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Social networks, resilience and public policy

The role that support networks play for lone mothers in times of recession and austerity

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Social networks, resilience and public policy: The role that support networks play for lone mothers in times of recession and austerity

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A thesis submitted for the degree of Doctor of Philosophy

University of Bath

Department of Social & Policy Sciences

April 2015

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Abstract

During the period 2007-2015 the United Kingdom experienced economic crisis, troubles and insecurity in the labour market, radical welfare reforms, service cuts, declining real income levels and a diminished standard of living for many. Research has consistently shown that the most vulnerable groups in society, such as lone mothers, have been disproportionately adversely affected by these changes. Given that someday there will be another recession, or some other serious socio-economic transformations, there is the need to think seriously about how policy makers might offer meaningful protection and resilience to those who will be affected. One policy maker, for example, has recently commented that: "in this period of austerity, we need to support families, and use the power of their relationships and the networks they create to help strengthen people's capacity for resilience" (Jon Cruddas, March 2014). However, until now, this rhetoric seems to be operating only at the level of political ideals. There is a distinct lack of both theoretical and empirical substance.

This thesis offers a redress. It offers a theoretical framework, grounded in an analysis of social networks, for understanding people's resilience in face of adverse circumstances. It then applies this framework in an empirical investigation into the social support networks of lone mothers, and examines the role that these networks play in times of recession and austerity. The evidence shows that lone mothers vary in their capacity to cope with and adapt to wider socio-economic change. The findings suggest that this variability is linked to the capacity of the lone mother to create, sustain and mobilise a social support network. Those individuals with strong support networks of family and friends are more likely to be able to obtain resources necessary for daily family life and are more resilient in face of the uncertainties associated with new social environments. Given this, the thesis suggests that one way in which social policy might strengthen the resilience of people and families vulnerable to economic crises is through facilitating their support networks, and proposes ways in which this might be done.

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Chapter 1: Resilience against socio-economic adversity

1.1. Introduction

The aim of this thesis is to investigate if social networks help people adapt to wider socioeconomic adversity, and if so it seeks to explain how. The purpose of addressing this aim is to contribute towards three interconnected 'research challenges'; one concerned with social policy, one with social theory and one with empirical research. Section 1.2 of this chapter outlines in greater depth the 'social policy challenge', which is that policy makers are looking for ways in which they might strengthen people's social networks to facilitate positive outcomes such as 'resilience'. Section 1.3 then introduces the 'theoretical challenge', which is that there is currently no systematic theoretical framework in the social sciences which links people's social networks to their resilience against socio-economic adversity. Section 1.4 describes the empirical challenge, which focuses on lone mothers as a group vulnerable to economic adversity and the role that their social networks play in hard economic times. Section 1.5 then outlines the explanatory framework that the thesis uses to address each of these challenges, as well as the specific research questions that the thesis seeks to answer. The chapter finishes in section 1.6 by outlining the contributions that the thesis makes to the academic literature and public policy discourse, and also by outlining the structure that the rest of the thesis takes.

1.2. 'The Social Policy Challenge': Using the power of people's relationships

It has become increasingly commonplace for politicians, the media and academics to speak of and analyse accelerating rates of social, economic, technological and cultural change. Looking back over the previous 100 years it is clear why. The history books detail a range of life-changing socio-economic transformations: wars, violent swings in the economic cycle, rapid industrial growth and globalization, to name just a few. Given this, it seems fair to assume that the future will be fraught with similar challenges. These challenges will affect things that people value, their livelihoods and lifestyles, and will place a strain on their capacity to have some control over the course that their lives take.

Take, for example, the recent economic crisis. During the period 2007 - 2015 the United Kingdom has been confronted with a number of adverse socio-economic changes which have impacted negatively on the lives of many. The crisis began in the summer of 2007 when bad lending practices in the globalised financial sector spread through the entire global economic system. In the UK, as in many other countries around the world, the financial crisis was followed closely by a deep recession, the reverberations of which can still be felt even now that a recovery seems to be taking place.

On top of this, in the UK we have seen some radical transformations to government policy. When the Liberal-Conservative Coalition Government entered office in 2010, they argued that

to get the economy back on track would require deep cuts to government spending. They initially outlined that they would reduce the government deficit by £81bn by 2014/2015, with £64bn of this being cut from public expenditure and the rest coming from raising taxes (O'Hara 2014). Recent commentaries have called these spending cuts 'colossal', 'historic' and much more (Institute for Fiscal Studies 2014, Taylor-Gooby 2012). These public policy changes have increased financial pressure (and will continue to) on many of societies poorest individuals (Brewer et al. 2013a, Clark & Heath 2014).

The combination of the economic recession and government austerity means that in the UK we have seen troubles and insecurity in the labour market, job losses, rising unemployment, high levels of inflation, declining real income levels, and a decreased standard of living for many. Those already at risk of poverty have been particularly hard hit by these adversities. Take lone mothers for an example¹. Lone mothers as a group (and indeed, lone parents more generally²) had already been at increased risk of poverty and other adverse outcomes (such as physical and mental health problems) before the recession hit. However, as a group they have also been disproportionately adversely affected by the recession and associated government austerity. As the Women's Budget Group (2013) have recently described, 'single parents as a group lose the most'. How do these families cope with the additional economic pressures? Clearly, groups like lone mothers will vary in their capacity to adapt to such hard times.

Times of rapid socio-economic change underscore questions related to how people cope with adversity and still manage to live to an acceptable standard that they are happy with. Why are some able to cope and others less able to do so? Take the examples of Jody and Sharon, who are both lone mothers who will be met later in the thesis. These mothers seem relatively similar to one another when we look at them from a number of standard social policy angles. Both have young children. Both are unemployed. Both are reliant upon welfare for their livelihoods. Both have lower levels of educational attainment. Both have been subject to violent domestic abuse. Yet they have coped very differently with wider socio-economic adversity. Jody could be said to be sinking under the additional financial pressures, struggling to feed her children, surviving on only one meal a day herself, becoming increasingly isolated, lonely and depressed. On the other hand, Sharon could be said to be thriving by her own standards in terms of her lifestyle. What differentiates these two mothers? It is not just their psychological ability to deal with adversity. (To be sure, the type of outcome that we are talking about here, related to family finances and lifestyle, is not psychological.)

Given that someday there may be another recession, or some other serious socio-economic transformations, there is the need to think seriously about how policy makers might offer meaningful protection and resilience to those likely to be affected. Although we cannot predict what will happen tomorrow (the prevalence of uncertainty and our cognitive limitations makes this impossible) we do have it in our power to ensure that our social systems, our societies, our families, have as much capacity as possible to deal with unforeseen shocks. This is why it is so important to learn from our current challenges. We can at least attempt to use these challenges to improve the ways in which we as a society deal with the challenges of the future.

¹ By which is meant mothers not co-habiting with a partner and living with their own dependent children (under the age of 16).

² Statistics presented later in the thesis show that lone mothers make up 91% of lone parents.

Policy makers are engaging with these ideas. The socio-economic adversity that the UK has been through means that they are engaging with and discussing ideas such as 'resilience'. Policy makers quite often link the idea of resilience to social networks and community life. For instance, one policy maker, Jon Cruddas (2014), has recently commented that "in this period of austerity, we need to support families, and use the power of their relationships and the networks they create to help strengthen people's capacity for resilience". However, at the current time this rhetoric seems to be operating only at the level of political ideals. There is a distinct lack of both theoretical and empirical substance. What, for example, is meant by 'resilience'? How might relationships and social networks strengthen people's capacity for resilience? Is Cruddas implying that policy makers should help people become psychologically resilient, to help people grin and bear it like a Stoic? One thinks not.

The need to answer these types of question will grow over the next few years as policy makers try to find practical ways of using the power of people's relationships, networks, and communities to foster positive outcomes such as resilience. This is the social policy challenge. (As we will see later in the thesis, the Conservative's 'Big Society' and Labour's 'One Nation' both attempt to address such a challenge, albeit with differing emphasises.) As indicated above, however, starting from this challenge we have ourselves two further interrelated challenges:

- What does social theory have to say about how policy makers might make use of people's relationships to strengthen their capacity for resilience against wider socio-economic change?
- Empirically, does this hold up?

No study, it seems, is yet to systematically address such challenges. For this reason, this thesis offers a theoretical framework, grounded in an analysis of social networks, for understanding people's 'resilience' in the face of adverse circumstances. The thesis applies the framework to an empirical investigation into the social support networks that lone mothers have, and examines the role that these networks play in times of recession and austerity. We see, for example, that one key differentiation between the two lone mothers we met earlier is that Sharon has a social support network that helps her to obtain resources to deal with daily life, which helps her seize opportunities, and which also reduces uncertainties associated with wider socioeconomic adversity. On the other hand, Jody does not have this type of network and consequently struggles to get-by.

1.3. 'The Theoretical Challenge': Resilience against socioeconomic adversity?

There is currently no systematic theoretical framework in the social sciences that links social networks with resilience against wider socio-economic hardships. This is the theoretical challenge that this thesis seeks to address. The challenge is addressed by adopting the point of view that what might often be considered as rival approaches to conceptualising the social world can often be used together in a complementary fashion to enhance explanatory power (Scott 2011a)³. The particular concepts that this thesis brings together are drawn from literatures concerned with: i) the resilience of complex adaptive systems, ii) social agents and what they are motivated by, and iii) people's social networks.

Resilience as a concept is used across an array of sciences: ecology, engineering, psychology and disaster management, to name a few. Academic debate in social policy, seeking conceptual clarity on the concept, has drawn almost exclusively upon the psychological literature⁴. One reason for this is that at the current time there is no coherent sociological framework that deals with resilience. In contrast, the psychological literature on resilience is burgeoning, in part because of a trend in psychology that has shifted focus away from people's negative psychological states towards their positive ones.

For social policy, however, the practical applications of psychological approaches to resilience are likely to be limited. Firstly, in psychological approaches the outcome, the explanandum, is psychological. It is possible to be psychologically resilient and yet live through the most horrific of personal or social adversities. Such thinking might tend towards normalising adversity. It might, for example, lead policy makers to think that as long as people can cope psychologically, then everything is ok. Or, for those actually living through some adversity, it might promote acceptance of that adversity and engender inactivity. Secondly, in psychological approaches the explanans is generally also psychological, focusing on attributes of individuals (such as 'positive thinking'), largely ignoring or inadequately conceptualising the broader social and economic ecology within which people lead their lives.

What is missing is a sociological interpretation. This can add two main things. Firstly, it can help define resilience in terms of outcomes beyond the psychological ability of the individual to cope with adversity. Secondly, it can give us an idea of how such resilience is conditioned by social factors such as people's support networks (rather than psychological tendencies such as positive thinking).

A sociological approach would, this thesis argues, benefit from seeking inspiration from literature concerned with what are called 'complex adaptive systems'⁵. This body of literature emphasises the importance of interconnections, of systems, but also of the elements that make up such systems (as does much work in sociology). In this literature, resilience is generally defined as how much a system can be disturbed and persist without going through radical transformations to its 'identity', its 'structure and function' (Holling 1973). Even given the focus on persistence, resilience is not a static state. It is a dynamic 'adaptive outcome' that arises from 'adaptive responses' taken by a given system (and, as we will see as the thesis progresses, there are a number of other 'adaptive outcomes') (Engle 2011). The adaptive responses taken by a

³ Scott (2011a) gives the example that both 'action' and 'system' characteristics are an important part of the social world, both with their own associated conceptualisations (often considered as rival approaches), and neither can be ignored or exaggerated at the expense of the other without sacrificing explanatory power.

⁴ For proof of this one only needs to look at the reference list of the key papers (e.g. Mohaupt 2009, Harrison 2013) as well as the actual content of special issues of journals, such as Social Policy and Society (2009: 8,1). Furthermore, it seems that the psychological literature that is drawn upon has quite a narrow focus: how children and adolescents deal with personal life adversities, such as abuse.

⁵ It is not only sociology that benefits from ecological thinking on resilience. Current work in economics, for instance, has realised the potential fruitful application of complex adaptive system concepts (derived from ecology) to examine the resilience of 'banking ecosystems' (Haldane & May 2011).

system are generally resultant from the particular elements and interconnections within that system.

However, we are still left with the question, in social systems such as families what exactly is it that is resilient; what persists? Sociological and economic perspectives on what people aim towards, in terms of their lifestyles and livelihoods, can help answer this question. It is well demonstrated that people aspire to ensure the persistence of a desirable standard of living and try to avoid any degradation to these living standards (Simon 1996, Goldthorpe 2000). Such arguments have been shown to apply specifically to lone mothers (Millar 2007). Conditions over which a given individual has little control, such as economic recession and government policy, will affect their ability to maintain such lifestyle aspirations. The sociological approach taken in this research suggests that in response to such threats people are not likely to just grin and bear it, they will act on the things they do have some control over ('adaptive responses') to try and ensure the persistence of some desirable standard of living. Clearly, people do not have direct control over the macro-economy. However, by exercising influence over things where they do have some control, such as their interactions with others, they are likely to be able to better realise desired results and avoid undesirable circumstances when adversity strikes. For instance, when faced with turbulent conditions, social agents might act with agility and creativity, reweaving the social support networks amidst which they live to construct resilience (Room 2011).

Indeed, there is a large research literature which tells us that people's personal social networks shape their decision-making, their behaviour, and the outcomes they experience (Small 2009, Kadushin 2012). This literature, it is argued, can help us understand why some individuals have the capacity to achieve resilience against socio-economic hardships whilst others do not. Having said this, as it currently stands the social network literature gives a rather static picture of social networks (Scott 2011b, Room 2011). For instance, theoretically it lacks an understanding of the linkages between wider socio-economic circumstances and the formation, structure, content and importance of social networks. A complex adaptive systems framework can, however, help work around this theoretical impasse, conceptualising the ways in which people's personal social networks interrelate with and help them adapt to wider socio-economic circumstances.

Finally, it is worth noting that there is currently no systemic treatment of the potential linkages between each of the literatures described above; between people's aspirations, their social networks and their resilience in times of adversity. This thesis links these literatures together with the aid of a sociological framework for explanation - 'analytical sociology' (Hedström 2005) – which enables us to put them together within a coherent methodological framework for empirical research.

1.4. 'The Empirical Challenge': The role that personal support networks play for lone mothers in times of economic crisis

The theoretical framework offered in this thesis suggests that wider socio-economic adversity will change the ways in which people interact with and depend upon their social networks. And,

social networks will partially determine the extent to which people are capable of adapting to the effects of wider socio-economic adversity. To examine the plausibility of this argument we must conduct empirical research with a group that the recent socio-economic crisis has affected. Lone mothers are such a group.

As we have already seen, recent research has shown that lone mothers have been badly affected by the economic crisis and government austerity. Even before the recession lone mothers had been a group at risk of poverty. Furthermore, despite their commitment to work lone mothers quite often cycle in and out of employment and struggle to secure an adequate income or work place progression (Evans et al. 2004, Harkness et al. 2012, p.22). The recession has exacerbated these insecurities, making it increasingly more difficult for lone mothers to find secure and flexible work with an income adequate to support family life (Tinsley 2014, Rabindrakumar 2014)⁶. On top of this, high levels of inflation, particularly in the utilities (gas and electricity), food and childcare markets, has led to a rapid increase in the cost of living. As lone mothers spend a higher proportion of their income on these costs (ONS 2010a) their standard of living has been disproportionately affected. It is also clear that lone mothers have been particularly affected by the government's austerity agenda (Women's Budget Group 2013). But, what is unclear is how they might adapt to or buffer against such changes, and the role that their social networks play in such a process.

To examine the role that social networks play for lone mothers in tough economic times, it is necessary that we first learn something their social networks. There is already an academic literature that highlights the important role that social networks play for lone mothers. Millar and Ridge (2009), for instance, show that the 'relationships of care' that lone mothers have affect their ability to take up potential opportunities offered by government policy reforms. Those lone mothers who are able to take advantage of new opportunities offered by government policy tend to have supportive relationships. Yet, although this literature shows that social networks play an important role in fostering positive outcomes for lone mothers, it isn't clear if any particular aspects of their support networks are associated with such outcomes. Nor has research examined how lone mothers create, sustain and mobilise their networks. So, another empirical challenge is this: The literature concerned with the social networks of lone parents does not highlight the specific bases of social support (support that is likely to be crucial in adverse times) or the ways in which social support networks are created, maintained and mobilised.

By addressing the empirical research challenges described above, this thesis builds upon and contributes to current literature concerned with the social support networks that lone mothers have and gives an understanding of the role that these networks play in changing socioeconomic circumstances. For policy makers that seek to make use of the power of people's relationships, e.g. to foster positive outcomes such as resilience against adversity, this type of information will be essential.

⁶ As will be described later in the thesis, the picture is slightly more complicated than suggested here. Lone parent employment rates did increase during the recession. However, this increase says little about the quality of work available. Lone parents are, for example, much more likely to be affected by 'underemployment', low pay and inwork poverty than the general population (Tinsley 2014, Gottfried 2010).

1.5. Research Framework and Questions

As discussed above, this thesis brings together insights from a number of different literatures concerned with i) the resilience of complex adaptive systems, ii) social agents and what they are motivated by, and iii) people's social networks. This section offers a brief outline of how these literatures are brought together within a coherent theoretical framework, a framework which is used to set out and explore a particular set of empirical research questions. The purpose of this overview is to give enhanced clarity to the conceptual and theoretical chapters that follow, allowing the reader to understand the place of each chapter in the overall scheme of the thesis as a whole.

The explanatory framework of the thesis starts with the macro socio-economic context of the research, economic recession and government austerity, and seeks to map the relationship between this context and the 'adaptive outcomes' of lone mother families. Here we might find that a given lone mother family struggles to cope with economic adversity (i.e. is not resilient). This type of family might find that their lifestyle has degraded as a result of the recession and austerity. On the other hand, we might find that another lone mother family is resilient to the same adversity and has been able to ensure the persistence of some desirable standard of living, even given the recession and austerity. Indeed, lone mothers as a group are likely to vary in their capacity to cope with wider socio-economic change.

