the time, I found extremely difficult to follow, despite a career spent in local government and a scholarly interest in public management. A discussion of the local plan was then introduced by a council planning officer using rather technical language and in a decidedly dull and monotonous fashion. Fortunately one of the ward councillors then took over, proving to be very knowledgeable on the topic, and communicating in an animated, accessible and down-to-earth fashion. The ward councillor and the planning officer represent the same organisation (the City Council) and delivered essentially the same message on the same topic, but in very different ways, demonstrating the considerable significance of individual behaviour in the way that organisations present themselves.

In discussing some of my findings with senior WMFS managers, they acknowledged that as an organisation the WMFS has a language of its own that fire fighters are wont to slip into, using terms such as 'PRL' and 'RTC'¹⁷ even when talking to members of the public. The use of such language is likely to serve to create a barrier between agencies and communities and the approach taken to communication is therefore a factor that it is important for agencies to consider when looking at the way in which interactions with communities are managed.

17 Pump Rescue Ladder, Road Traffic Collision

Box 7: Do I talk differently with different people?

The process of writing this section has led me to reflect on the ways in which I change how I interact with people depending on whom I am talking with. I realise that when the conversation was taking place about how the café could be reopened I listened, but did not engage much. This was a discussion between residents that I merely observed, making judgements, and later making notes.

When I came to write about my discussion with Rachel I realised that it had played out quite differently. Although the setting was essentially the same, a 'Tea and Talk' at a community centre, this was an animated discussion between two middle-class professionals. We exchanged ideas and developed each other's understanding in a way that did not happen in the earlier discussion. I am not comfortable admitting this, but I was more comfortable talking to Rachel than I was talking to residents. We shared more assumptions, had more common ground to build the discussion around, and as a result I found the discussion interesting and engaging. As we wound up our discussion Rachel too indicated that she had enjoyed it.

This interaction may in itself be seen as an example of the way in which public services, often provided by middle-class professionals, may inadvertently favour those from the same background. Matthews and Hastings (2013) identify the greater empathy between middle-class public servants and their middle-class clients as an important mechanism by which the middle-classes are able to gain an advantage in accessing services. There is evidence, for example, that middle-class parents' ability to relate to teachers as fellow professionals, in contrast to parents from more working-class backgrounds, helps them to ensure that their children's needs are met (Crozier 1997), and that midwives may advocate more strongly for women from their own background (Hart and Lockett 2002). The nature of the interaction at the coalface, and the background of those who are involved, can have a significant impact on service delivery.

8.6.4 Geographic focus

The ward forum is a key part of the City Council's engagement efforts, described by them as "an important way for local people to get involved and get things done on their doorstep" (Coventry City Council 2014). Ward forums are organised on the basis of the Council's electoral wards, and a number of other agencies find it useful to organise themselves around the same units of geography. The West Midlands Fire Service, for example, organises its prevention work around wards, with the watch that I spoke to having specific responsibility for Henley Ward, the ward that includes the WEHM area. Similarly, the police organise their neighbourhood policing teams on a ward basis. This common use of a geographical unit is seen by agencies as enabling co-ordination, statistics collation and reporting.

The neighbourhood has been perceived as an important focus of local governance and engagement in recent years (Smith et al. 2007), notably since the onset of the New Labour administration in 1997 (Durose and Lowndes 2010). However, the definition of neighbourhood is far from clear. Taylor and Wilson (2006) note that top-down, administrative ideas of what constitutes neighbourhood may differ markedly from the perceptions of residents, with the former tending to focus on "ward boundaries or other boundaries used for the collection of statistical information" (Taylor and Wilson 2006: 5). I found good evidence to support this assertion. The police are explicit in referring to their ward based areas as 'neighbourhoods' (West Midlands Police 2015), for example, and the City Council appear to conflate wards and neighbourhoods in some of their discussion of ward forums (Coventry City Council 2014). Residents, however, seem to take a very different view.

Long standing residents, in particular, have very clearly defined notions of the extent of their neighbourhood, and that extent is very limited. This is illustrated in [Figure 8.1](#), which contrasts the administrative boundaries of Henley Ward with the extent of the three main neighbourhoods which formed the focus of this study, as perceived by those who live there. The boundaries of Manor Farm are based on my conversations with Kenneth, Tilly, Anna and Lenny. In fact, Tilly and Anna told me that to a certain extent they saw their neighbourhood as even smaller, considering Manor Farm to be divided into two by the area

of open space that runs from north to south through the middle of the estate (see also [Figure 5.1](#), page 77, for a more detailed map), and Lenny suggested that his partner shared this view.

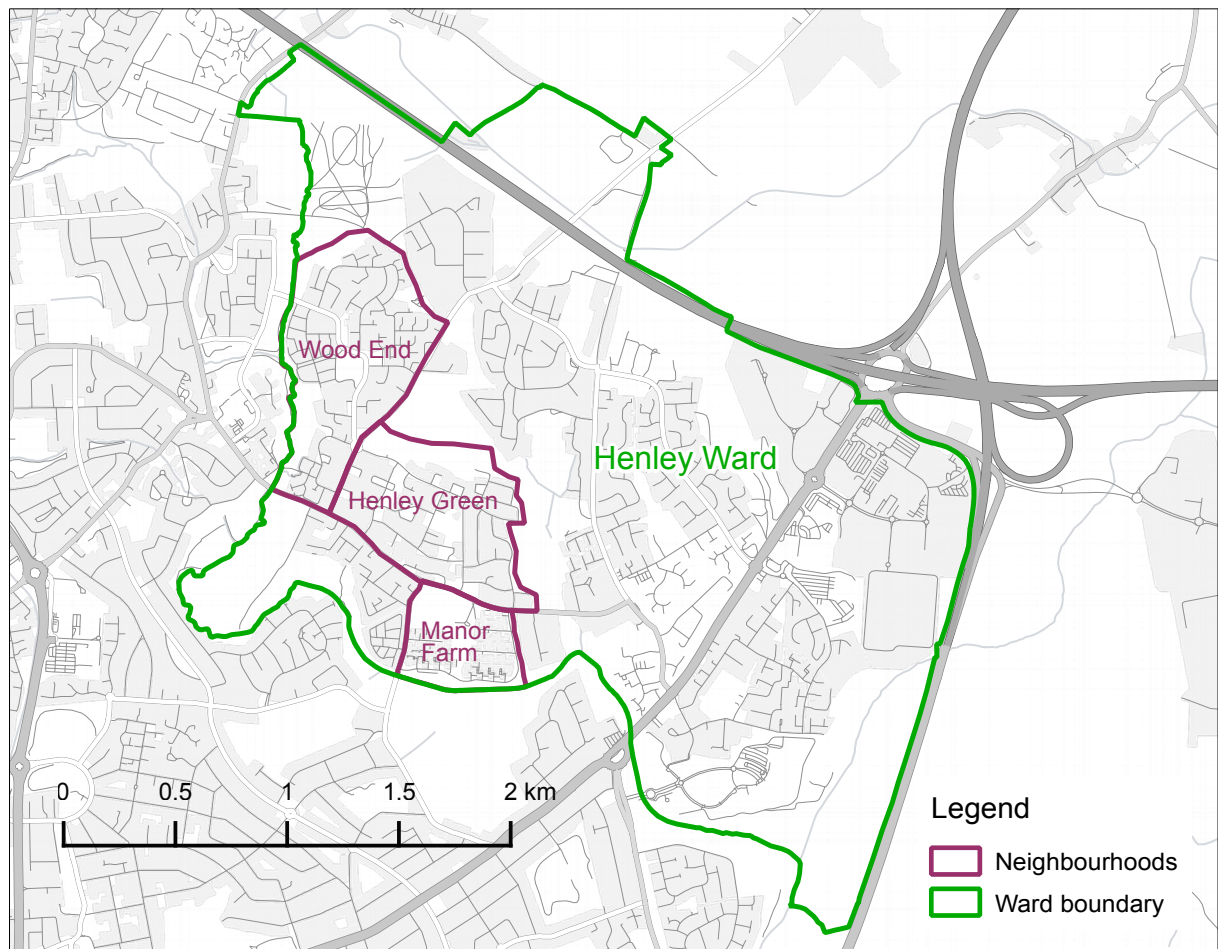


Figure 8.1: Ward extent compared to resident perceptions of neighbourhood

The boundaries for Wood End come from my conversations with Robert, Cynthia and Craig, supported by additional comments from Karl and Gary. Robert and Craig in particular had no hesitation in describing very clearly the features that bound Wood End; essentially three roads and a river. I did not encounter an explicit explanation of the extent of Henley Green and these boundaries are therefore largely based on statements from those in Manor Farm and Wood End about what lies beyond their own areas. The boundaries shown are far from definitive, and in particular some would consider part of the area straddling the boundary between Wood End and Henley Green to form an additional neighbourhood of Deedmore, but they serve to illustrate a significant point.

Irrespective of exactly where the boundaries between neighbourhoods lie, what is clear here is that residents' perceptions of what constitutes neighbourhood deal with a very much smaller scale than the administrative boundaries that define the ward. What makes this particularly important is that residents are often fiercely territorial. Robert, for example expressed considerable frustration at the tendency of media reports to refer to many of the surrounding neighbourhoods as Wood End, saying "hang on, how big's this estate got while I was asleep? Basically all it is... well, I could walk you round it, it would take you about fifteen minutes, that's all". Gary, himself from Bell Green, the area to the west of Wood End, described the river that bounds those two neighbourhoods as "a huge divide". Another example of the perceived importance of neighbourhood boundaries came from Lenny, talking about the extent of Manor Farm and stressing its difference from Henley Green, which lies on the other side of Henley Road:

When you see all the literature about the New Deal, it was Wood End, Henley Green, Manor Farm. There's none of that. Henley Road's the boundary, as far as I've ever heard anyone say. They don't associate across over the road, that's, you know, it's different. The best way of describing Manor Farm is that they don't do outsiders. And that isn't me being racist or anything, it's not like immigrants or refugees or anything like that. It's just if you're not from Manor Farm. It's as simple as that.

On one occasion when I met Karl in the café he frequents he was upset because, following a fall out with the local church, the Wood End Residents' Association had moved its meetings to the Moat House Leisure and Neighbourhood Centre, which is just outside Wood End (see map, [Figure 5.1](#), page 77). At 'Tea and Talk' sessions I also heard Manor Farm residents talk of not using the Moat House Leisure and Neighbourhood Centre, and this reticence amongst residents to travel to the Moat House was backed up by Deborah, talking about use of the café there:

You've got people down at Wood End saying "oh, that's in Henley Green I'm not going in there", and you've got the people here from Manor Farm who say they won't go up there because they get everything, they've got that great big community centre...

Box 8: Welcoming the community in

During my time in the field I regularly visited two community centres in the area, and was struck by the difference I experienced in feelings of being welcomed—not by the people I met in these buildings, who were almost always welcoming, but by the buildings themselves.

The Moat House Leisure and Neighbourhood Centre is a spacious new building in Henley Green, located close to the centre of the Wood End, Henley Green and Manor Farm (WEHM) NDC area (although, as I note in 8.6.4, this certainly does not mean that all those living in the WEHM area see it as local). Set on the corner of two roads the frontage is unfenced and a wide path leads up to a clearly marked entrance, inviting the visitor in. Through the doors is a spacious reception area with comfortable seating, and beyond that a café, subsidised by the Moat House Community Trust in order to encourage use. To me, the building and décor convey a strong sense of welcome and there are often people there just enjoying a cup of tea or making use of the wifi.

Henley Green Community Centre is on the edge of Manor Farm, just outside the area of Henley Green. It is set within the grounds of a school, grounds which are surrounded by a high wall and imposing gates. Having passed through the gates the entrance to the community centre is still not obvious. Once you find the entrance the doors are locked, a safeguarding measure made necessary by the fact that a nursery is co-located in the building. To gain access you must ring a bell, having first worked out which of several bells you need to ring. Through the doors lies an uninviting corridor, with busy notice boards covering the walls and limited natural light. There is little about this building which felt welcoming to me—the locked doors in particular are both a symbol of exclusion and a rather literal barrier to engagement. Unlike Moat House, this is not somewhere to just hang out. It always felt something of an ordeal visiting this community centre, even when I knew the staff well. As Yanow (1996) points out, the design, layout and décor of a building can convey much meaning to its users, and the meaning here seems to be “you are not welcome”.

It should be noted here that the strong sense of geographic identity is something that I particularly encountered in the longer established communities. Amongst newer communities it was less evident, and particularly within the African community it appeared that the primary allegiance was to people's country of origin, rather than their current area of residence. The Tanzanian church group, for example, although meeting on the edge of Manor Farm, is made up of people living throughout Coventry, and Clarissa told me that this focus on home country was common throughout the African diaspora.

The territorial nature of the longer established communities, however, is an important factor when looking at engagement. There is an evident tension between the scale at which public agencies organise themselves geographically, and the scale which is meaningful to residents. If agencies allow their internal structures and organisational needs to dictate the geographic focus of their engagement efforts then the reach of those efforts is likely to be poor. There is some evidence that this is recognised and that agencies are trying to work around it. The police, for example, ran 'Cuppa with a Copper' drop-in sessions in Wood End for a while, deliberately choosing a venue in Wood End, rather than the Moat House Leisure and Neighbourhood Centre. The Moat House Community Trust are actively trying to ensure that some of their events take place in venues other than the Moat House, and have also sought to try to break down some of the rivalry between the residents' associations from each neighbourhood by organising cross-neighbourhood events. However, despite these efforts the potential influence of the organisational structure of public agencies should not be ignored. As Lowndes and Wilson (2001: 632) point out, institutions are "the sets of routines, norms and incentives that shape and constrain individuals' preferences and behaviour", and as such choices that are made about organisational structure will inevitably affect engagement with communities. With financial constraints leading services to seek ever larger economies of scale, and a political agenda pushing towards larger units of governance, such as the West Midlands Combined Authority and Metro Mayor, there is a danger that the way agencies are organised will move even further away from residents' perceptions of what constitutes neighbourhood. This can be seen in the recent closure of Whitefriars' neighbourhood offices, leaving them, in the eyes of residents at least, less responsive and less accessible.

8.6.5 *Taken-for-granted assumptions of public services*

In this section on communication and interaction I have explored a number of diverse themes, yet there is something that links them together. All of these themes relate in one way or another to the culture of the organisations involved, to a set of “shared, taken-for-granted implicit assumptions that a group holds” (Schein 1996: 236). Organisations behave in ways which make sense to them; they work in ways in which they are accustomed to working or which feel comfortable to them and those who work within them. The themes in this section highlight the occasional failure of agencies to acknowledge or recognise that the communities which they are trying to engage with may have different values, different priorities and different ways of working (Eversole 2011). My own reflections (Box 7, page 174) emphasise the impact that the congruence of cultural values can have and how easy it is to slip into ways of working that feel more comfortable. If engagement is to be effective across multiple communities then public services will need to challenge many of their taken-for-granted assumptions and be prepared to work in new and challenging ways, ways which make sense to the communities they serve rather than just to the organisations. This challenge is one which I will discuss in more depth in Chapters 9 and 10.

8.7 Conclusion

In this chapter I have moved away from focusing on the fire service and fire prevention to explore community engagement more generally and to highlight issues that are acting as barriers to engagement in the area of Coventry that this study focuses on. In doing so I have identified a number of factors that affect the ability of all public services, including the fire service, to engage effectively with the communities that they serve. Figure 8.2 summarises the difficulties of community engagement by bringing together the main themes that have been discussed in this chapter with additional factors identified in earlier chapters. The theme of “not seen as a priority” derives from the specific evidence about the fire service discussed in Chapter 7 (see 7.3.2, *Fire is not a priority*) and is further supported by the methodological findings discussed in Chapter 5 around the difficulty of recruiting participants for in-depth conversations (see 5.5.1, *The failure of the big conversation*). The diagram also highlights a further theme discussed in Chapter 5, that of failing to target certain groups altogether (see 5.5.3, *Engaging with solo-livers*).

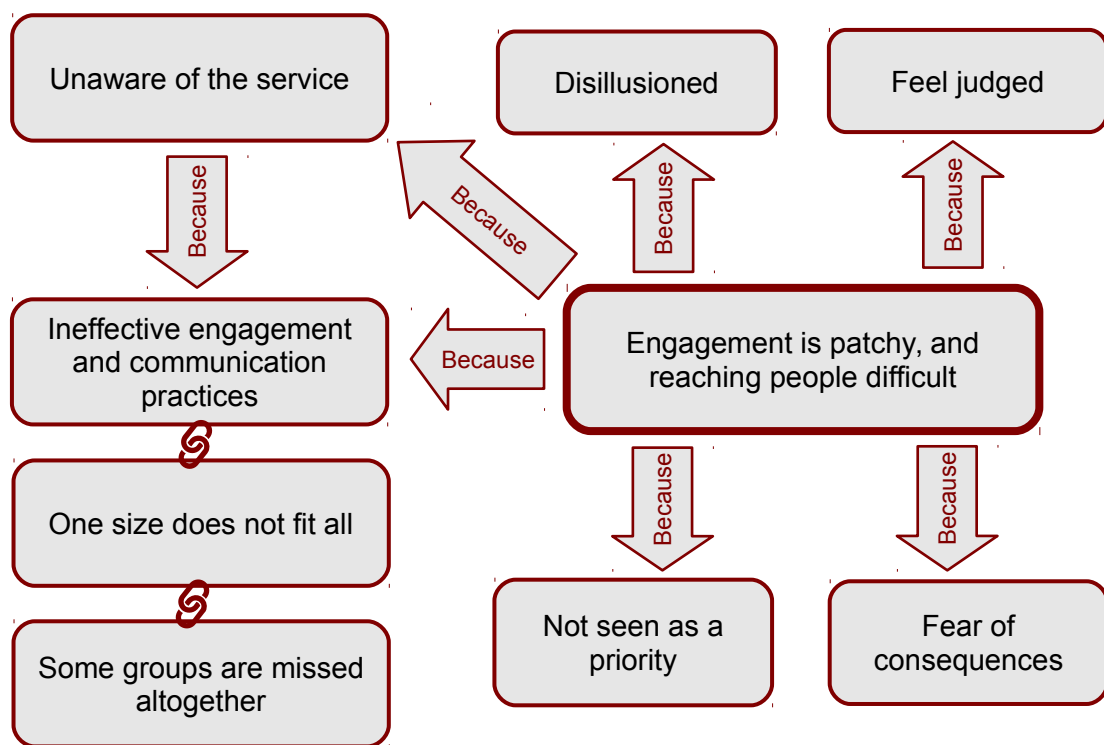


Figure 8.2: Factors inhibiting community engagement

Overcoming these various barriers presents a significant challenge for any agency. Many of the issues relate to deeply embedded perceptions. Many of those perceptions are strongly influenced by the actions of multiple agencies, and, indeed, by the interaction between agencies. With increasingly constrained resources, agencies find themselves with both a greater need to engage effectively, both to manage demand and to co-produce services, and less capacity to facilitate that engagement. Nevertheless, the story of Ellen and Allan's initiative (see 8.2.4) demonstrates that, on a micro-level at least, effective interventions that can reach highly marginalised groups are possible. This was an intervention that relied heavily on the individuals involved and the ways in which they built relationships, and the importance of individual interactions seems to be a thread that runs through several of the themes looked at here. Whether it is the language that individual bureaucrats use, the judgements that they make, or the attitudes and values that they hold in common with those they deal with, on one level community engagement is about the relationship between individuals. Individual behaviour, though, is influenced by organisational culture, and in some cases, such as the making of promises that are not then delivered, it is organisational behaviour which directly affects citizens' perceptions. In the coming chapters I will propose

a conceptual framework that brings together the themes identified and provides a way to think about the challenges of engagement and the options for addressing those challenges.

Chapter 9: Space and dialogue

9.1 Introduction

In this chapter I outline a conceptual framework that begins to explain the findings that I have described in earlier chapters, and offers a way of thinking about engagement that helps us to understand some of the changes that might be made in order to improve engagement between state agencies and the communities that they serve. I begin by considering what I mean by engagement, relating this discussion to some of the many and varied understandings of the term found in the literature. I adopt a very broad definition, encompassing most aspects of communication, consultation, participation and service access, ultimately relating the idea of engagement to dialogue.

Having established the link between engagement and dialogue I employ a spatial metaphor, arguing that actors must enter a space of dialogue for dialogue to occur. Asking what it is that encourages actors into that space, I outline three important characteristics of the space—it must be perceived as being safe, comfortable, and rewarding. If it is not, actors are unlikely to enter it and dialogue is unlikely to take place. I then go on to discuss some of the ways in which state agencies can seek to ensure that appropriate spaces for dialogue exist and are attractive to the communities that they serve.

In the latter part of the chapter I look at the role of individual public servants in promoting dialogue, arguing that engaging with communities requires a particular set of skills that includes flexibility and innovation, and that public servants must have the freedom to exercise these.

9.2 Engagement as dialogue

Definitions of engagement vary greatly throughout the literature, and it is often linked closely to the term ‘participation’. Furthermore, in some areas, notably health, the term ‘service access’ is used to describe much of what I have considered in this study. At this point, then, it is worth taking some time to consider the distinction between engagement, participation and service access. With each term having a range of meanings these three

concepts appear to be at once both similar and distinctly different, and I discuss here how they relate, how they overlap, and what they mean in the context of this study.

9.2.1 Community participation

Community participation is commonly seen as a continuum encompassing multiple meanings. This concept of participation goes back to Arnstein (1969), who proposed a model of citizen participation as a ladder, with rungs going from manipulation at the bottom through informing, consultation, and partnership to citizen control at the top. The hierarchical model of Arnstein's ladder has been adapted by a number of others since (e.g. Pretty 1995, Choguill 1996, Shier 2001), with each version following the theme that greater participation involves citizens exercising greater power over their lives, usually accompanied by a normative assumption that increased participation and power is a good thing (Cornwall 2008). A similar approach is taken by the International Association of Public Participation (2014) in their spectrum of public participation, which moves from 'inform' through to 'empower', although Bruns (2003) notes that the horizontal ordering of the spectrum is less suggestive of a hierarchy in which one end is taken to be better than the other, and more of a range of options of equal validity.

9.2.2 Community engagement

The term 'engagement' is often associated with participation—indeed, the online Oxford Dictionary lists 'participation' as a synonym of engagement (Oxford University Press 2016). The terms are often used interchangeably in the international development literature¹⁸ and, reflecting this relationship, engagement is often linked to empowerment (e.g. Baba et al. 2016), seen by many as the ultimate aim of improving participation (International Association for Public Participation 2014). This close link between community engagement and community participation can be further seen in guidance from the National Institute for Health and Care Excellence, whose statement that "Community engagement ranges from the simple provision of information to power sharing with local communities" (2014: 2) closely mirrors the continuum of participation described by Arnstein (1969) and others. O'Mara-

18 See, for example, Gaventa and Barrett (2012) who use the term 'engagement' in the title whilst using 'participation' throughout the abstract

Eves et al. (2013), however, take a slightly different view. They argue that engagement is an umbrella term that encompasses a range of activities, including information provision, consultation, community development, participation and empowerment. Rather than seeing these activities as a part of a continuum they suggest that they are a series of nested sets, each being a subset of the next, a concept illustrated in [Figure 9.1](#).

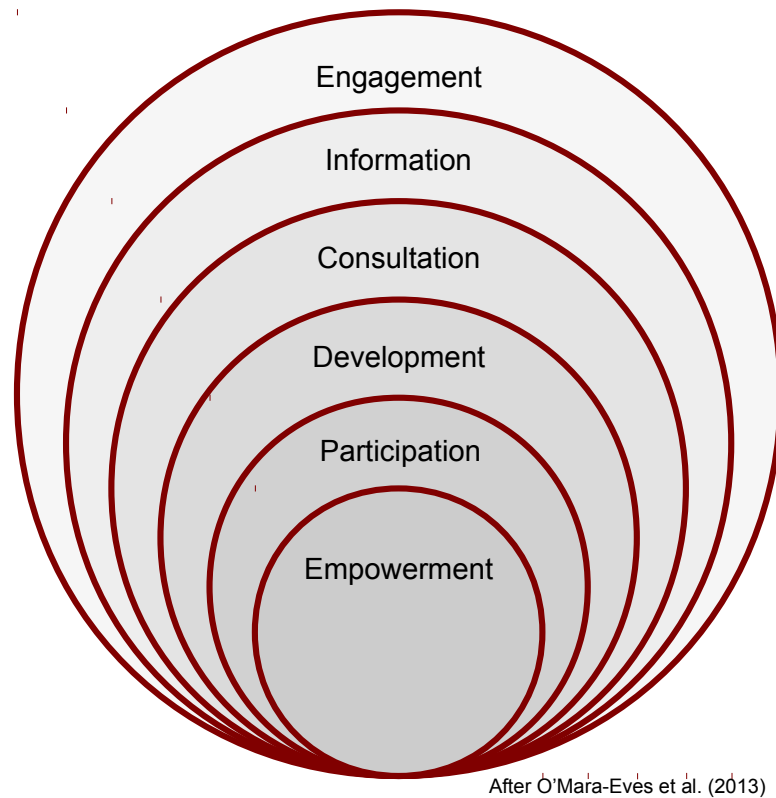


Figure 9.1: Relationship between aspects of engagement

Whilst this model in some ways retains the same progression seen in the 'ladder' models, it highlights the fact that each new stage is dependent upon the previous stage—empowerment, for example, cannot happen without participation; participation is meaningless without a good flow of information. The model also serves to emphasise the idea that engagement has many aspects and takes many forms.

As O'Mara-Eves and her colleagues acknowledge, this conception of engagement as a broad, over-arching idea is not uncontested. For Hashagen (2002) for example, engagement is a concept that goes beyond consultation and involvement. Engagement implies a more collaborative relationship, and one in which public agencies are more responsive and

flexible. In consultation and involvement, he suggests, the state defines the structures to be used and the parameters which bound the activity, and then encourages the community to take part on the state's terms. In engagement, however, the state must "fully understand the dynamics of the communities with which it seeks to work, and... be prepared to adapt and develop structures and processes to make them accessible and relevant to those communities" (Hashagen 2002: 2). This view that engagement is something that goes beyond mere information provision or consultation is one that is popular in the fields of community development and international development in particular. However, as Cornwall (2008) notes, the clear lines drawn in typologies of participation and engagement, and indeed the normative assumptions of 'good' and 'bad' participation, become much fuzzier in practice. Deciding what is, and what is not, engagement requires some consideration of the context in which it takes place. In the context of this study, that of preventing residential fires, the provision of information to the community by the state has always been a key activity and it makes little sense to exclude it from the definition of engagement that is used in this discussion. Broadly, then, I will begin, by adopting O'Mara-Eves and colleagues' view that engagement is an umbrella term that covers a wide range of activities. I will, however, add an important caveat, accepting one of Hashagen's (2002) points. Engagement is a two way process. To put up a poster outside a fire station exhorting people not to smoke in bed is not, in itself, engagement. As a minimum, engagement implies that members of the public react in some way, even if it means simply that their attention is engaged by the poster. To really step into the realm of engagement, however, some form of dialogue or interaction is necessary. In effect, in our context, a resident must choose to access the service.

9.2.3 Service access

The relationship between service access and engagement is once again not straightforward. Part of the issue here comes back to the contested definitions of engagement. Whilst I have suggested that a useful definition of engagement in the current context is broad, including service access as a bare minimum, others consider engagement to be a step beyond service access. In the context of health care for those living with HIV, for example, Mugavero et al. (2010) argue that engagement goes beyond service access to encompass the patient's long-term commitment to remain in treatment. In the context of this study such a definition of

service access might be interpreted as including a continued commitment to behaviour that reduced fire risk. Whilst this is clearly important, with the study's findings suggesting a reticence to access services in the first place it is perhaps premature to focus on how to achieve such ongoing commitment.

A more relevant distinction between engagement and service access can be found by considering who initiates contact. The idea of service access suggests an action initiated by the service user. Engagement brings with it connotations of a two-way interaction and the possibility of initiation coming from either party; residents may seek to engage with a service, but equally a service may reach out and attempt to engage with residents. Indeed, access to a service, an action initiated by a service user, may itself be the result of efforts by the service provider to engage with its users. In the context of service provision, then, service access is a subset of engagement. Again, engagement can be seen as an over-arching concept covering a wide range of activities. All of those activities, however, involve some sort of dialogue between the parties.

9.2.4 Community engagement and its meaning in this study

In the discussion which follows I will adopt a wide definition of engagement, similar to that suggested by O'Mara-Eves et al. (2013) and illustrated in [Figure 9.1](#). The fact that the context in which O'Mara-Eves and her colleagues were writing, that of reducing health inequality in the UK, is not dissimilar to the present context lends further weight to the argument that theirs is a model which is appropriate to this study. Community engagement is seen here as any of a wide range of activities that involve dialogue between service providers and the communities that they serve, including access to services by members of those communities, the exchange of information and knowledge, participation and consultation.

9.3 Spaces of dialogue

The metaphor of space, as Cornwall (2002a, 2002b) highlights, is one that is widespread in discussions of participation and engagement. It is a powerful metaphor, bringing with it the idea of something to which participants may be either admitted or excluded, where they feel welcome or not. Whilst the space is often a metaphor it can, as we saw earlier ([Box 8](#), page

178), also be literal. Language drawing upon the metaphor of space is widespread—we talk of ‘coming to the table’ and ‘entering into dialogue’, of ‘forums’ and ‘arenas’, of ‘opening up’ and ‘inviting in’. If dialogue and engagement takes place in spaces, then we must ask what are the characteristics of those spaces that persuade, discourage or prevent actors from entering them? Using another spatial metaphor, Eversole (2012) talks of communities making a journey into unfamiliar terrain in order to engage. What is it that prompts people to set off on that journey? What, instead, will make them stay at home? In this section I will explore some of these questions, arguing that for people to enter spaces of engagement, spaces of dialogue, those spaces must appear to them to be both safe and comfortable. What is more, even if a space appears safe and comfortable it is usually also necessary that people must perceive there to be potential rewards available from entering the space. [Figure 9.2](#) summarises the three characteristics of spaces of dialogue that people will enter.

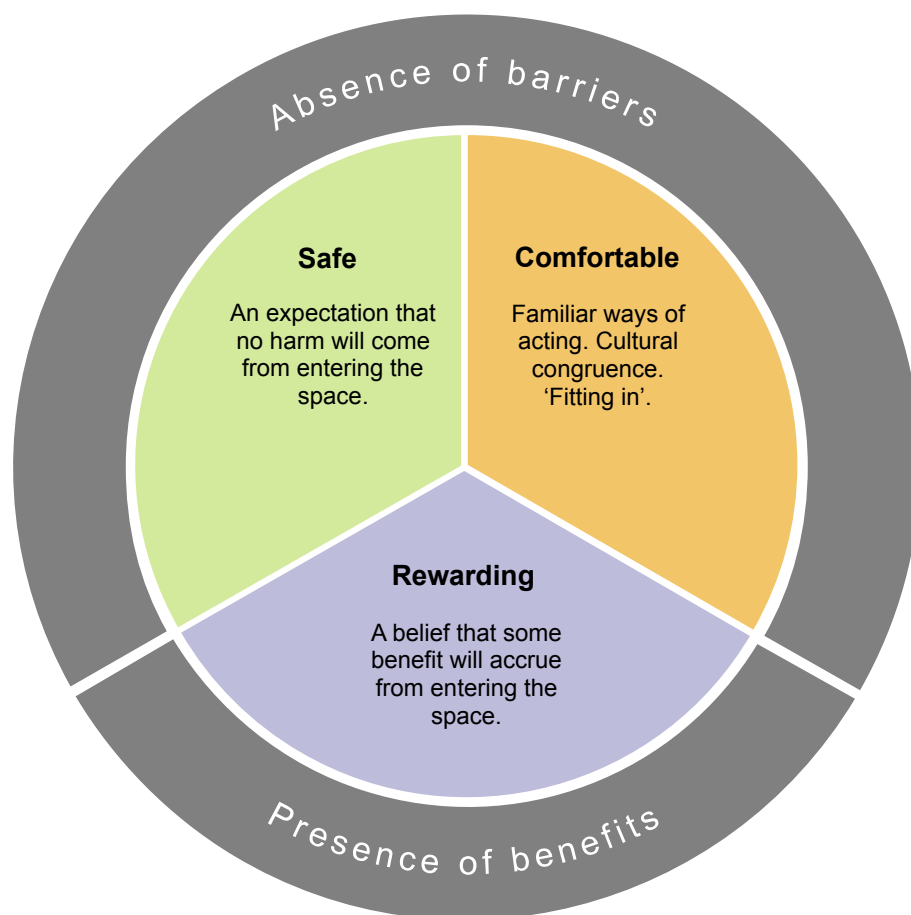


Figure 9.2: The three characteristics of spaces of dialogue

9.3.1 Safe space

‘Safe space’ is an extension of the space metaphor that is widely seen. It is particularly prevalent in the fields of education (Boostrom 1998), and in the context of giving voice to marginalised groups. As a phrase it is often used, but exactly what is meant by it is not so often spelt out. Indeed, I used the term without further explanation in discussing the space which Ellen created for the women that she supported (see 8.2.4). So what is meant by ‘safe space’?

Fundamentally something can be said to be safe when it entails no risk of harm. As Boostrom (1998) highlights, in the context of discussions of safe space in education it is rarely direct physical harm that is being considered, but rather emotional or psychological harm. Looking more broadly, however, it is all forms of risk of harm that must be absent for a space to be safe. Perceptions of risk, though, are constructed (Douglas and Wildavsky 1983, Clark et al. 2014) and what is important in determining whether someone enters a space or not is not so much the presence or absence of risk, but whether they perceive there to be a risk. Thus a useful working definition of safe space becomes one where there is perceived to be no risk associated with entering it.

Holley and Steiner suggest that a safe space is one where those present “feel secure enough to take risks” (2005: 50), going on to describe it as somewhere where people are “able to risk honesty with the knowledge that they will not suffer greatly for it” (2005: 51). This definition raises an important question. It suggests that those involved still perceive there to be a risk present, but nevertheless choose to enter the space, believing that the risk will not be realised. At first glance this appears contradictory—if you believe the risk will not be realised then you must believe that you are not taking a risk. What Holley and Steiner seem to be describing is a situation where the risk could be realised, but those involved have come to trust that it will not be. Thus we come to a position where safe space is not simply somewhere where there is perceived to be no risk, but can also be somewhere where it is trusted that no harm will come, despite the risk. The distinction may at first appear to have little value—it could be argued, for example, that trusting that no harm will come and perceiving that no harm can come amount to very similar things. The difference, however,

becomes important when we turn to considering how a safe space may be created, or how an unsafe space may be made safe. Here there is a marked difference between the idea of removing or mitigating risk, and the idea of building trust.

A further complication is introduced here by recent work in the field of trust that argues that trust and distrust are not opposites on the same continuum, but distinct and different concepts (Van de Walle and Six 2014, Saunders et al. 2014). One definition of distrust that has been used in this debate is that it is “an actor’s assured expectation of intended harm from the other” (Lewicki et al. 1998: 446), a definition which puts it almost directly opposite our starting point for defining safe; that it is an absence of risk of harm. The only significant difference rests in the intentionality expressed in Lewicki et al.’s definition, whilst the opposite of safe could include unintentional or accidental harm. Thus a safe space can be almost entirely defined in terms of the levels of trust and distrust held by the actors.

Returning to an earlier point in the argument, trust becomes a necessary part of the definition only if there is a perception of risk. Since most of the perceived risks can be associated with the presence of distrust, trust is necessary only if there is distrust. Whilst some have argued that it is possible for trust and distrust to coexist (Van de Walle and Six 2014) others have taken an opposing view, suggesting that distrust is so pervasive as to rule out any possibility of trust (Bijlsma-Frankema et al. 2015). In the context of creating safe space for dialogue, however, the fact that trust is necessary only when distrust is present suggests that reducing distrust should be the more important focus. Indeed, Van de Walle and Six (2014), whilst suggesting that trust and distrust can coexist, go on to argue that in a situation of high distrust it becomes extremely difficult for an agency to take actions intended to build trust as anything that it does will be treated with suspicion.

In practical terms, then, what does a safe space for dialogue look like? Since safe space is defined by the actors’ perceptions of risk, trust and distrust, this will vary from actor to actor. All three factors are constructed by individuals in their particular context and the likelihood of a space being seen as safe must therefore be evaluated in the context in which it arises. This theoretical observation is supported empirically by Holley and Steiner (2005), who

found that members of different cultural groups have different perceptions of what makes a classroom feel safe. The concept of safe space may have general applicability, but the detail is specific to the context. Even within this single study there are multiple contexts, and perceptions of safe space will vary. It is instructive, however, to consider how the broad themes identified in this study relate to the concept of safe space.

There is an obvious link between the idea of safe space and the theme of fear of consequences identified as a barrier to engagement (see 8.4). A space is not safe if the perception is that entering it will bring with it unwanted consequences that are perceived as harmful. The belief that agencies will collude to work against anyone who engages with them represents a significant distrust, a clear expectation that agencies intend harm, which is inconsistent with the notion of safe space.

A second clear link is to the sense of feeling judged (see 8.2). This is a point that relates strongly to existing literature on safe space in education, which stipulates freedom from judgement and criticism as an important aspect of safe space (Boostrom 1998, Holley and Steiner 2005). As we saw in the discussion on feeling judged (section 8.2), the sources of that judgement are many, including public servants, people from outside the area, and neighbours. This may make it difficult to overcome the perception that spaces for dialogue are not safe and suggests that issues of confidentiality and the publicness of engagement may also be important in this context. The greater the number of people who are aware of an individual's engagement, the greater the risk that judgement or criticism will result from that engagement. When viewed in terms of distrust the question of publicness raises a further issue, relating to whom it is that is distrusted. Whilst to an extent it is the ability of public services to maintain confidentiality that is distrusted, it may also be neighbours and peers who are the target of distrust. Such widespread distrust is unlikely to be in the gift of a single public agency to remedy.

9.3.2 *Comfortable space*

Whilst it is important that spaces of dialogue are perceived as safe, this is unlikely to be sufficient to attract people into them. The second important characteristic of spaces of dialogue is that they are perceived as being comfortable. Safety goes some way towards

comfort, in that it is unlikely that a space that is perceived as being unsafe will be perceived as being comfortable, but comfort requires more. I use the term 'comfort' here to suggest a sense of 'fitting in', a degree of familiarity with the customs and practices of the space. A space that is comfortable, then, is one that exhibits a degree of congruence between the culture of the space and the culture of those entering it.

The idea of cultural congruence is one that has been well explored in the education literature. Au and Mason (1983), for example, argue that the ways in which students participate in the classroom are defined by the cultural values that they bring with them from the home. If these values differ from the rules of participation expected in the classroom then participation tends to be poor. Enabling full participation thus requires a degree of cultural congruence between the children's values and those encouraged in the classroom. Another example of the importance of cultural congruence in education is the evidence that using culturally relevant texts for teaching reading significantly improves learning outcomes for pupils from minority ethnic groups (Rickford 2001). There is also evidence that the degree to which parents engage with their child's school is connected to cultural congruence, with differences in cultural values between working-class parents and the middle-class dominated teaching profession (Lareau 1987) and ethnic differences (Crozier and Davies 2007) both being seen to discourage parental engagement.

In the area of health and social care cultural congruence has also been highlighted, and clearly linked to the idea of service access, with Penchansky and Thomas (1981: 128) defining service access as "a concept representing the degree of 'fit' between the clients and the system". The idea of cultural congruence as fit, so evident in phrases such as 'fitting in', is developed further by Schim and Doorenbos (2010). Writing about end-of-life care, they conceptualise cultural congruence as two parts of a jigsaw, one at the service provider level, the other at the service user level, which must fit together to produce culturally congruent care, an idea illustrated in [Figure 9.3](#). At the provider level are cultural diversity, cultural awareness, cultural sensitivity and cultural competence, whilst at the user level is a range of cultural constructs including such things as family, spirituality, personal space, and ways of communicating.

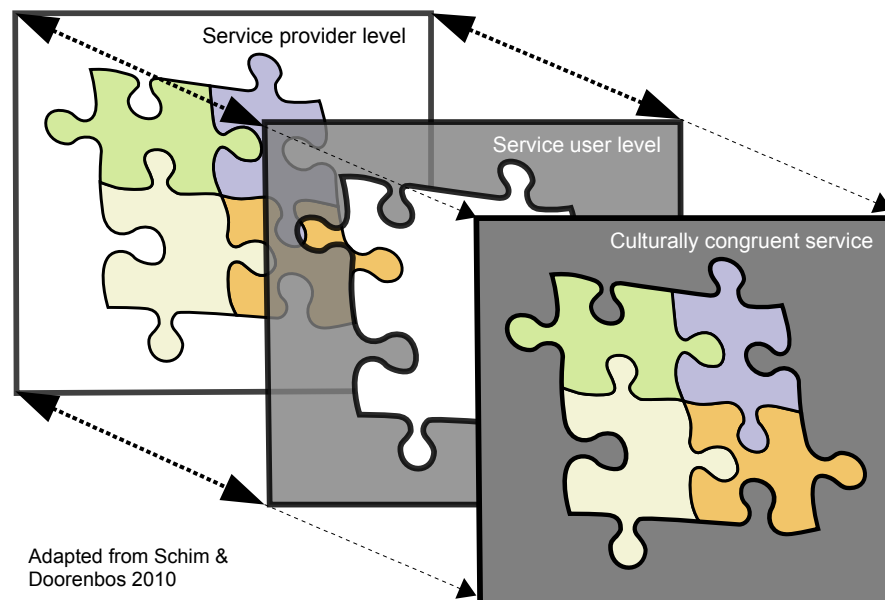


Figure 9.3: Cultural congruence as a fit between service provider and service user

As Eversole (2011) highlights, communities and state agencies commonly have fundamentally different ways of doing things, different ways of organising and different ways of communicating. Where, as is often the case, spaces for dialogue are created by government agencies and reflect government ways of working, these spaces are often unfamiliar to communities. They are uncomfortable and challenging, and communities are unlikely to enter them voluntarily. Even when community members do attempt to engage in these spaces, the unfamiliarity of the space may be difficult for them to adapt to and this can limit the effectiveness of their engagement (Taylor 2011).

Returning to Eversole's (2012) journeying metaphor, both communities and agencies have to journey to spaces of dialogue. The further that journey, that is, the less the cultural congruence, the more likely it is that the destination will feel uncomfortable. As a metaphor this fits well one of the conclusions of Matthews and Hastings (2013) regarding middle-class advantage—that an alignment of cultural values between middle-class service users and many bureaucrats enables the middle-classes to engage more readily with services. In this case the similarities in ways of working and communicating, the familiarity of these, makes for a short journey into a space that is relatively comfortable. At the other end of the scale, a recently arrived African migrant is unlikely to find much familiarity in a space that is

characteristic of British bureaucracy, that is largely defined by the customs and language of middle-class White bureaucrats.

The idea that the comfort of a space relates to the degree to which it aligns with an actor's cultural values may also partly link the concept of comfortable space back to distrust. Sitkin and Roth (1993), in considering distrust in an intra-organisational context, argue that a person is distrusted if their values and world view are perceived as being so different from those of the organisation that they become seen as a "cultural outsider" (1993: 371).

However, if we consider that the presence of distrust implies a lack of perceived safety, and that comfort goes beyond safety, it follows that whilst distrust may be present in an uncomfortable space, it is not sufficient to define it. Whilst differences in values may trigger distrust (Bijlsma-Frankema et al. 2015) the idea that distrust automatically exists between groups that are different is too simplistic (Williams 2001) and adds little to our framework.

I have considered the importance of comfort from the perspective of the community.

However, there are inevitably at least two parties to any dialogue. If we work to make the journey into spaces of engagement shorter for those in more marginalised communities, it is likely to become longer for those who work in public agencies. If there is distance between the two parties, then wherever the spaces of dialogue arise the journey will be long and the destination uncomfortable for at least one party. Why, then, should we expect the state agency to put up with this discomfort? Firstly, it is reasonable to make a normative assumption that public services should attempt to be accessible to the communities that it is their job to serve, and should be so in a way that promotes equality and does not create barriers for some communities that do not exist for others. Secondly, the state can call upon greater resources to help it to make the journey and to support staff in the process. Thirdly, within a public organisation with a diverse workforce it is more likely that individuals can be identified to undertake the journey for whom the challenge will be less. Thus not only ought the state to make the longer journey, it is better positioned to so. This is not to say, however, that undertaking the journey will be without challenges for public services and those who work for them, and I will return to consider some of these in a later section (9.5).

It is worth returning at this point to consider Hashagen's argument that engagement goes beyond consultation and involvement, and in particular his assertion that engagement requires the state to "fully understand the dynamics of the communities with which it seeks to work, and... be prepared to adapt and develop structures and processes to make them accessible and relevant to those communities" (2002: 2). Whilst I have argued that engagement should be taken as a broader umbrella term applied to all forms of dialogue, when we begin to consider the importance of comfortable space to dialogue it becomes clear that *effective* engagement does indeed require a greater understanding by the state of the ways in which communities work and organise themselves. This is the cultural awareness, sensitivity and competence that Schim and Doorenbos (2010) see as being the service provider side of the 'fit' that results in a culturally congruent service.

This idea of comfort in spaces of dialogue relates most strongly to the theme around communication and interaction in this study (section 8.6). I suggest in discussing this theme that there are multiple communities, but in large part attempts by state agencies to engage with them have failed to recognise this diversity, and have taken a 'one size fits all' approach. Inevitably, this leaves many feeling that the spaces made available for dialogue are not spaces in which they feel comfortable or in which the ways of working are familiar to them. One observation I highlighted in that discussion concerned time keeping in the African community (see 8.6.2), and it is notable that one of the less obvious cultural constructs that Schim and Doorenbos (2010) identify on the service user level of their model is that of time orientation, which they describe as "Meaning of time, schedules, and calendars, interpretations of promptness and lateness" (2010: 262). Another example of a space of dialogue being uncomfortable and unfamiliar comes from Ellen's work and her account of the difficulty experienced by the women she supported in navigating public services (see 8.3.3). The concept of comfortable space and the importance of cultural congruence is further supported by my reflections on my own differing levels of comfort in interactions (Box 7, page 174).

9.3.3 *Rewarding space*

The creation of spaces of dialogue which are perceived as being both safe and comfortable is a necessary requirement for dialogue to take place, but it is not necessarily a sufficient requirement. Often people need an incentive to engage (Taylor 2011). Space which is safe and comfortable is space which lacks barriers, but there may still be a need for a positive driver to move into this space and engage. Conceptually this can be likened to Herzberg et al.'s (1959) two-factor theory of motivation, which argues that factors that cause dissatisfaction in the workplace are separate from factors that result in satisfaction. Removing the dissatisfaction factors is important, but not sufficient to ensure motivation.

Eversole (2012) points out that community members do sometimes undertake the journey into government-defined spaces of dialogue, despite the challenges, because it allows them access to resources that would not otherwise be available to them, and because at times communities need the power of the state to help them overcome barriers. Eversole is looking at the context of development processes, and a parallel can be seen here with the engagement that at least some of the communities in north east Coventry had with the New Deal for Communities (NDC) programme—a programme that promised access to £54m of investment in the area. Not all dialogue promises such rewards, however, and even in the case of the NDC there is evidence from some programmes that residents actively avoided engagement because of the perceived negative consequences (Mathers et al. 2008). The fact that sometimes significant access to resources has been sufficient to encourage engagement certainly does not mean that that this can always be relied upon when barriers are still present, but it does suggest that positive motivation can be important. In considering spaces of dialogue, then, we must look at what it is that could encourage community members to enter them—what the rewards are.

The degree of reward that is needed to encourage people to enter a space of dialogue can be conceived of as being related to the extent of the barriers which they must overcome in order to enter the space, to the difficulty of the journey which they must undertake. The less comfortable or familiar a space, or the higher the perceived risk in entering it, the greater the reward must be. In choosing spaces in which to promote dialogue, then, state agencies need

to be aware of the likely benefit that community members will perceive and balance this against any perceived effort or expense on the community's part.

Possible rewards are many and varied, and may be collective or individual. They range from large scale investment in the local area, such as in the case of the NDC, through to help getting out to the shops, or having a repair carried out in the home. In order for there to be a perception of reward, however, there must be a realistic expectation that it will transpire. The need for space to be rewarding thus relates strongly to the theme of disillusionment found in this study—people do not engage because they do not believe that engagement will bring any sort of change or benefit to them (see 8.3). Irrespective of whether spaces of dialogue are available that are perceived as being both safe and comfortable, in the absence of a belief that entering them will bring benefit those spaces are likely to remain empty.

The need for spaces of dialogue to be rewarding also relates strongly to the fact that many in this study did not consider fire to be an important risk (see 7.3.2). Even amongst those who did show some inclination to engage with public services, few saw the need to seek out advice on fire prevention. In effect, they did not perceive sufficient potential benefit from it. My own experience of fieldwork also offers support for the idea that people will accept lower reward if they have to put in less effort. I had little to offer and found people generally unwilling to go far out of their way to talk to me, but happy to have a quick chat if I visited their spaces (see 5.5.1).

9.3.4 Summary

Dialogue takes place in spaces, both metaphorically and literally. It is useful to consider the characteristics of spaces of dialogue that encourage people to enter them, and I have argued that three characteristics particularly demand our attention; spaces of dialogue must be perceived to be safe, comfortable and rewarding (Figure 9.2, page 188). Throughout my argument I have highlighted how each of the characteristics of spaces of dialogue relates to the findings of this study and those links are summarised in Table 9.1.

The nature of a space that is perceived to be safe, comfortable and rewarding is not fixed, but varies from community to community, from context to context. It follows that if public

agencies wish to enter into dialogue with the diverse communities that they serve they must be prepared to enter into a wide range of different spaces, and to work in ways which are appropriate to those spaces.

<i>Finding</i>	<i>Related characteristic of spaces of dialogue</i>
Disillusionment	Space is not rewarding
Feeling judged	Space is not safe
Fear of consequences	Space is not safe
Communication is not appropriate to the community	Space is not comfortable
Fire is not a priority	Space is not rewarding
FRS as part of the wider state	Space is not safe

Table 9.1: Links between key findings and the characteristics of spaces of dialogue

The metaphor of spaces of dialogue is one that has the potential to be transferred and applied more widely. Whilst exactly what a safe, comfortable and rewarding space looks like is context dependent and varies from community to community, the overall framework may prove to be of more general use.

9.4 Making spaces more attractive

In this section I will discuss some of the strategies that could be employed by public agencies in an attempt to ensure that spaces of dialogue are available that are attractive to community members—that are safe, comfortable and rewarding. There is no one ideal strategy—different contexts will privilege different approaches. For each strategy discussed I will set out some of the advantages, some of the problems, and suggest the contexts in which the strategy will be most valuable. In doing so I consider effective engagement and dialogue to be very much a two way process, with information and knowledge flowing both from agency to community, and vice versa. In the context of fire prevention, for example, this means that not only does the FRS seek to impart knowledge of fire safety to the community, but it is also seeking to learn from the community so that it can better understand how fire safety can be fitted into the cultural norms of that community. Having discussed each of the strategies I will finish this section by looking at examples of each strategy found in this study.

9.4.1 *Go where people are*

What is clear from the framework I have developed here is that the closer spaces for dialogue are to the community, the more likely it is that the community will move into those spaces. There are fewer barriers as the space is perceived as more familiar, comfortable, and safe, and since less effort is required to reach the space, there is less need for reward.

Cornwall (2004) draws a distinction between invited space and popular space. Invited space is space created by the state, into which community members are invited. Popular space, in contrast, is space that is created by communities themselves, arising out of communities' own needs and actions. For Cornwall, the boundaries between these two types of spaces are not fixed, with the possibility existing that communities can make invited spaces their own, or that the state can appropriate popular spaces. At the outset, however, it seems clear that popular spaces are more likely to be closer to the community—to reflect the community's customs, ways of working, and culture. Invited spaces, on the other hand, created by the state, are highly likely to reflect the culture and approach of the state agency that creates them. Popular spaces, then, are more comfortable to community members. Since community members already occupy them we may infer that they also feel safe there, and that the rewards involved are sufficient to attract at least some of the community in. One strategy for achieving attractive spaces for dialogue, then, is for public agencies to move into the spaces that communities have already created for themselves, to heed Lisa's call to "Come out of the office and go where people are" (see [8.6.1](#)).

On the face of it, this is a strategy that places both public agency and community members in the same space, a space in which community members are comfortable, facilitating a two way dialogue between them. Several significant problems exist with this strategy, however. If communities have high levels of distrust of public services, the effect of those services attempting to engage with communities in the communities' popular spaces may be to change the nature of those spaces such that community members no longer feel safe within them and desert them. There is also no guarantee that communities will welcome the intrusion of a state agency entering their space under such circumstances. Whilst this

strategy may well bring benefits in many circumstances it is unlikely to be of value on its own where distrust is high.

The strategy of public agencies working within community generated spaces also brings significant challenges for the agencies themselves. Whilst popular spaces may exist literally, they are also metaphorical, made up of the ways of doing things that are familiar to communities. The very fact that the strategy is necessary because of the fundamental differences between approaches to working between state agencies and some communities (Eversole 2011, Taylor 2011) highlights a major difficulty for the state. Public agencies have deeply embedded cultures and achieving a shift in these can prove extremely difficult. The literature on participatory governance is dotted with examples of entrenched agency culture undermining attempts to broaden participation. Coaffee and Healey (2003), in a study of the introduction of Area Committees in Newcastle, found considerable institutional resistance to change, with market based approaches to management continuing to dominate and influence the nature of the new spaces. Boxelaar et al. (2006) found that attempts to adopt a genuinely participatory, soft-systems approach to a rural development project were effectively subverted by the underlying performance and project management regime of the wider organisation, whilst Taylor (2007), too, suggests that performance cultures can have a negative effect on attempts to broaden participation. In the related area of service co-production, Bovaird's (2007) study of six examples notes initial professional resistance to the shift towards co-production in all cases. Whilst most of these studies found reasons to be hopeful about changes in the way participation is enacted, they all serve to highlight the considerable potential difficulties involved in shifting corporate culture within public agencies to facilitate such change.

The strategy of going where people are, then, is one which will ultimately be constrained by both the levels of distrust that exist between community and agency, and by the ability of the agency to promote and sustain cultural change internally. Where these issues can be overcome, however, it offers the best chance of effective dialogue between state agencies and communities.

9.4.2 *Outsource engagement*

As Sullivan and Skelcher note, “Accessing ‘hard-to-reach’ communities successfully can only be achieved by the use of skilled outreach workers” (2002: 178). The second strategy for improving dialogue that I consider recognises that some organisations are better positioned to engage with communities than others. It is the strategy of outsourcing engagement, of commissioning or partnering with other organisations to enter into dialogue with communities on the agency’s behalf. In this approach a public agency enlists the help of a third party organisation which already has an established dialogue with the community which it is trying to reach. The intermediary organisation occupies a space of dialogue which the community is already entering and the commissioning agency takes advantage of this. I came across an example of this sort of arrangement when I spoke to Clarissa during my fieldwork. She told me that her organisation, which focuses on working with people from African and Caribbean backgrounds, had been commissioned by the City Council to deliver healthy cooking classes to those communities, as the City Council had struggled to engage with these groups effectively. The outsourcing engagement strategy has similarities to Davies’ (2007) casting of the National Institute for Clinical Excellence (NICE) as a ‘dialogic intermediary organisation’, brokering dialogue between a range of stakeholders on behalf of central government, although a significant difference is that NICE did not have an existing relationship with those stakeholders when it began in its task.

By placing distance between the agency and the community this strategy goes some way to overcoming issues of distrust and shielding the space of dialogue from the influence of the agency’s culture and ways of working. It does not, however, completely overcome these issues. There is a risk that association with the state agency may lead to the development of distrust of the intermediary, tainting the relationship between the intermediary and the community. This will not always be the case, and it is perhaps unlikely that delivering healthy cooking courses would, on its own, lead to an increase in distrust of Clarissa’s organisation, for example. Before entering into any such partnership, however, both the commissioning agency and the intermediary should assess this risk and satisfy themselves that they are comfortable with it.

The nature of the relationship between the intermediary and the commissioning agency can also serve to dilute the advantages of keeping the agency's culture at arm's length. A market-focused approach to commissioning and performance monitoring on the part of the state agency can push the intermediary to align with state-defined objectives in order to compete for contracts (Brown and Ryan 2003). This may result in bringing voluntary sector organisations into the realm of public governance and effectively eroding the difference between them and the state (Carmel and Harlock 2008). Agencies seeking to adopt the strategy of outsourcing engagement as a way of working around inertia in cultural change may still find that a significant shift in the way that they think about commissioning is needed if it is to be successful. Using contracts to closely define how work should be done may well remove any advantage. As Sullivan and Skelcher (2002) point out, successful engagement demands that intermediary organisations must have the scope to allow communities to engage on their own terms.

An important problem with the strategy of outsourcing engagement is that the intermediary has the potential to act as block to the flow of information. In casting NICE as dialogic intermediary organisation Davies (2007) is careful to stress that information flows through NICE in multiple directions, from stakeholders to government and from government to stakeholder. NICE, however, was, to a large extent, formed for this purpose. Brokering information flow between state agencies and communities is rarely the core purpose of the community-based organisations most likely to be in a position to access hard-to-reach groups. There is a danger that information flow will be interrupted or filtered; that information of value to one of the parties will not reach that party. The significance of this for the fire service is that it may find that whilst its ability to communicate a fire safety message to a particular community is improved, it does not get the benefit of building on that community's own knowledge about fire and how fire safety can best be fitted to the community's cultural norms.

9.4.3 Using gatekeepers

The third strategy that I consider for improving dialogue can be conceived of as a hybrid between the first two—it is the strategy of using gatekeepers to broker direct dialogue

between the agency and the community. This approach seeks to overcome issues such as high levels of distrust by having a trusted intermediary broker initial contact, whilst at the same time avoiding the problem of interrupted information flow by not relying entirely on the intermediary acting as a conduit, but undertaking some dialogue directly.

I have discussed the important role that gatekeepers played in enabling me to access some of the communities I worked with, and some of the limitations of gatekeepers (see [5.5.2](#)), and many of the same considerations apply to agencies seeking to engage with communities. As I highlight earlier, gatekeepers can help to bridge a cultural divide between two parties (Eide and Allen 2008), and to vouch for the trustworthiness of public servants. Of course, since gatekeepers have a strong interests in maintaining their credibility (McAreavey and Das 2013) this requires public servants to convince gatekeepers that they are, indeed, trustworthy, and in situations of high distrust this may prove difficult. In my earlier methodological reflections I note that at times the alignment of cultural values between gatekeepers and those seeking access may serve to inhibit the ability of those gatekeepers to engage and enable access. The same considerations may well be true of the gatekeeper's role in dispelling distrust. The closer they are seen to be to the agency the less likely they are to be able to convince the community of the agency's trustworthiness. On the other hand, the closer they are to the community, the less likely they are to feel able to vouch for the agency, and potentially the more they have to lose if they do.

The gatekeeper strategy is nevertheless a valuable one. Like the other strategies I have discussed, it has limitations, but where the distance between agency and community is not too great it can prove to be of significant value, as we saw in the case of Ellen and Allan's fire prevention work with sex workers (see [8.2.4](#)).

9.4.4 Examples from the field

I now turn to consider how some of the observations I made in the field relate to the three strategies I have outlined for improving dialogue. I begin with the most obvious example, and one I have described in some detail already—that of Ellen and Allan's work with sex workers. Here is a clear example of the gatekeeper strategy. Ellen had spent time working with the group of women and building a relationship with them such that they placed a

degree of trust in her judgement. She was able to introduce Allan to the women because of the trust that they had developed. An interesting and important feature of this relationship, though, is that Ellen's own trust appears to have been in Allan, not in the fire service. It was specifically Allan's approach and outlook that convinced her that it was worth trying to build that relationship. Furthermore, she was very clear that it was the way in which Allan related to the women that allowed the approach to work. Although there may have been a gulf between the general ways of working of the fire service and those of the women in Ellen's group, Allan's own approach was much closer, and this fact enabled the project to succeed.

My next example is not nearly so clear cut, and serves to illustrate the fact that in reality the boundaries between the different strategies can be fuzzy, with each actor playing out several intertwined strategies. The 'Tea and Talk' sessions which I attended at the two community centres in the area are, in many ways, popular spaces. They are largely, but not entirely, the creation of long-standing residents. It is certainly the ongoing attendance of long standing residents that keeps them going, with some baking cakes whilst others regularly promote the events on social media. The events are also regularly attended by housing and regeneration officers from Whitefriars, the social landlord. Here, then, we see a public agency moving into popular space in an attempt to improve engagement. 'Tea and Talk' tends to be attended by more engaged residents, almost exclusively White British, and mostly with an ongoing relationship with Whitefriars by virtue of being tenants. The cultural gap, whilst it may well exist, is not huge. As my conversation with Rachel, one of the housing officers, highlights (see [8.6.1](#)), Whitefriars have much more difficulty engaging with other groups in the area. The cultural gaps are greater, so great that Rachel seemed unsure whether popular spaces for other groups exist, what they might look like or where to look for them.