Then the thesis seeks to explain the different outcomes which are experienced by lone mother families with reference to the causal processes and linkages that connect the context of the research to the outcomes of interest. As already noted, we assume that people in general, lone mothers in particular (Millar 2007), desire to maintain the persistence of some aspired towards way of life. However, exposure to the recession and government austerity will, in all likelihood, negatively affect the persistence of that aspired towards way of life. This, we argue, will motivate the lone mother to take 'corrective actions', changing the ways in which she interacts with the world around herself, to rectify or improve her situation.

One domain in which social agents might take corrective action is in their interactions with other people. People's relationships and social networks supply opportunities for action. As we will see in the chapters that follow, there are a number of particular types of social support – emotional support, childcare, support finding a job, financial support - which a given lone mother might mobilise in times of need. Furthermore, the sociological literature suggests that each of the different types of support just mentioned is likely to be more accessible from certain types of individual and/or relationship (see, for example, Wellman & Wortley 1990). The literature suggest that family members are, for instance, likely to be a good source of childcare and financial support. Friends, on the other hand, are likely to be a good source of emotional support. One key argument of this thesis is that if a lone mother has a range of different types of social support accessible in her social network, she is more likely to be able to adapt to wider socio-economic change. Another important factor that we must consider when investigating how people solve problems associated with their environments is the knowledge and skills that they have access to. The particular knowledge that an individual has of their situation is likely to shape their response to that situation (Simon 1992).

Finally, having traversed a few key causal linkages which connect people to their wider socioeconomic context and to their social networks, we come back to the outcome of the explanatory scheme. At this part of the framework the thesis seeks to highlight how social action, in particular the mobilisation of latent resources in a social network, leads to adaptive outcomes and how differential access to social resources will likely affect the type of outcome that a given lone mother experiences.

Having given a brief outline of the theoretical framework above, we can introduce the actual research questions that the thesis aims to answer. The overarching aim of this thesis is to investigate if social networks help people adapt to wider socio-economic adversity, and if so it seeks to explain how. To address this aim requires answering four questions.

Q1: How do lone mothers vary in their capacity to adapt to hard economic times in terms of their adaptive outcomes?

Q2: Does exposure to recession and austerity alter the lone mother's motivations for action? If so, how?

Q3: How do the individual characteristics of the lone mother, such as her skills and knowledge, shape the actions she takes in response to exposure?

Q4: Do social support networks supply lone mothers with the adaptive capacity to construct desirable adaptive outcomes in adverse socio-economic times? If so, how?

The answer given to Question 1 leaves us with a 'black-box' to open in that it does not detail the causal processes through which the context of the research is connected to the adaptive outcomes that a particular lone mother might experience. Answering the rest of the research questions helps us to open that black-box. All of the questions are important for the logic of the research. However, the primary research focus is on examining the potential linkage between social networks and adaptive outcomes during times of socio-economic change (Q4). Finally, it is worth noting that given the theoretically driven nature of the research questions, the exact rationalisation for each question will become clearer as the thesis progresses through the early chapters.

1.6. Conclusions, contributions and thesis organisation

This thesis examines the causal processes and linkages between macro socio-economic conditions, individual aspirations, decision-making, social support networks and 'adaptive outcomes' such as resilience. It asks, as an overall research aim, do people, lone mothers in particular, use their social networks to help them adapt to hard economic times? Answering such a question can shed light on each of the research challenges outlined earlier in this introductory chapter.

The thesis' contributions to knowledge are as follows. Empirically, the research adds to existing literature on the social networks that lone mothers have. It identifies which aspects of these social networks are important for social support outcomes, and highlights the role that personal networks play in adverse socio-economic times. Conceptually, the thesis contributes towards the construction of a sociologically informed concept of resilience. Theoretically, the thesis

refines and develops theory regarding the interaction between wider socio-economic conditions, social networks and resilience. Finally, given the empirical and theoretical contributions, the thesis is also able to contribute towards social policy debate by suggesting how policy makers might strengthen people's social networks and facilitate their resilience against socio-economic hardships.

The thesis is divided into three parts, each corresponding to the challenges and contributions outlined in this introductory chapter.

The majority of the conceptual and theoretical work is conducted in Part 1 (Chapter 2 to 4) of the thesis. Chapter 2 outlines a complex adaptive systems framework for conceptualising resilience and theorising what might contribute towards a given system achieving resilient outcomes. Chapter 3 then examines research literature on social support networks and argues that this literature can inform sociological research into resilience by highlighting some potential ways in which people might respond adaptively to adversity. Chapter 4 examines people's aims and their decision-making processes, as well as the types of action and social action that they might take, so as to inform resilience thinking in sociology. Each of these chapters finishes with a 'Critical note' which relates the framework being developed to cognate research literatures that could potentially benefit from such a framework.

Part 2 (Chapter 5 to 10) of the thesis is concerned with the empirical investigation. Chapter 5 describes the context of the research, with a focus on how recession and austerity has impacted on the financial situation of lone mother households. Chapter 6 presents the methodology of the research and situates the concepts described in Part 1 within a sociological framework for empirical explanation ('analytical sociology'). In terms of the actual research methods used in the research, the thesis adopts a mixed-method approach. The empirical research questions are addressed with semi-structured interviewing, personal network analysis (or, 'ego-network analysis'), statistical analysis (multilevel logistic regression) and qualitative data analysis. Chapters 7 to 10 present the findings from this empirical research.

Part 3 (Chapter 11 and 12) examines the policy implications of the research and the empirical and theoretical contributions that the thesis makes to academic knowledge and debate. Chapter 11 embeds the policy suggestions that emanate from this research within broader policy debate surrounding the Conservative's 'Big Society' and Labour's 'One Nation' policy umbrellas, and in particular discusses the usage of the concept of resilience in this debate. The chapter links the theory and evidence presented earlier in the thesis to strategies that policy makers might take to build the social aspects of resilience for individuals, families and communities. Finally, Chapter 12 summarises how the thesis has addressed the challenges described in this introductory chapter and what this means in terms of the overall contributions of the thesis.

Additional material that lends further support to the argument of the thesis can be found in footnotes and the appendix at the end of the document.

Part 1

Conceptual and Theoretical Framework

Chapter 2: The adaptive capacity, resilience and vulnerability of complex systems

2.1. Introduction

This chapter outlines a systems conceptual framework that will aid in the construction of a sociological conceptualisation of resilience in later chapters. The framework will also help theorise the ways in which social actors use their networks to adapt to changing socio-economic circumstances¹.

To gain an adequate understanding of any phenomenon depends upon obtaining a conceptually sound definition of the research domain at the start of the investigation. As argued in the introductory chapter, a full understanding of how individuals relate to and adapt to their socioeconomic world requires a sound conceptualisation of social connections. The main empirical and theoretical perspective that deals with social connections in the social sciences is the interdisciplinary field of social network analysis. However, the current scope of the social network literature to deal with the type of change that this research is concerned with (i.e. interactions between wider socio-economic circumstances and social networks) is limited. This is because social network analysis is, at the time of writing, a rather static method of analysis. By this we mean two things.

Firstly, the focus is on cross-sectional analysis, on social networks at a specific point in time. When the social network literature does deal with change over time it generally does so by examining how the static topology of a given network affects the outcomes and attributes of the nodes in the network ('dynamics on networks'). Studies that move beyond this, that examine temporal changes in a given social network's topology ('dynamics of networks'), are an exciting area of both theoretical and empirical development (Snijders & Dorein 2012). Secondly, social network analysis tends to focus on factors endogenous to the network, such as nodes, connections, and network structure (terminology given a lengthier exposition later in this chapter). This is because, as Snijders and Dorein (2012) note, "understanding how context affects network dynamics goes beyond the estimation of models". The social network literature is thus underdeveloped (both theoretically and empirically) in regards to i) temporal changes in network structure and ii) how factors exogenous to the network affect the development of the network. This state of affairs is somewhat like watching a game of chess, identifying the patterns that emerge, but without knowing about the rules of the game that generate those patterns.

This chapter argues that concepts that deal with systems, in particular recent interdisciplinary work on complex adaptive systems, can help conceptualise and investigate the interaction between social networks and their wider socio-economic circumstances². While of course the particular

¹ For what is meant by the difference between 'concepts' and 'theory' in this thesis, please see Appendix 1.

² Network thinking is actually one of the more successful strands of the complexity science movement (Newman 2010). Having said this, the complex adaptive systems framework has antecedents in a number of other fields such as cybernetics (Wiener 1948), general systems theory (Bertalanffy 1968), physics and chaos theory (Bak 1997) and evolutionary biology (Kauffman 1993). This chapter focuses on an understanding of complex adaptive systems garnered from the ecological sciences. Other strands of complexity thinking, for example drawn from physics, are

systems that different disciplines investigate are likely to be very different in some respects, the commonalities that occur can be quite striking (Room 2011, Farmer 1990). It is with such commonalities that this chapter is concerned. This knowledge, which might, for example, explicate mechanisms and processes which connect parts with wholes and systems with environments, is an extremely useful source of theoretical material for the social sciences.

The layout of the chapter is as follows. It starts by asking, what exactly is a complex adaptive system (section 2.2)? Then a number of concepts are examined, primarily 'adaptive capacity' and 'resilience', that can help us describe what happens when a complex adaptive system is faced with a disturbance in its environment (section 2.3). Then, a number of well-documented factors that constitute a given system's ability to cope with changes in its environment are described (section 2.4). This helps us conceptualise, in the following chapters, how social networks might influence the resilience of certain types of social system (such as families). The chapter concludes by summarising the main argument and draws linkages to the chapters that follow. It is concluded that even given the commonalities across disciplines, there are clear differences as well. The social sciences need to account for the particularities of human relationships as well as the role that reflective agents play in social systems (Room 2012). Accounting for the human aspect of complex adaptive social systems is the job of the chapters that follow.

2.2. The defining features of complex adaptive systems

To understand what a complex adaptive system is, it worth firstly examining how a simple system might be defined. Simple systems consist of elements that through their connections (interdependencies) form a particular system structure. The structure of these systems makes them distinguishable from their environment; they are bounded. It is, for example, relatively easy to distinguish a mechanical system, such as a washing machine, from its surrounding environment. Simple systems do generally interact, albeit in a simple manner, with their environment. These interactions are termed the 'boundary conditions' of the system. Moreover, the behaviour of these simple systems is usually quite easy to predict. A pocket watch, for example, is an intricate design of cogs and springs which will act in a predictable manner (one would hope) when it interacts with an energy source - a winding mechanism for example. This is because the movement of the parts of the system depend in unvarying ways on the movement of other parts. In systems language, some exogenous input goes through a fixed transformational function (dependent upon the interdependencies in the system), analogous to the terms in a mathematical equation, the consequence of which is a predictable output (Bossel 2007). Finally, simple systems generally depend on a specific constellation of environmental parameters to survive (i.e. they do not adapt to changes in their environment) and they do not regenerate or repair themselves over time. Given this, a simple system might well decay when some exogenous stressor is applied.

Holland (1992) offers a definition of complex adaptive systems that builds upon the definition of simple systems given above. Complex adaptive systems are composed of elements that are interconnected with one another (as with the definition of simple systems given above), but

not explicitly discussed in this chapter (the physics literature neglects the 'adaptive' aspect of living systems, focusing instead on issues such as non-linearity and chaos).

crucially complex adaptive systems display what might be termed 'emergent behaviour', they adapt to, learn about, and evolve in relation to their environment (Holland 1992). Complex adaptive systems are to be found in both nature and society. Examples relevant to the social sciences include the nervous system (Bullmore & Sporns 2009), the family (Potts 2000, Room 2011), the economy (Arthur 2013) and neighbourhoods (Miller & Page 2007, Schelling 1978).

The elements that complex adaptive systems are composed of are usually complex adaptive systems themselves. That is to say, they are generally able to learn from experience and adapt to their environment (Potts 2000, Levin et al. 2013, Holland 2012). These elements interact, respond, and adapt to each other as well as their environment. For example, a colony of ants will interact with its environment and the ants will communicate with one another about what they have learnt. The colony adapts to changing internal and external circumstances. Moreover, in complex adaptive systems, the elements are generally heterogeneous and diverse (Page 2011). For instance, in Adam Smith's market economy (often cited as an early exposition of a complex adaptive social system) interactions are driven by heterogeneity, by a division of labour between the butcher, the brewer and the baker. If everyone had the same skills there would be no need for interaction or interdependency.

From their interactions, the elements of the system may synchronise with one another and display what complexity scientists term 'self-organisation' and 'emergent behaviour' (Miller & Page 2007). Self-organisation means there is no central control directing the behaviour of the elements of the system. Rather, order emerges through interactions and communication at a micro level (much like in the examples given above of the ant colony and Adam Smith's market economy). These self-organised structures might display the emergence of novel macroscopic properties that cannot be reduced to the system's component parts. Goldstein (1999) describes emergence as follows: "Emergence is the arising of novel and coherent structures, patterns and properties during the process of self-organisation in complex systems." To use a popular adage, the whole is more than the sum of its parts. For this reason, it is not possible to decompose such systems into their elementary parts and expect them to retain their characteristic or causal properties³. The biological autonomy of a cell cannot be reduced to its particular molecular components (Capra & Luisi 2014, p.134). Similarly, the holistic properties of society are irreducible to individual acts (Scott 2011a).

In terms of the structure that the interacting elements of a complex adaptive system take, Simon (1962, 1996) has shown that certain structures have greater potential for dealing with changing circumstances. In particular, Simon (1996, ch.8) shows that the structure of complex adaptive systems are very likely to be in a state of 'near decomposition'. By which he means that the interactions within a system will be strong. On the other hand, interactions between such systems and their environment will be weaker, but not negligible. The narrow area of influence between the system and its environment is what we have already termed the boundary conditions. In complex adaptive systems, the boundary is generally something that the system has some autonomy over. That is to say, complex adaptive systems create, maintain and degrade

³ Epistemologically this means that new concepts are needed at each 'level' to help us understand the phenomenon: 'more is different' (Anderson 1972). In practice, this necessarily introduces a multilevel dimension to the analysis of both natural and social systems. In the social sciences, for example, explaining social outcomes might require reference to the individuals involved, institutionalised modes of behaviour and particular social network properties (López and Scott 2000).

aspects of their own boundaries, and this autonomy is one way in which a system might cope with its environment (Holland 2012, Cilliers 2001)4.

Complex adaptive systems are also dependent on their environments for the resources and information needed for their survival (Bossel 2007, Holland 2012, Capra & Luisi 2014)⁵. This means that they have to sustain themselves in relation to their environment and any adverse stressors or fluctuations in that environment. How disturbances are dealt with and adapted to by a given system will depend, in part, on factors endogenous to the system, such as the particular feedback loops, be they positive or negative⁶, which that system has (Bossel 2007). (These feedback loops are related to the structure of interactions in the system.) For example, organisms have 'essential variables' necessary for survival, e.g. physiological variables such as body temperature and the need for nutrition, which must be kept within certain bounds (Kauffman 1993, p.210). These essential variables are generally under the influence of circumstances external to the organism (such as the climate and food supply), circumstances to which the organism must adapt if it is to survive. Complex adaptive systems thus deal with selective pressures. This has been documented in sociology - Parsons, for example, argued that adaptation in social systems happens in response to disturbances that pressure the system to change (Scott 2011a, p.98).

One way complex adaptive systems deal with these selective pressures is by modifying interactions between the system's lower level elements, self-organising in different ways (Holland 2012, Page 2011). Complex adaptive systems also generally have the ability to create variation and novelty to cope with their environment. For example, to adapt to new environments they might alter the particular elements in the system, the structure of the system, or the boundary conditions of the system (altering the systems 'exposure' to a given 'perturbation' – terminology clarified in the next section) (Walker & Salt 2012, Bossel 2007). As Holland (1992) describes "these systems change and reorganise their component parts to adapt themselves to the problems posed by their surroundings". This process might involve exploring new interactions and behaviours through a process of trial and error. What works is kept (and perhaps scaled up) and what doesn't work is dropped. As these interactions evolve, they might display new forms of emergent behaviour that allow the complex adaptive system to better fit with its environment. The capacity of a system to adapt to its environment is thus a feature of

⁴ Moreover, the same nearly decomposable structure holds within systems. Subsystems have strong internal interactions and weaker interactions with their neighbour subsystems. This means that complex adaptive systems generally have what is termed a 'modular structure' (Simon 1996). These modular structures give greater capacity to adapt in the face of disturbances as causal spill-over will be more likely to be localised (and not spread to the whole system).

⁵ Bertalanffy (1968), in his work on general systems theory, described the differences between closed and open systems. A closed system is a part of the world that is effectively cut off from external influences. Conventional physics has tended to examine closed systems. Thermodynamics, for example, tells us that no closed system can become increasingly ordered or is capable of sustaining the order that characterises organised complexity. For this reason, the theories of closed systems have been rejected in the biological and the social sciences (see Luhmann 2012). However, as noted by Bertalanffy (1968), some systems are capable of creating and sustaining order as they are open to their environment with respect to inflows of energy (and other resources, such as information) and outflows of waste (Bertalanffy 1968; see also Bossell 2007).

⁶ Broadly speaking there are two different types of feedback, negative feedback (or, deviation reducing feedback) and positive feedback (or, deviation amplifying feedback). Both concepts are historically related to cybernetics (Wiener 1948). Social theorists such as Parsons (1951) and Luhmann (2012) recast their theories in light of ideas derived from cybernetics (see e.g. Scott 2011a).

the system that emerges, in part, from interactions internal to the system. Complex adaptive systems are thus self-organised by their elements but conditioned by their environments. The particular structure that a system takes comes about through an interplay of endogenous factors (e.g. possibilities granted by the elements in the system) and exogenous factors (e.g. the pressures of that system's environment).

The type of highly generalised systems theory described above was already being explicated in sociology during the 1960's. For example, Buckley (1967, p.62-63) argued that there are a number of characteristics that are required for complex adaptive social systems to adapt to variability in their environment. Firstly, complex adaptive social systems must have some degree of plasticity as well as sensitivity to their environment, allowing for constant action and reaction in response to change. Secondly, there must be some mechanism that allows for the creation of variety (i.e. adaptations) on which the system can act when responding to change. Thirdly, there must be some form of selective criteria that selects adaptations that fit closely with the environment and discards those that do not. Fourthly, there must be some arrangement for preserving order and propagating successful mappings. Buckley (1967, p.62-63) termed these processes 'morphogenesis' - "the processes which tend to elaborate or change a system's given form, structure or state".

To conclude this section, it is worth highlighting a final important characteristic of many complex adaptive systems – anticipation. Holland (1992) describes how some complex adaptive systems anticipate the consequences of future states of their environment as well as their potential responses to that environment. (Anthropomorphic terminology such as 'anticipate' is used by scholars such as Holland in a more limited sense, perhaps as a form of analogy.) This, we argue, is a characteristic and important feature of human social systems. This particular property of complex adaptive systems will be explored in greater detail in Chapter 4 when it is examined in relation to human foresight, i.e. how humans look ahead and adapt their behaviour to fit with what they expect of the future.

2.3. The adaptive capacity, vulnerability, resilience and transformability of complex systems

As seen above, the capacity that a given system has to adapt to its changing environment is a property that emerges from the interactions and structure internal to the system. In this section we further develop our understanding of 'adaptive capacity' and link it to other related concepts such as 'exposure', 'vulnerability', 'resilience' and 'transformability'. These concepts are drawn

A number of traditions and disciplines uses these and other similar terms. The concept of resilience is, for instance, used in disciplines as diverse as medicine, psychology, disaster management, engineering and the environmental sciences. It is not in the immediate interests of developing the argument of this chapter to delve into disciplinary differences in depth. However, given the argument of the introductory chapter (sec. 1.3), it is worth saying something about how psychology conceptualises resilience. In psychology resilience is typically defined along the following lines: "[Resilience is] positive adaptation in the context of significant challenges, variously referring to the capacity for, processes of, or outcomes of successful life-course development during or following exposure to potentially life-altering experiences" (Masten et al. 2009, quoted in Robertson 2012). Robertson (2012) argues that the key outcomes of psychological resilience are reduced anxiety and depression and increased psychological wellbeing. In terms of what constitutes psychological resilience, the literature highlights factors such as positive

from literature concerned with 'social-ecological' systems, themselves archetypal complex adaptive systems, a literature that attempts to understand how social systems adapt to changing ecological circumstances (Levin 1999, Carpenter et al. 2012)⁸. Interestingly, this social-ecological literature has been directly influenced by the sociological thought of Parsons (1964), in particular his concept of 'generalised adaptive capacity', which will also be discussed in this section.

The layout of the rest of this section is as follows. The first subsection (2.3.1) develops the idea that systems are 'exposed' to perturbations in their environments. The subsequent subsection (2.3.2) elaborates the fact that how a system deals with such perturbations is related to that system's 'adaptive capacity'. Finally, the potential 'adaptive outcomes' of system-environment interaction are described (2.3.3): vulnerable outcomes (roughly speaking, system deterioration), resilient outcomes (system-maintained), transformable outcomes (system-transformed).

2.3.1. Exposure to perturbations

As seen in section 2.2 above, complex adaptive systems are dependent on their environments, which they must adapt to. Ecologists say that complex adaptive systems are 'exposed' to and must adapt to 'perturbations' in their environment. By perturbation we mean, following Gallopín (2006), a "spike in pressure beyond the normal range of variability in which the system operates and [which] commonly originates beyond the system or location in question". (For example, later in this thesis the term is used to refer to the recent recession and government austerity which has exposed some families to the largest drop in living standards seen in decades.) Exposure, then, is the degree, duration and/or extent that a system is subject to such an external perturbation (Gallopín 2006, Adger 2006).

Gallopín (2006) discusses the fact that the response of a system to perturbation will depend not only on the internal characteristics of the system, but also on the level of exposure to and the magnitude of the perturbation. There is thus a qualitative difference between exposure, which can be defined without reference to a given system, and any internal characteristics of a given system that contribute to its capacity to adapt to that exposure. This division allows us to differentiate between the facts that a system might have low adaptive capacity to a specific type of perturbation, but persist without problems insofar as not exposed to it.

2.3.2. Adaptive capacity: The latent capacity to adapt to perturbations

In sociology, Parsons (1964) used the concept of 'generalised adaptive capacity' to describe the evolution of societies and their capacity to cope with environmental challenges and

thinking, problem solving skills and being able to take a different perspective (see Fletcher & Sarkar 2013 for a recent review).

⁸ Actually, the concepts that are presented in this section are derived from two distinct but interrelated approaches to understanding the response of social-ecological systems to change (and there are ongoing attempts to converge and synthesise these literatures). Firstly, there is a literature whose primary focus is on the concept of 'vulnerability' and secondly a literature whose primary focus is on 'resilience' (see esp. Miller et al. 2010, Engle 2011). Both literatures use these concepts in slightly different ways and with different emphases (Miller et al. 2010, Engle 2011, Gallopín 2006). Having said this, 'adaptive capacity' is generally defined in the same manner and is pivotal to both literatures. For this reason, it is a concept that is uniquely positioned to improve linkages between other concepts such as vulnerability and resilience (Engle 2011).

uncertainties. Central to his work was the concept of 'adaptation'. Adaptation, argued Parsons (1964), is "not merely passive 'adjustment' to environmental conditions, but rather the capacity of a living system to cope with its environment. This capacity includes an active concern with mastery, or the ability to change the environment to meet the needs of the system, as well as an ability to survive in the face of its unalterable features. Hence, the capacity to cope with broad ranges of environmental factors, through adjustment or active control, or both, is crucial". Successful adaptations, which originate from 'generalised adaptive capacity', will result in the survival of the system.

Social systems might build their adaptive capacity ('adaptive upgrading') through making adaptive responses to their environment. Such adaptive responses might well, for example, result in the social differentiation of roles/tasks (or, 'functional specialisation') (see e.g. Scott 2011a, p.254). Parsons argued that modern societies have greater levels of adaptive capacity compared to earlier societies because they have a greater range of (differentiated) structures and processes which can be called upon and which confer systemic flexibility (rather than, say, just a high level of adaptedness⁹). For example, bureaucratic organisation enables large-scale organised operations when needed, such as military deployment and tax administration (Parsons 1964, p.349). For Parsons (1964), another way in which social systems have the potential to adjust to their environment is through the alteration or control of symbolic and cultural systems (see e.g. Giddens 1984, p.263; Granovetter 1979).

The conceptualisation of adaptive capacity offered by Parsons (1964) provided the underpinnings (albeit often unacknowledged) for current day meanings in work on socialecological systems, work that connects adaptive capacity with other concepts such as exposure, vulnerability, resilience and transformability (Engle 2011). In this social-ecological literature, adaptive capacity refers to a given system's ability to adjust to (not just react to) perturbations which it is exposed to, so as to buffer and moderate potential damage (and, potentially, also take advantage of opportunities) (see in particular Smit & Wandel 2006, Engle 2011). Some scholars align adaptive capacity in social systems with the agents within a given system managing and constructing desirable outcomes when that system is perturbed (see e.g. Folke et al. 2010). In simple terms, adaptive capacity is the ability to create adaptations, adaptations being the manifestation of adaptive capacity (Smit & Wandel 2006). This definition of adaptive capacity suggests that it is a latent systemic potential which is likely to be dormant until circumstances (such as exposure to a perturbation) call for, at which point it might become activated and manifest in specific adaptations. Any increases in adaptive capacity will improve the likelihood that a system will be able to adapt to and manage the impact of changing circumstances. For these reasons, adaptive capacity is seen as a desirable "universally positive system property" (Engles 2011).

Given the definition above, we might also say that 'adaptive capacity' intervenes between exposure to a perturbation and what might be called the 'adaptive outcome' of exposure. (Using the language of philosophical realism, it is composed of generative processes that connect events or conditions.) For example, in Parsons (1964) usage, when exposed to environmental

⁹ High levels of adaptedness is not the same as high levels of adaptive capacity. A system may be well adapted to a specific or constant environment (be highly adapted) but have little capacity to adapt to other external circumstances (have low adaptive capacity). Adaptive capacity depends on having the potential for change.

challenges the adaptive capacity of a social system allows that system to 'survive'. In this case, 'surviving' is what in this thesis we would call the 'adaptive outcome'. The processes that enable the system to survive are conceptually distinct from actual survival. As we will see below, however, the social-ecological literature can help us go beyond Parsons in terms of conceptualising adaptive outcomes.

2.3.3. Adaptive outcomes: Vulnerability, resilience and transformability

When exposed to some perturbation, a complex adaptive system will have multiple possible outcomes, some 'desirable' and some 'undesirable' (see, for example, Adger 2006, Folke 2006). The concepts of vulnerability, resilience and transformability can help further develop this point. These concepts are sometimes used to refer to system processes and sometimes to system outcomes. So, to be clear, we use them to refer to system outcomes (and adaptive capacity to refer to system processes). Furthermore, what is meant by the term 'desirable' is often left implicit in the social-ecological literature. It is generally accepted that what is desirable or undesirable should be defined with reference to the particular system in question. It is not yet necessary to make explicit what is meant by 'desirable' in this research, but this will be explained in greater depth in Chapter 4.

In this thesis, a system is said to have vulnerable outcomes if a perturbation has deleterious or undesirable consequences for that system. It might, for example, refer to a new system state with depleted resources (Miller et al. 2010, Engle 2011, Adger 2006). Vulnerable outcomes are induced by the absence of adaptive capacity and can manifest in a number of ways. Some systems might degrade slowly over time. For example, mechanical systems do not have the ability to self-repair and their response to exposure will be to degrade and break down over time (Scheffer et al. 2012). On the other hand, complex adaptive systems might enter a low adaptive capacity state in which exposure to perturbations can cause sudden catastrophic damage (see e.g. Scheffer 2009). Adaptive capacity can help a system avoid vulnerable outcomes by modulating and buffering exposure to perturbations (Engle 2011). In this research, however, systems that achieve this are termed resilient or transformable, depending upon the type of change that the system makes.

The concept of resilience describes the persistence of system outcomes upon being exposed to perturbation, whilst the 'structure and function' of that system largely remains constant (Folke et al. 2010, Walker et al. 2004, Carpenter et al. 2012, Walker & Salt 2012). This is what Holling (1973) calls 'ecological resilience' and what Folke et al. (2010) term 'resilience as persistence'. Some scholars argue that resilience only refers to desirable system outcomes (Folke 2006), whilst others highlight that undesirable system states can be resilient to change (Walker et al. 2006). In this thesis, in light of the pivotal role played by the concept of adaptive capacity (which is desirable for a system to have), resilience refers only to the persistence of desirable system states/outcomes in the face of change (see e.g. Folke 2006, Miller et al. 2010, Engle 2011).

¹⁰ Some scholars have adopted a more technical narrow version of the concept, what Holling (1973) calls 'engineering resilience', which emphasises recovery and the speed at which a system returns to 'normal function', or the original system state, after a disturbance (an idea popularised in psychology as 'bouncing back').

It is also worth emphasising that although the focus of the concept of resilience is persistence, it is not a static state, but arises from dynamic adaptive responses taken by a system (i.e. adaptations) and is thus reliant on the capacity to adapt (Engles 2011). Because environmental circumstances are constantly changing, to maintain the resilience of some desirable system outcome complex adaptive systems must continually respond to change. Moreover, resilience as a concept can be used either to refer to the general persistence of a system ('general resilience'), or to the resilience of some specific system outcome to some specific perturbation ('specific resilience') – the resilience "of what to what" (Carpenter et al. 2001, Folke et al. 2010, Walker & Salt 2012). For example, this research examines the capacity of lone mothers to maintain desirable living standards (the resilience of what) when perturbed by recession and government austerity (resilient to what).

Lastly, some systems might transform their 'structure and function' in face of changing circumstances to facilitate desirable outcomes (Walker et al. 2004). In social systems, Walker and Salt (2012) define transformability as the capacity "to create a new way of living" when the previous way of doing things becomes untenable. The concept of transformation was introduced to distinguish between high adaptive capacity systems that maintain desirable system outcomes while retaining a similar system structure and function (resilient outcomes) and those that shift to a fundamentally new system to achieve desirable outcomes (transformable outcomes) (see e.g. Engle 2011). So, as with the concept of resilience, the concept of transformability implies desirability. Unlike resilience, it implies more radical transformation to achieve that desirability.

To conclude this section, we have taken a particular reading of the social-ecological systems literature, one which gives 'adaptive capacity' a pivotal place, a reading that sees the states of vulnerability, resilience and transformability as outcomes which are resultant from the capacity to adapt when a given system is exposed to some perturbation in its environment. Diagram 2.1 below visually represents the conceptual linkages discussed in this section. Systems with lower adaptive capacity (on the left) are more likely to end up with undesirable system outcomes when exposed to some perturbation (thick black arrow) while those with higher adaptive capacity (on the right) have a greater likelihood of ending up with desirable outcomes, whether this means the desirable outcomes are maintained or achieved through structural transformation. One benefit of separating 'adaptive capacity' and 'adaptive outcomes' in this way is that such a conceptual separation allows for the identification of low adaptive capacity systems before they are exposed to some perturbation (allowing, for instance, a greater emphasis on the prevention of undesirable outcomes).

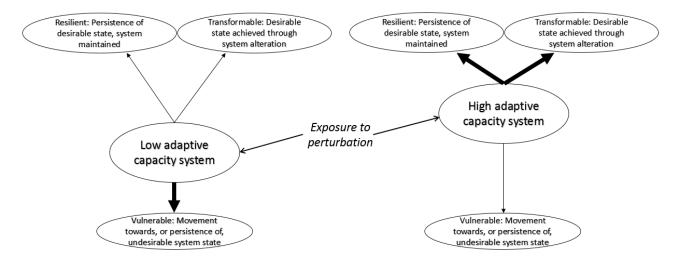


Diagram 2.1: The relationship between exposure, adaptive capacity, vulnerability, resilience and transformability (inspired by, but adapted from, Engle 2011)

2.4. System conditions that influence adaptive capacity

Although the concepts outlined above offer a powerful tool for describing the interplay between a system and its environment, they do not identify a straightforward set of theories, metrics or techniques that can help us understand or explain what constitutes adaptive capacity. Related to this point, Engle (2011) notes that it is useful to understand "what structures, relationships, processes, and other variables allowed for (or blocked) the facilitation of such adaptations (i.e., adaptive capacity)". Section 2.2 also highlighted that the capacity that a system has to adapt to its environment is a feature of that system's elements and connections. Given this, one scientific literature that can help us better understand what constitutes adaptive capacity is the interdisciplinary study of networks.

This section argues that an understanding of the elements in a system, the networks these elements form, and structural change in those networks, can help us better understand systemic properties such as adaptive capacity (see, for example, Janssen et al. 2006, Scheffer et al. 2012, Walker & Salt 2012, Carpenter et al. 2012, Bascompte 2007). Scheffer et al. (2012) point out that "A broad range of studies suggest two major features are crucial for the overall response of such systems: (i) heterogeneity of the components and (ii) their connectivity". Subsection 2.4.1 examines how the properties of the components in a system affect the adaptive capacity of that system. Then, section 2.4.2 examines how to represent system connectivity as a network. Sections 2.4.3 and 2.4.4 then look at how dynamics that take place on a systems topology, as well as the dynamics of a systems topology, are likely to affect adaptive capacity.

2.4.1. System elements and their impact on adaptive capacity

To understand the opportunities available to a given system and the capacity it has to adapt to change, it is important to characterise the features of the elements of that system. One might characterise the heterogeneity of the elements, as suggested by Scheffer et al. (2012). On the

other hand, it is also important to have some understanding of the 'functional homogeneity' of the elements (i.e. of the role played by the elements in the system) (Holland 2012). These points correspond to what in ecology has been termed 'response diversity' and 'functional redundancy' respectively. However, keeping with the network theme of this thesis, we refer to these concepts by the terms 'network diversity' and 'network depth'.

Network diversity: By diversity we mean what Page (2011, p.20) calls 'diversity of types and kinds'. For example, it might refer to the diversity of species in an ecosystem. Ecologists have shown that the more diverse the elements in an ecosystem (e.g. species), the more stable that system is when there are perturbations (Folke et al. 2004, Carpenter et al. 2012). Diversity has also been shown to increase the likelihood for renewal and reorganization into a desirable state following exposure to a perturbation (Elmqvist et al. 2003). To give an analogy, response diversity can be thought of as the amount of different tools that a handyman has in a toolbox. With a diverse toolbox a handyman will be able to deal with a range of potential DIY problems. On the other hand, if the handyman only has a hammer he wouldn't be much of a handyman. In the social world, Minnis (1985) highlights that resource diversity is a hallmark of social system stability. As we will see in the next chapter, Minnis (1985) describes that social networks are one way for individuals and groups to increase the diversity of resources they have access to.

Network depth: By network depth we mean that elements in a system and their function are duplicated. Adding more of the same does not always lead to increased system performance, but it is useful in certain circumstances. For example, having three screwdrivers in a toolbox won't necessarily increase the amount of DIY problems that a handyman can deal with. But, it does help when one of the screwdriver's breaks. Functional redundancy gives the system options for change if one element in that system fails. Holland (2012) gives the example of how orca whales shift from eating seals to otters when the seal population runs low. If a system relies heavily on one resource or system component, then its adaptive capacity will be adversely affected.

2.4.2. Representing system connectivity as a network

The connectivity of a system is likely to influence the response of that system to perturbation (Scheffer et al. 2012). One important insight of systems science is that networks are a good starting point to visualise and model the connectivity of complex systems, including human social networks (Newman 2010, Capra & Luisi 2014, Cilliers 2001, Room 2011).