In fact, to describe 'Tea and Talk' as solely the creation of residents is not strictly true. Both sessions are facilitated by the Moat House Community Trust (MHCT), a community group that is the successor body to the NDC board. As I highlighted in the discussion of data collection (see [5.5.4](#)), as the local authority has reduced its focus on community engagement the MHCT has become the de facto community engagement organisation in the area. In this

way, the MHCT can be seen as an example of the wider state commissioning another organisation to engage with communities. A more specific example of commissioning can be found in the bonfire night fireworks display that MHCT puts on, which was commissioned by West Midlands Fire Service (WMFS), the police and the City Council in an attempt to reduce the number of bonfires being lit on public land. What is perhaps problematic with this position of de facto community engagement channel which MHCT have adopted is that a single, relatively small organisation has been left with the responsibility of engaging with multiple communities in an area that, whilst geographically compact, is increasingly diverse.

In addition to acting as a commissioned organisation, MHCT has acted as a gatekeeper for my own efforts at engagement, providing me with introductions to the 'Tea and Talk' group, and with an initial introduction to the Pastor of the Tanzanian prayer group. In this latter case the involvement of MHCT was limited and much of the ongoing relationship could also be characterised as me moving into the group's popular space, with the support of the Pastor and another congregation member acting as gatekeepers.

It is clear, then, that whilst a number of discrete strategies can be identified for making spaces of dialogue more attractive, in practice they rarely play out in isolation. Public agencies may attempt to move into the community's popular spaces themselves, they may commission or partner with organisations already close to their target community to carry out engagement, or they may seek to make use of gatekeepers to broker more direct dialogue with communities. Each engagement context, each agency and each community, is different and will privilege a different approach. The result is a complex network of intermingled strategies in which individual actors adopt multiple roles. A state agency that is engaging effectively is likely to be one that is engaging in many ways and in many spaces.

9.5 Individuals and dialogue

The previous section outlines a number of strategies that organisations may adopt in order to find spaces of dialogue in which they can connect with different communities. I now turn to considering the important role that individuals play in interactions between public agencies and community members. I will look first at the need for public servants to be able to act

flexibly in order to create suitable spaces of dialogue, before considering the need for cultural diversity in public agency workforces. I will then consider the need to build capacity for effective engagement within agencies, and look at some of the organisational challenges associated with such a change.

9.5.1 Flexibility and discretion

As Lipsky (1980) highlighted, the point of contact between citizens and the state is individuals, referred to by him as street-level bureaucrats. Ultimately, dialogue, if it takes place at all, takes place between individuals. Whilst we may talk of ‘the state’ engaging with ‘the community’, at the coalface a public service worker, a street-level bureaucrat, enters into dialogue with a resident. The shape of the space in which that dialogue takes place has much to do with the behaviour of the individuals occupying that space. When Allan entered the space which Ellen and the women she worked with had created together (see [8.2.4](#)), a space which felt safe and comfortable to those women, he did not disrupt that sense of safety and comfort. It was the way Allan chose to behave, the way he approached the interaction and the way he treated the women in the group that kept the safety of the space intact and ultimately made the project a success.

Central to Lipsky’s (1980) argument is the idea that street-level bureaucrats exercise considerable discretion in the way in which they deliver services, thus effectively contributing to the way in which policy is made, interpreted and implemented. Rowe (2012) suggests that when Lipsky talks of discretion he is ambivalent about whether this discretion is a good or a bad thing, merely observing and describing that discretion. Given the argument that I have made here, that public service employees must work in a complex set of differing spaces, it is hard to avoid the view that the flexibility and discretion to adopt different approaches, to employ “pragmatic improvisation” (Maynard-Moody and Musheno 2012: S18) to suit the context, is not just a good thing, but an essential one. Indeed, Lipsky’s assertion that it is difficult to reduce discretion because the jobs of street-level bureaucrats “involve complex tasks for which elaboration of rules, guidelines or instructions cannot circumscribe the alternatives” (1980: 15) would seem to support this view.

The discretionary actions chronicled by Lipsky more than three decades ago are not the same as those needed to facilitate dialogue today, however. Much of what Lipsky describes is concerned with managing work within the limits of constrained resources, with rationing services and limiting access to them. Durose (2011) argues that in the age of governance and the context of community engagement street-level workers are no longer bureaucrats, but entrepreneurs, moving beyond their traditional roles to develop new strategies to help them negotiate the complexities of local governance and build relationships with citizens. She identifies three broad entrepreneurial approaches in use—‘reaching’, ‘enabling’ and ‘fixing’. ‘Reaching’ entails reaching out and beginning dialogue with marginalised groups; ‘enabling’ involves building capacity for engagement within community groups; ‘fixing’ is the process by which top-down policy objectives are matched with bottom-up community priorities to produce outcomes that satisfy all parties. Of these three approaches the first, reaching, relates strongly to the broad definition of engagement I have used here, and acts as the foundation of the other two. The examples that Durose uses to illustrate her notion of reaching are largely of street-level workers moving into the popular spaces of residents, that is, of the strategy I have termed ‘go where people are’. This is unsurprising given that her focus is on the actions of individuals, as the other two strategies that I have outlined, particularly that of outsourcing engagement, are options more likely to be taken up at an organisational level than an individual one. What is particularly notable in the examples, however, is the evidence of flexibility, creativity, and of the entrepreneurial qualities of “coming up with innovations, solutions that fit specific problems, which might include smart ways to bend existing rules” (van Hulst et al. 2012: 438). Durose’s (2011) work offers strong support for the argument that individual workers at the coalface need to be able to work in innovative and flexible ways in order to facilitate widespread engagement.

9.5.2 *Diversity*

An organisation that is able to call upon employees with a diverse range of skills and diverse cultural backgrounds is likely to find it easier to create and maintain a range of spaces of dialogue. With cultural congruence central to the idea of spaces of dialogue which are comfortable, the public service worker must be able to understand and translate between differing cultures. As Eversole (2012: 32) puts it, an appreciation of “the knowledge,

institutions and best practice” of both professionals and communities is required. Crucially, though, the cultures between which translation is needed will vary from community to community, and the understanding and approaches needed to best undertake that translation will vary accordingly. Sixsmith et al. (2003) have highlighted the importance of a degree of cultural congruence between researchers and the communities in which they work for building empathy and trust. Similar considerations apply to public service workers, who are likely to find that the closer their own cultural background is to those of the community with which they are trying to engage, the easier it is to build an understanding of that community’s needs, and, indeed, of its fears. Furthermore, with greater cultural congruence there is likely to be less distrust of individual workers, even if the organisation that they come from is the subject of widespread distrust. Thus an organisation seeking to engage in dialogue with multiple communities will find advantages in being able to draw upon a culturally diverse workforce.

In addition to cultural diversity, diversity in skills and approaches may also be advantageous. The literature on community engagement identifies a number of core skills that are of particular value. The ability to work networks and build relationships for example (Williams 2002, Sullivan and Skelcher 2002), along with a willingness to listen empathetically (van Hulst et al. 2012). Given that understanding of engagement is still limited, and the field so complex, the ability to reflect on and learn from experiences is a particularly important skill (Taylor 2011). Durose et al. (2016) identify five distinct profiles of urban practitioners who are perceived to ‘make a difference’, and are clear that all five have an important role to play in different ways and at different times. Van Hulst et al.’s (2012) case study of exemplary urban practitioners finds many features that such practitioners have in common, but equally it finds many differences between them. Indeed, they highlight a tendency for practitioners with different but complementary skills to work together, with one perhaps better at working community networks whilst another navigates bureaucratic institutions in support. Just as a single approach to engaging with multiple, diverse communities is unlikely to be successful, employing a single type of public servant to undertake the task is unlikely to prove to be the best way to achieve desired outcomes.

9.5.3 *Capacity building*

The relational skills essential to working effectively in spaces of dialogue are not the technical skills that many public servants have traditionally relied upon. As Taylor (2011) highlights, much attention is given in the community development literature to the idea of building capacity in the community, but it is equally important to build capacity within public sector organisations, to develop the skills of workers at the coalface. Indeed, in the context being considered here it is arguably more important. If the aim of an agency is to engage representatives of the community in the policy process, then building capacity within the community is potentially achievable, as only a small proportion of community members are likely to be directly involved. Here, however, we are concerned with engaging in dialogue with an entire community—there is little point in increasing awareness of fire risk amongst only a handful of people. Similarly, when considering the importance of safe and comfortable space to service access, access to services needs to be available to all. It is unrealistic to think that an entire community is going to learn the ways of bureaucratic organisations. If engagement is to be fostered, it is the agency and its staff that will need to change, to learn to work effectively in the community's spaces. Agencies will need to invest in training and development to facilitate increased engagement. This change of skill focus also represents a significant change for many public service workers, and as with all change this is something through which employees will need to be supported (Bridges 2009). At an organisational level these skills need to be recognised and rewarded, built into the organisation's competency and performance framework, if there is to be a realistic chance of them seeing widespread development.

9.5.4 *Organisational challenges*

The focus of this study has been the interface between communities and state agencies, and in particular the community side of that interface. In this section I have looked at how the actions and attitudes of public service workers operating at the interface with communities may impact upon the nature of dialogue and the effectiveness of engagement. To look in depth at the impact that organisational culture has would be moving a long way from the intended focus of the study, but given that, as Lowndes and Wilson remind us, institutions “are the sets of routines, norms and incentives that shape and constrain individuals’

preferences” (2001: 632) it would be remiss not briefly acknowledge the importance of organisational structure.

Many of the skills and actions needed of individuals able to work across multiple spaces of dialogue—innovation, entrepreneurship, risk-taking, flexibility—do not sit comfortably with the more managerial, top-down and target-driven management approaches that are found in a large number of public sector organisations. This as an issue that was very clear for Boxelaar et al. (2006), whose study found that a project which attempted to take a highly participatory, soft-systems approach was systematically undermined by the wider management culture of the organisation, despite the commitment of the individuals involved in the project itself. Community interventions that attempt to tackle ‘wicked’ problems are complex, non-linear, and unpredictable (Williams 2002). Such interventions are not easily captured and controlled by conventional risk and project management procedures (Taylor 2011). Organisational processes need to be found that can support more complex, relational working, that can accommodate the flexibility needed to engage across multiple spaces of dialogue. Ultimately, organisations, too, must go some way towards reflecting the approaches that are needed in street-level workers. As Kroeger (2016) reminds us, if the representatives of agencies feel the need to distance themselves from those agencies they work for this may itself lead to distrust in those representatives.

This is not to say that control should be abandoned, however. Bureaucracy may have become a dirty word in some quarters, but it exists for good reason. The ways in which public money is spent must be accounted for; the discretion which street-level bureaucrats exercise must be bounded in some way. The challenge for public agencies is to find new ways of balancing the need for accountability and transparency in the delivery of their services with the need to nurture the flexibility and diversity that is required to work effectively in multiple spaces of dialogue and engage with diverse communities.

This is certainly a formidable challenge, and not one that can be resolved quickly. However, there are ways to stage it. For example, adopting the strategy of working with other organisations to engage communities, organisations culturally closer to the communities of

interest, goes some way to bridging the gap. Furthermore, such collaboration provides an opportunity for the public agency to learn new competencies through the partnership (Hamel et al. 1989). As I have noted though (section 9.4.2), to be effective this strategy still requires changes in the public agency. In particular, commissioning and procurement procedures are likely to need revision in order to reduce the risk of the relationship moving the commissioned organisation away from the community. Nevertheless, it represents an important start that enables public agencies experiencing inertia in implementing cultural change to make use of and learn from the engagement expertise of other organisations.

9.6 Conclusion

In essence, engagement can be conceived of as dialogue. I have argued that for dialogue to take place there must be spaces that are perceived by both sides as safe, comfortable, and rewarding. For marginalised communities such spaces are rare. Spaces in which public agencies are present are not seen as safe because of high levels of distrust of those agencies. Spaces in which public agencies dominate are constructed with the cultural values and taken-for-granted assumptions of those agencies. These values and assumptions are not the same as those of the community, and consequently the community does not feel comfortable in them. Whilst community members will occasionally enter spaces that feel uncomfortable, or even unsafe, if the rewards are high enough, the greater the levels of discomfort and distrust, the higher the rewards must be.

With the constituency of public agencies made up of many different communities, with diverse values, needs, and aspirations, effective engagement requires agencies to occupy many different spaces of dialogue and to adopt a range of different strategies in an attempt to ensure that spaces of dialogue are available for all. This in turn requires public sector workers operating at the interface with communities to be able to work in flexible and innovative ways, to have well developed networking and relational skills, and themselves to have diverse backgrounds and skill sets. Creating an institutional environment in which such attributes can flourish is an important but difficult challenge for public agencies.

Organisations with less experience of engaging with harder-to-reach communities are likely

to find it easier to begin by partnering with other organisations with stronger links to those communities.

Chapter 10: Implications for fire prevention

10.1 Introduction

Having looked at engagement between communities and public services generally, I now rein the focus back in and return to the specific question of fire prevention. In this chapter I look at the findings I have reported in earlier chapters and the framework I have described for understanding dialogue and engagement and consider how these affect fire prevention and how they can help inform future fire prevention work. As this is a thesis, not a consultancy report, I do not make prescriptive recommendations here. Rather, I offer a series of challenges and observations for those involved in community fire safety, and particularly for the West Midlands Fire Service (WMFS). As is the nature of a doctorate, I have looked at a very defined and specific subject area. Those charged with making strategic decisions in a large public sector organisation must balance many conflicting issues and I do not presume to be privy to all of these, but offer here a particular perspective that deserves to be considered alongside the others.

If there is a single message in this chapter it is about diversity of approach—it is that communities are many and varied and that different ways to approaching fire safety work need to be considered. I do not question that in many contexts current approaches work, and work well. The steady fall in rates of dwelling fire over the last two decades testifies to this. I do, however, suggest that they could work better. In particular, I argue that for a number of key communities, communities that experience unusually high rates of fire at present, there is evidence to support the argument that other approaches should be attempted. Two particular challenges that I will make are that the individual home visit is not always the best way to deliver community fire safety, and that the fire and rescue service (FRS) is not always the best organisation to deliver fire safety.

The options that I suggest come from my analysis of one area and how the communities in that area engage with public services. They are not the only approaches possible. There are many more, and there are people within both the FRS and the community who will be able to think of some of them. To make use of this knowledge FRSs need to enable their staff to

take innovative action, and when they do engage with communities they need to spend time listening to what community members have to say to them.

10.2 Safe and Well visits

The Home Fire Safety Check (HFSC) (see [7.2.2](#)) and its successor the Safe and Well visit (see [7.2.3](#)) have formed the mainstay of much community fire safety work for over a decade. Both types of visit, however, are time consuming, and as Matheson (2012) observes, potentially intrusive, requiring a considerable commitment from the householder. An important early finding of this study was that there is a limit to how much time people are prepared to give up (see [5.5.1](#)). I found that whilst people were often happy to have quick chats with me in passing, few were prepared to give up an hour and a half or more to sit down for an in-depth conversation. There is a cost to entering this space of dialogue that is not seen as being justified by the potential reward. Given the low risk that residents appear to associate with fire, even if their awareness of the availability of Safe and Well visits were greater it seems unlikely that they would see this as something that offered sufficient reward to give up so much time for.

A further barrier comes from the publicness of visits. Undertaken, as they are in the West Midlands, by on-duty fire fighters, in uniform and travelling in a bright red fire-fighting appliance, they are highly visible. In her account of accompanying fire fighters on HFSCs in Bristol, Matheson (2012) talks of twitching curtains and neighbours coming out into the street to stare. In an area where contact with public services can be perceived as leading to judgement from neighbours the publicness of such visits is unlikely to be appealing. The interaction will not be perceived as safe as there is a high risk of being judged negatively.

Just as I had to adjust my approach to the research to rely less on long, in-depth interviews and more on quick chats in passing (see [5.4.1](#) and [5.5.1](#)), the FRS may find benefits in adopting alternative approaches in some contexts, approaches that are less time consuming, less formal, and perhaps less bespoke. At an individual level, the quality of such initiatives may well be reduced, but this loss could be offset by a much higher reach. This is not to say that HFSCs or Safe and Well visits should be abandoned as a tool—they do appear to have

had a major impact on fire safety where they have taken place—but rather that they should not be relied upon or necessarily viewed as the only, or the best way to approach fire prevention. There may be much that can be achieved without visiting people’s homes or taking up large amounts of their time. The home visit should be only one tool of many available to the FRS and other agencies for promoting fire safety. To an extent, this is the case already. Safe and Well visits are not the sole method used to promote fire safety, with such activities as school visits and social media campaigns also featuring (see 7.2.5), but they are the main method, with alternatives often being seen as ways to drive up take-up of home visits. There is a need to diversify activities further, with alternatives devised that particularly address the needs of specific communities.

10.3 Embedding fire safety

A clear finding of this study is that fire is not perceived as a priority—the risk is not seen as being great. In terms of our framework for looking at spaces of dialogue, the benefits of interactions that focus solely on fire safety are seen as being low. Another approach to addressing this problem might be to embed fire safety work in other activities, rather than see it as a stand-alone intervention. Embedding fire safety in activities that are already seen as being beneficial would be ideal. One example of this can be found in a collaboration which South Yorkshire Fire and Rescue have established with midwives, which involves providing fire safety information on a thermometer intended to help new parents ensure that they keep the room at a suitable temperature for their baby (South Yorkshire Fire and Rescue 2016). Embedding fire safety into other activities is likely to involve collaboration with other agencies and I suggest a further example at the end of a later section (10.5), which looks at collaboration and partnership.

10.4 Workforce diversity

There is little doubt that FRSs have a diversity problem. The workforce is overwhelmingly White and male, particularly amongst operational fire fighters. In March 2016 just 5.0% of operational fire fighters in England were women, whilst of those who stated their ethnicity, only 3.8% were from an ethnic minority (Home Office 2016b). This effectively puts FRSs on the back foot when trying to engage with those from non-White ethnic groups, leaving a gulf

between the culture and approaches of FRS staff and those of the communities they seek to reach. Even where distrust is absent and the space for dialogue is perceived as safe, it may not be perceived as being comfortable where there is a big difference between community members' cultural values and those of the fire fighters interacting with them.

Furthermore, without people within the organisation who have direct access to knowledge of other communities, FRSs are likely to find difficulty in finding the popular spaces of the communities, in the same way as the social landlord in this study struggled to reach African residents (see 8.6.1). These points have been recognised by central government, with the last Labour administration publishing a diversity and equality strategy that stresses the importance of a workforce that reflects the communities that it serves in order to improve the organisation's understanding of its communities' diverse needs (Department for Communities and Local Government 2008).

Whilst a number of studies have considered the role of masculinity in fire fighter culture, giving some insight into the difficulty of recruiting and retaining women to the service (e.g. Baigent 2001, Thurnell-Read and Parker 2008, Allaway 2010), the underlying reasons why increasing the number of non-White fire fighters has proved to be so difficult remain under researched. If improving engagement with non-White communities is to be achieved this is an area that requires further attention.

10.5 Delivering fire safety through other organisations

The vast majority of fire prevention work nationally is currently undertaken by FRSs. There are a number of obvious reasons why this should be the case, not least of which is that Fire and Rescue Authorities, the elected governance bodies to which FRSs are responsible, have a statutory duty to promote fire safety in their area (Fire and Rescue Services Act 2004). The statutory duty imposed on Fire and Rescue Authorities, however, does not prevent other organisations from playing a role in fire prevention. I have found evidence of significant barriers for some communities in engaging with any state agency, and evidence that the FRS is perceived as being part of that state. The strategy of establishing dialogue using an intermediary organisation which is closer to the community is one which should not be

dismissed. The inequality in the distribution of fire is a ‘wicked issue’, a cross-cutting concern bound up with wider problems of health inequality and social exclusion. Wicked issues require approaches that work across organisational boundaries (Ling 2002, Williams 2002).

Whilst the WMFS have expanded the scope of their prevention work, taking on additional health and social care functions through such actions as moving into Safe and Well visits, and taking on response to the Telecare fall alarm system for elderly and vulnerable residents (see 7.2.3), I encountered little evidence of a move of roles in the opposite direction—of the WMFS engaging others to deliver fire prevention work. During my conversations with senior managers in the WMFS three main reasons were given for the FRS retaining fire prevention work almost exclusively. I will look at each of these reasons in turn, before considering a fourth, unacknowledged argument, and then giving as an example one area where collaboration might be advantageous. The three acknowledged reasons for not using other organisations to deliver fire safety work are that the FRS is trusted, that the FRS alone has the technical knowledge necessary, and that the FRS has the latent capacity to undertake the work. The fourth possible reason is that managers are trying to protect their service.

10.5.1 The FRS is trusted

During my first conversations with WMFS officers the view was routinely expressed that the service was trusted and that the uniform opens doors. This is a view which seems to be reflected by the Chief Fire Officers’ Association, who state that:

Our brand and the esteem in which the service is held gives us access to people’s homes that others cannot achieve; people seem more likely to engage in difficult conversations with our staff than with others. Perhaps this is due [to] the public perception of the service as being broadly neutral.

(Chief Fire Officers’ Association 2015)

Whilst this may be true in a great many contexts, the evidence that I have found suggests that in some contexts it is not the case. For many in the neighbourhoods that I have looked at

the fire service is viewed as part of the wider state and fire fighters as figures of authority to be avoided. These findings mirror those of Matheson, who sums up her work by saying:

Findings suggest a mutual distrust of non-group members, whereby residents resent fire fighters for their intrusion into neighbourhoods and fire fighters resent residents for requiring interventions into their community.

(Matheson 2012: 2)

What is more, both this study and Matheson's before have focused on disadvantaged neighbourhoods, on the very groups that experience the highest incidence of fire and which it is therefore most important to reach. Whilst, on the basis of the evidence that I have found, I cannot presume to universally dismiss the notion that FRSs are trusted, I can dismiss the notion that they are trusted universally. In certain contexts the presence of fire fighters can make the spaces of dialogue feel unsafe and uncomfortable to residents, and in those contexts utilising an intermediary in an attempt to engage is likely to be a valuable strategy.

10.5.2 The FRS has the necessary technical knowledge

It is undoubtedly true that FRSs hold the greatest stock of expertise in fire, its causes and its consequences, and how to minimise risk from it. As one fire fighter explained, he has seen first hand the impact of not closing doors at night, and just how fast fire spreads. The argument goes that this experience enables FRS staff to assess risks and to communicate messages in a way that no other agency could.

Whilst this may be true in circumstances where the FRS can reach residents, in those contexts where they are unable to do so all the technical knowledge that they have is of little value. In such contexts it may well prove easier to pass technical knowledge on to an intermediary who can access the target community than to create a situation where the FRS can access that community. This may ultimately mean that the level of technical understanding held by those directly involved will be lower, but as with the issue of using alternative approaches to the HFSC, this loss may be more than offset by the greater reach. The FRS must, in any event, distil its technical knowledge into a form that is readily digestible by residents, losing some of the depth of understanding in the process, so it is not clear how much poorer the

information provided by a suitably briefed third party would be. Ultimately, passing on knowledge is both about having the knowledge and about having the ability to communicate it to the desired audience. As Sullivan and Skelcher (2002) note, reaching hard-to-reach groups is a demanding skill in itself and there are likely to be circumstances where others are better placed to strike a balance between technical knowledge and the ability to communicate.

10.5.3 The FRS has the capacity to do prevention work

Whilst exactly how community fire safety work is resourced does vary from FRS to FRS a common approach, and that used in the West Midlands, is to make use of the 'latent capacity' that exists as a result of the need to have sufficient fire fighters on duty to ensure a five minute response to emergencies (see 7.2.1). This latent capacity makes the service unusual in the public sector, with many agencies currently struggling to resource all the services that they would ideally like to provide. The WMFS is making good use of the capacity to offer services to other agencies, such as expanding HFSCs into Safe and Well visits, and taking on the response to vulnerable residents' fall alarms (see 7.2.3), thereby both contributing to the public good and generating a valuable income stream for the service. The WMFS also continues to make use of its latent capacity to carry out community fire safety work, an approach that, where it works, represents an efficient reuse of resources. However, in those contexts where engagement is challenging for an FRS it is difficult to see this as an efficient approach. The argument that the FRS should deliver community fire safety activities exclusively simply because they have the capacity to do so does not stand up to scrutiny.

Whilst working with other organisations to facilitate engagement may increase costs, in appropriate contexts it is also likely to prove more effective, improving outcomes and hence effectively maintaining efficiency (Watt 2006). Improving outcomes in fire prevention also amounts to management of the demand for response work, leading to lower response costs. Perhaps more importantly, in improving outcomes and addressing inequality the approach is addressing public value, which should sit at the heart of public management decisions (Stoker 2006). Furthermore, diverting resources away from ineffective endeavours would leave additional capacity to provide sold-services, recovering some of the costs. Such sold-

services should focus on areas where the FRS is able to provide an effective service. Given that the FRS resource configuration is focused on rapid response, a greater involvement in the response activities of other agencies may prove a fruitful avenue to explore. The involvement of the WMFS in the Telecare falls response service is a good example of this. Supporting the ambulance service by providing first responders to appropriate incidents would be a further possibility.

10.5.4 Protecting the service

A fourth possible reason for the apparent lack of enthusiasm in engaging with other organisations to deliver fire prevention is that it is part of an attempt to protect the future of the service. This reason has not been directly acknowledged in my conversations with WMFS managers, but there have been hints of it present during conversations about finance.

With all public services under constant financial pressure, and the looming threat of closures and mergers (see [10.6.3](#) on moves to bring the fire and police services closer), there is inevitably a tendency amongst public managers to make decisions that they perceive as protecting the position of their service. Taking on work from the health and social care areas both provides a valuable income stream for the fire service and boosts arguments in the political arena about the value that the service is able to bring and the importance of maintaining its capacity. Engaging with other agencies to deliver what has traditionally been seen as fire service work has the potential to be perceived in much more negative terms. Not only is it a cost, but it also threatens the narrative that the fire service is indispensable because of its unique knowledge of fire prevention. With rates of fire having fallen so dramatically in recent years there are calls to cut FRS resourcing accordingly, and part of the counter argument is that the resource freed up has been successfully redeployed to prevention (Mansfield 2015). Enabling other organisations to get more involved in delivering fire prevention brings with it the risk of undermining that argument.

This argument is a pragmatic one which has little normative value. The public value that the fire service is able to deliver in terms of fire prevention is maximised by effective partnership working, partnership working that works in multiple directions. Where fire prevention is a key issue the fire service will remain an important facilitator, even if end delivery is by

multiple organisations. If working in partnership improves outcomes then that is to the service's credit, a fact that should be embraced and promoted.

10.5.5 A possible example

There is good reason to expand the number of organisations involved in delivering community fire safety work to bring in those who have better access to particular communities. I offer the following example of one simple way in which such an expansion might be facilitated, drawing on observations that I made during fieldwork.

In Chapter 9 I described how a community-based organisation that focuses on working with Black African and Black Caribbean people had been commissioned by the City Council to provide healthy cooking and eating classes to those communities. The City Council commissioned the work as it had struggled to engage with Black African and Black Caribbean communities itself (see 9.4.2). During one of my visits to the African prayer group I had a conversation with a Tanzanian man who told me that he had little doubt why Africans experienced a high rate of fire. People from his community, he explained, were not used to cooking on gas, and much of their cooking involves frying with a lot of oil. This combination of factors results in a large number of cooking fires. Accessing this sort of community knowledge is one of the reasons that two-way dialogue is so important, but even without this information it is well established that cooking appliances are a major source of ignition in accidental fires (Mulvaney et al. 2009, Gaught et al. 2016). If cooking techniques are an important factor in fire in the African community, and a community group with established access to that community is already delivering cooking classes to it, there is an obvious opportunity to incorporate some fire safety education into the cooking classes. Not only does this approach work through an organisation that is more comfortable to the community and less distrusted than the FRS, the dialogue also offers greater reward than that perceived from fire safety alone because it is combined with cooking classes.

10.6 Pitfalls of joined-up working

10.6.1 Guilty by association

From their involvement in Crime and Disorder Reduction Partnerships through to their increasing engagement with health and social care agencies (see 7.2.3), FRSs continue to

embrace the concept of joined-up working. The idea that joined-up working is an important and necessary part of tackling difficult or 'wicked' issues, issues that extend beyond the remit of a single agency, is widely accepted (Ferlie et al. 2011). Whilst there is some attention given in the literature to the organisational difficulties that are associated with multiple agencies with very different institutional cultures working together (e.g. O'Flynn et al. 2011), an issue which has received little attention is that of the impact which partnerships may have on the ability of the partners to engage with residents. Both this study and an earlier study by Canvin and colleagues (2007) have found evidence of reticence to engage amongst some residents that appears to stem in part from joined-up working. The fear that interactions with one agency will lead to unwanted interactions with other agencies leads to distrust in the initial agency, to a perception that this space of dialogue is not safe. The presence of this distrust in turn means that assurances from an agency that information will not be shared are unlikely to be believed (Van de Walle and Six 2014). Evidence from this study suggests that the fear of unwanted attention is a problem which is negatively affecting the ability of the WMFS to reach some communities, just as Canvin et al. (2007) found it was affecting access to primary health care.

This is a particularly difficult problem to overcome. There are far too many benefits associated with joined-up working to consider abandoning it, but it does bring with it a significant cost in terms of distrust. The strategy, outlined [above](#), of managing engagement through community organisations and others with established relationships with communities, is a promising one, but itself brings with it the danger that the intermediary will become tainted with the distrust that affects the FRS. It is also a strategy that works around the problem, rather than properly addressing it. There is a need for further research into the negative impact of joined up working, and attention to finding ways of minimising this.

It was clear when talking to fire fighters that they have some awareness of the issues involved in being associated with other agencies, and also that they have, and exercise, a degree of discretion that allows them to try to minimise the decline of trust and the emergence of distrust. When conducting Safe and Well visits, for example, fire fighters

would use their judgement to skip questions that might heighten fear of negative consequences. It is important that procedures and protocols do not close in to remove this discretion. Indeed, given the importance of discretion and flexibility that I have outlined (section 9.5.1) every opportunity should be taken to encourage and nurture innovative behaviour.