Networks (also called graphs¹¹) are made up of nodes (also called elements, vertices or components) and connections (also known as edges or arcs). In mathematical terms, a network is defined as G(V, E), where V is the set of nodes and E is the set of connections. (The total

¹¹ The branch of mathematics used to describe and analyse networks is graph theory (Harary & Batell 1981, Scott 2012a). In contrast to statistics, which can be thought of as the mathematics of quantity, graph theory can be thought of as the mathematics of quality and structure. Interestingly, back in the 1930's Radcliffe-Brown (1937, p.69) argued that the social sciences would eventually be required to develop this type of methodological tool to represent the relational aspect of social structure: "The kind of mathematics which will be required ultimately for a full development of the science of society will not be metrical, but will be that hitherto comparatively neglected branch of mathematics, the calculus of relations, which, I think, is on the whole more fundamental than quantitative mathematics".

number of nodes in the network is usually denoted N and the total number of edges M.) The ith node of V can be connected to the j-th node through an edge (i, j). The structure that a network/system takes is generally represented in numerical terms in an adjacency matrix (see e.g. Scott 2012a, ch.3).

An example of a simple adjacency matrix and the corresponding network/graph is given below (Diagram 2.2). The example is what in the social sciences is called an 'ego-network', which means that the focal node (a, in red) is connected to all other nodes in the network. (This type of network will be discussed in greater detail in the next chapter.) It is also worth noting that in the example below the network is said to be 'undirected' because the connections between elements are symmetrical (the links go both ways, hence the adjacency matrix is symmetrical).

	а	b	С	d	е	f	g	h	i	j	k
а	0	1	1	1	1	1	1	1	1	1	1
b	1	0	1	0	0	0	0	0	0	0	0
С	1	1	0	1	1	0	0	0	0	0	0
d	1	0	1	0	1	1	0	0	0	0	0
е	1	0	1	1	0	1	0	0	0	0	0
f	1	0	0	1	1	0	1	1	1	0	0
g	1	0	0	0	0	1	0	1	0	0	0
h	1	0	0	0	0	1	1	0	1	0	0
i	1	0	0	0	0	1	0	1	0	0	0
j	1	0	0	0	0	0	0	0	0	0	1
k	1	0	0	0	0	0	0	0	0	1	0

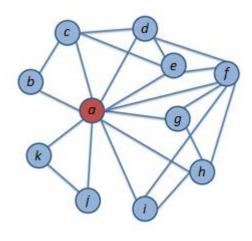


Diagram 2.2: Example of a simple adjacency matrix and the corresponding network 12

If we wanted to know how a perturbation might affect a given system, then decomposing it into its component parts (a, b, ..., k) would only get us so far. Though, as we will see in the following sections, by representing the system as a network, and examining certain properties/metrics of that network, we can potentially gain a better understanding of the adaptive capacity of that system.

2.4.3. Dynamics on networks

The structure of a system will affect what happens on that system. At the level of the connections in a system, if elements are tightly coupled to one another (i.e. they are highly dependent on one another) then change is more likely to cascade through the system (Scheffer 2009; Strogatz 2004). Change that takes place on one node will be quickly transmitted to other nodes that it is tightly coupled with. In the social sciences, Rappaport (1977) has termed this 'hypercoherence' defining it as when the "interdependence of parts ... becomes ever tighter as

¹² The author has adapted this diagram significantly from an example given on 'Wikimedia commons'.

the self-sufficiency of local systems disappears." He goes on to highlight that: "Coherence reaches dangerous levels as disruptions occurring anywhere spread everywhere with little or no delay". The recent global financial crisis demonstrates this. The balance sheets of the financial institutions involved in the crisis were so highly coupled to one another (i.e. they were so dependent on one another for funds) that when one of the banks went down, the effect cascaded through the entire network of banks, a bit like a domino effect (Ormerod 2012). If, on the other hand, there is only a mild level of coupling between the elements of a system, there will be somewhat of a stabilising effect. Things happen a bit more gradually in this state, giving the agents in the system a bit more time to react (Scheffer 2009). Lastly, if there is weak coupling between elements in the system then there will be no synchronisation and the elements will act according to their own rules (Scheffer 2009).

The network structure as a whole will also influences the dynamics that take place on a system. Network science, for example, has demonstrated that the resilience of a system, and its particular vulnerabilities, will be strongly affected by the topological properties of that system (Albert et al. 2000, Holme et al. 2002). To give an example, again focusing on the recent financial crisis, Arthur (2013, p.10) describes that the structure of the banking system, in particular the density¹³ of the connections in the system, made it vulnerable to collapse:

When a transmissible change happens somewhere in a network, if the network is sparsely connected [i.e. low density] the change will sooner or later peter out for lack of onward connections. If the network is densely connected, the change will propagate and continue to propagate. In a network of banks, an individual bank might discover it holds distressed assets. It then comes under pressure to increase its liquidity and calls on its counterparty banks. These in turn come under pressure to increase their liquidity and call on their counterparties, and so the distress cascades across the network. Such events can cause serious damage. They peter out in a low-connection network, but propagate or percolate—for long periods as the degree of connection passes some point and gets large.

The ideas presented in this subsection will be built upon in the next chapter when we examine specific examples related to social networks that show how the properties of connections and networks are likely to influence individual and social outcomes (and thus, it is argued, adaptive capacity).

2.4.4. Dynamics of networks

In what has been discussed above, only variables on the nodes change (for example, the failure of a given bank is dependent upon the connections it has to other banks). However, the topology of networks can also change over time. Over and above the dynamics that take place on networks, to understand adaptive capacity we argue that the possibilities for topological change available to a given system must also be understood.

¹³ Density is technically defined as the ratio between the total possible edges and the actual edges (Scott 2012a p.69). A complete graph, in which every node connected, has a density of 1.

Kauffman (2000) introduces the notion of "adjacent possibilities" to help understand changes to a systems topology (see also Potts 2000). An adjacent possibility is a possible (not actual) system that is one step removed from the current actual system. As Johnson (2010) notes, it can be thought of a map of the way in which the current state of affairs can potentially reinvent itself. Diagram 2.3 below gives a graphical representation of this idea. In this example, if we allow that the creation or decomposition of a connection between elements is a step change to an adjacent possibility, then there will be n(n-1)/2 adjacent possibilities, where n is the number of nodes in the network. So, in a system with 3 elements there will be 3 adjacent possible systems.

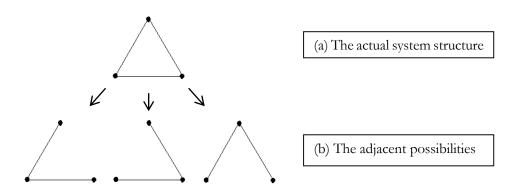


Diagram 2.3: The actual system (a) and its adjacent possibilities (b)

It is argued that the more possibilities for change that a system has, the more adaptive capacity that that system is likely to have. A complex adaptive system might tinker with the possibilities that it has available until it finds a structure that fits better with its environmental conditions. Some particular factors that are likely to influence the available adjacent possibilities in social networks will be explored in greater depth in the next chapter.

2.5. Conclusions

This chapter started by describing complex adaptive systems. These systems must adapt to their environment and do so by changing their internal structure of interactions or the ways in which they interrelate with their environment. This is not an endogenous account of system change, not one in which external conditions are just the 'background' against which change unfolds. The external conditions of a complex adaptive system are key to its change. At the same time, however, we saw that conditions internal to a complex adaptive system are also important for change and supply the system with its adaptive capacity. A number of other concepts were also introduced - vulnerability, resilience and transformability. Systems with vulnerable outcomes are likely to lack the capacity to adapt, whereas systems with resilient and transformable outcomes have a greater capacity to adapt (albeit, they adapt in different ways). It is argued that these concepts are useful for understanding how individuals, families, communities and even societies cope and deal with changing circumstances.

The literature that has been drawn upon in this chapter is interdisciplinary. However, to recognise similarities is not to deny differences. Cross-system generalisations have limits. Specific disciplines need to account for the specific characteristics of their area of research. The social sciences, for instance, need to account for the role that reflective agents play in human systems, which clearly do not play a role in physical or biological systems (which are, in comparison, relatively "blind") (Room 2012). Furthermore, we argue that it is absolutely necessary to identify, with as much precision as possible:

- What specific system factors are likely to supply a given system with its adaptive capacity? This is addressed in relation to this research in Chapter 3.
- What specifically is it that is resilient for a given system (or, what are 'desirable outcomes')? This is addressed in relation to this research in Chapter 4.
- Finally, what specifically is it that a given system is resilient against? This is addressed in relation to this research in Chapter 5.

Critical notes: Families as complex adaptive systems

Families, including lone parent families, are composed of interdependent individuals. Furthermore, families clearly have to adapt to changing socio-economic circumstances (Bott 1957, Finch 1989). The family unit can thus be conceptualised as a complex adaptive system. Indeed, there are some recent precedents to conceptualising families (including lone mother families) as complex adaptive systems (Potts 2000, Room 2011). This critical note summarises this scholarship and concludes by suggesting how the systems framework described in the chapter above can build on such work.

The married household as a complex adaptive system: Potts (2000 p.149) conceptualises the married household as a complex adaptive system, commenting that "a marriage, as a system, and like all adaptive systems in changing environments, needs to be flexible to survive. It must be capable of adaptation to a range of unforeseen contingencies". He links the 'systemic flexibility' (what we have termed adaptive capacity) of the 'marriage-system' solely to what he calls 'structural decomposition', or weak connectivity between the marriage and the wider socioeconomic environment. By this he means that increased marital flexibility results from the marriage not being overly dependent on its connections to the wider socio-economic environment. Weaker system-environment coupling means that, in the case of a perturbation, the marriage can effectively remove itself from harm's way. Potts (2000 p.154) goes on to outline how the coupling between a marriage-system and it environment is a key parameter in determining the structure of the household system after a perturbation. Divorce is less likely when the marriage is weakly coupled to its environment.

The lone mother family as a complex adaptive system: Room (2011, p.255) conceptualises the lone mother family as a complex adaptive system. He starts by outlining that in the UK, since the election of the 1997 Labour Government, the lone mother family has become embedded in a more complex set of institutional arrangements that have attempted to move them from a reliance on government welfare into gainful employment. Many lone parents were, for example, moved from Income Support to Job Seekers Allowance and required to actively look for work. He contrasts the relative security of Income Support with the uncertainty

involved with these new arrangements: "for these mothers their incomes are much more unstable and uncertain than with a normal wage or salary, or than Income Support benefit had been previously". These changes and new uncertainties require more of an active engagement, awareness and choice of strategies on the part of the lone mother. How far lone mothers are able to succeed in coping with this new institutional terrain depends in part on the "local ecosystem of connections" that they craft for themselves. Room (2011) also argues that the patterns of informal social support that emerge – or, self-organise – can give the lone mother the flexibility required to cope with uncertain social environments.

Critical note conclusions: The conceptualisation of complex adaptive systems outlined in Chapter 2 above can build on the work of Potts (2000) and Room (2011). Similar to both Potts (2000) and Room (2011), this thesis argues that the family unit must be flexible to maintain desirable outcomes in changing socio-economic environments. The framework outlined in the chapter above can build upon their work by helping describe the processes through which such social systems remain flexible and have the capacity to adapt to their environment. For example, we have connected the capacity to adapt (i.e. flexibility) to systemic factors related to the elements, connections and network structure of systems. Moreover, the framework outlined in the chapter above can help us describe in greater detail the potential outcomes of the adaptive process (e.g. vulnerable, resilient or transformable outcomes).

Chapter 3: Relationships, social networks and social support

3.1. Introduction

The previous chapter argued that it is possible to characterise complex adaptive systems according to their outcomes when they are perturbed by disturbances in their environment. They may be categorised as having vulnerable, resilient or transformable outcomes. Underlying each of these system states is adaptive capacity, which is a latent property of the system and might become activated upon expose to some perturbation. This was all outlined at an abstract systems theoretical level and it was suggested that there is a need to account for discipline specific characteristics. However, the social science of adaptive capacity is currently quite underdeveloped (Waters 2013). In this chapter we address this gap in the literature by suggesting that well-established theory and findings from research into social networks can help understand what constitutes adaptive capacity for certain types of social systems (such as families).

In the social sciences, a network is usually defined as a set of individuals connected to one another through a series of relationships. In the past few decades there has been a rapid expansion of studies that have developed structural methods of social network analysis and studied an array of different social networks (Borgatti et al. 2009, Scott 2012a, Freeman 2004). The expansion of the field has been driven by the recognition that social networks are of great relevance to numerous social processes, the provision of social support for instance (Wellman & Wortley 1990). The remainder of this introduction gives an overview of the conceptual underpinnings of social network analysis, and points towards the particular aspects of the literature that will be drawn upon in the rest of the chapter.

The conceptual underpinnings of social network analysis were developed by some of the classical sociologists. Amongst those regularly cited as having developed relational and network concepts (if not structural methods of analysis) are Comte¹, Durkheim², Marx³ and Simmel⁴ (Crossley 2012, López & Scott 2000, Freeman 2004). Georg Simmel in particular is often cited as the major intellectual force behind conceptualising society in relational terms (Blau & Schwartz 1984). His discussion of the so-called *tertius gaudens* (Simmel 1950, p.154), in which the dynamics of 'dyadic interaction' (one on one interaction) is affected by a third party (the third party benefiting from the disunion of the two), was ground-breaking in terms of conceptualising relational structure.

Modern scholarship on social networks builds on the insights of the classical sociologists and suggests that an individual's relationships define a connective geometry within which they can

¹ "Every system must be composed of elements of the same nature with itself, the scientific spirit forbids us to regard society as composed of individuals" (Comte, quoted in Freeman 2004)

² "Society has for its substratum the mass of associated individuals ... The representations which form the network of social life arise from the relations between individuals thus combined" (Durkheim, quoted in Crossley 2012)

³ "Society does not consist of individuals, but expresses the sum of interrelations, the relations within which these individuals stand" (Marx, quoted in Crossley 2012).

⁴ "Society exists where a number of individuals enter into interaction" (Simmel, quoted in Freeman 2004)

be located and in so doing their actions and outcomes explained to some degree. In locating the individual in a relational context, the social network approach reflects a general move away from reductionist forms of explanation and atomistic ontologies – for example, those that aggregate psychological tendencies and/or individual characteristics to explain social outcomes – and towards explanations that emphasise the consequences of being embedded in a set of structuring social relations (Granovetter 1985, Wellman 1997)⁵. Research into 'social capital' and 'social support', for instance, demonstrates that individuals benefit from having useful resources embedded in their social networks, and how factors such as the 'strength of ties' or the density of a social network might affect the mobilisation of these resources (Lin 2001, Song et al. 2011).

There are, broadly speaking, two types of theory (and associated empirical research) concerned with social networks. Firstly, there is theory related to the advantages that social networks have for individuals (often researched under the term 'social capital') and secondly theory related to the formation and decay of relationships and networks (Borgatti and Lopez-Kidwell 2011). The former uses relational and network properties as the independent variables and examines how they might affect, for example, the provision of social support. The latter on the other hand uses them as the dependent variable, examining factors that drive change in the structure of social networks. There is a clear synergy here with the distinction made in the previous chapter between dynamics on and dynamics of networks. Given this, both of these areas of study can potentially help develop an understanding of the adaptive capacity of social systems.

The rest of this chapter is structured as follows. Section 3.2 examines research and evidence which demonstrates how social networks are likely to be important for the adaptive capacity of social systems. This is a relatively new area of research and there is consequently a dearth of relevant empirical examples and theoretical elaboration. Given this, we suggest that it is possible to learn from the wider social network literature. Section 3.3 introduces literature that examines the consequences that social networks have for the individuals embedded within them (driven by the first type of theory mentioned in the paragraph above). Section 3.4 then examines a number of processes that drive the formation and decay of social networks (driven by the second type of theory mentioned in the paragraph above). The chapter finishes in section 3.5 with a summary of how the literature presented in this chapter can help develop an understanding of the adaptive capacity of small-scale social systems, such as lone mother families.

Before continuing with the chapter, it is necessary to draw a distinction between social network studies that look at what are called personal 'ego-networks' and those that examine what are called 'whole networks' (also known as 'ego-centric' versus 'socio-centric' network analysis) (Prell 2012, Scott 2012a). Data on whole networks usually contains complete information on the nodes and edges within a single given 'boundary specification', generally defined by the researcher (Laumann et al. 1989). For example, a researcher might choose to study only nodes and edges within a specific organisation or business. Ego-network studies, on the other hand, tend to research a larger number of smaller 'personal networks' as perceived by a respondent (Wellman 2007). They ask 'ego' (the focal individual in the network) to describe who they are

⁵ It is worth noting that a move away from ontologies that emphasise the individual does not mean a rejection of the individual. Social networks are, this thesis argues, ontologically multilevel in the sense that they consists of i) individuals, ii) relationships and iii) network structure as a whole. By envisaging social networks as multilevel structures in this way we can avoid reducing individuals to structure (or conversely, structures to individuals).

connected with, their 'alters'. Ego-network studies sacrifice the comprehensiveness that is possible with whole network analyses (e.g. to estimate global network metrics) "for a relative lack of boundedness in the networks that they can study" (Wellman 2007). For this reason, egocentric studies can have advantages, depending on the research questions being asked (Borgatti & Halgin 2012). Prell (2012, p.118) describes that in studying ego-networks we can examine how egos' make use of or are influenced by their alters. Given this, and considering the primary aim of this thesis is to investigate if (and how) lone mothers use their personal networks as a source of adaptive capacity in hard economic times, ego-centric research seems the most appropriate. Consequently, most of the literature and theory presented in this chapter relates to ego-networks.

3.2. Evidence that social networks contribute towards the adaptive capacity of social systems

This section describes research from a number of disciplines that shows how social networks affect the capacity that social systems have to withstand perturbations, perhaps ensuring the persistence of desirable outcomes (i.e. resilience). To start with, anthropology has a research tradition that examines how social systems react to change (Rappaport 1968, Moran 2007, Minnis 1985). Ecological anthropologist Minnis (1985) describes how the response of a social system to external perturbations is a social, institutional and cultural phenomenon. Examining the ability of tribal groups to respond adequately to "food stress", he argues that there is a graded hierarchy of responses which help them adapt. This involves utilising latent resources embedded in social networks:

"In the absence of unrestricted mobility, social groups faced with food provisioning problems will have to enlarge their social/economic network so as to have access to a more reliable food supply ... Ceteris paribus, the greater the provisioning problem, the wider the social network necessary" (Minnis 1985, p.20)

Tribes coping with food shortage will mobilise resources from, in this order: their household, then their kin group, then the wider community and finally the 'extra community'. If one of these options was not available, then the tribe would have less capacity to adapt to food stress. It is worth noting, however, that if the stress exceeds a critical limit then individuals and tribes might revert to behaviours detrimental to the whole, such as theft (Minnis 1985, p.38).

There is also an interdisciplinary literature that highlights the importance that social networks have when natural disasters strike, helping individuals and communities construct resilient outcomes (Aldrich 2012, see Aldrich and Meyer 2014 for a recent review). This literature shows that those individuals or areas with greater access to resources through social networks recover quicker from natural disasters. This is because, as Aldrich and Meyer (2014) describe, "individual and community social capital networks provide access to various resources in disaster situations, including information, aid, financial resources and childcare along with emotional and

⁶ Although, this literature is embedded within the older cybernetics systems literature, so does not directly use terms such as 'adaptive capacity' and 'resilience', preferring terms such as 'regulatory mechanisms' and 'homeostasis' respectively (actually, very similar concepts).

psychological support." Intuitively, each of the types of support described by Aldrich and Meyer (2014) will also be important in times of socio-economic adversity. These findings also link directly to a sociological literature which shows that receiving social support enables people to cope during 'non-routine circumstances' (Beggs et al. 1996, Haines et al. 1996, Hurlbert et al. 2000, Elliot et al. 2010). Kadushin (2012) summarises this literature as follows "Social support might be something like an inoculation, making stress less likely to occur among those who are socially supported ... Alternatively, support might follow the experience of stress, thus helping a person to cope with it."

In a similar fashion, recent work in the environmental sciences has highlighted that it is important to investigate social networks to understand the ways in which people adapt to a climate change. Adger (2003) argues that "adaptation processes involve the interdependence of agents through their relationships with each other, with the institutions in which they reside, and with the resource base on which they depend." Similarly, Pelling and High (2005) argue that "as an emergent property of social systems, adaptive capacity to climate change is continually being reshaped through social relationships". However, this literature is primarily theoretical and lacks empirical examples of how social networks might influence adaptive capacity.

In summary, the literature described in this section highlights how social networks play an important role in adaptation to challenging circumstances. Buckley (1967) might say that people's relationships and social networks provide plasticity to social systems, allowing them to respond to change. However, the literature highlighted in this section often does not examine or analyse the networked bases of such adaptation in much depth. Moreover, these literatures are primarily concerned with natural/environmental disasters, not socio-economic disturbances. Pelling and High (2005) conclude that we do not yet understand "the consequences for individual adaptation of using social capital in response to background stressors emanating from the economy or polity". Overall, the social science of adaptive capacity is in a state of underdevelopment (Waters 2013). For this reason, findings from the broader social network tradition can help develop a better understanding of the relational basis of adaptive capacity.

3.3. The consequences of social networks for social support (or, the dynamics that take place *on* social networks)

Traditionally, research on social networks emphasises the impact that they have on specific social processes or outcomes. In this body of research, which makes up a substantial proportion of the literature (Borgatti & Foster 2003), the properties of social networks are treated as the independent variables which affect the specific social phenomena under study; for example, the provision of social support. Such theories about the advantages that social networks have for the individuals embedded within them are usually described by the term 'social capital'.

Conceptualisations of social capital differ. However, the fact that social capital is network based has been acknowledged by all scholars who help laid the foundations for the concept (see for example, Bourdieu 1986, Coleman 1988, Burt 1992, Portes 1998, Putnam 2000, Lin 2001). The particular definition used in this research is that social capital refers to the *potential* resources

(information, financial capital, human capital, etc.) embedded in a social network, a latent capacity available to individuals when needed (Lin & Erickson 2008). Although a latent capacity, social capital can be activated (or, mobilised) through the giving and receiving of social support. The similarities to the definition of adaptive capacity given in Chapter 2 are clear. For instance, Song et al. (2011) argue that "when encountering undesirable life events they [individuals] are expected to use social capital (i.e. personal capital of their network members) to supplement their personal capital through the process of social support". In this conceptualisation of social capital, social networks are a necessary condition for access to and the mobilisation of embedded resources (Lin & Erickson 2008).

This section argues that whether or not a given individual or family can adapt to socio-economic change is in part dependent on the resources they have access to through their relationships. The greater the depth and diversity of resources that can be activated through social support, the more adaptive capacity that a given person/family is likely to have. Given this, it is important to understand what factors affect access to and the mobilisation of such resources. The rest of this section is structured around the fact that research has shown that the types of resources available in a network, and the activation of social support, varies with regard to i) the individuals involved in a network, ii) the specific types of relationships in a network and iii) the network structure itself (Plickert et al. 2007, Wellman & Frank 2001).

3.3.1. Individual characteristics and their association with social support

It is well demonstrated that the type and extent of social support received is, at least in part, a function of the characteristics of the ego and alters involved in a personal network (Lin 2001, Wellman & Frank 2001, Song et al. 2011). For example, being connected to alters who are wealthy enhances access to social capital. Also, certain well-documented characteristics of individual egos are associated with them having access to lower levels of social capital/support, what Perri 6 (1997) has termed 'network poverty'⁷. Both the extent of resources available in a network as well as the likelihood of an individual experiencing 'network poverty' have been shown to be related to the following characteristics: occupational class, educational attainment, poverty and gender. All of these factors interrelate with lone motherhood.

In terms of the resources available in a social network, Lin and Dumin (1986) argue that, given the nature of social stratification, valued resources are more likely to be found in higher occupational classes. An extensive research literature has now shown that there is a strong occupational class distinction between the types of networked resources available to individuals (see Perri 6, 1997, for an overview in the UK context). Cochran et al. (1993), for example, describe how mothers (including lone mothers) in 'white-collar' families report involvement with a larger number of network members for a greater variety of different types of social support versus mothers in a lower occupational class. Having access to such support can positively influence job search and occupational attainment (i.e. "it's not what you know, it's who you know") (Lin & Dumin 1986, Seidel et al. 2000, see Lin 1999 for a review). Also, it has

⁷ Perri 6 (1997, p.27) outlines a number of different types of network poverty, including being completely isolated, lacking support from 'strong ties', lacking 'weak ties' and lacking the transitional ability afforded by an appropriate support network for the specific stage of life. (Some of this terminology will be expanded upon in the rest of the present chapter.)

been shown that an absence of friends in employment could lead to a detachment from the labour market (Russell 1999). Education has also been shown to be significantly associated with the size of people's personal networks – as noted by Fischer (1982 p.252, quoted in Cochran & Niego 2002, p.138), those with higher levels of educational achievement have "broader, deeper, and richer networks".

Research has also shown that egos with a higher income report giving and receiving higher levels of social support than those who are, relatively speaking, poor (Plickert et al. 2007, Harknett & Hartnett 2011). For instance, Harknett and Hartnett (2011), found that for lone mothers poverty is associated with the absence of a financial support network as well as the absence of other non-monetary forms of support.

In terms of gender, it is known that the social networks of men and women can be quite different (Tindall & Cormier 2008, Russell 1999). As Russell (1999) has argued, "the very building blocks of social networks are gendered". Women are, for instance, more likely to be involved in giving and receiving social support (Wellman & Wortley 1990). Women also tend to give a wider variety of support than men, especially emotional support, and also tend to be better at giving support in emergency situations (Wellman & Frank 2001, Plickert et al. 2007). Having said this, research has shown that, compared to men, women face certain types of networked disadvantage. Evidence suggests that men seem to have access to greater levels of social capital through their social networks (Ibarra 1992, Moore 1990, Lin 2000, O'Connor 2013).

Moore (1990), for instance, describes how men's networks are generally larger compared to those of women and contain more 'weak ties' that connect them to people that would otherwise be distant in the network (weak ties, we will see below, are very useful for some forms of social support). Women's networks, on the other hand, tend to contain more family members and homophilous strong ties which, although good for some forms of social support, such as childcare and emotional support, might not be very good for gaining advantage in the labour market (Moore 1990). More recently, O'Connor (2013) has also shown that network alters are better able to help with job search if they have certain individual characteristics: "most job seekers have contacts who help with their [job] searchers, however, those who rely on female, unemployed, less educated ... do not get help". Moreover, having a child has been shown to significantly reduce the size of social networks for women, but not for men (Munch et al. 1997). As described by Fischer (1982 p.253, quoted in Cochran & Niego 2002 p.138): "Women with children at home had fewer friends and associates, engaged in fewer social activities, had less reliable social support, and had more localized networks than did otherwise similar women without children".

This section has suggested that certain types of individual, e.g. higher occupational class people, seems to confer more social capital in a personal network, enhancing access to valuable resources. Also, the type of support available in a personal network is likely to be conditioned by the gender of the alters. Conversely, for ego, being lower class, living in poverty, being female and having children are all associated with having access to less social capital. However, analysing the characteristics of the individuals involved in a network would be misleading by itself. For instance, someone may be connected to a resource rich individual, but if the relationship is weak or insignificant then it may not mean much in terms of the support they could potentially mobilise.

3.3.2. Tie level characteristics: tie strength and tie type

Most sociologically informed studies of social capital and social support analyse the characteristics of the ties in a network ('dyads') alongside the characteristics of the individuals. It is well-documented that tie level attributes, such as the strength and role-relationship of a tie, mediate the type of social support given and received between individuals (Granovetter 1973, Plickert et al. 2007). Such attributes are not reducible to the individuals involved and need to be examined separately (Wellman & Frank 2001).

Perhaps the best-known theory of tie level social capital can be found in Granovetter's (1973) theory of the differences between 'strong' and 'weak ties'. For Granovetter (1973), strong ties imply some form of intimate or emotional attachment⁸. He argues that the characteristics of strong ties (such as intimacy) mean that they are good for some types of social support, emotional support for instance, but not so good for other types, such as supplying information from the wider network. This is now a well-accepted sociological generalisation. Wellman and Wortley (1990), for example, show that stronger ties provide a greater level and variety of social support overall (see also Wellman & Frank 2001).

On the other hand, weak ties connect individuals with socially heterogeneous individuals who might otherwise be distant in the network (Granovetter 1973). This type of contact is surprisingly valuable as they facilitate the flow of information from otherwise distant parts of the wider network. In this sense, individuals with a shortage of weak ties are likely to be "confined to the provincial news and views of their close friends" (Granovetter 1983). Other studies have shown that weak ties are linked to occupational mobility and a wide range of other social phenomena (Lin et al. 1981). It is worth noting that individual characteristics, such as poverty and lack of education, are all associated with lacking weak ties (Perri 6, 1997).

Another tie-level characteristic is the role-type of a relationship. In terms of role-relationships, it has been demonstrated that people prioritise kin relationships when it comes to certain types of support (Plickert et al. 2007, Roberts & Dunbar 2011, Rainie & Wellman 2012)¹⁰. Wellman and Wortley (1990) describe how family are likely to offer emotional support and financial aid when needed. Similarly, Wheelock and Jones (2002) describe how family, and especially grandparents, are a key source of childcare support for working parents. Similarly, Millar and Ridge (2013) describe how family members help lone mothers when they move into work by providing essential support, such as childcare, positively influencing their employment

⁸ Granovetter (1973) argues that strong ties developing through "structural balance" and "homophily" (both concepts that are discussed later in the chapter). This essentially means that the strength of a tie is directly proportional to the amount of overlapping ties shared by individuals (i.e. strong ties share the same friends) and that strong ties are more likely to be socially homogenous with ego.

⁹ Weak ties arise from occasionally random contacts that are sustained because of some form of benefit, or possible future mutual benefit, accrued from them. Weak ties are not expected to exhibit strong tendencies towards 'structural balance' (thus they do not cluster). Granovetter (1973) also argues that they are unlikely to be socially homogenous.

¹⁰ There are various potential reasons for kin being more supportive, for example normative and cultural reasons (Wellman & Wortley 1990) and biological reasons such as 'kin-selection' (Trivers 2002).

sustainability. Aldrich and Meyer (2014) also describe that family ties are generally the first providers of assistance when some disaster strikes.

In modern times, however, what with the diversification of family structure and increased geographic mobility, there tend to be less family members around locally to offer support. Family is generally no longer the solidary social support system that it might have been in the past, and friends play an increasingly important role (Jamieson et al. 2006; Allan 2008; Rainie & Wellman 2012). In contemporary society, friendships and neighbours are likely to offer a range of support and perhaps even sometimes supplement the income of lone mothers (Edin & Lein 1997, Harknett 2006).

The types of individual and tie level characteristics described thus far do not yet exhaust our search for the networked bases of social capital and social support. As Simmel (1950) argued long ago, there is more to interpersonal life than just individuals and ties. The structural characteristics of a network must be taken into account when investigating social networks and their consequences.

3.3.3. Network characteristics: network density, structural holes, size and composition

Research has shown that wider network dynamics affect dyadic interaction and impact on individual level outcomes (Walker et al. 2000, Wellman & Frank 2001, Coleman 1988). Individuals are embedded in dyads and dyads are embedded in networks. In the words of John Barnes (1970, quoted in Wellman & Frank [2001]), one of the pioneers of social network analysis, "to discover how A, who is in touch with B and C, is affected by the relation between B and C ... demands the use of the network concept."

To give an example, Bott (1957) showed how the social networks within which a marriage or partnership exists significantly affect the interactions that take place within that relationship. She found that those involved in denser kinship networks tended to have segregated conjugal roles (versus joint conjugal roles). She also suggests that densely knit networks are more likely to be more supportive, a finding that has been corroborated by recent research (Wellman & Frank 2001, Plickert et al. 2007). Dense networks, it is also worth noting, seem to be more supportive in crisis situations (Haines et al. 1996, Hurlbert et al. 2000). For example, recent research has also shown that dense networks "aid adaptation and enhance resilience" when faced with climate warming related crisis (Wolf et al. 2010).

James Coleman (1988, 1990) theorises why dense networks are associated with positive and supportive outcomes (although, he uses the largely synonymous term 'network closure'). His argument suggests that the more connections that there are in a network then the more accessible social capital will be for mobilisation. This is because dense networks make enhanced coordination possible. For example, in a dense network it is more likely that ideas regarding 'proper behaviour' are encountered repeatedly and institutionalised. Denser networks also render deviance from some normative standard harder to hide (because of processes such as gossip) (Granovetter 2005). Dense networks are thus good for "generating trust, in establishing expectations, and in creating and enforcing norms" (Coleman 1988).

The flip side of dense networks, however, is that they might also act as a constraint (Burt 2005). Burt (1992) offers another theory of network level social capital, one which suggests quite the opposite to Coleman's theory. For Burt (1992), a well-structured network is one that is rich in what he terms 'structural holes'. A structural hole can be thought of as a gap between two previously unconnected networks or individuals that have complementary resources. The individual that bridges such a structural hole will likely gain positional leverage as a 'broker': "players with well-structured networks obtain higher rates of return" (Burt 1992, p.13)¹¹. For example, this type of network can facilitate creativity by enhancing an individual's access to a diversity of ideas (Burt 2004). In contrast, in dense networks, individuals are likely to hear the same things from each tie. Burt (1992) refers to this as the redundancy of network closure¹². In terms of adaptive capacity, it has been shown that such 'bridging' ties can provide access to novel resources that might help deal with a crisis (Aldrich & Meyer 2014).

Finally, the size and composition of a network is important for individual and social outcomes. The larger a personal network is, the more likely that it will contain a greater variety and depth of resources (Wellman & Wortley 1990, Plickert et al. 2007). Also, network size – or, the 'degree' of a personal network – can also be interpreted as a basic local centrality measure, as those who are more central in the wider network generally have a bigger personal network (Christakis & Fowler 2010, Scott 2012a). And, key nodes will likely have greater access to resources flowing through the network (Travers & Milgram 1969). In terms of network composition, high gender diversity networks tend to supply more support overall (Hurlbert et al. 2000). This is because, as Haines et al. (1996) argue, "men and women provide different types of support, [so] individuals who are embedded in gender-diverse networks may have better access to wider range of resources". Also, research has suggested that having a combination of friends and family in a personal network is better for stable support (Wellman & Wortley 1990).

3.3.4. The impact that social organisations (and institutional practices) have on social networks and their consequences

What has been neglected in the discussion thus far is the fact that individuals and relationships are more often than not embedded in organisational settings and institutional practices (Bourdieu 1986; Feld 1981; Small 2009). Social organisations – also often referred to as social foci (Feld 1981) - have been shown to influence the size, nature, quality and usefulness of people's networks (Small 2009). 'Social foci' are defined as the various groups, contexts and activities around which social life is organised (Feld 1981). Institutional practices associated with social foci have been shown to shape social interaction and increase access to social capital and people's capacity to mobilise it.

¹¹ This is very similar to Granovetter's (1973) argument about the benefits accrued from weak ties. However, Burt (1992) steps back from the distinction between strong and weak ties arguing that it wrongly links the benefits of specific network structures to the strength of the ties rather than to the "structural hole" that the tie spans. So, whereas Granovetter (1973) correlates the potential benefits of tie level capital to the strength of the tie, Burt (1992) correlates it to the network structures which the tie connects to.

¹² It is worth noting that in later work Burt (2005) acknowledges that "network closure" and "brokerage" are two different but complementary forms of social capital. For example, network closure and cohesion tends to provide social support, making life easier, whereas brokerage allows the individual to seek out information and advantage. Denser networks could also, we argue, be a precondition for bridging ties to be useful.

Of particular interest to this research, Small (2009, p.177) has demonstrated that "when a mother enrols her child in a centre she simultaneously enlists herself in a set of obligations, expectations, and norms that, more often than not, transforms the nature of her networks." These obligations, expectations, and shared normative standards help the mother create and mobilise social capital. As noted earlier, mothers may lack the time to develop strong ties (Cochran et al. 1993). However, Small (2009, p.87) describes how quite often social organisations perform much of the work that is required to sustain relationships (for example, through organising activities and coordinating behaviour). Having said this, there may also be negative effects from being associated with specific social foci and/or geographical areas (see, for example, the classic study by Wilson 1987).