10.6.2 Getting out more—creating good impressions

Whilst data sharing appears to have been the greatest concern in Canvin et al.'s (2007) study, an issue of at least as much importance here seems to be the association with the wider state, and the police in particular, that is brought about by the uniform and by the FRS's position as an emergency, blue-light service. As I highlighted in concluding Chapter 7, the negative associations with other agencies seem to be to the fore when people are thinking in general terms. When focused on the fire service perceptions are often more positive. I suggested in section 7.5 that greater contact with residents might have the effect of foregrounding views based on the generally positive experiences of the FRS, rather than the more negative experiences of the wider state, a point I highlight again in section 8.3.4. On the whole the fire service is perceived as being tucked away and any attempt to reverse this situation, providing that it does not itself build negative experiences, may help the service to build a reputation that is less tainted by distrust.

The nature of additional contact needs to be carefully considered. Given the asymmetric effect of contact, with negative contact having much greater influence on the development of attitudes than does positive contact (Skogan 2006), it is very important to ensure that contact is as positive as possible. There is plenty of scope for low risk activities to increase contact and visibility though. One simple option, for example, might be to take a leaf out of the PCSOs' book and spend some time drinking tea in a local café rather than in the station mess room.

10.6.3 Working more closely with the police

Closer ties between FRSs and the police are very much on the political agenda at present. In a number of areas collaborations have been implemented, such as shared back office services, or the development of tri-service community responders, combining the functions of PCSOs,

retained fire fire fighters and first responders (Home Office 2016c). In January 2016 responsibility for fire and rescue moved from the DCLG to the Home Office in order to support the Conservative manifesto pledge of promoting greater collaboration between emergency services (Home Office 2016c), and on 31 January 2017 the Policing and Crime Act received Royal Assent. The Act introduces a duty for all three emergency services to collaborate and gives Police and Crime Commissioners (PCCs) the ability to take on the functions of Fire and Rescue Authorities where a local case is made (Police and Crime Act 2017). It also makes provision for PCCs, or in some cases mayors of combined authorities, to put in place a single employer for both fire and police services. Where this happens the single chief officer would formally be known as the Chief Constable, although the government does stress that “police forces and fire and rescue services would remain distinct front line services” (Home Office 2016d: 3).

The prospect of a merger of police and fire service governance structures, and possibly even of chief officers, raises some significant questions for fire prevention. Much of the logic behind the proposals appears to be built around the perceived synergies of the emergency response side of the two services’ work. The government’s argument for the changes highlights the long term decline in incidents attended by FRSs, contrasting this with the increase in police and ambulance service calls (HM Government 2015). There is, however, little mention of the important role that FRSs play in fire prevention, or, indeed, of the relatively small amount of a fire fighter’s working life that is spent on responding to emergency incidents. It seems highly likely that such close collaboration will have a negative effect on the ability of the fire service to engage with key communities. There are clear issues in the relationship between the police and some disadvantaged communities (see section 7.4.2) and a significant risk of the fire service being further tainted by a closer association the police (Mansfield 2015). The street-level fire fighters that I spoke to were in no doubt in their minds about this. As one put it:

Bad move that would be, an absolute bad move. They’ll never come back from that if that happens... all this 15 to 20 years of fire prevention activity that we’ve been doing, working to get in these people’s houses that wouldn’t open the door to us is going to go like that, overnight.

The proposals would perhaps make sense if the fire service were a largely responsive blue-light service, but that has not been the case for at least two decades. Closer association with the police is likely to affect the ability of the fire service to access some of the most vulnerable communities in society and without a clear strategy for compensating for this it will do little to enhance equity in the distribution of fire.

If it were the case that the distrust of the state that I have observed in the disadvantaged communities I worked with extended throughout society, and that the FRS had difficulty in accessing everyone, then there might be a case for returning the FRS to focusing exclusively on response, in closer union with the police. Fire prevention work could then be transferred to another agency, perhaps aligning it with public health. However, this does not appear to be the case. The fire fighters that I spoke to at all levels clearly believe that they can get access to many communities and there is little reason to dispute this. Whilst the fire service needs to widen its repertoire of approaches, its current approaches would seem to have worked well in many contexts. Abandoning them now to focus exclusively on response does not seem justified. Yet synergies in the response work seems to be the main argument for bringing the fire and police services together.

10.7 Conclusion

In this chapter I have drawn together my empirical findings and conceptual framework to address my third research question, “what are the implications of these findings for fire prevention work?”. Building on my conclusion in Chapter 9, that effective engagement requires an agency to occupy many different spaces of dialogue, I have argued that FRSs need to diversify their approaches to community fire safety in order to improve engagement with marginalised and disadvantaged communities. They need to take action to break down some of the barriers that I have identified or, where this is not practical, to work around them. I have outlined several possible examples for consideration. The cost of fire safety work to community members can be reduced by using less time consuming approaches than in-depth home visits; the benefits to community members can be increased by combining fire safety with other issues that are perceived as more important; distrust may be reduced and a sense of safety in the space of dialogue increased through greater informal community

contact; and using other organisations to deliver fire prevention work can increase the sense of both safety and comfort in the spaces of dialogue.

No one change will improve engagement overnight, nor will one approach work across the board. A wide range of different approaches is needed, and uncovering the options will require a willingness to experiment. Flexibility and innovation in approaches to community fire safety should be encouraged and nurtured, making use of the knowledge that street-level fire fighters have built up about the communities that they work with. Where there is existing dialogue with communities this should be built upon and community knowledge accessed to find ways of improving dialogue further. The options I have outlined in this chapter are certainly not the only possible solutions, but they demonstrate the value of carefully considering how to ensure that spaces of dialogue are seen as safe, comfortable and rewarding.

Chapter 11: Conclusion

I begin this final chapter by looking back over the process I have been through in the last three and a half years and reflecting on the areas where things went well and where they might have been done differently. I will then summarise the contribution which this work makes to knowledge, both in the way in which it throws new light on the research questions, and through some of the methodological innovations used in the process. Finally, I will consider a number of limitations of the research before highlighting some areas that merit future investigation.

11.1 Reflecting on the research

11.1.1 Should I have done the research?

Let me start the reflections by asking a big question—should I have done the research? In asking this I am not asking whether the research should have been done, for I have little doubt that it is important work, but whether I was the right person to undertake it. I am thinking here about the primary data generation—the qualitative, interpretive part of the study. Would the research have been different if it had been undertaken by someone else?

The work has been a huge challenge to me in many ways. In [Box 4](#) (page 95) I reflected on how my innate shyness has hampered me throughout the process. Another person, a more audacious person such as the colleague I refer to in those reflections, would not have faced this problem in the same way. Of course, they may have encountered other problems, but on the face of it some audacity might have been a considerable help in undertaking this research.

Another big challenge for me derives from my position, the position of a middle-class, middle-aged White man, a demographic which may be seen as one common amongst public servants (Matthews and Hastings 2013). Whether or not I was seen as having a connection to the state I do not know, but as I note in another reflection ([Box 6](#), page 142) I was always an outsider. As someone with a middle-class background I was an outsider talking to working-class Coventarians; as a White English man I was an outsider talking to Black African

migrants; as a civilian I was an outsider talking to fire fighters. Would an insider, or at least someone who was not quite so far outside, have fared better? I recommend in Chapter 10 that FRSs look to improving their workforce diversity or to delivering fire safety work through partner organisations in order to ensure that spaces of dialogue are comfortable to community members. A similar approach to research may well bring benefits. For example, principal investigators looking to undertake research similar to this might look to finding research assistants from within the communities that they are trying to reach in order to create a more comfortable space of dialogue.

Perhaps there have been benefits to my position, however. I was trying to understand the challenges that face public agencies in endeavouring to engage with communities in the neighbourhoods I worked in. My position meant that I faced many of the same challenges and some of the findings that I have presented here stem from this fact. By facing the challenges that I have faced and reflecting on them I have learnt things that can help with understanding the relationship between communities and public services. The recommendation that FRSs rely less on individual home checks comes directly from my own difficulty in setting up in-depth interviews (see 5.5.1). The discussion of comfortable space was influenced by my own reflections on how comfortable I feel speaking to different people (Box 7, page 174). In the end all that I can say is that someone else looking at this topic may have found out different things. They may have been able to get closer to the communities concerned, to have generated more findings from conversations with community members, but they may have found out less about the process. I began Chapter 2 by saying “Human society is complex—almost inconceivably so”. Making sense of that complexity requires many different people with many different skills and attributes to look at the problem from many different directions. It has been a hard journey for me, but I have learnt a lot, both about the communities I worked with and about myself. So yes, I should have done the research.

11.1.2 Starting fieldwork earlier

There were two distinct phases to this research: a quantitative analysis of secondary data, and a qualitative phase that generated primary data. Both of these phases were important,

with the quantitative phase forming the basis for choosing the area of focus for the qualitative phase. Looking back, though, I spent too long on the quantitative phase. I have written it up in a single chapter in this thesis (Chapter 4), but the work took up the best part of a year. I became very focused on ironing out issues of collinearity and ensuring that the work was robust. The use of principal component analysis and multiple regression contributes to that robustness, but in retrospect the bivariate correlations alone would have been sufficient to form the basis for identifying the locus of research for the qualitative phase. Accepting some of the shortfalls in the quantitative work and moving on from that would have allowed me to begin fieldwork earlier and give what is, I believe, the more interesting part of the study more attention.

Whilst I set out to generate data largely through in-depth interviews in the end these formed only a part of the data. The use of participant observation, a lot of 'hanging out', and the inclusion of everyday interactions, rather than only those set-aside specifically for the purpose of data generation, all take this study a long way towards ethnography. The methods that I used to generate data are by their nature slow. An important part of the process is about simply being there enough to get known and accepted, and that takes time. More than that though, the research approach itself generates relevant data sporadically. Whilst a survey or a structured interview is largely under the control of the researcher and can be kept focused on the research question, the approaches that I used in the field are much more under the control of the participants. Interactions wander in the direction that participants want to go. The researcher, to a great extent, must rely on waiting for and seizing the moment. Sometimes that moment comes up but is missed, never to be recreated. The research process is a series of events, of stories unfolding over time, over which the researcher has relatively little control. Inevitably, then, adopting the approaches which I used in the field makes for a slow process, and one which, in retrospect, I could have allowed more time for.

11.1.3 Writing and reflexivity in field notes

I have noted before some of my thoughts on field notes (Box 5, page 116), and wondered whether I would have been better served by adopting a more comprehensive approach to

making field notes, rather than the strategy of salience which I used. Most of my field notes were dictated, and I then went on to work directly with the audio. An advantage of dictating was that it often enabled me to get thoughts down very quickly after observing events in the field, but I also think now that there would have been benefit to writing more around them. As I discuss in section 6.5, writing is itself a process of sense making and generating ideas (Colyar 2009), an opportunity to reflect more deeply on experiences. Whilst my dictated field notes were reflexive, they were also often quite spur of the moment. Taking more time at the end of the day to sit down and reflect, listening back through dictated field notes and expanding on them in writing would, I think, have helped me with unravelling the story whilst I was still in the field and may have helped me to find new ways to generate data. As I said earlier (section 6.5), I put off writing for too long, and reflective writing built around my field notes would have been a valuable way to get over that.

11.2 Key findings and their contribution to knowledge

11.2.1 *Inequality in the distribution of fire*

The first of the questions I set out to investigate with this study was ‘do different communities experience different levels of accidental dwelling fire?’. Through a robust statistical analysis of accidental dwelling fire (ADF) incidents attended by the West Midlands Fire Service (WMFS) I have demonstrated that there continues to be considerable inequality in the way in which ADF is distributed through society in the largely urban context of the West Midlands county. At a small area level, rates of ADF are strongly associated with a range of socio-economic and demographic factors that broadly fall into three groups: economic deprivation, ethnic make-up, and household structure. I have demonstrated that almost one third of the variance in rates of ADF can be explained using just three variables: the proportion of the population who have not worked for over five years, the proportion of the population identifying as Black, and the proportion of households that are made up of a single person aged under 65 years. I also found that the age of people living alone has an important bearing on rates of fire.

My investigation was innovative in its use of principal component analysis (PCA) to address the problem of collinearity in predictor variables and has demonstrated a valuable technique

for future studies, and for FRSs conducting their own analysis. With rates of fire having declined dramatically in recent years (Knight 2013, Home Office 2016a) it is important to establish whether inequality in the distribution of fire continues to exist. Even some of the most recent published UK based studies rely on data from 2000–2004 (Corcoran et al. 2013), and this study therefore represents a significant update to the literature on the topic. Furthermore, the role that age plays in the association between rates of ADF and numbers of single-person households has not previously been reported. This is a finding which has important practical implications for the targeting of fire safety interventions, particularly given the rapid rise in the number of people of working age living alone in recent years (Bennett and Dixon 2006, Smith et al. 2005).

11.2.2 The relationship between public services and disadvantaged communities

The findings of inequality in the distribution of fire are conceptualised in this study as inequality in the outcomes of fire prevention interventions. Community fire safety is, in effect, co-produced—it is the result of the interaction between the community and the agency, usually an FRS, initiating the intervention. The nature of the relationship between communities and agencies thus has an important role in determining the efficacy of community fire safety interventions. The second question which I sought to investigate therefore began as ‘what is the nature of the relationship between the fire service and communities experiencing high rates of fire?’. Following early findings that, in the communities I worked with, the fire service is rarely thought about directly, but is often associated with the wider state, this research question was eventually to become ‘what is the nature of the relationship between public services and communities experiencing high rates of fire?’.

There has been very little research into the relationship between UK fire and rescue services (FRSs) and communities, Matheson’s (2012) investigation of the relationship between disadvantaged communities in Bristol and the Avon Fire and Rescue Service being the only example. Matheson focuses on the FRS and on the context of violence against FRS crews, viewing the relationship through the lens of social identity theory. By stepping back somewhat from the FRS I contribute to this nascent literature by identifying that the FRS is

something that is barely thought about by many – residents only really bring the FRS to mind when they experience a fire. Fire is rarely seen and is generally not perceived to be an important issue that warrants much attention. As so few people have direct contact with the FRS, views of it, and whether or not to engage with it, are based on a series of experiences of public services more generally, with fire fighters viewed as figures of authority. The experiences of the state that come most readily to people's minds, in line with Skogan's (2006) finding with the police, tend to be the more negative ones. Thus, as did Matheson, I have uncovered evidence which challenges the prevailing view within the FRS itself that the FRS is universally trusted. Whilst immediate views of the FRS's emergency response work are often positive, in the important context of those communities experiencing the highest rates of fire views of the wider work of the FRS are tinted with considerable suspicion.

Turning to the relationship between communities and public services generally I found a disinclination to engage with services founded in several factors. Firstly, people feel judged for needing help, both by service providers, and sometimes by neighbours. Secondly, there is a fear that seeking help from one service will result in unwanted contact with another service. Thirdly, people have become disillusioned as successive experiences of contact with public services have not brought the results that they had hoped for. Finally, there was often a lack of knowledge of which services were available, or of how to access them, as services fail to communicate in a way which is accessible to many of the communities concerned. My findings in this area support those of Canvin et al. (2007) and add to our understanding of the relationship between public services and communities living in disadvantaged neighbourhoods.

11.2.3 Spaces of dialogue

To explain these findings I have argued that engagement, taken broadly, can be conceived of as a dialogue and I have proposed a new conceptual framework built on the metaphor of dialogue taking place in a particular space. For community members to enter that space they must perceive it to be safe, comfortable and rewarding. They must feel that there are no negative consequences to entering the space; they must feel a degree of familiarity with the space and the customs and practices of the space; and they must feel that they will get some

benefit from entering the space. For marginalised communities such spaces are not often found. Distrust of public agencies means that many of the spaces available for dialogue are perceived as unsafe. Spaces dominated or created by public agencies are constructed with the cultural values and taken-for-granted assumptions of those agencies, values and assumptions that often differ from those of the community. Such spaces feel unfamiliar and uncomfortable, discouraging community members from entering them. Furthermore, the widespread disillusionment engendered by successive poor experiences of accessing services means that community members have a greatly diminished expectation of benefit or reward from entering a space of dialogue. This lack of safety, comfort or reward in spaces for dialogue means that community members are discouraged from engaging with or accessing public services.

The value of this conceptual framework is that it need not be restricted to the single context of this study. Whilst what makes a space seem safe, comfortable and rewarding will be context specific and will vary from community to community, that it must be perceived to have these three characteristics may be a transferable finding, and I have suggested that further research should seek to test this notion. With large parts of the community engagement literature focusing on empowerment and involvement in policy development a further important contribution of this framework is that it takes a very broad view of engagement, one that encompasses much of the interaction between state and citizen in day to day life. It thus helps to explain a more general reticence to access services that has received only limited attention in the literature.

What follows from this conceptual framework is that in order for multiple, diverse communities to find spaces for dialogue that they can work in it will be necessary for public services to occupy multiple spaces. This will require services to adopt a range of different strategies. Potential strategies include moving into spaces created by the community itself, partnering with organisations that already have an established relationship with the community, and using gatekeepers to broker the creation of new spaces for dialogue. No single strategy will work in every situation and there is evidence of a complex network of intermingled strategies being adopted, in which individual agencies may act in multiple

roles. An agency that is engaging effectively is likely to be one that is engaging in many ways and in many spaces.

Working across these multiple spaces of dialogue will require public servants who work close to communities to be empowered to work in innovative and flexible ways and to have well developed networking and relational skills. This marks a considerable organisational challenge for many public agencies. The creation of multiple spaces for dialogue will also be enhanced by a workforce that can draw on both diverse cultural backgrounds and diverse skill sets. These findings resonate with recent studies that have looked at the characteristics of successful practitioners (e.g. Durose 2011, van Hulst et al. 2012, Durose et al. 2016). Significantly, whilst those studies have approached the question by looking at street-level workers who are successfully engaging, I have considered the question from a distinctly different angle—that of investigating the perceived barriers to engagement of community members. That the two different approaches synthesise well provides further support for the idea of safe, comfortable and rewarding spaces of dialogue.

11.2.4 Methodological contributions

Whilst investigating the second question, that concerning the relationship between public services and communities, I adopted an interpretive, qualitative approach that sought to engage directly with communities in a group of disadvantaged neighbourhoods that experience high rates of fire. Some of the communities living in these neighbourhoods have often been considered 'hard to reach', and given my position as an outsider the research proved challenging. An unexpected benefit of this position, however, was that many of the challenges that I faced in carrying out the research were the same challenges that public agencies face in engaging with hard-to-reach communities. Reflecting on these challenges proved to be a valuable way to throw light on aspects of the research question and, as I note (see section 11.1.1), several of my findings and recommendations derive from my reflections on the research process and from the ways in which I had to work flexibly and constantly adapt the process in order to keep it moving forward. Turning my position as an outsider to advantage in this way represents an unconventional methodological innovation.

Unusually, in approaching the analysis of qualitative data I decided not to transcribe, but to work directly with audio recordings. This novel approach has only become a practical possibility relatively recently, and options for working in this way continue to improve rapidly. The possibility has received relatively little attention in the methodological literature, and most of the attention that has been given to working directly with audio has been based on earlier versions of software with more limited functionality. In discussing both the practical and theoretical implications of not transcribing audio data (section 6.2) I make a valuable contribution to the methodological literature on this emerging technique and begin a debate on the need for transcription in a digital age.

11.3 Limitations

Every research project has its limitations, bounds to the knowledge that it can claim to evidence. I will focus in this section on the limitations of the interpretive, qualitative part of the research, as I have already discussed the limitations of the statistical analysis (see section 4.7). The first of these limitations is one which applies to any interpretative study—it is bound to the context in which the research was conducted, that of a diverse, disadvantaged community in the West Midlands. Whilst it has generated rich evidence about the barriers to engagement evident in that community it cannot be assumed that the same barriers exist elsewhere. Great care is needed in transferring these findings. Nevertheless, as I have set out throughout the discussion, the findings sit well with existing work. There is evidence to suggest that the barriers uncovered here are not unique to this one neighbourhood, but can be found in similar communities elsewhere. In this regard I highlight here two of the studies that I have referred to often. Matheson's (2012) investigation of the relationship between disadvantaged communities in Bristol and the fire and rescue service found significant tensions and distrust, whilst Canvin and her colleagues (2007) identified barriers to engagement that include several of those that I have presented, including a fear of consequences, a feeling of being judged, and disillusionment with public services. There are grounds, then, to believe that in similar contexts similar factors will be found.

An important limitations of this study concerns those that I did not manage to reach. My perception is that I have scratched the surface of disengagement. Much of my contact came

through ‘Tea and Talk’ sessions and community events, or through time spent in cafés, but what of those who do not attend events or visit cafés? Whilst I have reached some members of hard-to-reach groups and have uncovered valuable evidence about attitudes to public services in a disadvantaged neighbourhood I am conscious that there are many that I did not manage to speak with. To address the concern about the breadth of participants I have sought to access the knowledge of professionals who have worked with the communities in the area over an extended period, but inevitably this knowledge is filtered through a particular lens. There have clearly been limits to the extent that I have managed to reach people, as there will always be with any qualitative study. In large part those limits result from my own position as an outsider, and as I have discussed (section 11.1.1), there were some benefits to this position too, in that I was able to reflect on these difficulties and use those reflections to illuminate some of the problems faced by public services. Whilst the difficulty in accessing some groups perhaps mean that we do not have the whole picture, we certainly have a greater part of it than before I undertook the study.

11.4 Future research directions

As with many research projects, I set out to answer a handful of research questions and in doing so have identified many more. Here I outline some areas of research that would complement this study, helping to put it into context and to develop practical and policy applications to address some of the issues uncovered here.

11.4.1 *Inequality and fire*

An important area that I have found little discussion of is the extent to which the impact of similar incidents of fire may be much greater for some than it is for others. It seems likely that not only do those who have the least tend to have more fires, but also that the impact of those fires is greater for them. As I highlight in reviewing the literature on fire inequality (see 3.2.4), fully understanding the extent to which inequality in fire exists would require more consideration of the difficult question of how impact varies with context.

Another point that I noted in reviewing the literature on fire inequality is that there is some limited evidence to suggest that the effects of social deprivation on fire rates may be

mitigated to some extent by high levels of social cohesion and social capital (see 3.3.6). This is an area that merits further attention.

11.4.2 Test the spaces of dialogue framework in other contexts

One of the main contributions of this project is the development of a theoretical framework which posits that engagement requires spaces of dialogue which are felt to be safe, comfortable, and rewarding. This framework was developed from the findings of this study, synthesised with existing literature on community engagement. Whilst I am clear that the findings of the study arise in a particular context, I theorise that the concept of safe, comfortable and rewarding space has more general applicability. The detail of what safe, comfortable and rewarding looks like may vary from community to community, but the idea offers a useful way of thinking about engagement irrespective of context. I have shown that the framework works when applied to the findings of this study, but further research is needed in order to establish its utility in other contexts. Such work need not necessarily involve primary research, but might involve a review of existing studies of engagement, taken in its broadest sense, testing to see if the framework adequately explains the findings of such studies. In the discussion of spaces of dialogue (Chapter 9) I have related the framework to a number of other studies (e.g. Canvin et al. 2007, Matthews and Hastings 2013) but further work in this area would be of value.

11.4.3 The nature of distrust of public agencies

I have drawn a link between the perception of space as safe and distrust in the public agencies occupying that space. There is a need for further research into the nature of distrust in public agencies to better understand what gives rise to that distrust, and how to begin to dispel it. This is an area that might particularly benefit from the use of Q-methodology – a method of systematically analysing and categorising subjective viewpoints (Watts and Stenner 2012).

11.4.4 FRS organisational culture

Organisational culture affects the opportunities for employees to act in an innovative way, to exercise the sort of flexible and entrepreneurial behaviour that would allow the development of diverse spaces of dialogue. As I point out in discussing organisational challenges (see

9.5.4), innovation and flexibility at the coalface do not sit comfortably with the managerial, target-driven and risk-averse approaches found in many public sector organisations. There is a need for more research into ways of ensuring accountability and transparency within public bodies, whilst also encouraging a culture that allows innovation in engagement to flourish.

Organisational culture also affects the ability to attract, recruit and retain staff. I have argued that for FRSs to be able to facilitate the diverse spaces that are required to ensure effective engagement across a wide range of communities they require a broadly-based, diverse workforce that reflects the communities that they serve. As I note (see 10.4), at present the workforce of FRSs in the UK is far from diverse, with operational fire fighters in particular being overwhelmingly White and male (Home Office 2016b). Despite strong policy commitments to improving diversity (Department for Communities and Local Government 2008) this situation is proving difficult to change. There is a clear need for further research into the underlying reasons why FRSs find it so difficult to recruit from Black and minority ethnic communities, and to recruit women.

11.4.5 Joined-up working

I have highlighted the fact that the tendency towards joined-up working, whilst bringing many benefits, may also serve to heighten distrust in organisations such as the FRS, as it builds fear that contact with an FRS will lead to unwanted contact with other agencies (see 10.6). This is an area which has received little attention and the potential negative effects of joined-up working would benefit from future research.

One particular area that will shortly become important relates to close ties between FRSs and the police. With the passing into law of the Policing and Crime Act comes the possibility of a merging of police and fire governance structures in some areas. There is an urgent need for research to focus on the impact of such a merger upon public perceptions of the FRS, particularly amongst more disadvantaged and marginalised communities.

11.5 Final thought

The key to delivering effective fire safety interventions is to understand how best to engage with the communities to which it is hoped to deliver those interventions. Through this research I have demonstrated that there are significant barriers to the fire service engaging with some disadvantaged communities, the very communities that experience the highest rates of fire. Building on these findings I have developed a new conceptual framework that is a valuable way of considering and responding to barriers to engagement; it is an approach that enables public agencies to think creatively about how best to reach communities. Using this conceptual framework as a foundation I have argued that developing effective community engagement in a heterogeneous society requires diverse strategies, flexibility and innovation. At times the long standing approaches and taken-for-granted assumptions of agencies will need to be questioned. In the context of the fire service I have begun to ask some of those questions, and I have set out a future research agenda that will explore some of them further. The way that the research has unfolded, however, means that many of the findings are not limited to the fire service. What started out as a project that focused on inequality in fire has ultimately made a useful contribution towards understanding inequality in access to services across the board, and thereby to improving service delivery to some of society's most vulnerable communities.

References

- Abdi, H. and Williams, L.J. (2010) 'Principal Component Analysis'. *Wiley Interdisciplinary Reviews: Computational Statistics* 2 (4), 433–459. doi:10.1002/wics.101
- Alderson, P. and Goodey, C. (1998) 'Theories of Consent'. *BMJ* 317 (7168), 1313–1315. doi:10.1136/bmj.317.7168.1313
- Allaway, B.M. (2010) *Exploration of Culture and Change in the Scottish Fire Service : The Effect of Masculine Identifications* [online] PhD Thesis. Edinburgh: University of Edinburgh. available from <<http://hdl.handle.net/1842/7577>> [15 November 2013]
- Alvesson, M. (2003) 'Beyond Neopositivists, Romantics, and Localists: A Reflexive Approach to Interviews in Organizational Research'. *Academy of Management Review* 28 (1), 13–33. doi:10.5465/AMR.2003.8925191
- Andrews, R. and Brewer, G.A. (2010) 'Social Capital and Fire Service Performance: Evidence from the U.S. States'. *Social Science Quarterly* 91 (2), 576–591. doi:10.1111/j.1540-6237.2010.00708.x
- Andrews, R., Cowell, R., Downe, J., Martin, S., and Turner, D. (2006) *Promoting Effective Citizenship and Community Empowerment* [online] London: Office of the Deputy Prime Minister. available from <<http://goo.gl/bmghFj>> [16 February 2013]
- Arnstein, S.R. (1969) 'A Ladder of Citizen Participation'. *Journal of the American Institute of Planners* 35 (4), 216–224. doi:10.1080/01944366908977225
- Arson Control Forum (2004) *Social Exclusion and the Risk of Fire* [online] Research Bulletin 4. London: ODPM. available from <<http://goo.gl/iJ3TXQ>> [8 January 2014]
- Atkinson, R. and Flint, J. (2001) 'Accessing Hidden and Hard-to-Reach Populations: Snowball Research Strategies'. *Social Research Update* (33), 1–4
- Au, K.H. and Mason, J.M. (1983) 'Cultural Congruence in Classroom Participation Structures: Achieving a Balance of Rights'. *Discourse Processes* 6 (2), 145–167. doi:10.1080/01638538309544560
- Baba, C., Kearns, A., McIntosh, E., Tannahill, C., and Lewsey, J. (2016) 'Is Empowerment a Route to Improving Mental Health and Wellbeing in an Urban Regeneration (UR) Context?' *Urban Studies* 0042098016632435. doi:10.1177/0042098016632435
- Baigent, D. (2001) *Gender Relations, Masculinities and the Fire Service: A Qualitative Study of Firefighters' Constructions of Masculinity during Firefighting and in Their Social Relations of Work* [online] Thesis. available from <<http://hdl.handle.net/10540/283598>> [15 November 2013]
- Basit, T. (2003) 'Manual or Electronic? The Role of Coding in Qualitative Data Analysis'. *Educational Research* 45 (2), 143–154. doi:10.1080/0013188032000133548
- Baumeister, R.F., Bratslavsky, E., Finkenauer, C., and Vohs, K.D. (2001) 'Bad Is Stronger than Good'. *Review of General Psychology* 5 (4), 323–370. doi:10.1037/1089-2680.5.4.323
- Beebejaun, Y., Durose, C., Rees, J., Richardson, J., and Richardson, L. (2015) 'Public Harm or Public Value? Towards Co-Production in Research with Communities'. *Environment and Planning C: Government and Policy* 33 (3), 552–565. doi:10.1068/c12116