The position developed thus far could be summed up as follows; whilst individuals dance to their own tunes, and in step with their "alters", their movements also take place within the network ensemble and also likely within an organisational/institutional setting. The next section moves on to examine the processes through which such relationships and networks form and decay through time.

3.4. The formation and decay of social networks (or, the dynamics of social networks)

Some critics have noted that social network research fails to examine how "intentional, creative human action serves in part to constitute those very social networks that so powerfully constrain actors in turn" (Emirbayer & Goodwin 1994). To be sure, the topologies of social networks are dynamic and, driven by the agents within as well as wider social structures, constantly change over time. This section examines a number of processes that have been theorised to lie behind the formation and decay of social networks. Whereas in the previous section networks were the independent variable (and social support was the dependent), the literature discussed in this section treats relationships and networks as the dependent variable.

It was argued in Chapter 2 that an understanding of the ways in which networks have the potential to develop and change over time can tell us something about the adaptive capacity of the related system. For any given system, it was argued, the possibilities for structural change (the 'adjacent possibilities') influence that system's capacity for dealing with its environment. Systems with more options for development are likely to have greater levels of adaptive capacity. Building on this, this section argues that for greater insight into the adaptive capacity of social systems it is essential to understand the processes which lie behind social network formation and decay. It is known, for instance, that certain types of individual (e.g. those living in poverty) struggle to develop reciprocal relationships and social support. Because of this difficulty, these individuals are likely to have less adaptive capacity than individuals who can form social support networks more easily.

There are a number of theorised mechanisms that can help us better understand relationship and network formation (and they are, we argue, complementary when used together). This section starts by describing one of the most basic processes of relational formation – reciprocity (Mauss 1925, Molm 2010). The section then moves on to more complex forms of network formation. It is described how people are likely to befriend friends of friends and avoid conflicting relationships (Heider 1946; Cartwright & Harary 1956; Holland & Leinhardt 1971).

On top of this, individuals are also likely to preferably interact with those similar to themselves – termed homophily (Lazarsfeld & Merton 1954; McPherson & Smith-Lovin 2001) – as well as those who share a 'social foci' (Feld 1981; McPherson & Smith-Lovin 1987; Kossinets & Watts 2009). The section concludes by thinking about how the wider socio-economic conditions might influence social networks (Bott 1957, Perri 6 2004, Allan 1998, Finch 1989)¹³.

3.4.1. The importance of reciprocity

Recent research has demonstrated the importance of reciprocity in constituting social networks and their consequences (Plickert et al. 2007, Molm 2010, Schaefer et al. 2010, Gaudeul & Gianneti 2013). Reciprocity can be defined as the give and take of two parties in the absence of any explicit negotiation of a return benefit being made (Mauss 1925, Molm et al. 1999, Gouldner 1960). There is no explicit knowledge of whether, when, or to what degree that the benefit given will be reciprocated (Molm et al. 1999).

Having said this, there is a certain morality associated with this type of giving and receiving. As Gouldner (1960) highlights, the (often implicit) golden rule of reciprocity is that "people help those who have helped them". Similarly, Mauss (1925, p.1) notes that "in theory such gifts are voluntary but in fact they are given and repaid under obligation". This means, in Gouldner's words (1960), if you want people to help you the surest way is to start by helping others. (So, it is likely that the types of support outcomes discussed in section 3.3 above are based on reciprocal give and take¹⁴.) For these reasons, reciprocity has been theorised as a mechanism that generates trust and creates social cohesion and integration (Gouldner 1960, Molm 2010). Simmel (quoted in Blau 1964, p.1) goes so far as to argue that "if every grateful action, which lingers on from good turns received in the past, were suddenly eliminated, society (at least as we know it) would break apart". To use Buckley's (1967) terminology, reciprocity is thus a relational mechanism by which individual's and societies are able to preserve order.

Having said all of this, there is potentially a darker side to reciprocity. Gouldner (1960, p.178) points out that the norm of reciprocity "may lead individuals to establish relations only or primarily with those who can reciprocate, thus inducing neglect of the needs of those unable to do so". Recent research has confirmed this hypothesis and shown that the sentiment and benevolent attitude that exists between people is likely to atrophy if one party fails to reciprocate (Molm et al. 2009). For such reasons, those with a limited ability to reciprocate with their social network run the risk of being socially excluded (Offer et al. 2010). The inability to reciprocate is therefore likely to be a mechanism of what Burt (2000) has called network decay and will also

¹³ There are a number of other theorised mechanisms that it is beyond the scope of this chapter to examine. For example, individuals might preferably be friend popular individuals (Merton 1968), and also to rationally exploit the benefits of cross-cutting circles of acquaintances (Simmel 1950, Granovetter 1973, Burt, 1992, Burger & Buskens 2009).

¹⁴ This makes it somewhat surprising that in a great deal of social network research the reciprocal relationship is left with little or no expression. That is to say, much social network research cares little for the content of relationships, generally just conceiving of them as either present or absent (an agnosticism exemplified by the "structural equivalence" of Lorain & White 1971) and correlating them with certain outcomes such as social support. Although this simplification may be useful to ensure the parsimony of analytical procedures, theoretically it is clearly specious. For this reason, social network analysis cannot stand alone as an analytic and explanatory perspective. Here we are in general agreement with Blau (1964, p. 2) that the "foundation required for a systematic theory of social structure is a thorough knowledge of the processes of social association".

make it difficult for some individuals to form social support networks. This is perhaps one reason that those in disadvantaged circumstances lack the 'weak ties' that are so useful for certain things, such as finding a job (Perri 6, 1997). Given that individuals in disadvantaged circumstances are less likely to be able to create and mobilise social support networks, they are likely to have less adaptive capacity, less room for manoeuvre, when dealing with challenges¹⁵.

3.4.2. 'The friend of a friend is a friend': Cognitive dissonance and structural balance

We have seen (section 3.3.3) that Coleman (1988) theorised why 'closed networks' are more likely to generate mutual obligations, expectations, and norms, all of which generate social capital. However, Coleman (1988) is less clear about how such networks might form over time. One theory that attempts to explain the formation of such networks is the theory of the clusterability of what are called 'balanced signed graphs' (Wasserman & Faust 1994, ch.6). The foundations for this theory are Heider's (1946) studies of 'cognitive dissonance'. Cognitive dissonance denotes a kind of mental anxiety and discomfort that individuals might experience about holding contradictory or conflicting views. Individuals have a motivational drive to reduce this dissonance (see also Festinger 1957). Heider's (1946) also argued that the attitudes or opinion of people will coincided with the attitudes or opinions of other people around them. If they do not coincide, the tension will lead to cognitive dissonance and the individual will seek a 'balanced state'. In Heider's (1946) words:

"In the case of two entities a balanced state exists if the [ties] between them [are] positive (or negative) in all aspects ... In the case of three entities, a balanced state exists if all three possible ties are positive in all respects, or if two are negative and one positive"

In terms of interpersonal relations a simple aphorism describes the effect of this psychological mechanism: "the friend of a friend is a friend, the friend of an enemy is an enemy, the enemy of a friend is an enemy and the enemy of an enemy is a friend". When applied to social networks like this, the mechanism is generally termed 'structural balance' (Cartwright & Harary 1956; Holland & Leinhardt 1971). If balance does not exist, i.e. the enemy of a friend is a friend, then the individual is expected to feel cognitive dissonance and pressure to change their sentiment towards one of the individuals in question, leading to structural change in the social network. This is often witnessed in friendship groups surrounding a married couple that separate or divorce. So, we argue, this is a mechanism that is likely to negatively impact on the size of the social networks of lone mothers¹⁶. (It is also a mechanism that extends beyond personal social

¹⁵ It is worth noting that in the discussion above reciprocity has been described in dyadic (i.e. bi-lateral) terms. The 'gift relationship' might, however, also take the form of 'generalised reciprocity' in which people reciprocate with some group, or wider system of reciprocity, rather than one-on-one with a specific individual (see for example, Malinowski 1922, Levi-Strauss 1969, Ekeh 1974, Bearman 1997, Molm et al. 2007). Titmuss (1971) describes, for instance, that when someone has received blood from a donor, they might feel an obligation to donate blood not back to that specific person, but to the system of generalised reciprocity as a whole.

¹⁶ The notion of cognitive balance can also be used to explain the way in which beliefs, values and norms become consistent in dense networks (Coleman 1988). To give an example, Duncan and Edwards (1999) describe this phenomenon in relation to lone mothers; they argue that the mothers primary network of relations is likely to generate "gendered moral rationalities" that the lone mother conforms to and that influence their decision to enter paid employment or not.

networks and has been shown to operate in international political alliances, see for example Jervis 1997, ch.6.)

3.4.3. The homophily principle ("Birds of a feather flock together")

'Structural balance' explains the formation and decay of relationships in terms of people's psychological tendencies and the preceding structure of the social network. The network is the independent and dependent variable, a type of theory that Borgatti & Lopez-Kidwell (2011) call a 'network theory of networks'. There are a number of other alternative (and quite often complementary) theories of tie formation which rely on mechanisms and processes 'external' to the network (i.e. the independent variables exist apart from the network), which Borgatti & Lopez-Kidwell (2011) denote with the simpler term 'theory of networks'. One such theory is the 'homophily principle' – Latin for love of the same (McPherson & Smith-Lovin 2001).

The homophily principle is based on the observed tendency of 'like to associate with like' and is "one of the most striking and robust empirical regularities of social life" (Kossinets & Watts 2009). Friends, spouses and co-workers all tend to be more similar to each other along certain dimensions than would be predicted from baseline demographic trends (McPherson & Smith-Lovin 2001). These dimensions include race (Kalmijn 1988), age (Marsden, 1988), gender (Ibarra 1992) and socioeconomic status and education (Marsden 1987). So, those in poverty and those in economically disadvantaged positions are more likely to network together. Studies have also shown that homophilous ties are more likely to help one another and offer the types of social support outlined in section 3.3 above (Wellman & Wortley 1990, Haines et al. 1996). The inclination for like to associate could, in this sense, be a mechanism that helps maintain inequality of status for some groups (e.g. through the nepotism in higher occupational classes) (Kossinets & Watts 2009, Ibarra 1992, Perri 6 1997). Homophily is also, we argue, likely to affect adaptive capacity. If disadvantaged individuals are more likely to network with other disadvantaged individuals, then they are likely to have less opportunities for creating social networks which contain valuable resources, and thus their adaptive capacity is likely to be diminished.

3.4.4. Social foci and geographical propinquity ("Birds of a flock flock together")

An individual's choice of whom they form relationships with is also constrained by other aspects of his or her life, such as the 'social foci' with which they are affiliated (Feld 1981, Kossinets & Watts 2009). We saw in section 3.3.4 that what are called 'social foci' shape access to and the ability to mobilise social capital. Social foci have also been shown to influence the formation of social networks (Kossinets & Watts 2009). Indeed, Feld (1981) originally introduced 'social interaction foci theory' to explain some patterns that can be found in social networks, such as their high levels of clustering. (He actually introduced the theory as a structural alternative to the 'cognitive theory' of structural balance.) One of the basic notions of the theory is that the social foci around which individuals spend their time organises their personal network ties and structure (Feld 1981). Furthermore, recent research has also shown that lacking access to social

foci is one of main reasons why people find it difficult to meet new people or why relationships might be discontinued (Small 2009; Mollenhorst et al. 2014).

Similar arguments have also been put forward for a 'propinquity effect', i.e. the spatial dependency of interpersonal relations (Festinger et al. 1950, Fischer 1982, Wong et al. 2006, Blau & Schwartz 1984, Wilson 1987, Perri 6, 1997). For example, Wilson (1987) and Perri 6 (1997) argue that individuals living in poorer neighbourhoods find it difficult to develop networks with middle-class people – they simply lack the physical space and opportunities for interaction with such people. Indeed, in terms of lone mothers, Duncan and Edwards (1999) highlight that lone mothers have differential access to social capital based on their local neighbourhood. Moreover, Takhteyev et al. (2012) also demonstrate that it is not just physical distance that matters, but also transport infrastructure. Infrastructure networks, such as roads, railways and flight paths, have a large impact on the strength of ties. Finally, physical access has also been shown to promote the mobilisation of practical support (but is less associated with other forms of support such as financial assistance) (Wellman & Wortley 1990). Clearly, then, such mechanisms of network formation and support mobilisation are, following the argument of the chapter, likely to influence the capacity that people have to adapt to adversity.

3.4.5. Wider macro socio-economic factors influence the development of social networks and the consequences they have

Social networks have also shown to be influenced by their wider socio-economic environment. For instance, factors such as government policy and economic and labour market conditions are very likely to affect social networks. In relation to the impact of social policy, Perri 6 (2004) concludes that "governments unavoidably have enormous influence over the patterns of social ties in the populations over which they exercise jurisdiction". Some social policies have a perverse effect upon the social networks of the poor and unemployed through discouraging and disabling them from developing the right kind of networks for their particular situation (Perri 6, 1997, Room 1999). Some policies concentrate disadvantaged people together with others like themselves instead of helping them make the type of links (e.g. weak ties) that might help them find opportunities in the wider social environment. Room (1999 p.170) summarises the argument:

"Policies tend to concentrate low-income families into the same housing estates; to put the young unemployed together to separate training programmes; to neglect the lowcost public transport that would enable low income families to maintain and develop contacts and networks in the wider society."

Perhaps one the most conceptually nuanced considerations of how wider socio-economic factors affect social networks comes from the beginnings of the social network tradition, in a chapter from Bott's (1957) study *Family & Social Network* titled "Factors affecting social networks". Bott (1957) argued that factors outside the direct control of individuals would affect their social networks.

"The economic and occupational system, the structure of formal institutions, the ecology of cities, and many other factors affect the connectedness of networks by

limiting and shaping the decisions that families make ... These factors do not operate singly, but rather in most complex combinations" (p.97-98).

Bott (1957) described how the 'immediate social environment' of the family takes the form of a social network, and how this network varies between families because of wider socio-economic conditions. She highlights that some conditions "favour the development of relatively close-knit networks, sometimes conditions are created that favour relatively loose-knit networks ... It [the network] depends on family's personal response to the situations with which they are confronted, and their response depends in turn on their conscious and unconscious needs and attitudes" (Bott 1957, p.110). Recent scholarship has reached similar conclusions (Allan 1998, 2001, Finch 1989). For instance, Finch (1989) argues that the level of social support given by family members is governed to a considerable extent by prevailing economic conditions. However, it not made clear exactly how this works for different types of individual. Related to working life more broadly, precariousness in employment and tough labour market conditions have been shown to lead to a reduction in the intensity of social life (Paugam 1995, Clark & Heath 2014). As Paugam (1995, p.55) notes "the risk of breakdown in social relations is proportional to difficulties in the labour market".

In the 1950's Bott (1957) concluded that not much was known about how wider factors, which she refers to as the 'total social environment', affect social networks, the 'immediate social environment' of the family. We argue that the impact of the 'total social environment' still has not been adequately researched almost 60 years on. So, why has this insight been lost and work in this area not been developed? This is largely, we argue, because of methodological restrictions which make it easier for the social network analysts to examine factors endogenous to the network.

3.5. Chapter conclusions

The previous chapter described how for Parsons (1964) the adaptive capacity of societies was tied to certain factors such as their ability to control/manipulate cultural symbols or mobilise bureaucratic organisations. In contrast, this research, which is working at more of a micro level, has located adaptive capacity with relationships and social networks.

The chapter started by highlighting literature that explicitly demonstrates the link between social networks and adaptive capacity. This literature shows that adaptive capacity, in the sense that we are describing it, is not a psychological attribute. The tribal groups studied by Minnis (1985) would not have survived 'food stress' through psychological hardiness alone. However, literatures that explore the link between adaptive capacity and social networks are in the early stages of development. As noted by Waters (2013, p.33) "the social science of adaptive capacity is still lacking clarity, including what it consists of and is determined by. In order to build resilience this knowledge gap needs to be addressed". The rest of the chapter argued that the wider research literature concerned with social networks can give greater clarity on the social network basis of adaptive capacity (and, thus, more specifically, tell us something about the ways in which lone mothers might adapt to challenging socio-economic circumstances).

The conceptual fit between the concepts presented in the Chapter 2 and the concepts presented in this chapter is now hopefully clearer. What the systems perspective (and language such as

adaptive capacity) can bring to social network research is a dynamic element, allowing us to conceptualise in greater depth how social networks might interrelate with and help people adapt to changing circumstances. Linking this back to personal networks, we might call the network surrounding an individual their 'ego-system'. The ego-system is the social network that individuals create and mobilise for themselves, and one which we can apply the language of system dynamics developed in the previous chapter to. The adaptive capacity of ego is, we argue, a property of their ego-system. When subject to perturbations in their environment, ego might utilise their ego-system for purposeful action to achieve desirable outcomes. They might, for example, mobilise various resources in adverse situations, such as emotional and psychological

Although we have treated adaptive capacity in this chapter, linking it to social networks, as of yet we have not discussed a sociologically adequate conceptualisation of what 'resilient outcomes' are likely to be in the social world. This is the job of next chapter.

Critical notes: Lone mothers and their social networks

support, childcare, help finding a job, or financial resources.

This critical note describes research specifically concerned with the relationships and social networks that lone parents have (with an emphasis on lone mothers). As lone parents are quite a specific group, social network oriented research concerned with them is not extensive. This is one reason that the literature presented below has played a subsidiary role so far. It would be difficult to construct, from it alone, a conceptual and theoretical framework adequate to address the research challenges.

The critical note also highlights, from the point of view of the framework outlined in the chapter above, how this thesis can potentially build upon the literature concerned with the social networks that lone parents have. As we will see, the emphasis in the literature described below is on the consequences that social networks have for lone parents. Explicit examination of the networked bases of social support and the formation of relationships is rarely carried out.

The positive consequences that social networks have for lone mothers: It is a well-established finding that lone parent families that are embedded in a fabric of social support are less vulnerable to negative outcomes and adverse circumstances (Edin & Lein 1997; Anderson 1999, Klett-Davies 2007). The positive consequences of having a strong social support network are evident from the onset of lone parenthood. Brassard (1982, quoted in Cochran et al. 1993, p.130) describes that: "the network supports and guides the single mother in making this role shift towards assuming primary, daily responsibility for being an authoritative leader with her child".

Social networks supply lone parents with a range of different types of support, support which is often necessary for the normal functioning of daily family life (Cochran et al. 1993). For instance, Ciabattari (2007) describes that for lone mothers having access to social support reduces work-family conflict, especially amongst those who are the most disadvantaged: "strong support networks among low-income women may also decrease their experience of work-family conflict". Social support networks are associated with a range of other positive outcomes, as research by Harknett (2006, p.172) describes: "[Lone] mothers with strong private safety nets worked more, earned more, and were less reliant on welfare compared with mothers with more

meagre private safety nets". Similar findings are reported Millar and Ridge (2009) who describe how having a pool of friends and family to draw upon creates an essential kind of wealth for lone parents as they bring up their children. Having said all of this, it is also clear that it is the most disadvantaged lone mothers (e.g. those living in poverty) who tend also to be embedded in networks that lack resources and that cannot offer the same strength of social support: "personal disadvantages are associated with weaker support" (Harknett & Hartnett 2011).

Social network formation and decay: In terms of social network formation and decay, it is known that from the onset of lone parenthood lone parents are generally disadvantaged compared to a coupled parent. Klett-Davies (1997) highlights that with the onset of lone parenthood the mother's network changes dramatically. As would be predicted by structural balance theory, many relations cease, especially if the alters in question are connected with the estranged spouse (see also Cochran et al. 1993). There is also some indication that lone mothers might find it difficult to create and sustain friendships with coupled/married people as they may be viewed as a threat to stable relationships (Anderson 1999; Åberg 2009).

There is also a literature concerned with lone mothers and reciprocity. This literature highlights that lone mothers often struggle to form, sustain and mobilise support networks because they tend to have fewer resources to offer in reciprocal exchange (Nelson 2000; Offer et al. 2010). Offer (2012, p.121) argues that this is because lone mothers quite often "suffer from conditions that can make them unattractive network members". Indeed, not always being able to reciprocate with people is potentially one reason why the most disadvantaged mothers are often embedded in impoverished support networks (Harknett & Hartnett 2011).

The role played by 'relationships of support' in relation to social policy: Of particular interest to this research, Millar and Ridge (2009) have examined how 'relationships of support' affect the ability of lone mothers to enter and sustain work. The context of their research is the changing policy landscape in the UK – specifically the introduction by New Labour of obligations for lone parents to seek employment as well as active labour market policies to encourage their employment. The longitudinal research by Millar and Ridge (2009) tracked lone mothers who move from benefits to employment and highlighted that social relationships (inside and outside the family) emerge to support the "family-work project". Remaining in gainful employment depends crucially on the patterns of social support that emerge. So, they argue, it is the networks of support that the lone mothers have that very much influences how far they are able to make use of new government initiatives.

Critical note conclusions: What is unclear in the research described in this critical note is where exactly, i.e. any particular types of individual or relationship, the positive consequences of social networks (such as support) come from. The conceptualisation of relationships and social networks does not tend to go beyond describing their positive outcomes. The framework of Chapter 3 above could, for this reason, build on the literature described in this critical note. It could do so by drawing attention to how particular characteristics of the individuals involved in a network, the characteristics of relationships, or the network as a whole, might affect the provision and mobilisation of social support¹⁷, as well as through giving more of an

¹⁷ Harknett (2006) for example just examines the scale of perceived social support ("I synthesize the complexities of who you know, what they have to offer, and the ability to access support using measures of perceived availability of support", p.174).

understanding of the processes through which relationships are formed (e.g. through 'social foci'). Indeed, it is such insights that can tell us something about the adaptive capacity of lone mothers against socio-economic perturbations.

Chapter 4: Aspirations, action and complex adaptive social systems

4.1. Introduction

"The apparent complexity of our behaviour over time is largely a reflection of the complexity of the environment in which we find ourselves" (Herbert Simon, 1996, p.110)

The two preceding chapters have developed a conceptual and theoretical framework of systemenvironment interactions, connections, elements and system dynamics, relating these to certain properties of systems such as adaptive capacity. This framework has also been linked with social networks, suggesting that social networks, their consequences and dynamics, are likely to be a source of adaptive capacity in adverse circumstances. However, an appropriate complex adaptive systems conceptualisation must seek to adequately represent the elements of the system in question (Simon 1992). Moreover, we have yet to fully address the question – what specifically is it that is resilient in this research? This chapter, through a conceptual analysis of the social agent, attends to both of these matters.

In the social sciences the substrate and necessary condition of all social, economic, political and cultural phenomena is the social agent with their capacities and proclivities. Simmel (1910) recognized this long ago when he argued that society is only possible because of "conditions residing a priori in the elements themselves, through which they combine themselves actually into the synthesis society". This chapter seeks to represent this agent through examining theory related to the motivations and actions of individuals. Such 'action based theory' can be thought of as a theoretical mechanism of sociological theory, as describing abstract ideal typical motivations and forms of action (Hedström 2005, p.38). Although action theory cannot hope to replicate the full complexity of real world intentions and action, it is still realist in the sense that it aims to relate to the social world in some way.

There are a number of different types of 'action theory' (see Goldthorpe 2007a, ch.7 for a review). The particular type of theory that has been adopted in this chapter was informed by the following requirements. Firstly, the model of action must be realistic from a psychological, economic and sociological viewpoint. This is important because, as will be explained in Chapter 6, we use action concepts and theory as a device to interpret and explain empirical data. (That is to say, the concepts and theories discussed in this chapter play a similar role to Weber's ideal types in achieving empathetic understanding, Verstehen). The theory of perfect rationality (to be found in much economic writing) would not, for obvious reasons, be conducive as an interpretative device (see Goldthorpe 2007a, p.153). At the same time, given the nature of this research and its explicit concern with wider socio-economic circumstances, we require that the model must be sensitive to the ways in which the social and economic context might shape individual motivations and action. Also of particular importance is a model that easily converges

with social network thinking¹. Given the requirements described above, the particular model of motivation and action that has been adopted in this research is drawn from Simon's (1996) concept of bounded rationality, and extensions of his work that demonstrate the convergence of his ideas with network and complex adaptive system theorising (Potts & Earl 2004, Room 2011).

In section 4.2, Simon's theory of bounded rationality is examined. Concepts related to Simon's theory allow us to define what it is that will be considered as 'resilient outcomes' in this research (subsection 4.2.2). The section that follows (4.3) then builds on these concepts with sociologically informed models of action, linking the different types of action that are conceptualised to the structure of complex adaptive social systems. The final section (4.4) conceptualises 'agency' in terms of what are termed spheres of influence, which denotes what social agents have some control over in their actions and interactions (versus what they have little control over). This enables us to better understand how social agents might respond to adverse socio-economic challenges (which they have little control over) by mobilising and reweaving their personal social networks (which they do have some control over).

4.2. Complex adaptive human agents

This section starts with Herbert Simon's (1996) concept of 'bounded rationality'. Of particular relevance is his concept of 'aspirations', of what people are motivated by. The concept of 'aspirations' provides us with a mechanism by which to connect the social agent to their socioeconomic environment, as well as mechanism to help us explain why people might be motivated to change their social connections/network. The section finishes by suggesting how such concepts can advise a sociological conceptualisation of adaptive outcomes such as 'resilience'.

4.2.1. Decision-making and 'aspirations'

"An intelligent system's adjustment to its outer environment (its substantive rationality) is limited by its ability, through knowledge and computation, to discover appropriate adaptive behaviour (its procedural rationality)" (Simon 1996, p.25).

For Simon (1996, p.26) adapting to an outer environment (substantive rationality) is the main goal of the social agent. For this reason, if social agents were perfectly rational and adaptable then we would only need to study their environments ("nowhere has this method of explaining human behaviour been carried further than in modern neoclassical economics") (Simon 1992). However, in reality, it is quite often a problem for humans to calculate what the appropriate, let alone optimal, actions might be in a particular situation ('procedural rationality') (Simon 1996, p.27). To give an example relevant to social policy, Hills (2015, p.101) highlights that given the complexity of the welfare system it is sometimes difficult for people to calculate if they will be better off in work or not. For such reasons, Simon (1955, 1956, 1957) introduced the theory of bounded rationality. Bounded rationality is the notion that when individuals engage in decision-

¹ Social network analysis itself is not much help here. Indeed, one area in which the social network tradition is underdeveloped is in its conceptualisation of the human agent (see Emirbayer & Goodwin 1994.)

Central to the idea of bounded rationality is the notion of 'satisficing', or accepting a 'good enough solution' (Simon 1996, p.27). This is necessary because in the complex real world, optimisation (i.e. attempting to calculate the outcome of every possible course of action, what Simon calls 'Olympian rationality') is impossible for social agents, limited as they are in their computational abilities. People might instead use 'heuristics', which are simple rules to follow in problem situations. Gigerenzer and Selten (2001), for instance, argue that when faced with a problem solving situation, individuals will search through an 'adaptive toolbox' of heuristics until they find one which leads to a good enough solution. However, Simon (1996, p.29) notes that even with the theory of bounded rationality we still need some criteria of psychological satisfaction. What, psychologically, can be counted as good enough? For the criteria of satisfaction Simon (1996, pp.29-30) introduces the notion of 'aspiration levels'.

There are many possible dimensions of aspirations: monetary, social, or simply to be happy. A social actor will have an aspiration level above which they experience satisfaction and below which they experience varying degrees of dissatisfaction along these dimensions (Simon 1996, p.29). Aspirations are thus the goals towards which satisficing actions are aimed (Simon 1996, p.30). If the aspiration level is met, then the agent is satisfied. If they are not met, the actor will reorient their actions so as to try and meet them or adjust their aspirations downwards².

This thesis argues that aspirations act much like the theory of cognitive dissonance outlined in the previous chapter. If aspirations are not met then the agent will feel some negative emotion (such as unease about their situation) and an inclination to change their way of doing things. In a similar vein, Elster (2007) talks of action tendencies that are associated with such emotions. For instance, when someone feels fear (emotion) they have action tendencies for 'flight or fight' (Elster 2007 p.153). These tendencies appear to aim at restoring some balance (i.e. ridding oneself of the cause of fear). Indeed, the fact that frustrated aspirations and desires are accompanied by negative emotions has been described since the days of ancient Greeks and Romans, especially by Stoic philosophers such as Epictetus and Seneca (Nussbaum 2009, Elster 2007).

A study into the social origins of depression, by medical sociologists Brown and Harris (1978), is also relevant here. Their research suggests that mental illness, in particular clinical depression, arises "in a context of hopelessness consequent upon the loss of importance sources of reward or positive value". Furthermore, they note that "a woman's own social milieu and the broader social structure ... determine what is valued, as well as what is lost ... and what resources she has to face the loss." The conclusions reached by Brown and Harris (1978) suggest a number of points relevant to this thesis: that what individuals value is situationally embedded (e.g. an experience of a particular way of life given the sociological and economic conditions of society); that what is lost is often beyond the control of the individual (e.g. the loss of a given individual's desired way of life might result from the wider economy going into decline); that individuals might draw upon resources from their social milieu to work through such a loss. Finally, that

² We wish to make clear that we are in no way referring to colloquialisms associated with the term 'aspiration', i.e. 'aspirational working class', which is arguably a way of dividing working class people up. We do not wish to import these associations and the term is used consistently in the technical sense in which Simon (1996) uses it.

the mental state of a given individual does not just reflect a given loss, it reflects the ability of that individual to find satisfactory alternatives to their ways of doing things (such as to work through and overcome the loss) (Brown & Harris 1978, p.234).

Given the above discussion, it is clear that aspirations and the actions that follow are not fixed. They are dynamic and situationally embedded within a given individual's experience of a current or previous way of life. External conditions which the agent has little control over will affect what they aspire towards, as well as their ability to meet these aspirations. For instance, culture and institutions supply individuals with messages and rules about what to aspire towards and what not to aspire towards (Hodgson 2006). Personal social networks do the same. Duncan and Edwards (1997) argue that whether or not a given lone mother aspires to enter work will be affected by her network of family and friends. Additionally, the sudden onset of adverse circumstances (a 'perturbation') might make it harder for an individual to meet aspirations that they have previously met with ease. Furthermore, if a choice continually leads to satisfaction, the aspiration levels will likely be adjusted upwards and vice versa.

Kahneman and Tversky (2000) argue a set of very similar points, albeit with slightly different terminology. They say that *expectations* (i.e. similar to what Simon calls aspirations) are *anchored* in experience. (A similar concept is also outlined by Elster (2007), what he terms 'adaptive preferences', meaning people only desire that which they believe they can feasibly achieve.) Kahneman and Tversky's (2000) work also highlights that people do not have as much commitment to advancement as they do to stopping losses. Losing money, say £100, generates more dissatisfaction than gaining the equivalent amount generates satisfaction. They call this 'loss aversion'. So, we argue, aspiration levels are less likely to be shifted downwards than they are upwards. Clark and Heath (2014, p.78), in their analysis of the recent economic crisis and government austerity, demonstrate the relevance that these arguments have for this thesis (their terminological usage follows Kahneman and Tversky):

"We can distinguish a notion of relative impoverishment that might have wide application, and cause widespread hurt, in a sharp recession: namely, being impoverished relative to one's expectations [i.e. aspirations] and (closely related) to one's past... Psychologists have theorised that expectations are 'anchored' in experience – and have observed that people will go to far greater lengths to avoid dashing such expectations than they would to achieve a comparable gain."

It is also worth highlighting that there are similar arguments to be found in sociology. Goldthorpe (2000, p.242) argues that young people aspire to avoid the possibility of downward socio-economic mobility and try to make appropriate decisions about their educational attainment to avoid such a situation. Achieving upwards adjustments, Goldthorpe (2000) argues, is only of secondary concern. In a very similar manner, Millar (2007, p.542) argues that lone mothers in particular try to maintain their living standards over time, especially trying to protect against moving into poverty. They aspire towards the persistence of some desirable standard of living. Furthermore, it is stability and consolidation of desirable living standards rather than advancement that is their priority: "it was stability and consolidation rather than change and advancement that was their immediate aim" (Millar 2007).

Situations that affect a given individual's ability to meet their aspirations (i.e. economic contraction) will, following Simon's (1996) theory, shape the actions that ensue. This is because

individuals monitor their aspiration levels, using feedback from this goal and their environment to guide actions aimed at trying to maintain or retain the resources needed to satisfice their aspirations (Simon 1996, p.35). Such arguments can be also found in early forms of systems theory, such as cybernetics. Wiener et al. (1943) argued that "All purposeful behaviour may be considered to require negative feed-back. If a goal is to be attained, some signals from the goal are necessary at some time to direct the behaviour". Linking this argument to the framework developed in Chapter 2, aspirations can be conceived of as 'variables to be controlled' through feedback from experience. To use Buckley's (1967) terminology, individual social agents display a certain degree of sensitivity to their environment; they monitor their environment, adapting their aspirations in light of what is happening in their environment, as well as the particular actions they take in order to meet their aspirations.

Simon (1996, p.35) describes that such feedback mechanisms work in a number of ways. Firstly, what he calls 'feed-forward' (versus feedback) involves the subjective anticipation of future events shaping behaviour in the present. For example, an individual might anticipate that some future event will affect their likelihood of retaining their aspired towards way of life and consequently take 'corrective actions' in the present to offset such an event. For feed-forward to take place the agent must have some idea of the possibility of a future event happening. So, the agent cognitively maps their environment using their skills and any salient information that they have access to, then generates internal representations (or, mental models) of courses of action that might be appropriate to satisfice aspiration levels in the environment they expect to find themselves in. As Loasby (2001) describes, "the future cannot be known, but it can be imagined, and by acting on that imagination it can, in part, be changed." However, in the absence of the ability of the agent to use feed-forward (i.e. because of a lack of appropriate information or skills), they adapt to the present:

"An alternative [to feed-forward] is to use feedback to correct for unexpected or incorrectly predicted events ... Even if events are imperfectly anticipated [via the processes of feed-forward] and the response to them less than accurate, adaptive systems may remain stable in the face of severe jolts, their feedback controls bringing them back on course after each shock that displaces them" (Simon 1996, p.35).

The agent's anticipations about the future also adapt through a process in which the actor interacts with and learns about their environments "from unfolding events around them" (Simon 1996, p.39). Also of interest, Simon (1996, p.45) acknowledges the role that institutions, socialisation, and learning from others, might play in such processes. Although, he doesn't develop on this point, and this is one way in which sociology might play an important role in developing theories of bounded rationality. As will be argued below, given human cognitive capacities, social agents might enhance their capacity to deal with challenging circumstances by drawing upon information and ideas from the wider social environment.

Simon (1996, p.46) also highlights an analogy to Darwinism in his discussion of adaptive behaviour. He says that the actions that people take are subject to two processes, what he calls 'the generator' and 'the test': "The generator produces variety, new forms that have not existed previously, whereas the test culls out the generated forms so that only those that are well fitted to the environment will survive". This is one avenue through which we are able to start thinking, in section 4.3 below, about a convergence of Simon's concepts related to human decisionmaking and aspirations with his concepts concerning the structure of complex adaptive systems. Somewhat surprisingly Simon draws few explicit links between these two areas of his work (even though his key contributions towards both appear in the same volume, 1996). There has, however, been some work in economics, described below, which develops this potential for convergence (Potts & Earl 2004).

4.2.2. Aspirations and adaptive outcomes such as resilience

This subsection asks, what can the discussion above tell us about adaptive outcomes and concepts such as resilience? Before answering this question, it is worth examining previous definitions of social resilience (all of which build upon the definition given in Chapter 2):

"Social resilience is the ability of groups or communities to cope with external stresses and disturbances as a result of change" (Adger 2003)

"[Resilience is] the collective ability of a neighbourhood or geographically defined area to deal with stressors and efficiently resume the rhythms of daily life through cooperation following shocks" (Aldrich and Meyer 2014)

"[Resilience is] a process linking a set of adaptive capacities to a positive trajectory of [social] functioning and adaptation after a disturbance" (Norris 2008)

These definitions implicitly make the assumption of some normative standard against which to judge individual and social functioning after a perturbation. Any social unit that departs from this standard (in a negative direction) when perturbed cannot be called resilient. It will also be remembered that in Chapter 2 resilience was defined in terms of the persistence of some 'desirable' system state when exposed to perturbation. What, however, counts as 'desirable', 'coping', 'efficiently resuming the rhythms of daily life' or 'positive trajectory' in the definitions above? The answers to such a question are left open. Making this explicit would enable more specific ways of empirically examining resilience, making it more operationalisable as a sociological research concept.