- Bennett, J. and Dixon, M. (2006) *Single Person Households and Social Policy: Looking Forwards* [online] York: Joseph Rowntree Foundation. available from <<https://goo.gl/6nmz50>> [23 July 2015]
- Berger, P.L. and Luckmann, T. (1971) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin
- Bijlsma-Frankema, K., Sitkin, S.B., and Weibel, A. (2015) 'Distrust in the Balance: The Emergence and Development of Intergroup Distrust in a Court of Law'. *Organization Science* 26 (4), 1018–1039. doi:10.1287/orsc.2015.0977
- Bolton, P. (2012) *Education: Historical Statistics* [online] SN/SG/4252. House of Commons Standard Note. House of Commons Library. available from <<http://okwd.uk/gUU>> [29 April 2016]
- Boostrom, R. (1998) "'Safe Spaces': Reflections on an Educational Metaphor". *Journal of Curriculum Studies* 30 (4), 397–408. doi:10.1080/002202798183549
- Bovaird, T. (2007) 'Beyond Engagement and Participation: User and Community Coproduction of Public Services'. *Public Administration Review* 67 (5), 846–860. doi:10.1111/j.1540-6210.2007.00773.x
- Boxelaar, L., Paine, M., and Beilin, R. (2006) 'Community Engagement and Public Administration: Of Silos, Overlays and Technologies of Government'. *Australian Journal of Public Administration* 65 (1), 113–126. doi:10.1111/j.1467-8500.2006.00476.x
- Boyle, D. and Harris, M. (2009) *The Challenge of Co-Production: How Equal Partnerships between Professionals and the Public Are Crucial to Improving Public Services* [online] London: NESTA. available from <<http://okwd.uk/VpZ>> [16 October 2013]
- Bradford, B., Jackson, J., and Stanko, E.A. (2009) 'Contact and Confidence: Revisiting the Impact of Public Encounters with the Police'. *Policing and Society* 19 (1), 20–46. doi:10.1080/10439460802457594
- Bridges, W. (2009) *Managing Transitions: Making the Most of Change*. 3rd ed. London: Nicholas Brealey
- Brown, K.A. and Ryan, N.F. (2003) 'Redefining Government-Community Relations through Service Agreements'. *Journal of Contemporary Issues in Business and Government* 9 (1), 21–30
- Browne, K. (2005) 'Snowball Sampling: Using Social Networks to Research Non-Heterosexual Women'. *International Journal of Social Research Methodology* 8 (1), 47–60. doi:10.1080/1364557032000081663
- Bruck, D., Ball, M., and Thomas, I.R. (2011) 'Fire Fatality and Alcohol Intake: Analysis of Key Risk Factors'. *Journal of Studies on Alcohol and Drugs* 72 (5), 731–736. doi:10.15288/jsad.2011.72.731
- Bruns, B. (2003) 'Water Tenure Reform: Developing an Extended Ladder of Participation'. in *Politics of the Commons: Articulating Development and Strengthening Local Practices*. held 14 July 2003 at Chiang Mai, Thailand
- Bryman, A. (2004) *Social Research Methods*. 2nd edn. Oxford: Oxford University Press
- Burns, D. (2000) 'Can Local Democracy Survive Governance?' *Urban Studies* 37 (5–6), 963–973. doi:10.1080/00420980050011181
- Bywaters, P., Brady, G., Sparks, T., and Bos, E. (2014) 'Child Welfare Inequalities: New Evidence, Further Questions'. *Child & Family Social Work* 21 (3). doi:10.1111/cfs.12154

- Cabinet Office (2011) *Communicating Risk Guidance* [online] London: Cabinet Office. available from <<http://okwd.uk/xCN>> [9 December 2013]
- CACI (2014) *Acorn Technical Document* [online] London: CACI. available from <<http://okwd.uk/ZmQ>> [6 June 2014]
- Canvin, K., Jones, C., Marttila, A., Burström, B., and Whitehead, M. (2007) 'Can I Risk Using Public Services? Perceived Consequences of Seeking Help and Health Care among Households Living in Poverty: Qualitative Study'. *Journal of Epidemiology and Community Health* 61 (11), 984–989. doi:10.1136/jech.2006.058404
- CAP Centre (n.d.) *Background* « CAP Centre. available from <<http://okwd.uk/AXV>> [23 June 2016]
- Carmel, E. and Harlock, J. (2008) 'Instituting the "Third Sector" as a Governable Terrain: Partnership, Procurement and Performance in the UK'. *Policy & Politics* 36 (2), 155–171. doi:10.1332/030557308783995017
- Cattell, R.B. (1966) 'The Scree Test For The Number Of Factors'. *Multivariate Behavioral Research* 1 (2), 245–276. doi:10.1207/s15327906mbr0102_10
- Chandler, S.E., Chapman, A., and Hollington, S.J. (1984) 'Fire Incidence, Housing and Social Conditions – The Urban Situation in Britain'. *Fire Prevention* (172), 15–20
- Chief Fire Officers' Association (2015) *Safe and Well Visits* [online] available from <<http://www.cfoa.org.uk/21422>> [16 November 2016]
- Choguill, M.B.G. (1996) 'A Ladder of Community Participation for Underdeveloped Countries'. *Habitat International* 20 (3), 431–444. doi:10.1016/0197-3975(96)00020-3
- Cilliers, P. (2005) 'Complexity, Deconstruction and Relativism'. *Theory, Culture & Society* 22 (5), 255–267. doi:10.1177/0263276405058052
- Clark, A., Smith, J., and Conroy, C. (2014) 'Domestic Fire Risk: A Narrative Review of Social Science Literature and Implications for Further Research'. *Journal of Risk Research* 18 (9), 1113–1129. doi:10.1080/13669877.2014.913660
- Clark, A.M. (1998) 'The Qualitative-Quantitative Debate: Moving from Positivism and Confrontation to Post-Positivism and Reconciliation'. *Journal of Advanced Nursing* 27 (6), 1242–1249. doi:10.1046/j.1365-2648.1998.00651.x
- Coaffee, J. and Healey, P. (2003) "'My Voice: My Place": Tracking Transformations in Urban Governance'. *Urban Studies* 40 (10), 1979–1999. doi:10.1080/0042098032000116077
- Colyar, J. (2009) 'Becoming Writing, Becoming Writers'. *Qualitative Inquiry* 15 (2), 421–436. doi:10.1177/1077800408318280
- Coomber, R. (2002) 'Signing Your Life Away? Why Research Ethics Committees (REC) Shouldn't Always Require Written Confirmation That Participants in Research Have Been Informed of the Aims of a Study and Their Rights - the Case of Criminal Populations'. *Sociological Research Online* 7 (1). doi:10.5153/sro.678
- Corbin, J.M. and Strauss, A. (1990) 'Grounded Theory Research: Procedures, Canons, and Evaluative Criteria'. *Qualitative Sociology* 13 (1), 3–21. doi:10.1007/BF00988593

- Corcoran, J., Higgs, G., and Anderson, T. (2013) 'Examining the Use of a Geodemographic Classification in an Exploratory Analysis of Variations in Fire Incidence in South Wales, UK'. *Fire Safety Journal* 62 (A), 37–48. doi:10.1016/j.firesaf.2013.03.004
- Corcoran, J., Higgs, G., Brunsdon, C., Ware, A., and Norman, P. (2007) 'The Use of Spatial Analytical Techniques to Explore Patterns of Fire Incidence: A South Wales Case Study'. *Computers, Environment and Urban Systems* 31 (6), 623–647. doi:10.1016/j.compenvurbsys.2007.01.002
- Corcoran, J., Higgs, G., and Higginson, A. (2011) 'Fire Incidence in Metropolitan Areas: A Comparative Study of Brisbane (Australia) and Cardiff (United Kingdom)'. *Applied Geography* 31 (1), 65–75. doi:10.1016/j.apgeog.2010.02.003
- Cornwall, A. (2002a) 'Locating Citizen Participation'. *IDS Bulletin* 33 (2), i–x. doi:10.1111/j.1759-5436.2002.tb00016.x
- Cornwall, A. (2002b) *Making Spaces, Changing Places: Situating Participation in Development* [online] IDS Working Paper 170. Brighton: IDS. available from <<http://okwd.uk/Jpr>> [1 October 2016]
- Cornwall, A. (2004) 'New Democratic Spaces? The Politics and Dynamics of Institutionalised Participation'. *IDS Bulletin* 35 (2), 1–10. doi:10.1111/j.1759-5436.2004.tb00115.x
- Cornwall, A. (2008) 'Unpacking "Participation": Models, Meanings and Practices'. *Community Development Journal* 43 (3), 269–283. doi:10.1093/cdj/bsn010
- Costello, A.B. and Osborne, J.W. (2005) 'Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most from Your Analysis'. *Practical Assessment Research & Evaluation* [online] 10 (7). available from <<http://goo.gl/XrWzJI>> [4 February 2015]
- Coventry City Council (2013) *Review of Neighbourhood Working* [online] available from <<http://goo.gl/sA0vPQ>> [24 June 2016]
- Coventry City Council (2014) *Ward Forums* [online] available from <<http://www.coventry.gov.uk/wardforums>> [12 September 2016]
- Coventry Society (n.d.) *Information on Wood End Henley Green Manor Farm and Deedmore Area of Coventry* [online] available from <<http://okwd.uk/phe>> [13 September 2016]
- Coventry University (2011) *Guidelines for Research in the Community* [online] Coventry: Coventry University. available from <<https://okwd.uk/LYS>> [1 June 2016]
- Crow, G., Wiles, R., Heath, S., and Charles, V. (2006) 'Research Ethics and Data Quality: The Implications of Informed Consent'. *International Journal of Social Research Methodology* 9 (2), 83–95. doi:10.1080/13645570600595231
- Crozier, G. (1997) 'Empowering the Powerful: A Discussion of the Interrelation of Government Policies and Consumerism with Social Class Factors and the Impact of This upon Parent Interventions in Their Children's Schooling'. *British Journal of Sociology of Education* 18 (2), 187–200. doi:10.1080/0142569970180203
- Crozier, G. and Davies, J. (2007) 'Hard to Reach Parents or Hard to Reach Schools? A Discussion of Home-School Relations, with Particular Reference to Bangladeshi and Pakistani Parents'. *British Educational Research Journal* 33 (3), 295–313. doi:10.1080/01411920701243578

- Cunliffe, A.L. and Karunanayake, G. (2013) 'Working within Hyphen-Spaces in Ethnographic Research: Implications for Research Identities and Practice'. *Organizational Research Methods* 16 (3), 364–392. doi:10.1177/1094428113489353
- Dacin, M.T., Munir, K., and Tracey, P. (2010) 'Formal Dining at Cambridge Colleges: Linking Ritual Performance and Institutional Maintenance'. *Academy of Management Journal* 53 (6), 1393–1418. doi:10.5465/AMJ.2010.57318388
- Dale, A., Shaheen, N., Kalra, V., and Fieldhouse, E. (2002) 'Routes into Education and Employment for Young Pakistani and Bangladeshi Women in the UK'. *Ethnic and Racial Studies* 25 (6), 942–968. doi:10.1080/0141987022000009386
- Davidson, C.R. (2009) 'Transcription: Imperatives for Qualitative Research'. *International Journal of Qualitative Methods* 8 (2), 35–52
- Davies, C. (2007) 'Grounding Governance in Dialogue? Discourse, Practice and the Potential for a New Public Sector Organizational Form in Britain'. *Public Administration* 85 (1), 47–66. doi:10.1111/j.1467-9299.2007.00633.x
- Denyer, D. and Tranfield, D. (2006) 'Using Qualitative Research Synthesis to Build an Actionable Knowledge Base'. *Management Decision* 44 (2), 213–227. doi:10.1108/00251740610650201
- Department for Communities and Local Government (2008) *Fire and Rescue Service: Equality and Diversity Strategy 2008-2018*. [online] Wetherby: Communities and Local Government Publications. available from <<http://okwd.uk/cjt>> [19 November 2016]
- Department for Communities and Local Government (2009) *IRS Help and Guidance* [online] v. 1.8. London: DCLG. available from <<http://goo.gl/ObZiwU>> [23 May 2014]
- Department for Communities and Local Government (2011a) *The Economic Cost of Fire: Estimates for 2008* [online] Fire Research Report 3/2011. London: DCLG. available from <<http://goo.gl/50XyIf>> [8 January 2014]
- Department for Communities and Local Government (2011b) *English Indices of Deprivation 2010: Guidance Document* [online] London: DCLG. available from <<http://goo.gl/eOh4Sg>> [20 January 2014]
- Department for Communities and Local Government (2011c) *English Indices of Deprivation 2010: Technical Report* [online] London: DCLG. available from <<http://goo.gl/REB7hg>> [23 January 2014]
- Department for Communities and Local Government (2011d) *English Indices of Deprivation 2010: County Summaries* [online] London: DCLG. available from <<https://goo.gl/0BENgj>> [24 February 2015]
- Department for Communities and Local Government (2011e) *English Indices of Deprivation 2010* [online] available from <<http://goo.gl/TRjmCY>> [7 August 2013]
- Department for Communities and Local Government (2012a) *Fire Statistics: Great Britain, 2011 to 2012* [online] London: DCLG. available from <<http://goo.gl/wXHxp7>> [16 May 2014]
- Department for Communities and Local Government (2012b) *Incident Recording System-Questions and Lists* [online] Version 1.6. London: DCLG. available from <<http://goo.gl/PGmXNj>> [9 December 2013]
- Department for Communities and Local Government (2013) *English Housing Survey, 2010-2011: Household Data*. 2nd edn. SN: 7040. Colchester, Essex: UK Data Archive (distributor). doi:10.5255/UKDA-SN-7040-2

- Department for Communities and Local Government (2014) *English Housing Survey* [online] available from <<https://okwd.uk/P7s>> [23 May 2014]
- Department for Communities and Local Government (2015a) *English Indices of Deprivation 2015: Upper-Tier Local Authority Summaries* [online] available from <<https://okwd.uk/ynN>> [3 December 2016]
- Department for Communities and Local Government (2015b) *The English Indices of Deprivation 2015* [online] London: DCLG. available from <<https://okwd.uk/igJ>>
- Department for Education (2010) *How to Communicate with Hard-to-Reach Groups* [online] LSCB Communications Toolkit. London: DfE. available from <<http://goo.gl/R3bxy>> [21 June 2016]
- Department of Health (2002) *Addressing Inequalities—reaching the Hard to Reach Groups*. National Service Frameworks. London: Department of Health
- DiGuseppi, C., Edwards, P., Godward, C., Roberts, I., and Wade, A. (2000) 'Urban Residential Fire and Flame Injuries: A Population Based Study'. *Injury Prevention* 6 (4), 250–254. doi:10.1136/ip.6.4.250
- Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., and Sutton, A. (2005) 'Synthesising Qualitative and Quantitative Evidence: A Review of Possible Methods'. *Journal of Health Services Research & Policy* 10 (1), 45–53
- Dixon-Woods, M., Agarwal, S., Young, B., Jones, D., and Sutton, A. (2004) *Integrative Approaches to Qualitative and Quantitative Evidence* [online] London: Health Development Agency. available from <<https://okwd.uk/rgx>> [27 November 2012]
- Douglas, M. and Wildavsky, A. (1983) *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers* [online] Berkeley, CA: University of California Press. available from <<http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10676258>> [5 December 2016]
- Downey, J. and Fenton, N. (2007) 'Global Capital, Local Resistance? Trade Unions, National Newspapers and the Symbolic Contestation of 'Offshoring' in the UK'. *Current Sociology* 55 (5), 651–673. doi:10.1177/0011392107079921
- Duffy, B. (2000) *Satisfaction and Expectations: Attitudes to Public Services in Deprived Areas* [online] LSE STICERD Research Paper CASE 045. London: Centre for Analysis of Social Exclusion. available from <<http://goo.gl/IDNEI>> [24 July 2016]
- Dupré, J. (2007) 'Fact and Value'. in *Value-Free Science?: Ideals and Illusions*. ed. by Kincaid, H., Dupré, J., and Wylie, A. Oxford: Oxford University Press, 27–41
- Durose, C. (2011) 'Revisiting Lipsky: Front-Line Work in UK Local Governance'. *Political Studies* 59 (4), 978–995. doi:10.1111/j.1467-9248.2011.00886.x
- Durose, C., van Hulst, M., Jeffares, S., Escobar, O., Agger, A., and de Graaf, L. (2016) 'Five Ways to Make a Difference: Perceptions of Practitioners Working in Urban Neighborhoods'. *Public Administration Review* 76 (4), 576–586. doi:10.1111/puar.12502
- Durose, C. and Lowndes, V. (2010) 'Neighbourhood Governance: Contested Rationales within a Multi-Level Setting – a Study of Manchester'. *Local Government Studies* 36 (3), 341–359. doi:10.1080/03003931003730477
- Economic and Social Research Council (2010) *ESRC Framework for Research Ethics* [online] Swindon: ESRC. available from <<http://okwd.uk/N5h>> [10 October 2014]

- Edwards, P., Roberts, I., Green, J., and Lutchmun, S. (2006) 'Deaths from Injury in Children and Employment Status in Family: Analysis of Trends in Class Specific Death Rates'. *BMJ* 333 (7559), 119–122. doi:10.1136/bmj.38875.757488.4F
- Eide, P. and Allen, C.B. (2008) 'Recruiting Transcultural Qualitative Research Participants: A Conceptual Model'. *International Journal of Qualitative Methods* 4 (2), 44–56
- Eisenhardt, K.M. (1989) 'Building Theories from Case Study Research'. *Academy of Management Review* 14 (4), 532–550. doi:10.5465/AMR.1989.4308385
- Emmel, N., Hughes, K., Greenhalgh, J., and Sales, A. (2006) *Developing Methodological Strategies to Recruit and Research Socially Excluded Groups* [online] Project report, ESRC Research Methods Programme. available from <<http://goo.gl/T1nWBh>> [25 March 2015]
- Emmel, N., Hughes, K., Greenhalgh, J., and Sales, A. (2007) 'Accessing Socially Excluded People—trust and the Gatekeeper in the Researcher-Participant Relationship'. *Sociological Research Online* 12 (2). doi:10.5153/sro.1512
- Evans, J.D. (1996) *Straightforward Statistics for the Behavioral Sciences*. Pacific Grove: Brooks/Cole Publishing Company
- Evers, J.C. (2011) 'From the Past into the Future. How Technological Developments Change Our Ways of Data Collection, Transcription and Analysis'. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* [online] 12 (1). available from <<http://okwd.uk/nQp>> [5 December 2016]
- Eversole, R. (2011) 'Community Agency and Community Engagement: Re-Theorising Participation in Governance'. *Journal of Public Policy* 31 (1), 51–71. doi:10.1017/S0143814X10000206
- Eversole, R. (2012) 'Remaking Participation: Challenges for Community Development Practice'. *Community Development Journal* 47 (1), 29–41. doi:10.1093/cdj/bsq033
- Experian Ltd (2009) *Experian's Mosaic Public Sector Citizen Classification for the United Kingdom* [online] Nottingham: Experian Ltd. available from <http://cdu.mimas.ac.uk/experian/MosaicPublicSector_Info.pdf> [6 August 2013]
- Ferlie, E., Fitzgerald, L., McGIVERN, G., Dopson, S., and Bennett, C. (2011) 'Public Policy Networks and "Wicked Problems": A Nascent Solution?' *Public Administration* 89 (2), 307–324. doi:10.1111/j.1467-9299.2010.01896.x
- Field, A. (2009) *Discovering Statistics Using SPSS*. 3rd edn. London: SAGE Publications
- Fire and Rescue Services Act (2004, c.21) London: TSO
- Firestone, W.A. (1993) 'Alternative Arguments for Generalizing from Data as Applied to Qualitative Research'. *Educational Researcher* 22 (4), 16–23. doi:10.3102/0013189X022004016
- Fischer, F. (1998) 'Beyond Empiricism: Policy Inquiry in Post Positivist Perspective'. *Policy Studies Journal* 26 (1), 129–146. doi:10.1111/j.1541-0072.1998.tb01929.x
- Flanagan, S.M. and Hancock, B. (2010) '"Reaching the Hard to Reach" - Lessons Learned from the VCS (Voluntary and Community Sector). A Qualitative Study'. *BMC Health Services Research* 10 (92). doi:10.1186/1472-6963-10-92

- Fontes, L.A. (1998) 'Ethics in Family Violence Research: Cross-Cultural Issues'. *Family Relations* 53–61. doi:10.2307/584851
- Ford, G. (2004) *Fires in the Home: Findings from the 2002/3 British Crime Survey* [online] London: ODPM. available from <<http://goo.gl/pba1Uw>> [22 May 2014]
- Gaught, P., Gallucci, J., and Smalldridge, G. (2016) *Fire Statistics England, 2014/15* [online] Statistical Bulletin 08/16. London: Home Office / National Statistics. available from <<https://okwd.uk/JTh>>
- Gaventa, J. and Barrett, G. (2012) 'Mapping the Outcomes of Citizen Engagement'. *World Development* 40 (12), 2399–2410. doi:10.1016/j.worlddev.2012.05.014
- Geertz, C. (1998) 'Deep Hanging Out'. *The New York Review of Books* 45 (16), 69–72
- Gibson, W., Callery, P., Campbell, M., Hall, A., and Richards, D. (2005) 'The Digital Revolution in Qualitative Research: Working with Digital Audio Data through Atlas. Ti'. *Sociological Research Online* 10 (1). doi:10.5153/sro.1044
- Gilbert, S. and Miller, C. (2015) 'Area of Coventry Named the Most Deprived in the Midlands'. *Coventry Telegraph* [online] 1 October. available from <<http://okwd.uk/EUf>> [2 October 2015]
- Glasby, J. (2011) 'From Evidence-Based to Knowledge-Based Policy and Practice'. in *Evidence, Policy and Practice: Critical Perspectives in Health and Social Care*. ed. by Glasby, J. Bristol: Policy Press, 85–98
- Gorard, S. (2006) 'Towards a Judgement-based Statistical Analysis'. *British Journal of Sociology of Education* 27 (1), 67–80. doi:10.1080/01425690500376663
- Graham, M.H. (2003) 'Confronting Multicollinearity in Ecological Multiple Regression'. *Ecology* 84 (11), 2809–2815. doi:10.1890/02-3114
- Graneheim, U.H. and Lundman, B. (2004) 'Qualitative Content Analysis in Nursing Research: Concepts, Procedures and Measures to Achieve Trustworthiness'. *Nurse Education Today* 24 (2), 105–112. doi:10.1016/j.nedt.2003.10.001
- Greenland, S. and Robins, J. (1994) 'Invited Commentary: Ecologic Studies—Biases, Misconceptions, and Counterexamples'. *American Journal of Epidemiology* 139 (8), 747–760
- Grix, J. (2002) 'Introducing Students to the Generic Terminology of Social Research'. *Politics* 22 (3), 175–186. doi:10.1111/1467-9256.00173
- Gummesson, E. (2006) 'Qualitative Research in Management: Addressing Complexity, Context and Persona'. *Management Decision* 44 (2), 167–179. doi:10.1108/00251740610650175
- Hallsworth, M., Parker, S., and Rutter, J. (2011) *Policy Making in the Real World: Evidence and Analysis* [online] London: Institute for Government. available from <<https://okwd.uk/zea>> [3 December 2012]
- Hamel, G., Doz, Y.L., and Prahalad, C.K. (1989) 'Collaborate with Your Competitors—and Win'. *Harvard Business Review* 67 (1), 133–139
- Hart, A. and Lockey, R. (2002) 'Inequalities in Health Care Provision: The Relationship between Contemporary Policy and Contemporary Practice in Maternity Services in England'. *Journal of Advanced Nursing* 37 (5), 485–493. doi:10.1046/j.1365-2648.2002.02107.x

- Hashagen, S. (2002) *Models of Community Engagement* [online] Glasgow: Scottish Community Development Centre. available from <<http://okwd.uk/gzo>> [19 October 2016]
- Hastie, C. and Searle, R. (2016) 'Socio-Economic and Demographic Predictors of Accidental Dwelling Fire Rates'. *Fire Safety Journal* 84, 50–56. doi:10.1016/j.firesaf.2016.07.002
- Haverland, M. and Yanow, D. (2012) 'A Hitchhiker's Guide to the Public Administration Research Universe: Surviving Conversations on Methodologies and Methods'. *Public Administration Review* 72 (3), 401–408. doi:10.1111/j.1540-6210.2011.02524.x
- Hawdon, J. and Ryan, J. (2003) 'Police-Resident Interactions and Satisfaction With Police: An Empirical Test of Community Policing Assertions'. *Criminal Justice Policy Review* 14 (1), 55–74. doi:10.1177/0887403402250919
- Haynes, L., Service, O., Goldacre, B., and Torgerson, D. (2012) *Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials* [online] London: Cabinet Office. available from <<http://goo.gl/Bfn8dD>> [3 December 2012]
- Health and Safety Executive (2001) *Reducing Risks, Protecting People: HSE's Decision Making Process* [online] Sudbury: HSE Books. available from <<http://www.hse.gov.uk/risk/theory/r2p2.pdf>> [9 December 2013]
- Herrera, C.D. (1999) 'Two Arguments for "Covert Methods" in Social Research'. *The British Journal of Sociology* 50 (2), 331–343. doi:10.1111/j.1468-4446.1999.00331.x
- Herzberg, F. (1959) *The Motivation to Work*. 2nd edn. New York: Wiley
- Higgins, E., Taylor, M.J., and Francis, H. (2012) 'A Systemic Approach to Fire Prevention Support'. *Systemic Practice & Action Research* 25 (5), 393–406. doi:10.1007/s11213-012-9229-9
- Higgins, E., Taylor, M.J., Jones, M., and Lisboa, P.J.G. (2013) 'Understanding Community Fire Risk—a Spatial Model for Targeting Fire Prevention Activities'. *Fire Safety Journal* 62 (A), 20–29. doi:10.1016/j.firesaf.2013.02.006
- HM Government (2015) *Consultation: Enabling Closer Working between Emergency Services* [online] London. available from <<https://goo.gl/2CbnrN>> [17 September 2015]
- Holborn, P.G., Nolan, P.F., and Golt, J. (2003) 'An Analysis of Fatal Unintentional Dwelling Fires Investigated by London Fire Brigade between 1996 and 2000'. *Fire Safety Journal* 38 (1), 1–42. doi:10.1016/S0379-7112(02)00049-8
- Holley, L.C. and Steiner, S. (2005) 'Safe Space: Student Perspectives on Classroom Environment'. *Journal of Social Work Education* 41 (1), 49–64. doi:10.5175/JSWE.2005.200300343
- Homan, R. (1992) 'The Ethics of Open Methods'. *British Journal of Sociology* 43 (3), 321–332. doi:10.2307/591538
- Home Office (2016a) *Fire Statistics Data Tables* [online] available from <<http://okwd.uk/sXH>> [8 August 2016]
- Home Office (2016b) *Fire and Rescue Authorities: Operational Statistics Bulletin for England 2015 to 2016* [online] Statistical Bulletin 12/16. London: Home Office. available from <<http://okwd.uk/rMf>> [19 November 2016]

- Home Office (2016c) *Fire and Rescue Policy to Move to the Home Office* [online] available from <<http://okwd.uk/a6R>> [18 November 2016]
- Home Office (2016d) *Policing and Crime Bill: Emergency Services Collaboration: Overview of Part 1 of the Bill* [online] available from <<https://okwd.uk/8md>> [18 November 2016]
- Homes and Communities Agency (2012) *WEHM, North Coventry Estate Renewal* [online] available from <<http://okwd.uk/Pai>> [6 August 2015]
- van Hulst, M., de Graaf, L., and van den Brink, G. (2012) 'The Work of Exemplary Practitioners in Neighborhood Governance'. *Critical Policy Studies* 6 (4), 434–451. doi:10.1080/19460171.2012.730763
- International Association for Public Participation (2014) *IAP2's Public Participation Spectrum* [online] IAP2. available from <<http://okwd.uk/K5w>> [18 October 2016]
- Jarvis, D., Berkeley, N., and Broughton, K. (2012) 'Evidencing the Impact of Community Engagement in Neighbourhood Regeneration: The Case of Canley, Coventry'. *Community Development Journal* 47 (2), 232–247. doi:10.1093/cdj/bsq063
- Jennings, C.R. (2013) 'Social and Economic Characteristics as Determinants of Residential Fire Risk in Urban Neighborhoods: A Review of the Literature'. *Fire Safety Journal* 62 (A), 13–19. doi:10.1016/j.firesaf.2013.07.002
- Jha, P., Peto, R., Zatonski, W., Boreham, J., Jarvis, M.J., and Lopez, A.D. (2006) 'Social Inequalities in Male Mortality, and in Male Mortality from Smoking: Indirect Estimation from National Death Rates in England and Wales, Poland, and North America'. *The Lancet* 368 (9533), 367–70. doi:10.1016/S0140-6736(06)68975-7
- Kahn, R.L., Katz, D., and Gutek, B. (1976) 'Bureaucratic Encounters— An Evaluation of Government Services'. *The Journal of Applied Behavioral Science* 12 (2), 178–198. doi:10.1177/002188637601200203
- Katz, D., Gutek, B.A., Kahn, R.L., and Barton, E. (1974) *Bureaucratic Encounters: A Pilot Study in the Evaluation of Government Services* [online] Ann Arbor, Michigan: Institute for Social Research. available from <<http://hdl.handle.net/2027.42/99172>> [1 September 2016]
- Kisby, B. (2011) 'Interpreting Facts, Verifying Interpretations: Public Policy, Truth and Evidence'. *Public Policy and Administration* 26 (1), 107–127. doi:10.1177/0952076710375784
- Knight, K. (2013) *Facing the Future: Findings from the Review of Efficiencies and Operations in Fire and Rescue Authorities in England* [online] London: HMSO. available from <<http://goo.gl/8MnIvn>> [9 October 2013]
- Krausova, A. and Vargas-Silva, C. (2013) *West Midlands: Census Profile* [online] Oxford: University of Oxford. available from <<http://goo.gl/X4kaE4>> [25 February 2015]
- Kroeger, F. (2016) 'Facework: Creating Trust in Systems, Institutions and Organisations'. *Cambridge Journal of Economics* bew038. doi:10.1093/cje/bew038
- Labour Party (1997) *New Labour Because Britain Deserves Better* [online] Labour Party Manifesto, 1997. available from <<http://okwd.uk/vg9>> [15 August 2014]
- Lareau, A. (1987) 'Social Class Differences in Family-School Relationships: The Importance of Cultural Capital'. *Sociology of Education* 60 (April), 73–85

- Lewicki, R.J., McAllister, D.J., and Bies, R.J. (1998) 'Trust and Distrust: New Relationships and Realities'. *Academy of Management Review* 23 (3), 438–458. doi:10.5465/AMR.1998.926620
- Ling, T. (2002) 'Delivering Joined-up Government in the UK: Dimensions, Issues and Problems'. *Public Administration* 80 (4), 615–642
- Lipsky, M. (1980) *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*. New York: Russell Sage Foundation
- Local Government Boundary Commission for England (2013) *Electoral Reviews: Technical Guidance* [online] London: LGBCE. available from <<http://goo.gl/jDhjJP>> [12 June 2014]
- Löffler, E., Parrado, S., Bovaird, T., and Van Ryzin, G. (2008) "If You Want to Go Fast, Walk Alone. If You Want to Go Far, Walk Together". *Citizens and the Co-Production of Public Services* [online] Paris: Ministry of Budget, Public Finance and Public Services, France. available from <<http://okwd.uk/V39>> [9 October 2013]
- Longhi, S. and Rokicka, M. (2012) *European Immigrants in the UK before and after the 2004 Enlargement: Is There a Change in Immigrant Self-Selection?* [online] ISER Working Paper 2012–22. Essex: Institute for Social and Economic Research. available from <<https://goo.gl/VBe34Z>>
- Lowndes, V. and Pratchett, L. (2012) 'Local Governance under the Coalition Government: Austerity, Localism and the "Big Society"'. *Local Government Studies* 38 (1), 21–40. doi:10.1080/03003930.2011.642949
- Lowndes, V., Pratchett, L., and Stoker, G. (2001) 'Trends in Public Participation: Part 2 – Citizens' Perspectives'. *Public Administration* 79 (2), 445. doi:10.1111/1467-9299.00264
- Lowndes, V. and Wilson, D. (2001) 'Social Capital and Local Governance: Exploring the Institutional Design Variable'. *Political Studies* 49 (4), 629–647. doi:10.1111/1467-9248.00334
- MacQueen, K.M., McLellan, E., Metzger, D.S., Kegeles, S., Strauss, R.P., Scotti, R., Blanchard, L., and Trotter II., R.T. (2001) 'What Is Community? An Evidence-Based Definition for Participatory Public Health'. *American Journal of Public Health* 91 (12), 1929–1938. doi:10.2105/AJPH.91.12.1929
- Mansfield, C. (2015) *Fire Works: A Collaborative Way Forward for the Fire and Rescue Service* [online] London: New Local Government Network. available from <<http://okwd.uk/49m>> [7 March 2017]
- Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish, D., Grady, M., and Geddes, I. (2010) *Fair Society, Healthy Lives: The Marmot Review* [online] London: The Marmot Review. available from <<http://okwd.uk/kGu>> [19 May 2014]
- Mathers, J., Parry, J., and Jones, S. (2008) 'Exploring Resident (Non-)Participation in the UK New Deal for Communities Regeneration Programme'. *Urban Studies* 45 (3), 591–606. doi:10.1177/0042098007087336
- Matheson, K. (2012) *Fire Fighters, Neighbourhoods and Social Identity: The Relationship between the Fire Service and Residents in Bristol* [online] PhD Thesis. Bristol: University of the West of England. available from <<http://eprints.uwe.ac.uk/16692/>> [14 November 2013]
- Matheson, K., Manning, R., and Williams, S. (2011) 'From Brigade to Service: An Examination of the Role of Fire and Rescue Services in Modern Local Government'. *Local Government Studies* 37 (4), 451–465. doi:10.1080/03003930.2011.588701

- Matthews, P. and Hastings, A. (2013) 'Middle-Class Political Activism and Middle-Class Advantage in Relation to Public Services: A Realist Synthesis of the Evidence Base'. *Social Policy & Administration* 47 (1), 72–92. doi:10.1111/j.1467-9515.2012.00866.x
- Maynard-Moody, S. and Musheno, M. (2012) 'Social Equities and Inequities in Practice: Street-Level Workers as Agents and Pragmatists'. *Public Administration Review* 72, S16–S23. doi:10.1111/j.1540-6210.2012.02633.x
- McAreevey, R. and Das, C. (2013) 'A Delicate Balancing Act: Negotiating with Gatekeepers for Ethical Research When Researching Minority Communities'. *International Journal of Qualitative Methods* 12 (1), 113–131
- McIntyre, L., Officer, S., and Robinson, L.M. (2003) 'Feeling Poor: The Felt Experience Low-Income Lone Mothers'. *Affilia* 18 (3), 316–331. doi:10.1177/0886109903254581
- Mckenzie, L. (2012) 'A Narrative from the inside, Studying St Anns in Nottingham: Belonging, Continuity and Change'. *The Sociological Review* 60 (3), 457–475. doi:10.1111/j.1467-954X.2012.02094.x
- Mckenzie, L. (2013) 'Narratives from a Nottingham Council Estate: A Story of White Working-Class Mothers with Mixed-Race Children'. *Ethnic and Racial Studies* 36 (8), 1342–1358. doi:10.1080/01419870.2013.776698
- Mclean, C.A. and Campbell, C.M. (2003) 'Locating Research Informants in a Multi-Ethnic Community: Ethnic Identities, Social Networks and Recruitment Methods'. *Ethnicity & Health* 8 (1), 41–41. doi:10.1080/13557850303558
- McMillan, D.W. and Chavis, D.M. (1986) 'Sense of Community: A Definition and Theory'. *Journal of Community Psychology* 14 (1), 6–23
- Medland, A. (2011) *Portrait of the West Midlands* [online] London: ONS. available from <<http://goo.gl/OZg8H2>> [25 February 2015]
- Merrall, S. (2002) *Anthropogenic Accidental Dwelling Fire: Incident Distribution, Theory and the Fire Service* [online] PhD Thesis. Liverpool: University of Liverpool. available from <<http://goo.gl/SPPXq2>> [15 November 2013]
- Merton, R.K. (1948) 'The Bearing of Empirical Research upon the Development of Social Theory'. *American Sociological Review* 13 (5), 505–515. doi:10.2307/2087142
- Mezirow, J. (1981) 'A Critical Theory of Adult Learning and Education'. *Adult Education Quarterly* 32 (1), 3–24. doi:10.1177/074171368103200101
- Mezirow, J. (1990) 'How Critical Reflection Triggers Transformative Learning'. in *Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning*. ed. by Mezirow, J. San Francisco: Jossey Bass, 1–20
- Michell, J. (2003) 'The Quantitative Imperative: Positivism, Naive Realism and the Place of Qualitative Methods in Psychology'. *Theory & Psychology* 13 (1), 5–31. doi:10.1177/0959354303013001758
- Miller, K.E. (2004) 'Beyond the Frontstage: Trust, Access, and the Relational Context in Research With Refugee Communities'. *American Journal of Community Psychology* 33 (3/4), 217–228
- Moore, N. (2012) 'The Politics and Ethics of Naming: Questioning Anonymisation in (Archival) Research'. *International Journal of Social Research Methodology* 15 (4), 331–340. doi:10.1080/13645579.2012.688330

- Mugavero, M.J., Davila, J.A., Nevin, C.R., and Giordano, T.P. (2010) 'From Access to Engagement: Measuring Retention in Outpatient HIV Clinical Care'. *AIDS Patient Care & STDs* 24 (10), 607–613. doi:10.1089/apc.2010.0086
- Mulvaney, C., Kendrick, D., Towner, E., Brussoni, M., Hayes, M., Powell, J., Robertson, S., and Ward, H. (2009) 'Fatal and Non-Fatal Fire Injuries in England 1995–2004: Time Trends and Inequalities by Age, Sex and Area Deprivation'. *Journal of Public Health* 31 (1), 154–161. doi:10.1093/pubmed/fdn103
- National Audit Office (2015) *Impact of Funding Reductions on Fire and Rescue Services* [online] London: NAO. available from <<https://okwd.uk/f2t>> [16 November 2016]
- National Institute for Health and Care Excellence (2014) *Community Engagement to Improve Health* [online] NICE Local Government Briefing 16. NICE. available from <<http://publications.nice.org.uk/lgb16>> [19 October 2016]
- Nespor, J. (2000) 'Anonymity and Place in Qualitative Inquiry'. *Qualitative Inquiry* 6 (4), 546–569. doi:10.1177/107780040000600408
- NHS England, Public Health England, Local Government Association, Chief Fire Officers' Association, and Age UK (2015) *Consensus Statement on Improving Health and Wellbeing* [online] NHS England. available from <<https://okwd.uk/R55>> [16 November 2016]
- Novak, J.D. and Cañas, A.J. (2008) *The Theory Underlying Concept Maps and How to Construct and Use Them* [online] Technical Report IHMC CmapTools 2006-01 Rev 01-2008. Florida: Institute for Human and Machine Cognition. available from <<http://okwd.uk/bAt>> [3 March 2016]
- Noy, C. (2008) 'Sampling Knowledge: The Hermeneutics of Snowball Sampling in Qualitative Research'. *International Journal of Social Research Methodology* 11 (4), 327–344. doi:10.1080/13645570701401305
- Oakley, A. (1998) 'Gender, Methodology and People's Ways of Knowing: Some Problems with Feminism and the Paradigm Debate in Social Science'. *Sociology* 32 (4), 707–731. doi:10.1177/0038038598032004005
- Office for National Statistics (2010) *Standard Occupational Classification 2010: Volume 3, The National Statistics Socio-Economic Classification: (Rebased on the SOC2010) User Manual* [online] Basingstoke: Palgrave Macmillan. available from <<http://goo.gl/FOMmbp>> [5 June 2014]
- Office for National Statistics (2011a) *Output Areas (OAs)* [online] available from <<http://goo.gl/3tMUnc>> [12 June 2014]
- Office for National Statistics (2011b) *Super Output Areas (SOAs)* [online] available from <<http://goo.gl/OHLIYm>> [12 June 2014]
- Office for National Statistics (2011c) *2011 Census: Aggregate Data (England and Wales)* [online] Colchester: UK Data Service Census Support. available from <<http://infuse.mimas.ac.uk>> [1 August 2014]
- Office for National Statistics (2013a) *Using Indices of Deprivation in the United Kingdom: Guidance Paper* [online] ONS. available from <<http://goo.gl/rA2oqg>> [6 June 2014]
- Office for National Statistics (2013b) *A Century of Home Ownership and Renting in England and Wales* [online] available from <<http://goo.gl/m4K8pT>> [6 June 2014]

- O'Flynn, J., Buick, F., Blackman, D., and Halligan, J. (2011) 'You Win Some, You Lose Some: Experiments with Joined-Up Government'. *International Journal of Public Administration* 34 (4), 244–254. doi:10.1080/01900692.2010.540703
- Oliver, D.G., Serovich, J.M., and Mason, T.L. (2005) 'Constraints and Opportunities with Interview Transcription: Towards Reflection in Qualitative Research'. *Social Forces* 84 (2), 1273–1289
- O'Mara-Eves, A., Brunton, G., McDaid, D., Oliver, S., Kavanagh, J., Jamal, F., Matosevic, T., Harden, A., and Thomas, J. (2013) 'Community Engagement to Reduce Inequalities in Health: A Systematic Review, Meta-Analysis and Economic Analysis'. *Public Health Research* 1 (4). doi:10.3310/phr01040
- Oxford University Press (2016) *Engagement - Definition of Engagement in English* [online] available from <<https://en.oxforddictionaries.com/definition/engagement>> [19 October 2016]
- Parsons, W. (2002) 'From Muddling through to Muddling up - Evidence Based Policy Making and the Modernisation of British Government'. *Public Policy and Administration* 17 (3), 43–60. doi:10.1177/095207670201700304
- Pawson, R. and Bellamy, J.L. (2006) 'Realist Synthesis: An Explanatory Focus for Systematic Review'. in *Moving beyond Effectiveness in Evidence Synthesis: Methodological Issues in the Synthesis of Diverse Sources of Evidence* [online] ed. by Popay, J. London: National Institute for Health and Clinical Excellence, 83–93. available from <<http://goo.gl/9ebsKL>> [28 November 2013]
- Pearson, C. (2014) 'The Coventry Story of Regeneration in an Age of Austerity: A Practitioner's Perspective'. *Journal of Urban Regeneration & Renewal* 7 (2), 171–177
- Penchansky, R. and Thomas, J.W. (1981) 'The Concept of Access: Definition and Relationship to Consumer Satisfaction'. *Medical Care* 19 (2), 127–140. doi:10.1097/00005650-198102000-00001
- Police and Crime Act (2017, c.3) London: TSO
- Potter, G. (2000) *The Philosophy of Social Science: New Perspectives*. Harlow: Pearson Education
- Powell, M. (2011) 'The Policy Process'. in *Evidence, Policy and Practice: Critical Perspectives in Health and Social Care*. ed. by Glasby, J. Bristol: Policy Press, 11–30
- Pretty, J.N. (1995) 'Participatory Learning for Sustainable Agriculture'. *World Development* 23 (8), 1247–1263. doi:10.1016/0305-750X(95)00046-F
- QSR International (2012) *NVivo 10 Help* [online] available from <<http://okwd.uk/rmV>> [14 July 2013]
- Qu, S.Q. and Dumay, J. (2011) 'The Qualitative Research Interview'. *Qualitative Research in Accounting & Management* 8 (3), 238–264. doi:10.1108/11766091111162070
- Randle, A. and Kippin, H. (2014) *Managing Demand: Building Future Public Services* [online] London: The RSA. available from <<http://goo.gl/mo4Uox>> [13 March 2015]
- Richardson, L. and St. Pierre, E.A. (2005) 'Writing: A Method of Inquiry'. in *The Sage Handbook of Qualitative Research*. 3rd edn. ed. by Denzin, N.K. and Lincoln, Y.S. London: Sage Publications Ltd, 959–978
- Rickford, A. (2001) 'The Effect of Cultural Congruence and Higher Order Questioning on the Reading Enjoyment and Comprehension of Ethnic Minority Students'. *Journal of Education for Students Placed at Risk (JESPAR)* 6 (4), 357–387. doi:10.1207/S15327671ESPR0604_4

- Ringnér, M. (2008) 'What Is Principal Component Analysis?' *Nature Biotechnology* 26 (3), 303–304. doi:10.1038/nbt0308-303
- Ritchie, J., Lewis, J., and Elam, G. (2003) 'Designing and Selecting Samples'. in *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. ed. by Ritchie, J. and Lewis, J. London: SAGE Publications Ltd, 77–108
- Robinson, W. (1950) 'Ecological Correlations and the Behavior of Individuals'. *American Sociological Review* 15 (3), 351–357. doi:10.2307/2087176
- Roddy, E., Antoniuk, M., Britton, J., Molyneux, A., and Lewis, S. (2006) 'Barriers and Motivators to Gaining Access to Smoking Cessation Services amongst Deprived Smokers – a Qualitative Study'. *BMC Health Services Research* 6, 147. doi:10.1186/1472-6963-6-147
- Rogerson, P.A. (2006) *Statistical Methods for Geography: A Student's Guide*. 2nd edn. London: SAGE
- Rowe, M. (2012) 'Going Back to the Street: Revisiting Lipsky's Street-Level Bureaucracy'. *Teaching Public Administration* 30 (1), 10–18. doi:10.1177/0144739411435439
- Rozin, P. and Royzman, E.B. (2001) 'Negativity Bias, Negativity Dominance, and Contagion'. *Personality & Social Psychology Review* 5 (4), 296–320. doi:10.1207/S15327957PSPR0504_2
- Saldaña, J. (2016) *The Coding Manual for Qualitative Researchers*. 3rd edn. London: Sage Publications Ltd
- Sandelowski, M. (1994) 'Focus on Qualitative Methods: Notes on Transcription'. *Research in Nursing & Health* 17 (4), 311–314. doi:10.1002/nur.4770170410
- Sandelowski, M., Voils, C.I., Leeman, J., and Crandell, J.L. (2012) 'Mapping the Mixed Methods - Mixed Research Synthesis Terrain'. *Journal of Mixed Methods Research* 6 (4), 317–331. doi:10.1177/1558689811427913
- Saunders, M.N.K., Dietz, G., and Thornhill, A. (2014) 'Trust and Distrust: Polar Opposites, or Independent but Co-Existing?' *Human Relations* 67 (6), 639–665. doi:10.1177/0018726713500831
- Schein, E.H. (1996) 'Culture: The Missing Concept in Organization Studies'. *Administrative Science Quarterly* 41 (2), 229–240. doi:10.2307/2393715
- Schim, S.M. and Doorenbos, A.Z. (2010) 'A Three-Dimensional Model of Cultural Congruence: Framework for Intervention'. *Journal of Social Work in End-of-Life & Palliative Care* 6 (3–4), 256–270. doi:10.1080/15524256.2010.529023
- Schön, D.A. (1983) *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books
- Schutz, A. (1962) *Collected Papers I: The Problem of Social Reality*. The Hague: Martinus Nijhof
- Schwartz-Shea, P. and Yanow, D. (2012) *Interpretive Research Design: Concepts and Processes*. Routledge series on interpretive methods. New York: Routledge
- Scruton, P. (2004) 'Speaking Truth to Power: Experiencing Critical Research'. in *Researchers and Their 'Subjects': Ethics, Power, Knowledge and Consent*. ed. by Smyth, M. and Williamson, E. Bristol: Policy Press

- Shaw, K., Frazer, S., Robbins, C., Smith, I., Fuller, C., Geddes, M., Johnstone, C., and Nunn, A. (2004) *Liveability in NDC Areas: Findings from Six Case Studies*. NDC Research Report 22. Sheffield Hallam University
- Shenton, A.K. (2004) 'Strategies for Ensuring Trustworthiness in Qualitative Research Projects'. *Education for Information* 22 (2), 63–76
- Shier, H. (2001) 'Pathways to Participation: Openings, Opportunities and Obligations'. *Children & Society* 15 (2), 107–117. doi:10.1002/CHI.617
- Simon, H.A. (1957) *Administrative Behaviour: A Study of Decision-Making Processes in Administrative Organizations*. 2nd edn. New York: Macmillan
- Sitkin, S.B. and Roth, N.L. (1993) 'Explaining the Limited Effectiveness of Legalistic "Remedies" for Trust/Distrust'. *Organization Science* 4 (3), 367–392. doi:10.1287/orsc.4.3.367
- Sixsmith, J., Boneham, M., and Goldring, J.E. (2003) 'Accessing the Community: Gaining Insider Perspectives From the Outside'. *Qualitative Health Research* 13 (4), 578–589. doi:10.1177/1049732302250759
- Skogan, W.G. (2006) 'Asymmetry in the Impact of Encounters with Police'. *Policing and Society* 16 (2), 99–126. doi:10.1080/10439460600662098
- Slingsby, A., Dykes, J., and Wood, J. (2011) 'Exploring Uncertainty in Geodemographics with Interactive Graphics'. *IEEE Transactions on Visualization and Computer Graphics* 17 (12), 2545–2554. doi:10.1109/TVCG.2011.197
- Smith, A., Wasoff, F., and Jamieson, L. (2005) *Solo Living across the Adult Lifecourse* [online] Research Briefing 20. Edinburgh: Centre for Research on Families and Relationships. available from <<http://goo.gl/m4hCvf>> [23 July 2015]
- Smith, I., Lepine, E., and Taylor, M. (2007) *Disadvantaged by Where You Live?* Bristol: Policy Press
- Smith, J. and Clark, A. (2013) *The Post Incident Research Programme—a Qualitative Study into Risk, and Perceived Risk, within the Context of Accidental Dwelling Fires*. in 'Fire Related Research and Developments Conference (RE13)'. held 14 November 2013 at Fire Services College, Moreton-in-Marsh, UK
- Smith, R., Wright, M., and Solanki, A. (2008) *Analysis of Fire and Rescue Service Performance and Outcomes with Reference to Population Socio-Demographics* [online] Fire Research Series 9/2008. London: DCLG. available from <<http://goo.gl/mr7gNg>> [7 November 2013]
- Soss, J. (2006) 'Talking Our Way to Meaningful Explanations: A Practice-Centered View of Interviewing for Interpretive Research'. in *Interpretation and Method: Empirical Research Methods and the Interpretive Turn*. ed. by Yanow, D. and Schwartz-Shea, P. London: M. E. Sharpe, 127–149
- South Yorkshire Fire and Rescue (2016) 'Midwives to Provide Fire Safety to Mums-to-Be'. [4 April 2016] available from <<http://okwd.uk/Ugd>> [17 November 2016]
- Spencer, L., Ritchie, J., Lewis, J., and Dillon, L. (2003) *Quality in Qualitative Evaluation: A Framework for Assessing Research Evidence* [online] London: Cabinet Office. available from <<http://goo.gl/LWiewp>> [4 December 2012]

- Spencer, N. (2015a) 'New "Safe and Well" Visits'. [2 November 2015] available from <<https://okwd.uk/XTe>> [16 November 2016]
- Spencer, N. (2015b) 'Telecare Pilot Scheme'. [14 September 2015] available from <<https://okwd.uk/Rvh>> [30 May 2017]
- Spencer, N. (2015c) 'Marmot Partnership Award'. [10 September 2015] available from <<https://okwd.uk/5Rv>> [30 May 2017]
- Staite, C. (2012) *A New Model for Public Services?* [online] Birmingham: INLOGOV, University of Birmingham. available from <<http://goo.gl/S3GJLh>> [25 February 2013]
- Stanko, E.A., Jackson, J., Bradford, B., and Hohl, K. (2012) 'A Golden Thread, a Presence amongst Uniforms, and a Good Deal of Data: Studying Public Confidence in the London Metropolitan Police'. *Policing & Society* 22 (3), 317–331. doi:10.1080/10439463.2012.671825
- Sterman, J.D. (2006) 'Learning from Evidence in a Complex World'. *American Journal of Public Health* 96 (3), 505–514. doi:10.2105/AJPH.2005.066043
- Stoker, G. (2006) 'Public Value Management A New Narrative for Networked Governance?' *The American Review of Public Administration* 36 (1), 41–57. doi:10.1177/0275074005282583
- Sullivan, H.C. and Skelcher, C. (2002) *Working across Boundaries: Collaboration in Public Services*. Basingstoke: Palgrave Macmillan
- Sunshine, J. and Tyler, T.R. (2003) 'The Role of Procedural Justice and Legitimacy in Shaping Public Support for Policing'. *Law & Society Review* 37 (3), 513–548. doi:10.1111/1540-5893.3703002
- Taylor, M. (2007) 'Community Participation in the Real World: Opportunities and Pitfalls in New Governance Spaces'. *Urban Studies* 44 (2), 297–317. doi:10.1080/00420980601074987
- Taylor, M. (2011) *Public Policy in the Community*. 2nd edn. Basingstoke: Palgrave Macmillan
- Taylor, M. and Wilson, M. (2006) *The Importance of the Neighbourhood: Tackling the Implementation Gap* [online] York: Joseph Rowntree Foundation. available from <<https://okwd.uk/pe5>> [12 September 2016]
- Taylor, M.J., Higgins, E., Lisboa, P.J.G., and Kwasnica, V. (2012) 'An Exploration of Causal Factors in Unintentional Dwelling Fires'. *Risk Management: An International Journal* 14 (2), 109–125. doi:10.1057/rm.2011.9
- Thomas, D.R. (2006) 'A General Inductive Approach for Analyzing Qualitative Evaluation Data'. *American Journal of Evaluation* 27 (2), 237–246. doi:10.1177/1098214005283748
- Thurnell-Read, T. and Parker, A. (2008) 'Men, Masculinities and Firefighting: Occupational Identity, Shop-Floor Culture and Organisational Change'. *Emotion, Space and Society* 1 (2), 127–134. doi:10.1016/j.emospa.2009.03.001
- Townsend, P., Beattie, A., and Phillimore, P. (1988) *Health and Deprivation: Inequality and the North*. London: Croom Helm
- University of Salford Manchester and Greater Manchester Fire and Rescue Service (2014) *Post Incident Research Programme: Summary Document* [online] Manchester: GMFRS. available from <<http://goo.gl/jn71nt>> [17 September 2014]

- Van de Walle, S. and Six, F. (2014) 'Trust and Distrust as Distinct Concepts: Why Studying Distrust in Institutions Is Important'. *Journal of Comparative Policy Analysis: Research and Practice* 16 (2), 158–174. doi:10.1080/13876988.2013.785146
- Vickers, D. and Rees, P. (2006) 'Introducing the Area Classification of Output Areas'. *Population Trends* 125, 15–29
- Voas, D. and Williamson, P. (2001) 'The Diversity of Diversity: A Critique of Geodemographic Classification'. *Area* 33 (1), 63. doi:10.1111/1475-4762.00009
- Wainwright, M. and Russell, A. (2010) 'Using NVivo Audio-Coding: Practical, Sensorial and Epistemological Considerations'. *Social Research Update* [online] (60). available from <<http://sru.soc.surrey.ac.uk/SRU60.pdf>> [18 August 2015]
- Warwickshire Observatory (2005) *The Townsend Index of Disadvantage & Deprivation* [online] Warwick: Warwickshire Observatory. available from <<http://goo.gl/EaMAox>> [20 November 2013]
- Watt, P. (2006) *Measuring Efficiency Gains in Local Government That Derive from Improved Service Quality*. Birmingham: INLOGOV, University of Birmingham
- Watts, S. and Stenner, P. (2012) *Doing Q Methodological Research: Theory, Method and Interpretation*. London: Sage
- Wells, P. (2007) 'New Labour and Evidence Based Policy Making: 1997-2007'. *People, Place and Policy Online* 1 (1), 22–29. doi:10.3351/ppp.0001.0001.0004
- West Midlands Fire and Rescue Authority (2013) *Community Safety Strategy 2013-2016* [online] Birmingham: WMFRA. available from <<http://goo.gl/EmckT5>> [11 October 2013]
- West Midlands Fire Service (2016a) 'Is Firefighting Right for You?' [2016] available from <<https://okwd.uk/x6c>> [17 November 2016]
- West Midlands Fire Service (2016b) 'Health Commissioning'. [2016] available from <<https://okwd.uk/nAC>> [30 May 2017]
- West Midlands Police (2015) *Your Local Police - Coventry* [online] available from <<https://okwd.uk/GpY>> [12 September 2016]
- Wiles, R., Charles, V., Crow, G., and Heath, S. (2006) 'Researching Researchers: Lessons for Research Ethics'. *Qualitative Research* 6 (3), 283–299. doi:10.1177/1468794106065004
- Wiles, R., Crow, G., Heath, S., and Charles, V. (2008) 'The Management of Confidentiality and Anonymity in Social Research'. *International Journal of Social Research Methodology* 11 (5), 417–428. doi:10.1080/13645570701622231
- Wiles, R., Heath, S., Crow, G., and Charles, V. (2015) *Informed Consent in Social Research: A Literature Review* [online] NCRM Methods Review Papers NCRM/001. ESRC National Centre of Research Methods. available from <<http://okwd.uk/xZA>> [30 March 2015]
- Williams, M. (2001) 'In Whom We Trust: Group Membership as an Affective Context for Trust Development'. *Academy of Management Review* 26 (3), 377–396. doi:10.5465/AMR.2001.4845794
- Williams, P. (2002) 'The Competent Boundary Spanner'. *Public Administration* 80 (1), 103. doi:10.1111/1467-9299.00296

- Winkworth, G., McArthur, M., Layton, M., Thomson, L., and Wilson, F. (2010) 'Opportunities Lost—Why Some Parents of Young Children Are Not Well-Connected to the Service Systems Designed to Assist Them'. *Australian Social Work* 63 (4), 431–444. doi:10.1080/0312407X.2010.508170
- WM Housing Group (2015) *About Us* [online] available from <<http://www.wmhousing.co.uk/corporate/about-us>> [9 September 2016]
- Wolcott, H.F. (2001) *Writing up Qualitative Research*. 2nd edn. London: Sage Publications
- Wolfinger, N.H. (2002) 'On Writing Fieldnotes: Collection Strategies and Background Expectancies'. *Qualitative Research* 2 (1), 85–93. doi:10.1177/1468794102002001640
- Wood, J.M., Tataryn, D.J., and Gorsuch, R.L. (1996) 'Effects of Under- and Overextraction on Principal Axis Factor Analysis with Varimax Rotation'. *Psychological Methods* 1 (4), 354–365. doi:10.1037/1082-989X.1.4.354
- Yanow, D. (1996) *How Does a Policy Mean? Interpreting Policy and Organizational Actions*. Washington, D.C: Georgetown University Press
- Yanow, D. (2000) *Conducting Interpretive Policy Analysis*. Qualitative research methods 47. London: Sage Publications
- Yanow, D. (2007) 'Qualitative-Interpretive Methods in Policy Research'. in *Handbook of Public Policy Analysis: Theory, Politics and Methods*. ed. by Fischer, F., Miller, G.J., and Sidney, M.S. Public Administration and Public Policy 125. Boca Raton: CRC Press, 405–415
- Yin, R.K. (2003) *Case Study Research: Design and Methods*. 3rd edn. Applied Social Research Methods Series Volume 5. London: Sage Publications

Glossary

<i>Term</i>	<i>Meaning</i>
ADF	Accidental dwelling fire.
ADF index	An index giving an indication of the rate of accidental dwelling fire (ADF) in an area, expressed as a percentage of the rate that would be expected if ADF were distributed evenly. An index of 100 represents the expected rate, an index of 200 indicates that an area experiences twice the expected rate. See section 4.2.2 .
CAQDAS	Computer Assisted Qualitative Data Analysis System—a computer system enabling the analysis of qualitative data.
CIC	Community Interest Company.
Community Interest Company	A type of limited company which exists to benefit the community. A CIC's assets are locked in to its social objectives. CICs are regulated by the Office of the Regulator of Community Interest Companies.
DCLG	Department for Communities and Local Government, a UK government department. Until January 2016 the DCLG was the department responsible for fire and rescue policy. The responsibility then transferred to the Home Office.
FRS	Fire and rescue service.
GIS	Geographical Information Systems—computer systems enabling the storing and retrieval of data with an explicitly spatial element.
HFSC	Home Fire Safety Check.
Home Fire Safety Check	A detailed, individualised assessment of fire safety in the home, carried out during a visit, usually by FRS staff. See 10.2 .
IMD	Index of Multiple Deprivation—an index published by the DCLG which accounts for multiple aspects of deprivation to give a relative indication of the level of deprivation experienced by an area. The IMD is ordinal, not scalar.
IRS	Incident Reporting System. An standardised, electronic system by which FRSs report incidents attended to central government.
LSOA	Lower Super Output Area—a geographic area used for aggregating census data, generally having a population of between 1,000 and 3,000. Made up by combining Output Areas (OAs).
MHCT	Moat House Community Trust. A third sector organisation that is the successor body to the NDC in Wood End, Henley Green and Manor Farm. MHCT organise a range of community events.
NDC	New Deal for Communities—a major urban regeneration area based initiative implemented by the New Labour administration. In the area considered in this thesis the NDC programme brought £54m of investment in the ten years from 1999.

<i>Term</i>	<i>Meaning</i>
NS-SEC	National Statistics Socio-economic Classification. A system used in the UK for classifying an individual's socio-economic position according to their occupation.
OA	Output area. The basic unit for census output in England and Wales, aiming to cover around 125 households.
OAC	Output Area Classification. A geodemographic classification based on census data.
PCA	Principal component analysis. A statistical technique for simplifying complex data sets (see section 4.5).
PCC	Police and Crime Commissioner. An elected individual responsible for ensuring an efficient policing service is in place and for holding the police force to account. PCCs replaced Police Authorities in 2012.
PCSO	Police Community Support Officer. A uniformed but civilian member of the Police support staff.
QGIS	An open-source GIS software programme used for some of the analysis in this study.
Registered Social Landlord	A not-for-profit organisation providing rented housing and registered and regulated by the Homes and Communities Agency.
RSL	Registered Social Landlord.
Safe and Well visit	An extension of the HFSC being carried out by some FRSSs. Safe and Well visits look at a range of health and lifestyle factors beyond simply fire (see 10.2).
SEH	Survey of English Housing.
Watch	A group of fire fighters who routinely work together, with a shared shift pattern.
WEHM	The acronym used for the area covered by the NDC project in north east Coventry. WEHM stands for Wood End, Henley Green, Deedmore and Manor Farm, the four neighbourhoods included.
WMFS	West Midlands Fire Service—the fire and rescue service serving the former West Midlands metropolitan county.

Appendices

List of Appendices

Appendix A: Ethics approvals	262
Appendix B: Article in the <i>Fire Safety Journal</i>	269
Appendix C: Ethnic groups included in the quantitative analysis	277
Appendix D: Recruitment leaflet	278
Appendix E: Initial topic list	279
Appendix F: Summary fieldwork log	280
Appendix G: Verbal consent prompt sheet	284
Appendix H: Post hoc participant information sheet	286
Appendix I: Code groups used for focused review	287

Appendix A: Ethics approvals

The following ethics documents are included in the next pages:

- Ethics review feedback form, application P20630: Secondary analysis of aggregated data
- Certificate of Ethical Approval, application P20630: Secondary analysis of aggregated data
- Ethics review feedback form, application P27259: Fire Service: scoping meetings
- Certificate of Ethical Approval, application P27259: Fire Service: scoping meetings
- Ethics review feedback form, application P32851: Community perceptions of the Fire Service
- Certificate of Ethical Approval, application P32851: Community perceptions of the Fire Service

REGISTRY RESEARCH UNIT
ETHICS REVIEW FEEDBACK FORM

(Review feedback should be completed within 10 working days)

Name of applicant: Christopher Hastie.....

Faculty/School/Department: [Business, Environment and Society] Human Resource Management

Research project title: Fire Service: secondary analysis of aggregated data

Comments by the reviewer

1. Evaluation of the ethics of the proposal:

2. Evaluation of the participant information sheet and consent form:

3. Recommendation:

(Please indicate as appropriate and advise on any conditions. If there any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer).

<input type="checkbox"/>	Approved - no conditions attached
<input type="checkbox"/>	Approved with minor conditions (no need to re-submit)
<input type="checkbox"/>	Conditional upon the following – please use additional sheets if necessary (please re-submit application)
<input type="checkbox"/>	Rejected for the following reason(s) – please use other side if necessary
<input checked="" type="checkbox"/>	Not required

Name of reviewer: Anonymous.....

Date: 25/01/2014.....



Certificate of Ethical Approval

Applicant:

Christopher Hastie

Project Title:

Fire Service: secondary analysis of aggregated data

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Low Risk

Date of approval:

25 January 2014

Project Reference Number:

P20630

REGISTRY RESEARCH UNIT
ETHICS REVIEW FEEDBACK FORM

(Review feedback should be completed within 10 working days)

Name of applicant: Christopher Hastie.....

Faculty/School/Department: [Business, Environment and Society] Human Resource Management

Research project title: Fire Service: scoping meetings

Comments by the reviewer

1. Evaluation of the ethics of the proposal:

The researcher has considered the potential ethical issues involved in these scoping interviews satisfactorily.

2. Evaluation of the participant information sheet and consent form:

Both the PIS and consent form have been revised satisfactorily.

3. Recommendation:

(Please indicate as appropriate and advise on any conditions. If there any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer).

X	Approved - no conditions attached
<input type="checkbox"/>	Approved with minor conditions (no need to re-submit)
<input type="checkbox"/>	Conditional upon the following – please use additional sheets if necessary (please re-submit application)
<input type="checkbox"/>	Rejected for the following reason(s) – please use other side if necessary
<input type="checkbox"/>	Not required

Name of reviewer: Anonymous.....

Date: 06/11/2014.....



Certificate of Ethical Approval

Applicant:

Christopher Hastie

Project Title:

Fire Service: scoping meetings

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

06 November 2014

Project Reference Number:

P27259

REGISTRY RESEARCH UNIT
ETHICS REVIEW FEEDBACK FORM

(Review feedback should be completed within 10 working days)

Name of applicant: Christopher Hastie

Faculty/School/Department: [University Research Centre] Centre for Trust, Peace and Social Relations

Research project title: Community perceptions of the Fire Service

Comments by the reviewer

1. Evaluation of the ethics of the proposal:

Thank you for responding to the comments. You have a really well thought out application and we were especially impressed with your data management plan and your verbal consent. Would you be willing to anonymise these documents and allow the ethics committee to upload as templates/examples to the Sharepoint site? If so, could you please email James Malcolm? Thank you!

2. Evaluation of the participant information sheet and consent form:

n/a

3. Recommendation:

(Please indicate as appropriate and advise on any conditions. If there any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer).

X	Approved - no conditions attached
<input type="checkbox"/>	Approved with minor conditions (no need to re-submit)
<input type="checkbox"/>	Conditional upon the following – please use additional sheets if necessary (please re-submit application)
<input type="checkbox"/>	Rejected for the following reason(s) – please use other side if necessary
<input type="checkbox"/>	Not required

Name of reviewer: Anonymous.....

Date: 17/06/2015.....



Certificate of Ethical Approval

Applicant:

Christopher Hastie

Project Title:

Community perceptions of the Fire Service

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

17 June 2015

Project Reference Number:

P32851

Appendix B: Article in the *Fire Safety Journal*

The article in the following pages is based on the analysis described in Chapter 4 of this thesis. It was accepted for publication in the *Fire Safety Journal* on 16 July 2016, first appearing online on 28 July 2016. The full reference to the published article is:

Hastie, C. and Searle, R. (2016) 'Socio-Economic and Demographic Predictors of Accidental Dwelling Fire Rates'. *Fire Safety Journal* 84, 50–56. [doi:10.1016/j.firesaf.2016.07.002](https://doi.org/10.1016/j.firesaf.2016.07.002)

Statement of authorship

Chris Hastie conceived the approach to analysis, carried out all the analysis, drafted the article and revised it following reviewer comments.

Professor Rosalind Searle initially negotiated with the West Midlands Fire Service to gain access to their data prior to this project commencing. She provided valuable feedback on the structure of the first draft of the article, and on the revisions prepared following reviewer comments.

Professor Tim Sparks provided assistance with some of the statistical techniques and made comments on the draft article. Professor Spark's help is gratefully acknowledged, but he declined to be listed as an author.



Contents lists available at ScienceDirect

Fire Safety Journal

journal homepage: www.elsevier.com/locate/firesaf

Socio-economic and demographic predictors of accidental dwelling fire rates



Chris Hastie*, Rosalind Searle

Centre for Trust, Peace and Social Relations, Coventry University, Priory Street, Coventry CV1 5PB, United Kingdom

ARTICLE INFO

Article history:

Received 25 January 2016

Received in revised form

24 May 2016

Accepted 16 July 2016

Keywords:

Inequality

Principal component analysis

Linear regression

Race

Living alone

Unemployment

Fire

Prevention

ABSTRACT

Despite the considerable reduction in rates of fire that have been seen in the UK in recent years analysis of three years of service data from a large UK fire service reveals that there continue to be striking inequalities in the way in which fire is distributed through society. The use of principal component analysis (PCA) and ordinary least squares regression enabled the development of a model that explains around one third of the variance in rates of fire at small neighbourhood level using just three predictor variables: the proportion of residents identifying as Black, the proportion of residents who have not worked for more than five years or have never worked, and the proportion of single person households where the resident is aged under 65. The value of PCA in addressing problems of collinearity between potential predictor variables is particularly highlighted. The findings serve to update understanding of the distribution of fire in the light of the ongoing reduction in fire rates of recent years. They will help fire services to target fire safety interventions to those neighbourhoods and communities where they are most needed and have the greatest potential to bring about reductions in the rate of fire.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Dwelling fires are a major cause of injury and economic loss. The UK government estimated the total cost of fire in England in 2008 to be £8.3bn (\$12.7bn) [1]. Some two thirds of building fires in Britain in 2011–12 were dwelling fires, and these accounted for 76% of the 380 fire related deaths [2]. Over the same period, dwelling fires further accounted for 79% (8900) of all non-fatal fire casualties, with the vast majority of such fires (85%) attributed to accidental causes.

This paper details an analysis of fire service data which sought to establish how accidental dwelling fires are distributed through different sectors of society and to identify socio-economic and demographic factors which are associated with higher rates of dwelling fire. Drawing on existing literature, potential predictor variables are reviewed and issues involved in their operationalisation are discussed. A major problem facing those analysing the distribution of fire is the potential for collinearity between some of these predictor variables. The paper provides a useful example of the value of principal component analysis in addressing such collinearity. It further helps to update understanding of the unequal distribution of fire in the light of the ongoing reduction in fire rates, as well as identifying an important

variable that has received little attention in the past, the number of single person households aged under 65.

1.1. The unequal distribution of dwelling fires

It is well established that dwelling fires are not distributed evenly through society, but that certain sectors experience disproportionate numbers of incidents. An earlier review of much of literature related to this topic found considerable evidence of a social gradient in the distribution of fire, with poverty and deprivation clearly linked to increased numbers of incidents [3]. However, many of the existing studies are now relatively old, and even some recent studies rely on data that dates from over a decade ago e.g., [4]. At the same time, the incidence of fire is changing rapidly, with the number of building fires in the UK falling by 39% in the decade to 2012 [5]. Against this changing landscape, if fire services are to target fire safety interventions effectively it is important to establish whether or not the social gradient in exposure to dwelling fires continues to exist. This paper addresses that need by investigating the distribution of accidental dwelling fires resulting in the attendance of fire fighters, using service data from one English fire service, the West Midlands Fire Service (WMFS). As well as describing a method that can be used for analysis of fire incident data in other areas, the paper provides a valuable and up to date insight into the distribution of fire in one major urban area. The findings can reasonably be transferred to areas with a similar character, and with that in mind it is useful to commence by

* Corresponding author.

E-mail address: hastiec@coventry.ac.uk (C. Hastie).

briefly describing the character of the West Midlands.

1.2. The West Midlands county

The WMFS serves the area of the former West Midlands Metropolitan County in England and although that county no longer exists it is useful in the context of discussing the WMFS to refer to the West Midlands county, an area which should not be confused with the geographically larger West Midlands region.

The county covers an almost entirely urban area of 902 km² (348 miles²) in central England and in 2011 was home to 2.74 million people [6]. It takes in the cities of Birmingham, Coventry and Wolverhampton, along with the metropolitan boroughs of Dudley, Sandwell, Solihull and Walsall, and consists of two conurbations, the larger of which is the second largest urban area in England [7]. The county demonstrates considerable diversity in both economic and demographic terms. Three of its seven local authorities have more than half their population living in the most deprived neighbourhoods in England, whilst Solihull (the only local authority in the county with substantial rural areas) is amongst the least deprived areas in England [8].

Overall, 66% of the county's population considered themselves White British at the 2011 census, with 6.7% Indian, 7.3% Pakistani, 1.8% Bangladeshi, and 6% Black African or Caribbean [6]. A more recent development, following the enlargement of the EU, is the growing number of migrant workers from eastern Europe [9]. As of 2011 the greatest number of these people were from Poland [10].

2. Methods

2.1. Overview

The study was an area based, or ecological, examination of rates of accidental dwelling fire (ADF) across the area served by the West Midlands Fire Service (WMFS). WMFS provided anonymised data on incidents of ADF attended by them between September 2010 and August 2013. These data were analysed with reference to a range of socio-economic and demographic data available from other sources, principally from the UK census of 2011 [6] and the Department of Communities and Local Government's indices of deprivation for 2010 [11].

Analysis was undertaken using SPSS 22 [12] and began with an exploration of correlation between rates of accidental dwelling fire and each of the potential predictor variables. As high levels of collinearity were found between many of the predictor variables used, principal component analysis was then undertaken to identify the main components explaining the difference between areas. Suitable variables were selected that loaded heavily on the identified components and these were used in ordinary least squares regression analysis.

2.2. Choice of geography

When undertaking an area based study such as this the size of the unit of analysis is of some importance. Larger areas are likely to be more heterogeneous and their use will mask the considerable internal variation. On the other hand, small areas, whilst exhibiting less heterogeneity, may encounter too few fire incidents to permit useful analysis, or a single incident may represent a very large proportion, giving rise to extreme outliers in the data. This may result in associations appearing stronger at larger area levels as the impact of outliers is reduced. For this study the Lower Layer Super Output Area (LSOA) was chosen as the unit of analysis as it is the smallest unit at which meaningful numbers of ADF incidents

occur. The LSOA is a census unit used in England and Wales and defined by the Office for National Statistics. The boundaries of LSOAs are drawn up after the census is completed in order to allow census data to be used to define areas that were relatively homogeneous at the time of the census, with a population of between 1 000 and 3 000 people [13]. The mean LSOA population in this study was 1628 ($n=1680$, $s=298$), with a mean of 3.17 ADF incidents per LSOA ($n=1680$, $s=2.68$) across the three year period (September 2010 to August 2013) from which incident data were drawn.

2.3. Representing rates of fire

The WMFS incident data were first aggregated to provide counts of ADF incidents for each LSOA for the period September 2010 to August 2013, using the open source QGIS 2.0 geographical information system [14]. An index of ADF was then calculated for each LSOA using an approach adapted from Corcoran et al. [4]. This index represents the rate of accidental dwelling fire per household expressed as a percentage of the rate that would be expected were incidents evenly distributed.

The use of the number of households merits some further comment as it differs from Corcoran et al.'s [4] approach, which employed household population (i.e. total population living in households). In considering the rate of incidents an appropriate choice of denominator is the population at risk. In the case of accidental dwelling fire this is, strictly speaking, the number of dwellings in an area rather than the number of people. There is a very close relationship between dwellings and households in the UK census data, with the former derived from the latter. The main difference in figures comes from unoccupied dwellings, which count as a dwelling but not as a household. As numbers of households were already included within the dataset as the denominator for several other statistics (see Section 2.4) it was decided to use this figure as the basis for calculating rates of fire. Given the close relationship between the two figures the choice is unlikely to make a material difference to the study. On average the figures differ from each other by 3.1% and Pearson's correlation coefficient between them is 0.991.

A further point of note is that ideally the nominator and denominator should match, so the number of dwellings affected by fire should be used to calculate a rate, rather than the number of fire incidents affecting dwellings. Data relating to the number of dwellings affected were, however, not available. Most recorded incidents affect only a single dwelling and whilst it is possible that some affected more than one dwelling these are likely to be relatively few and to have little impact on results.

2.4. Choice of predictor variables

In surveying the existing literature to inform the choice of potential predictor variables, Jennings' [3] recent review was supplemented by additional studies drawn from the public health literature (which was out of the scope of Jennings' review), together with a number of reports from the UK government and grey literature.¹ As there is some evidence that factors associated with fire are context sensitive (e.g. Corcoran et al. report differences between Wales and Australia [15], and some marked differences have been found even between regions of the UK [16]) the focus was on UK based studies as they more closely reflect the context of this study.

The influence of poverty and social deprivation was a

¹ Literature such as reports and working papers produced and distributed outside of the traditional academic channels of peer-reviewed journal and books.

Table 1
Summary of census variables used.

Variable	Denominator
Population	
Number of households	
Population density	
Lone parents households	Households
Households with social landlords	Households
People with poor or no English	Population aged 3 years or over
People for whom English is not their first language	Population aged 3 years or over
Ethnic groups	Population
People who have never worked	Population aged 16–74
People who have not worked for over 10 years	Population aged 16–74
People who have not worked for over 5 years	Population aged 16–74
People with no qualification	Population aged 16 years or over
People without at least a level 2 qualification	Population aged 16 years or over
Households experiencing 0, 1, 2, 3 or 4 domains of deprivation	Households
One person households	Households
One person households, aged 65 or over	Households
One person households, aged under 65	Households
One person households, various age groups	Households
Overcrowded households (households with fewer bedrooms than needed)	Households
Households without central heating	Households
People who are limited a little or a lot by disability	Population
People whose health is bad or very bad	Population
People who were unemployed and seeking work in the week prior to the census	Population aged 16–74
People who were long term sick or disabled-economically inactive	Population aged 16–74

consistent finding [3,4], with poor housing quality [3,17], unemployment and lack of economic activity [16,18], and lower educational attainment [19] being aspects particularly noted. Household structure was identified in a number of studies, with lone parents [16] and adults living alone [16,20] both emerging as predictors. Age, though not necessarily associated with rates of fire incidents, has been reported as strongly linked to numbers of fire casualties, particularly in the public health literature [20–23]. Ethnicity has also been found to be associated with rates of fire [4,19], although it has been argued that this is the result of collinearity with poverty and deprivation [16].

Variables related to each of these factors were identified in data from the 2011 UK census. Census data were obtained showing counts of either people or households in each LSOA and for analysis purpose these were all converted to proportions. A summary of census variables used is shown in Table 1, which also indicates which denominator was used in converting counts to proportions.

2.4.1. Operationalising deprivation

Deprivation can be conceived of as a multi-dimensional concept which includes a range of different factors affecting an individual's opportunities and access to resources [24]. However, using multi-dimensional variables is potentially problematic when carrying out many statistical analyses, including principal component analysis and regression. There is a danger that changes in one dimension may be masked by changes in the opposite direction in another dimension. Furthermore, figures used in calculating the multi-dimensional variable may also be present in other variables, exacerbating problems of collinearity. For these reasons when carrying out the principal component and regression analysis only individual variables representing specific, distinct aspects of deprivation were used, rather than using multi-dimensional variables that seek to capture all aspects of deprivation.

For the correlation analysis, however, multi-dimensional variables were used, with two different approaches being employed to represent deprivation and capture its multiple elements. The first of these is a statistic published as part of the UK census that represents the number of households in each LSOA experiencing 0, 1, 2, 3 or 4 dimensions of deprivation. The dimensions used in calculating this variable are employment, education, health and disability, and housing. Notably, income is not considered directly in this statistic.

The second approach to representing the multi-dimensional nature of deprivation in the correlation analysis was the use of the indices of deprivation published by the UK Department of Communities and Local Government (DCLG), the most recent figures available at the time of analysis being from 2010. These indices assume deprivation to encompass a general lack of access to both resources and opportunities and for the 2010 release were built from 38 indicators covering seven broad domains: income; employment; health and disability; education, skills and training; barriers to housing; crime; and living environment. The index most commonly used, however, is the Index of Multiple Deprivation (IMD). The IMD combines values from all seven domains, applying different weights to each, in order to produce a composite indicator of the relative level of deprivation in an area [25].

The indices of deprivation have been widely used in the context of English policy making, but have a number of problems as far as statistical analysis is concerned. In addition to the general challenges of multi-dimensional variables already discussed, with some notable exceptions² the indices of deprivation are ordinal, not scalar. That is, if area A has an index twice that of area B it is possible to say that area A is more deprived than area B, but not that A is twice as deprived [26]. An important consequence of their ordinal nature is that the indices are not suitable for use with parametric statistical tests.

2.5. Correlation

To explore the relationship between the fire index and the range of potential predictor variables, two simple correlations, Pearson's r and Spearman's ρ , were calculated. Pearson's r was not calculated for those indices of deprivation that are ordinal rather than scalar (see Section 2.4.1).

2.6. Principal component analysis

Principal Component Analysis (PCA) was used to identify the important and unique components contributing to differences between LSOAs. Since the principal components identified in PCA are not related to each other it is also valuable in addressing problems of collinearity in predictor variables [27]. The identified components were then rotated using varimax rotation in an attempt to align real world variables to the components extracted. Varimax was chosen as it tends to ensure that each component has only a small number of variables with large loadings and many variables with small or zero loading [28] and is thus well suited to the present purpose.

The process of extracting useful results from the principal component analysis involved multiple iterations. Initially all the available predictor variables were included in the PCA, other than the multi-dimensional variables representing deprivation (see Section 2.4.1). Later iterations used some composite variables formed by combining related ethnic groups that had previously

² The domains of income and employment are scalar and each covers a single dimension.

been seen to load on the same component; in particular, Asian Pakistani and Asian Bangladeshi were combined (i.e. the two variables were summed into a single new variable), as were Black Caribbean, Black African and Black Other. White British was excluded because of its tendency to load negatively on any component against which another ethnic group loaded strongly.

Finally, smaller ethnic groups were excluded in later iterations, leaving Asian Pakistani and Bangladeshi, Asian Indian, Black, mixed Black/White and other White. This decision was taken on pragmatic grounds because including a large numbers of smaller groups tended to lead to poor convergence in the varimax rotation.

The assessment of how many components to extract was based on interpretation of the scree plot [29]. This is a somewhat subjective approach and varimax rotation is known to be sensitive to both over and under extraction [30]. The advice of Costello and Osborne [31] was followed, testing with one or two factors either side of the apparent point of inflection. To protect against factor splitting, in some iterations 12 dummy variables were added and populated using the SPSS function RV.UNIFORM(0,1), following the advice of Wood et al. [30].

2.7. Regression

Ordinary least squares regression analysis was undertaken with the ADF index as the criterion variable. The forced entry method was used as this approach leaves decisions on which variables to include to the investigator, rather than the software. As with the PCA, this process was iterative. The initial choice of predictor variables was based on the outcomes of the PCA. Subsequently, variables that had no significant impact upon the regression were removed; additional variables that had loaded highly in some of the PCA runs were introduced and tested; potential signs of collinearity were monitored, in particular the Variance Inflation Factor (VIF), and adjustments made where collinearity became evident. As a final check, because of the apparent lack of normality in the variables, bootstrapping was used to confirm results, using 5 000 samples and a confidence interval of 95%.

3. Results and discussion

3.1. Correlation

Due to the number of LSOAs considered ($n=1680$) the threshold for testing the significance of both Pearson's r and Spearman's ρ was extremely low, rendering significance a poor discriminator of the importance of identified correlations. Using a one-tailed test, only four of the predictors considered had correlations that were not significant at the 0.01 level, and of those one was significant at the 0.05 level. Accordingly a cut off for r of 0.4 has been adopted, as the lower end of the range considered to represent moderate correlation by Evans [32], and those predictors with an absolute value exceeding this level in either test are shown in Table 2. From these results it can be seen that three identifiable groups of factors emerged as being strongly positively associated with rates of ADF.

The first group of important factors concerns multiple aspects of deprivation. Worklessness is the aspect which appears most strongly associated with high accidental dwelling fire rates, but income, health and housing also feature. The overcrowding index is a measure of housing deprivation that represents the difference between the number of bedrooms in a dwelling and the number of bedrooms that the occupying household is deemed to need according to a standard formula.

A second group of associations comprised areas with a high proportion of the population identifying as Black African, Black

Table 2

Notable correlations between predictors and the index of fire incidence ($|r| \geq 0.4$).

Predictor	Spearman's ρ	Pearson's r
Households with social landlords	0.425	0.440
Black African	0.449	0.461
Black Other	0.405	0.409
Black, all	0.440	0.467
Never worked	0.480	0.429
Not worked for over 5 years or never worked	0.420	0.407
Not worked for over 10 years or never worked	0.448	0.425
Households with 0 dimensions of deprivation	−0.439	−0.426
Households with 3 dimensions of deprivation	0.464	0.478
Households with 4 dimensions of deprivation	0.459	0.468
Households with 2 or more dimensions of deprivation	0.423	0.417
Households with 3 or more dimensions of deprivation	0.475	0.478
Single person households aged < 65	0.379	0.408
Single person households aged 35–54	0.359	0.408
Index of multiple deprivation	0.482	N/A
Index of income deprivation	0.477	0.475
Index of employment deprivation	0.459	0.465
Index of health deprivation	0.442	N/A
Overcrowding index ≤ -1	0.472	0.396
Overcrowding index ≥ 2	−0.496	−0.476
Overcrowding index 0	0.506	0.510
Overcrowding index -1	0.471	0.417
Unemployed and seeking work in week prior to census	0.476	0.492
Long term sick (economically inactive)	0.410	0.397

Table 3

Correlation between fire rates and number of single person households of various age groups.

Age range	Spearman's ρ	Pearson's r
Under 35	0.376	0.334
35–54	0.359	0.408
55–64	0.174	0.202
65 and over	−0.158	−0.134
All under 65	0.379	0.408
All ages	0.271	0.326

Caribbean or Black Other. As some have argued that this association is the result of collinearity with other factors [16] a partial correlation was undertaken, controlling for income deprivation, employment deprivation, lone parents, households with social landlords and never having worked. Although controlling for these factors did considerably reduce the correlation coefficient it did not eliminate it (Black, all $r=0.204$).

The final set of associations relates to areas with high concentrations of single person households. Links between fire rates and single person households have been reported before [22,33], but previous research has not noted the influence of the age of individuals living alone. Those under 65, and in particular those in the 35–54 age bracket, appear to be an important group whose presence is strongly linked to higher rates of accidental dwelling fire. In contrast, a high concentration of those living alone and 65 or over shows only a weak association with rates of fire, and that is negative. These results are presented in more detail in Table 3.

It is unclear why such a difference exists between working age (i.e. under 65) and older single person households, but a clear difference was also evident in the principal component analysis, which suggested that these are distinct groups living in different areas (see Section 3.2). In general, those living alone under 65 are more likely to be men, and more likely to have come to solo living as a result of relationship breakdown, whilst those over 65 are more likely to be women and to have outlived a partner [34].

People living alone and of working-age are known to have lower rates of economic activity than the general population, and to be more likely to smoke or drink [35]. With a considerable proportion of dwelling fires attributable to smoking material [2] or associated with drinking [20,33] this may be one mechanism linking the younger group to increased rates of fire. Indeed, there is good evidence that alcohol is an important factor in fire related deaths of those under 60 in particular [36]. It is clear that with the number of people of working age living alone rising rapidly in Britain in recent years [34,35] this finding has important policy implications and merits further investigation.

The weak and negative association seen between the over 65 group and rates of fire is interesting because it stands in contrast to findings elsewhere that older people are more likely to be fire casualties [20–23]. This suggests that older people are no more likely to experience a fire, but if they do then the consequences are likely to be more severe. Difficulty effecting an escape, greater physical vulnerability to injury and poorer recovery may be important factors in this.

3.2. Principal component analysis

Whilst the results of principal component analysis were somewhat sensitive to both the variables included and to the number of factors extracted some clear trends were evident. Scree plots generally suggested that five components be extracted, and the use of dummy random variables confirmed this. Two identifiable components consistently emerged as amongst those with the highest eigenvalues. The first of these loaded strongly on Asian Pakistani and Asian Bangladeshi population, overcrowding, and people who have never worked, with these variables not loading strongly against any other component. This component also tended to load strongly against high numbers of people with poor English and high numbers of people who have not worked for some years (but not necessarily never having worked) and income deprivation, although these latter variables were less discriminatory, also loading against other components. It is worth noting in particular that the numbers of people of Asian Indian origin did not load highly on this component, but often loaded strongly on a separate component. The marked link seen between numbers of Pakistani and Bangladeshi residents and people who have not worked for some time may be at least partly connected to the very low levels of economic activity amongst Pakistani and Bangladeshi women in the UK, a factor that is not seen so strongly amongst Indian women [37]. It is notable that a measure of unemployment, which only considers those who are seeking work, loaded only moderately against this component and also exhibited moderate loadings against several other components. This lends weight to the idea that it is the number of people making a cultural decision to stay at home, rather than those seeking but unable to find work, which is a unique feature of this component.

The second component to emerge consistently across iterations of PCA loaded highly on measures relating to poor health and limiting disability, and on measures relating to poor educational achievement. Why the two apparently quite different issues of health/disability and educational attainment seem to combine remains unclear but moderate (although not discriminant) loading against this component of single person households aged over 65 may offer a clue. Older people are both more likely to suffer ill health and disability, and, given the marked changes in educational patterns in the UK since the mid twentieth century [38], to have lower educational achievement.

A number of other components were found during the process. As already mentioned, a component loading on the Asian Indian population was found to be distinct from the Asian Pakistani and Asian Bangladeshi population. A component loading on Black

population (African, Caribbean and Other) was evident in several iterations, as was one loading on single person households aged under 65. This latter variable consistently loaded on a different component to single person households aged 65 and over, reinforcing the idea that these are groups with very different characteristics. Other variables that loaded highly and discriminately on principal components in several iterations were the number of lone parents and the number of people whose ethnicity was mixed White/Black. Notably, there was little evidence of a single component that encompassed all the factors often thought of as related to deprivation. Furthermore, the measure of income deprivation consistently loaded moderately on at least two components, making it a poor choice for discriminating between them.

3.3. Regression

Regression began with those variables identified as loading discriminately on principal components, with variables then added and removed following the process described in Section 2.7. The final model used as predictor variables the proportion of people of Black descent, the proportion of single person households aged under 65, and the proportion of people who had not worked for more than 5 years or had never worked. Together, these three variables explained nearly one third of the total variance in the rate of ADF ($R^2=0.323$, adjusted $R^2=0.322$), with coefficients shown in Table 4.

The standardised coefficients are all positive and are all of a similar magnitude, suggesting that the three predictor variables exert roughly similar levels of influence over the criterion variable. The Variance Inflation Factors (VIF) for all predictors are relatively low, indicating low levels of collinearity. This is supported by additional collinearity diagnostics, which can be seen in Table 5. The highest variance proportion of a secondary variable on any particular component is 0.29, low in comparison to the primary variables on each dimension (shown in bold).

Although the standardised residuals fail formal tests of

Table 4
Regression coefficients.

	Unstandardised coefficients		Standardised coefficients	VIF
	B	SE B	β	
(Constant)	– 31.619	6.716		
Black population	249.165	30.440	0.211	1.638
Single person household < 65 years old	264.061	20.785	0.285	1.243
Not worked > 5 years or never	256.233	22.541	0.266	1.357

Notes: $R^2=0.323$; all coefficients $p < 0.001$

Table 5
Collinearity diagnostics.

Dimension	Eigenvalue	Condition index	Variance proportions			
			(Constant)	Black popn.	Single person HH < 65 yr	Not worked > 5 years
1	3.451	1.000	0.00	0.02	0.00	0.01
2	0.392	2.966	0.02	0.67	0.01	0.01
3	0.128	5.194	0.02	0.02	0.012	0.78
4	0.029	10.922	0.95	0.29	0.87	0.20

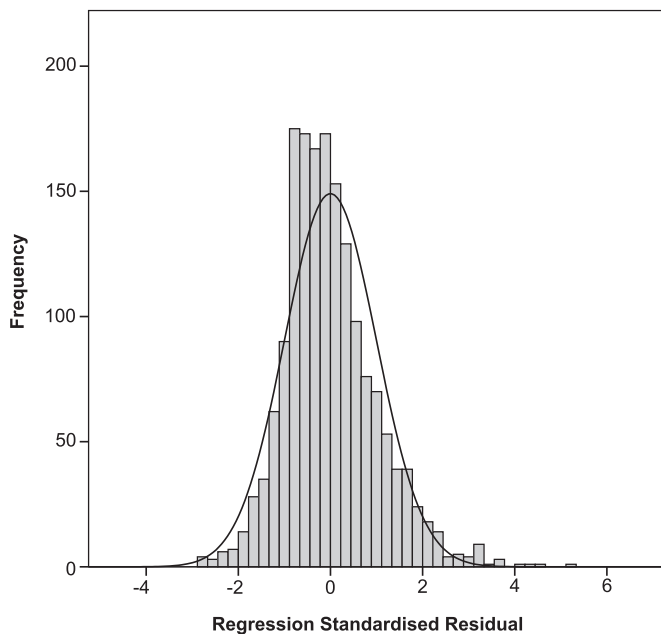


Fig. 1. Histogram of standardised residuals with normal distribution curve superimposed.

normality ($D(1680)=0.63$, $p < 0.001$) this is unsurprising given the large sample size ($n=1680$) [39], and visual inspection of the distribution reveals a reasonable approximation to normality (Fig. 1). Taken together these factors suggest that the model can be considered to be valid.

Previous models that have been reported to explain a greater proportion of the variance e.g., [16] have used much larger geographic units than in this study. The aggregation of data will tend to suppress the impact of outliers, resulting in greater explanatory power. Given the large number of potential influences on rates of fire, that three factors can explain nearly one third of the total variance at LSOA level is noteworthy. The strong role of human activity and behaviour in domestic fire initiation [40] suggests that a high proportion of random, unpredictable variance is to be expected. In this context, the explanatory power of this model must be viewed as noteworthy.

It is important to stress that the three predictors used in this model are not the only predictors that could be used to build a reasonable model. Each in effect represents a single complex component and other predictors that load highly on the same component are likely to give similar results. The model presented is thus only one of several possible models, but it is nevertheless of value in understanding the uneven distribution of fire incidents within the West Midlands county and predicting the distribution of future incidents. Through applying the insights from this model resources can be targeted more effectively, from the identification of critical audiences for fire safety information through to the siting of emergency response vehicles.

3.4. Limitations

A principal limitation of the current study is that it is ecological in nature. It is vulnerable to ecological fallacy because it does not directly link the variables studied together [41]. The existence of an association at an area level should not be seen as implying that such an association exists at an individual level [42]. For example, whilst these results suggest that those living in areas where there are high numbers of single person households aged under 65 experience higher levels of fire, it is not possible to say that

individuals under 65 who live alone experience more fires.

A further limitation comes from the fact that this study effectively involves a whole population. As the cases included do not represent a sample taken from some wider population it is not strictly possible to generalise to a wider population from these results – the results are specific to the West Midlands county. Whilst similar predictors may be found in similar populations, any attempt to transfer these findings to other areas should be qualified by a careful consideration of cultural context and demographic make-up.

The study considered only dwelling fires attended by the WMFS. However, there is evidence that a relatively small percentage of fires occurring in the home are reported to the fire services [43,44]. It is important to be clear, therefore, that what is investigated here is a subset of all domestic fires. Nevertheless, it is reasonable to assume that those fires that do result in calls to the fire service are the more serious ones and the ones most likely to result in substantial loss or injury. They are also the incidents that are of the greatest importance to the service in terms of resource planning and those upon which the service needs to focus to manage demand.

4. Conclusions

Despite a substantial reduction in rates of fire in the UK in recent years it is clear that in the large urban area that forms the basis of this study there continues to be considerable inequality in the way in which accidental dwelling fires are distributed through society. Whilst many socio-demographic factors correlate with rates of ADF, their high levels of collinearity make it difficult to discern, on the basis of correlations alone, which factors are most useful in understanding the distribution of fire and in targeting future interventions. Principal component analysis provides a useful tool to help understand the links between the many potential predictors available and to minimise collinearity by identifying a small number of variables that act in relative independence. By combining PCA with linear regression it is possible to produce a model that uses a small number of predictor variables whilst explaining around a third of the variance in rates of fire at a small neighbourhood level.

In line with earlier work, this study confirms that the ethnic make-up of an area, particularly the proportion of Black African and Caribbean residents, and the economic deprivation present in an area, most notably levels of worklessness, are strongly indicative of rates of fire. In addition it reveals a clear, and unreported, link to the proportion of single people in middle age groups living in an area. This is an insight that is of considerable value to fire services, made all the more important by the fact that this latter group is growing in numbers in the UK.

Community fire safety and prevention work has become an increasingly significant part of the role of fire services in the UK since the mid-1990s [45] and is now a statutory duty. The findings of this study will help fire services to improve the targeting of fire safety interventions and to focus on those neighbourhoods and communities where interventions are most needed and have the greatest potential to reduce both response demand and inequality. They also have value in helping plan the location of emergency response resources.

Acknowledgements

The authors would like to thank the West Midlands Fire Service for providing access to their incident data and guidance on its use.

Throughout the project the advice of Professor Tim Sparks of Coventry University's Sigma Statistics Support team has been invaluable. The work has made use of National Statistics and Ordnance Survey data that are © Crown Copyright and database right 2013 and are used under the terms of the UK Open Government Licence. The work was funded by Coventry University.

References

- [1] Department for Communities and Local Government, The economic cost of fire: estimates for 2008, DCLG, London. <http://goo.gl/50XyIf>, 2011 (accessed 08.01.14).
- [2] Department for Communities and Local Government, Fire statistics: Great Britain, 2011 to 2012, DCLG, London. <http://goo.gl/wXHp7>, 2012 (accessed 16.05.14).
- [3] C.R. Jennings, Social and economic characteristics as determinants of residential fire risk in urban neighborhoods: a review of the literature, *Fire Saf. J.* 62 (2013) 13–19, <http://dx.doi.org/10.1016/j.firesaf.2013.07.002>.
- [4] J. Corcoran, G. Higgs, T. Anderson, Examining the use of a geodemographic classification in an exploratory analysis of variations in fire incidence in South Wales, UK, *Fire Saf. J.* 62 (2013) 37–48, <http://dx.doi.org/10.1016/j.firesaf.2013.03.004>.
- [5] K. Knight, Facing the future: findings from the review of efficiencies and operations in fire and rescue authorities in England 2013 HMSO London, accessed October 9, 2013 (<http://goo.gl/8Mnlyv>).
- [6] Office for National Statistics, 2011 Census: Aggregate data (England and Wales), UK Data Service Census Support, Colchester, 2011. <http://infuse.mimas.ac.uk> (accessed August 1, 2014).
- [7] A. Medland, Portrait of the West Midlands, ONS, London, 2011 <http://goo.gl/OZg8H2> (accessed 25.02.15).
- [8] Department for Communities and Local Government, English indices of deprivation 2010: County summaries, DCLG, London. <https://goo.gl/OBENgj>, 2011, (accessed 24.02.15).
- [9] S. Longhi, M. Rokicka, European Immigrants in the UK Before and After the 2004 Enlargement: Is There a Change in Immigrant Self-selection?, Institute for Social and Economic Research, Essex, 2012 (<https://goo.gl/VBe34Z>).
- [10] A. Krausova, C. Vargas-Silva, West Midlands: Census profile, University of Oxford, Oxford, 2013 <http://goo.gl/X4kaE4> (accessed 25.02.15).
- [11] Department for Communities and Local Government, English Indices of Deprivation 2010. <http://goo.gl/TRjmCY>, 2011 (accessed 7.08.13).
- [12] SPSS, IBM Corporation. <http://www.ibm.com/software/uk/analytics/spss/>, 2014.
- [13] Office for National Statistics, Super output areas (SOAs), Office for National Statistics. <http://goo.gl/OHLYm>, 2011 (accessed 12.06.14).
- [14] QGIS Development Team, QGIS, QGIS. <http://www.qgis.org>, 2013.
- [15] J. Corcoran, G. Higgs, A. Higginson, Fire incidence in metropolitan areas: a comparative study of Brisbane (Australia) and Cardiff (United Kingdom), *Appl. Geogr.* 31 (2011) 65–75, <http://dx.doi.org/10.1016/j.apgeog.2010.02.003>.
- [16] R. Smith, M. Wright, A. Solanki, Analysis of Fire and Rescue Service Performance and Outcomes with Reference to Population Socio-Demographics, DCLG, London. <http://goo.gl/mr7gNg>, 2008 (accessed 7.11.13).
- [17] Arson Control Forum, Social Exclusion and the Risk of Fire, ODPM, London. <http://goo.gl/ij3TXQ>, 2004 (accessed 08.01.14).
- [18] P. Edwards, I. Roberts, J. Green, S. Lutchmun, Deaths from injury in children and employment status in family: analysis of trends in class specific death rates, *BMJ* 333 (2006) 119–122, <http://dx.doi.org/10.1136/bmj.38875.757488.4F>.
- [19] J. Corcoran, G. Higgs, C. Brunsdon, A. Ware, P. Norman, The use of spatial analytical techniques to explore patterns of fire incidence: a South Wales case study, *Comput. Environ. Urban Syst.* 31 (2007) 623–647, <http://dx.doi.org/10.1016/j.compenvurbysys.2007.01.002>.
- [20] P.G. Holborn, P.F. Nolan, J. Golt, An analysis of fatal unintentional dwelling fires investigated by London fire brigade between 1996 and 2000, *Fire Saf. J.* 38 (2003) 1–42, [http://dx.doi.org/10.1016/S0379-7112\(02\)00049-8](http://dx.doi.org/10.1016/S0379-7112(02)00049-8).
- [21] C. DiGiuseppi, P. Edwards, C. Godward, I. Roberts, A. Wade, Urban residential fire and flame injuries: a population based study, *Inj. Prev.* 6 (2000) 250–254, <http://dx.doi.org/10.1136/ip.6.4.250>.
- [22] E. Higgins, M.J. Taylor, H. Francis, A. Systemic, Approach to fire prevention support, *Syst. Pract. Action Res.* 25 (2012) 393–406, <http://dx.doi.org/10.1007/s11213-012-9229-9>.
- [23] C. Mulvaney, D. Kendrick, E. Towner, M. Brussoni, M. Hayes, J. Powell, S. Robertson, H. Ward, Fatal and non-fatal fire injuries in England 1995–2004: time trends and inequalities by age, sex and area deprivation, *J. Public Health* 31 (2009) 154–161, <http://dx.doi.org/10.1093/pubmed/fdn103>.
- [24] P. Townsend, Deprivation, *J. Soc. Policy* 16 (1987) 125–146, <http://dx.doi.org/10.1017/S0047279400020341>.
- [25] Department for Communities and Local Government, English Indices Of Deprivation 2010: Technical Report, DCLG, London. <http://goo.gl/REB7hg>, 2011 (accessed 23.01.14).
- [26] Department for Communities and Local Government, English Indices of Deprivation 2010: Guidance Document, DCLG, London. <http://goo.gl/eOh4Sg>, 2011 (accessed 20.01.14).
- [27] M.H. Graham, Confronting multicollinearity in ecological multiple regression, *Ecology* 84 (2003) 2809–2815, <http://dx.doi.org/10.1890/02-3114>.
- [28] H. Abdi, L.J. Williams, Principal component analysis, *Wires Comp. Stat.* 2 (2010) 433–459, <http://dx.doi.org/10.1002/wics.101>.
- [29] R.B. Cattell, The scree test for the number of factors, *Multivar. Behav. Res.* 1 (1966) 245–276, http://dx.doi.org/10.1207/s15327906mbr0102_10.
- [30] J.M. Wood, D.J. Tataryn, R.L. Gorsuch, Effects of under- and overextraction on principal axis factor analysis with varimax rotation, *Psychol. Methods* 1 (1996) 354–365, <http://dx.doi.org/10.1037/1082-989X.1.4.354>.
- [31] A.B. Costello, J.W. Osborne, Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most from your Analysis, *Practical Assessment Research and Evaluation*. <http://goo.gl/XrWzJl>, 10, 2005 (accessed 4.02.15).
- [32] J.D. Evans, Straightforward Statistics for the Behavioral Sciences, Brooks/Cole Publishing Company, Pacific Grove, 1996.
- [33] M.J. Taylor, E. Higgins, P.J.G. Lisboa, V. Kwasnica, An exploration of causal factors in unintentional dwelling fires, *Risk Manag.: Int. J.* 14 (2012) 109–125, <http://dx.doi.org/10.1057/rm.2011.9>.
- [34] J. Bennett, M. Dixon, Single Person Households and Social Policy: Looking Forwards, Joseph Rowntree Foundation, York. <https://goo.gl/6nmz50>, 2006 (accessed 23.07.15).
- [35] A. Smith, F. Wasoff, L. Jamieson, Solo Living Across the Adult Lifecourse, Centre for Research on Families and Relationships, Edinburgh. <http://goo.gl/m4hCvF>, 2005 (accessed 23.07.15).
- [36] D. Bruck, M. Ball, I.R. Thomas, Fire fatality and alcohol intake: analysis of key risk factors, *J. Stud. Alcohol Drugs* 72 (2011) 731–736.
- [37] A. Dale, N. Shaheen, V. Kalra, E. Fieldhouse, Routes into education and employment for young Pakistani and Bangladeshi women in the UK, *Ethn. Racial Stud.* 25 (2002) 942–968, <http://dx.doi.org/10.1080/0141987022000009386>.
- [38] P. Bolton, Education: historical statistics, House of Commons Library. <http://www.parliament.uk/briefing-papers/SN04252.pdf>, 2012 (accessed 29.04.16).
- [39] A. Field, Discovering Statistics Using SPSS, 3rd ed., SAGE Publications, London, 2009.
- [40] S. Merrall, Anthropogenic Accidental Dwelling Fire: Incident Distribution, Theory and the Fire Service, PhD Thesis, University of Liverpool. <http://goo.gl/SPPXq2>, 2002 (accessed 15.11.13).
- [41] S. Greenland, J. Robins, Invited commentary: ecologic studies – biases, misconceptions, and counterexamples, *Am. J. Epidemiol.* 139 (1994) 747–760.
- [42] W. Robinson, Ecological correlations and the behavior of individuals, *Am. Sociol. Rev.* 15 (1950) 351–357.
- [43] Department for Communities and Local Government, English Housing Survey, 2010–2011: Household Data, 2nd ed., UK Data Archive (distributor), Colchester, Essex. <http://dx.doi.org/10.5255/UKDA-SN-7040-2>, (accessed 23.05.14).
- [44] G. Ford, Fires in the home: Findings from the 2002/3 British Crime Survey, ODPM, London. <http://goo.gl/pba1Uw>, 2004 (accessed 22.05.14).
- [45] K. Matheson, R. Manning, S. Williams, From brigade to service: an examination of the role of fire and rescue services in modern local government, *Local Gov. Stud.* 37 (2011) 451–465, <http://dx.doi.org/10.1080/03003930.2011.588701>.

Appendix C: Ethnic groups included in the quantitative analysis

The ethnic groups listed below were included in the quantitative analysis detailed in Chapter [4](#).

- White British
- White Irish
- White Gypsy / Traveller
- White, other
- Mixed White / Black Caribbean
- Mixed White / Black African
- Mixed White / Asian
- Mixed, other
- Asian Indian
- Asian Pakistani
- Asian Bangladeshi
- Asian Chinese
- Asian, British other
- Black African
- Black Caribbean
- Black other
- Other, Arab
- Other

Appendix D: Recruitment leaflet



Can you help with my research?

I am a researcher at Coventry University and would like to talk to people about life on Manor Farm. I am particularly interested in how you feel about public services, especially the Fire Service. Could you spare a little time to talk to me about this?

What is involved in taking part?

Taking part in this research just involves spending some time chatting with me. It will be quite informal. We can talk wherever you like—at home, in a café, walking around the area. The chat will be completely confidential. You don't even have to give your real name if you don't want to.



© Crown copyright 2008. Licensed under the OGL

Why is this important?

Despite much work by the Fire Service to prevent fires, some areas, like Manor Farm, still have a lot more accidental fires than others. Understanding how the Fire Service can best work together with the people living in those areas will help reduce fires and save lives in places like Manor Farm.

If you can help, or would like to know more, please get in touch with Chris Hastie to arrange a time to chat:

email: hastiec@coventry.ac.uk
tel: [REDACTED]
mob: [REDACTED]

Appendix E: Initial topic list

The list of topics given below formed the starting point for pre-arranged conversations during fieldwork. Each conversation had a course of its own and these topics were not fixed in stone, but evolved over time, responding both to the immediate conversation and to the findings emerging from the fieldwork generally.

Context

- Family / household structure
- Employment
- Time in area
- Understanding of area – ask to draw map of ‘local neighbourhood’, or point to bounds on printed map if not comfortable with drawing
- Relationship with neighbours (e.g. support networks, perceptions of cohesion)
- Involvement with community groups (faith, diaspora, neighbourhood, interest)

Fire service

- Past contact with the fire service
 - Tell me about it
 - How did you feel about the people you dealt with?
 - How did you feel about the organisation?
- Personal relationships with fire fighters / civilian WMFS staff
- Home fire safety checks
 - awareness of
 - barriers to requesting
- Fire safety understanding
 - “what’s the highest risk thing you do?”
 - barriers to changing behaviour

Other public services

- Interactions with other public services (benefits, health, social services, council, police, probation, immigration etc)
- Degree to which different public services are seen as separate, or part of the same thing.

Appendix F: Summary fieldwork log

The table below summarises, on a week by week basis, the main fieldwork activities undertaken between June 2015 and February 2016.

<i>Week commencing</i>	<i>Activity</i>
1 June 2015	<ul style="list-style-type: none"> • Scoping visit to Balsall Heath area, attempt to define the extent of the area.
8 June 2015	<ul style="list-style-type: none"> • Identifying potential gatekeepers
15 June 2015	<ul style="list-style-type: none"> • Ethics approval for main field work obtained.
22 June 2015	<ul style="list-style-type: none"> • [No fieldwork—leave]
29 June 2015	<ul style="list-style-type: none"> • [No fieldwork—leave]
6 July 2015	<ul style="list-style-type: none"> • Attempted to contact potential gatekeepers across Windmill Lane, Benmore Estate and Manor Farm.
13 July 2015	<ul style="list-style-type: none"> • Attempted to contact potential gatekeepers. • Attended 'Tea and Talk' session at Henley Green Community Centre. • Long conversation with Community Centre co-ordinator afterwards.
20 July 2015	<ul style="list-style-type: none"> • Attended Manor Farm Residents' Association meeting. • Attended 'Tea and Talk' session at Henley Green Community Centre.
27 July 2015	<ul style="list-style-type: none"> • Attended 'Tea and Talk' session at Henley Green Community Centre.
3 August 2015	<ul style="list-style-type: none"> • Attended 'Tea and Talk' session at Henley Green Community Centre.
10 August 2015	<ul style="list-style-type: none"> • [No fieldwork—writing]
17 August 2015	<ul style="list-style-type: none"> • Visited Community Action Programme, Windmill Hill. • Attended Soho and Victoria Friends and Neighbours drop-in session (Windmill Hill).
24 August 2015	<ul style="list-style-type: none"> • Prepared leaflet for Manor Farm.
31 August 2015	<ul style="list-style-type: none"> • [No fieldwork—sick]
7 September 2015	<ul style="list-style-type: none"> • Leaflet drop across the whole of Manor Farm. • Incidental conversations with residents whilst out leafleting. • Attended 'Tea and Talk' session at Henley Green Community Centre.

<i>Week commencing</i>	<i>Activity</i>
14 September 2015	<ul style="list-style-type: none"> • In depth conversations with residents responding to the leaflet: <ul style="list-style-type: none"> • Keith and Maria • Tilly • Anna • Met and talked with Mickey (resident) whilst walking around Manor Farm. • Attended 'Tea and Talk' session at Henley Green Community Centre.
21 September 2015	<ul style="list-style-type: none"> • In depth conversation with Lenny (resident) following his response to the leaflet. • Attended Manor Farm Residents' Association meeting. • Attended MacMillan coffee morning at Moat House Leisure and Neighbourhood Centre, leading to valuable first conversation with Connie (community worker). • Attended 'Tea and Talk' session at Henley Green Community Centre.
28 September 2015	<ul style="list-style-type: none"> • Several 'walk abouts' in Manor Farm. • Met up with Mickey again. • 'Hanging out' in the café at Moat House Leisure and Neighbourhood Centre. • Attended 'Tea and Talk' session at Henley Green Community Centre.
5 October 2015	<ul style="list-style-type: none"> • Attended Manor Farm Residents' Association. • I was introduced to the Pastor of the Tanzanian prayer group and spoke to him about access to his congregation. • 'Hung out' at Moat House Leisure and Neighbourhood Centre café. • Attended 'Tea and Talk' session at Henley Green Community Centre.
12 October 2015	<ul style="list-style-type: none"> • Networking event at Town Hall led to some useful leads. • Time spent at Moat House Leisure and Neighbourhood Centre café. • First visit to Riley Square: library, café and supermarket. • Attended 'Tea and Talk' session at Henley Green Community Centre.
19 October 2015	<ul style="list-style-type: none"> • Attended Manor Farm Residents' Association. • Met with Robert (resident, Wood End) at his home for an in-depth conversation. Part of the time Craig and Cynthia were there. Robert then took me around Wood End, talking to people along the way and visiting Pat and family in their home. We finished off in Riley Square where we visited a community café and Robert introduced me to Garry and Karl.
26 October 2015	<ul style="list-style-type: none"> • Interviewed Deborah from the Moat House Community Trust. • Attended 'Tea and Talk' session at Moat House Leisure and Neighbourhood Centre. • Made field notes about a funeral procession I encountered on the way to the MHLNC. • 'Hung out' in the community café on Riley Square. • Attended 'Tea and Talk' session at Henley Green Community Centre—particularly valuable conversation with Rachel from Whitefriars Housing.

<i>Week commencing</i>	<i>Activity</i>
2 November 2015	<ul style="list-style-type: none"> • Attended 'Tea and Talk' session at Moat House Leisure and Neighbourhood Centre. • Volunteered as a steward at the Moat House fireworks display. • Visited Manor Farm on Bonfire Night, hung out around two bonfires. • Attended 'Tea and Talk' session at Henley Green Community Centre
9 November 2015	<ul style="list-style-type: none"> • Visited community café in Riley Square. • Met with the mid-week prayer group from the Tanzanian church and was invited to the Sunday gathering. • Attended 'Tea and Talk' session at Henley Green Community Centre. • Attended social gathering after Sunday prayers at the Tanzanian church at Henley Green Community Centre. Several very conversations, including Lisa.
16 November 2015	<ul style="list-style-type: none"> • 'Hung out' in the community café on Riley Square. • In-depth conversation with Clarissa, from a community development organisation focusing on Black African and Black Caribbean clients. • Attended 'Tea and Talk' session at Henley Green Community Centre. • Attended social gathering after Sunday prayers at the Tanzanian church at Henley Green Community Centre.
23 November 2015	<ul style="list-style-type: none"> • Attended 'Tea and Talk' session at Moat House Leisure and Neighbourhood Centre. • 'Hung out' in the community café on Riley Square. • Attended 'Tea and Talk' session at Henley Green Community Centre. • Attended social gathering after Sunday prayers at the Tanzanian church at Henley Green Community Centre—valuable group conversation with younger women from the congregation.
30 November 2015	<ul style="list-style-type: none"> • 'Hung out' in the community café on Riley Square. • Met with Edith from the Tanzanian church group prior to mid-week prayers. • Attended 'Tea and Talk' session at Henley Green Community Centre.
7 December 2015	<ul style="list-style-type: none"> • Attended a drop-in exhibition on proposed redevelopment for Manor Farm residents. • 'Hung out' in the community café on Riley Square. • Attended 'Tea and Talk' session at Henley Green Community Centre. • Helped some of the Tanzanian prayer group congregation to build a shed for storing their equipment at the Community Centre.
14 December 2015	<ul style="list-style-type: none"> • 'Hung out' in the community café on Riley Square. • 'Hung out' at Moat House Leisure and Neighbourhood Centre café. • Attended 'Tea and Talk' session at Henley Green Community Centre.
21 December 2015	<ul style="list-style-type: none"> • 'Hung out' in the community café on Riley Square. • 'Hung out' at Moat House Leisure and Neighbourhood Centre café. • Went in search of an advertised 'cuppa with a copper' session, which seemed to have been cancelled.

<i>Week commencing</i>	<i>Activity</i>
28 December 2015	<ul style="list-style-type: none"> • [No fieldwork—leave]
4 January 2016	<ul style="list-style-type: none"> • Conducted telephone interview with one of the ward councillors. • Held group conversation with fire fighters from a watch at a local fire station. • Conversation with station commander at a local fire station. • Attended 'Tea and Talk' session at Henley Green Community Centre.
11 January 2016	<ul style="list-style-type: none"> • In depth conversation with Rob (police officer) at the police station. • 'Hung out' in the community café on Riley Square. • In depth conversation with Sean (resident). • In depth conversation with Connie (community worker). • 'Hung out' at Moat House Leisure and Neighbourhood Centre café—including useful conversation with Andy (PCSO). • Attended 'Tea and Talk' session at Henley Green Community Centre.
18 January 2016	<ul style="list-style-type: none"> • 'Hung out' in the community café on Riley Square. • 'Hung out' at Moat House Leisure and Neighbourhood Centre café. • Attended 'Tea and Talk' session at Henley Green Community Centre.
25 January 2016	<ul style="list-style-type: none"> • Attended 'Tea and Talk' session at Henley Green Community Centre.
1/8/15 February 2016	<ul style="list-style-type: none"> • [Fieldwork winding down]
22 February 2016	<ul style="list-style-type: none"> • 'Hung out' in the community café on Riley Square. • Attended Henley Ward Forum.

Appendix G: Verbal consent prompt sheet

Participant Information Prompts

These prompts are intended as a reminder for verbal discussion of participant information to ensure that all points are covered in the conversation. They are not intended to be used as a script, nor to be distributed in printed form.

What it's all about

- I'm from Coventry University
- I'm trying to find out how people view the fire service and other public services and understand people's experiences of these services
- The work is funded by Coventry University

Recording

- I'd like to record our conversation because
 - I want to make sure I accurately reflect what you say
 - I have a memory like a sieve
 - I can't take notes and listen to you at the same time, and not listening would be rude

Free will

- You don't have to speak to me
- You can end the conversation at any time
- If I ask something you're not comfortable answering, you don't have to. Just let me know you don't want to talk about it.
- You can withdraw at any time in the next four week—just let me know. No explanation needed, no questions asked.
 - If you withdraw I'll destroy all the recordings and transcripts

Confidentiality and anonymity

- It's confidential
 - Kept securely
 - My ears only
 - Destroyed three years after the project finishes
- It's anonymous

- I may use some quotes in my report (thesis) or in an article, but no-one will know who said what
- Do you have a preferred pseudonym?
- **BUT** although I will do my best to keep **everything** you say confidential I may have to talk to others about what you say if
 - You tell me that you plan to cause physical harm to someone
 - You tell me about past involvement in a **serious** crime

Consent

- Is it all clear?
- Do you have any questions?
- Do you still want to take part?

Appendix H: Post hoc participant information sheet

Thanks for helping with my research

Getting in touch

My name is Chris Hastie and if you need to, you can contact me the following ways:

email: hastiec@coventry.ac.uk

tel: 024 7699 XXXX

mob: 07596 84XXXX

Things to know about the research

Here are some things you should keep in mind about the research

- **It's optional**, and if you change your mind you can just let me know up to four weeks after we last spoke and I'll delete all the stuff you told me
- **It's confidential and anonymous**. I won't tell anyone what you said. If I use a quote from you at some time I won't say who said it. If we talked in a group setting please respect this and don't talk about what others said in the group
- I'm from **Coventry University**, which is funding the research
- If you have any **questions** at all, you are welcome to get in touch with me to ask them. If you'd rather speak to someone else, you can contact my supervisor, Rosalind Searle by email: rosalind.searle@coventry.ac.uk



Appendix I: Code groups used for focused review

The following table details the code groups that formed the basis for focused review of the data (see 6.3).

<i>Code group</i>	<i>Description / Notes</i>
FRS response times	Comments on FRS response to incidents
Feelings about the FRS	General comments on feelings about the FRS
Contact with FRS	Descriptions of past contact with FRS
Reasons for contacting the FRS	Reasons given for having had contact with the FRS
Public services mentioned	Aggregated list of public services mentioned. Highlights the fact that other services tend to be mentioned, not the WMFS
Knowledge of fire risk	Understanding of fire risk and self assessment of knowledge
Experience of fire	Discussion of experience of fire, or the number of dwelling fires seen
Visibility of FRS	Views on how visible the fire service is
Awareness of FRS	Awareness of WMFS services, both prevention and response
Uniform	Discussion of uniforms, their importance and perceptions of them
The bonfires	Discussion of the bonfires that have often been lit on Manor Farm on Guy Fawkes night, and of the WMFS's role in putting them out
Talking to the police	Comments on talking to the police or being seen talking to the police
Criminality	Mention of criminal activity or perceptions of criminal activity
Harassing crews	Mention of harassment of fire crews, setting hydrants off
Public servants approaches	Discussion of the way public servants do things
Perceptions of public servants	Indications of ways public servants are perceived
Outside views of the area	How outsiders are perceived to view or represent the area
Help or blame	Whether the actions of public services are viewed as helping, or blaming for needing help
Being told what to do	Feelings about being told what to do. Indications that actions are viewed as being told what to do
Broken promises	Comments about things that public services have promised and not delivered on
Police not turning up	Specific comments about the police not responding to calls
Other public service failures	Public services failing to deliver, acting badly or being incompetent
Not listened to	Not being listened to or heard; consultations not being taken seriously
No-one cares	Indications that no-one cares about residents of the area

<i>Code group</i>	<i>Description / Notes</i>
Public agency co-ordination	Poor co-ordination between agencies leading to poor service
Fear of consequences	General comments about fear of the consequences of engaging
Benefits Agency	Comments relating to the Benefits Agency
Social services	Comments relating to social services
Data sharing	Agencies sharing data and passing information on
Services that don't suit	Services not being suitable for the people they are aimed at
Usual suspects	Observations (usually in field notes) about the same group of people being reached or attending an event
Cultural differences	Ways in which different communities work. Cultural differences in expectations
Many communities	Indications of the diversity within the area
Poor organisation	Perceived organisational failures
Actions to engage	Things that have been done by agencies to try to engage with communities
Language	Issues of language barriers, use of technical or bureaucratic language
Migrants and refugees	Points particularly related to migrant and refugee communities
"My patch"	The extent of the neighbourhood, pride in the area, territorial approaches