Now, 'desirability' is clearly a socially constructed concept. To account for this, we can tie the concept of resilience to the concept of aspiration levels. Doing so has the benefit of making explicit (and thus assessable) the standard against which we can judge whether a social system is resilient or not. Furthermore, it will be remembered that in Chapter 2 the concept of adaptive capacity, meaning the ability of a system to prepare for stresses or adjust to disturbances once they have happened, was pivotal in contributing to the persistence of desirable states (resilience). Given this, in this thesis resilience is defined as an outcome in which a given social unit's adaptive capacity keeps any discrepancy between aspiration levels and the resources necessary to meet those aspirations within desirable bounds when exposed to some perturbation. Adaptive capacity, which was linked in Chapter 3 with the ability to construct and mobilise social support networks, allows the actors in a given social system to manage and influence resilience, to achieve desirable outcomes when disruption strikes. (But, it is worth remembering, following the definition given in Chapter 2, that resilient outcomes imply that the social system in question has not gone through some radical change to achieve desirable outcomes.)

It is possible to recast what other scholars have argued in these terms. Take Goldthorpe's (2000) argument for an example. Let us first assume that a given young person aspires to maintain a certain class position during some period of wider socio-economic disturbance/change (perhaps, for example, the automation of work, which might make it harder to achieve this aspiration). If that individual's ability to make certain choices about their educational attainment (their adaptive capacity in this case) means that there is no discrepancy between their aspiration and their actual class position after the disturbance/change (the outcome), then the class position of the individual in question could be called resilient.

Furthermore, adaptive capacity, it will be remembered, also offered a way to bridge between other potential system outcomes: vulnerability and transformability. In a social system then, vulnerability is an outcome in which a given social agent cannot keep the discrepancy between their aspirations and the resources necessary for the persistence of aspired towards outcomes within desirable bounds. On the other hand, social systems which achieve aspired towards outcomes with more radical structural changes are called transformable.

Although the definition of resilience given above contains an element of psychology (aspirations), it moves beyond the psychological ability of the individual to cope. With the psychological definition of resilience (see Chapter 2, footnote 7), it would be possible for an individual to be living through some chronic adversity (such as a sustained period of poverty) and yet be psychologically resilient. In contrast, in the definition of resilience given above it would not be possible for an individual to be categorised as resilient in circumstances (such as living conditions, quality of life etc.) that fall outside their range of 'desirability'. And, the actual outcome that is aspired towards will not necessarily be a personal attribute nor reducible to psychology. For example, the persistence of a given standard of living will be, in-part, conditioned by wider socio-economic conditions. Furthermore, as seen in Chapter 3, such aspired towards outcomes might only be achieved/maintained through social interaction and cooperation. Take these interactions away and a particular aspired towards outcome might well disappear. The upkeep of a given aspired towards way of life is thus constituted by a complex set of interdependencies between micro (aspirations), meso (social networks) and macro factors (wider socio-economic conditions).

How does all of this relate to the actual actions that individuals take and the complex adaptive social systems of which they are a part? This is the topic we consider next.

4.3. Action and the structure of complex adaptive social systems

So far this chapter has used Simon's insights on decision-making and human aspirations to conceptualise what social agents are motivated by, the ways in which they are situationally embedded and to identify potential reasons why they might change their actions. This section relates all of this to the different types of action that individuals take and the complex adaptive social structures that these actions create, reproduce and transform. In particular, we argue that human action fluctuates between two poles. One of 'fast and frugal heuristics', of unreflective habitual action, and one of more considered and creative 'agile' action. In Room's (2011, p.105) words "Habitual action involves recognising a pattern and making a standard response. Agile

action means re-working that pattern, having regard to conjectures as to how the world is likely to unfold".

How are these forms of action related to aspirations and the wider socio-economic context? It is argued that what the agent aspires towards, and whether or not they are meeting these aspirations, will affect which of these types of action is more likely. Moreover, the social agent is likely to shift between these different types of action based on situational contingencies (as, situational contingencies will affect an individual's ability to meet their aspirations). As Room (2011, p.106) has noted "It is when actors detect anomalous patterns, including, for example, those that fall outside certain critical thresholds, that this alerts them to the need to make an agile response". In particular, this thesis argues that if there is no discrepancy between aspirations and external circumstances an individual will be more likely to act in the habitual ways in which they have done in the past. If, on the other hand, a perturbation affects their ability to meet aspirations, then they are more likely to take creative and agile actions. Habitual action then reproduces social structures when they are adaptive (or at least when the social actor is not conscious of them being maladaptive) and agile action transforms them when they are no longer fit for purpose³. (Hypothetically, then, we might say that a stable and relatively slowly changing environment will facilitate the habituation of action and the continuity of social structures, whereas a highly variable environment will facilitate agile innovation, creativity and the transformation of social structures.)

4.3.1 'Fast and frugal heuristics', habitual action and institutions

A large interdisciplinary literature which builds on the 'legacy of Simon' has developed the concepts of 'heuristics' and 'cognitive shortcuts', which are simple rules of thumb used by actors when they solve problems (Smith 2008, p.40). Heuristics are said to be fast if they solve a problem in little time (quicker than a strategy of deliberative reasoning, say) and frugal if they solve it with little information (i.e. without the omniscience required for 'Olympian rationality'). Such heuristics are necessary in complex environments in which deliberative decision-making and strategies of optimisation are likely to be impossible (Gigerenzer 2008, p.8). However, the

³ This idea of a continuum between reflective and unreflective action was also put forward by classical sociologists. Durkheim (1955, pp.79-80), for example, described a striking similar model of action in his studies on pragmatism: "When balance is disturbed in a living organism, consciousness awakes: it begins to question itself, the subject becomes aware of problems. Consequently, it can be said that the appearance of consciousness is a response to practical ends, for it comes into being to re-establish the disturbed equilibrium [through the reorientation of actions]. The same applies to habits of all kinds: consciousness disappears when it no longer serves a purpose. It only awakes when habit is disrupted, when a process of non-adaption occurs ... By way of contrast, when there is an equilibrium between our dispositions and the surrounding environment, our vital movements occur automatically, and pass so quickly that we have no time to know them, since they merely skim over consciousness." It is also a model of action that is seen in more recent interpretative conceptualisations of social action. Schutz (1964, p.64), for example, describes: "The cook-book has recipes, lists of ingredients, formulae for mixing them, and directions for finishing off. This is all we need to make an apple pie, and also all we need to deal with the routine matters of daily life. If we enjoy the apple pie so prepared, we do not ask whether the manner of preparing it as indicated by the recipe is the most appropriate from a hygiene or alimentary point of view, or whether it is the shortest, the most economical, or the most efficient. We just eat and enjoy it." (Schutz 1964, p.64). On the other hand: "If we encounter in our experience something previously unknown and which therefore stands out of the ordinary order of our knowledge, we begin a process of inquiry" (1964, p.105).

key concepts that build on Simon's work are the ideas of the 'adaptive toolbox' and 'ecological rationality' (Gigerenzer & Selten 2001, Smith 2008, Goldthorpe 2007a, p.180).

The 'adaptive toolbox' is the idea that people have repertoires of heuristics which they can search through and deploy in environments that require problem solving. On the other hand, the concept of 'ecological rationality' is normative in that it suggests a heuristic is good if it leads to a 'good enough solution' in a particular environment. (This compares to the work of Kahneman & Tversky [2000] who use optimal rationality as the benchmark for good decision-Ecologically rational heuristics adapted are closely situations/environments. Research has even shown that these types of ecologically rational heuristics can match or even, in some cases, outperform strategies of rational optimization (Gigerenzer & Selten 2001, p.4, Martignon 2001). Gigerenzer and Selten (2001, p.9) summarise that such 'fast and frugal heuristics' allow individuals to exploit regularities in given environments:

"These heuristics are adapted to particular environments, past or present, physical or social. This 'ecological rationality'—the match between the structure of a heuristic and the structure of an environment — allows for the possibility that heuristics can be fast, frugal, and accurate all at the same time by exploiting the structure of environments".

In sociology, Room (2011) argues that such cognitive shortcuts make up a large part of social life. Like the literature just described, Room argues that agents have standard templates of responses to situations which they are familiar with. For reasons of cognitive economy, these heuristics are usually automatic, informed by the past, and quickly process information without conscious mental review. Room (2011, p.105) connects these ideas with sociological theory, specifically with the Weberian notion of habitual action⁴. (See also Esser [1993] who treats 'heuristics' and 'habitual action' as largely interchangeable terms.) The idea of habitual action was largely dropped from sociological thought between the periods that Weber was writing and Parsons work (Camic 1986). This was because writers such as Parsons criticised the idea as suggesting that much human behaviour is meaningless, mechanical and determined. (This rejection of the idea of habit was, we suggest, a reaction to the psychological behaviourism of Parsons day). From Parsons onwards there was more of an emphasis on reflective action (Camic 1986).

Contra to this perception that habitual action involves purely mechanical behaviour, recent scholarship has brought the idea back into sociological theorising and suggested that there is still scope for individual will and decision-making even with habitual responses (Hodgson 2006, Emibayer & Mische 1998). Emibayer and Mische (1998), for example, argue that habitual modes of behaviour are selectively reactivated by agents within given situations. In Gigerenzer and Selten's (2001) terminology, we might say that individuals search through different modes of

⁴ Weber (1922, p.21) argued "In the great majority of cases actual action goes on in a state of inarticulate half consciousness or actual unconsciousness of its subjective meaning. The actor is more likely to 'be aware' of it in a vague sense than he is to 'know' what he is doing or be explicitly self-conscious about it. In most cases his action is governed by impulse or habit." He went on to argue (p.25) that action "is very often a matter of almost automatic reaction to habitual stimuli which guide behaviour in a course which has been repeatedly followed. The great bulk of all everyday action to which people have become habitually accustomed approaches this type." Habit in Weberian terms is essentially a proclivity to behave in certain ways in certain situations. For example, the ways in which people orientate themselves in relation to others when they take action (in Weberian terminology, 'social action') can be habituated.

habituated action until they find one that fits well with the situation they find themselves in. Furthermore, Emibayer and Mische (1998) argue that agents are capable of distancing themselves from their habits and engaging in more creative forms of action as they respond to challenges (more on this in section 4.3.2 below).

We argue that a given social agent will monitor how the objective situation that they find themselves within compares with what they subjectively aspire towards. If aspired to outcomes are present, then habitual modes of action will probably suffice and might be reactivated by the given agent. As noted by Schutz (1964, p.73) "We are satisfied if we have a fair chance of realising our purposes, and this chance, so we like to think, we have if we set in motion the same mechanism of habits, rules and principles which formerly stood the test and which will still stand the test" (1964, p.73). If, on the other hand, the aspired toward outcome is threatened, an individual will be challenged to reflect on their habitual modes of action and search for alternative ways of acting. In this sense, habitual action is not mechanical and determined, but is rather a low energy form of action for situations in which things seem to be going to plan⁵. Moreover, as we will argue in section 4.3.2 below, habits might well also be the outcome of a prior iterative process of conscious trial and error which succeed in terms of meeting its goals and consequently became habituated, perhaps even socially institutionalised.

Certainly, habitual ways of thinking and acting are not just individualistic, they can be transmitted between people, socially reinforced and institutionalised. Such common habitual modes of action are also important for stable social order, indeed, for society as a whole (Camic 1986). As Durkheim (1960, p.325) once argued:

"For society can exist only if it penetrates the consciousness of individuals and fashions it in 'its image and resemblance.' We can say, therefore, with assurance and without being excessively dogmatic, that a great number of our mental states, including some of the most important ones, are of social origin ... And so sociology, which draws on psychology and could not do without it, brings to it, in a just return, a contribution that equals and surpasses in importance the services that it receives from it."

As Durkheim argues in this quote, individual ways of thinking and acting quite often originate from the wider social group (an insight corroborated by recent work in 'cognitive sociology', see for example Zerubavel 1997, DiMaggio 1997). This social inheritance can broadly fall under the banner of 'institutions'. Institutions include socially inherited cognitive models (Room 2012) inherited rules of social interaction⁶ (Parsons 1951, Small 2009) as well as institutionalised forms

⁵ Goldthorpe (2007a, p.244) argues a similar point, that habitual action can be considered 'rational' if it helps solve problems: "If one believes that one has worked out the best way to shave, why constantly return to the problem? What would be irrational would be not to adapt to change: that is, not to reconsider the matter if information became available to suggest that by using other equipment or a different technique one could achieve a worthwhile improvement".

⁶ Parsons (1951, pp.436-437) gives the example of certain expectations related to the 'sick role' (vis-à-vis the role of the physician). Such institutionalised modes of social interaction help people define a given situation and identify the roles and responses that might be appropriate. In Kadushin's (2012) terminology, relationships are embedded within and constrained by an 'external' idealised system of norms and values that imposes qualities and criteria on interaction. We however argue that relationships are irreducible to institutions, but that the two are dynamically interlinked. So, this is what could be called "double embeddedness"; individuals are embedded in networks and networks are embedded within a system of social institutions that to some extent shape the interactions that take place within the network (Baker & Faulkner 2009). It is possible in sociological research to account for only one of these forms of embeddedness by, to use Giddens (1984) terminology, 'bracketing' factors related to the other.

of aspiration (Hodgson 2006). (Hodgson [2006, p.169] argues that "A hidden and most pervasive feature of institutions is their capacity to mould and change aspirations").

These types of institution, by allowing individuals to rely on readily available routines and habits that have already been established by others, also allow individuals to economise on otherwise energy decision-making processes. There is no need for each person to assess every situation they face with reference to the full range of behaviours that are possible in that situation. Instead, social agents might draw selectively from a shared repertoire of heuristics and apply them to the specific situations that they find themselves in. And, it is possible that by doing so, by learning from others and imitating those around them (especially those who are successful problem solvers), individuals might save a lot of time and potential harm. As Keynes (1937) once argued, "knowing that our individual judgement is worthless, we endeavour to fall back on the judgement of the rest of the world which is perhaps better informed". Indeed, the imitation of others is one way in which people propagate successful strategies (one of the key processes in adaptation described by Buckley, 1967).

4.3.2. Creativity and 'agility' in action

The literature described in the section above leaves us with a toolbox in which no new tools are added. However, not all action involves the application of heuristics or habitual responses readily available in the 'adaptive toolbox', otherwise, when confronted with new novel situations, individuals would likely not be able to adapt. In times of change and uncertainty heuristics and habitual routines will probably not suffice. In such situations, individuals may actively override their usual automatic response if they realise that it is no longer appropriate.

Alongside the scholarship on heuristics described above, Simon's work has also been built upon by authors who focus on the potentially creative aspects of action, building on his ideas of 'the generator' and 'the test' (Potts 2000, Potts & Earl 2004, Room 2011). This scholarship outlines how creativity is a potential source of new actions and social structures. This work also explicitly links the social agent to the structure of complex adaptive social systems. The argument is that humans have developed the capacity for advanced reasoning and therefore the ability to adapt more deliberately to new environments - to change old patterns of action that are no longer adequate with remarkable speed. (In fact, such arguments go back thousands of years – as Plato argued long ago in *The Republic*, necessity is the mother of invention.)

Potts (2000, ch.3) develops a graph theoretical conception of economic systems as being composed of elements and connections, what he calls a 'connective geometry', arguing that these economic systems have the feature of near decomposability that Simon described in his work on complex systems. Potts and Earl (2004) then argue that regularities in the way that human agents make decisions (procedural rationality) leads to regularities in outcomes, especially adaptive outcomes (substantive rationality), which shape the structure of the nearly

Such bracketing allows the researcher to analyse things such as strategic situationally based action without accounting for institutionalised modes of behaviour (see for example Scott [2012b, p.221]). As this research is concerned with social relationships, we largely bracket the institutional aspect of action, focusing instead on the role played by people's relationships in response to socio-economic crisis (that is to say, we take institutions largely for granted).

decomposable systems of which they are a part. For example, because people are cognitively limited, beyond a certain number of elements in a given social system decompositions in that system's structure will occur (Potts 2000, p.67):

"If we add to this [graph theoretical understanding of human systems] a bounded rationality constraint, such that an element can connect to no more than, say, seven other elements, then beyond n=7 we expect structural decomposition to occur"⁷

Of particular interest, however, is that Potts and Earl (2004) link decision-making to the ways in which agents decompose economic structures in some areas and increase interconnectedness in other areas. Economic evolution in their view is a creative and destructive process of the dynamics of connections driven by the decision-making and actions of cognitively limited humans who, however, have an "irrepressible drive for creativity" (Potts 2000, p.111). They describe how it is the human agent who is responsible for moving the social systems of which they are a part through the 'adjacent possible structures' of those systems. The microeconomic agent searches through the potential adjacent structures within the 'state space' that they have access to, probing for what is achievable with their 'resource endowment' (their skills, different forms of capital etc.), anticipating the potential outcomes of specific courses of action.

They might, for example, attempt to reconfigure the current system along the lines of an adjacent possibility in an attempt to create some new or better technologies (Potts 2000, p.131). The adjacent possibility, a combination of elements and connections slightly removed from current configurations, might potentially have value to the agent, helping them meet their aspirations. So, human agents are creative with the structures of elements and connections that they have access to. A similar model of the social agent is to be found in Loasby (2001, 1999) who argues that "we impose connecting principles to create patterns and causal linkages ... human cognition is a connective process". To use Buckley's (1967) terminology, this connective process provides a mechanism by which complex adaptive social systems can produce variability and adaptations to adapt to changes in their environment.

Moreover, Potts and Earl (2004, p.322) argue that changing the mix of connections in a system will affect the capacity that people have to manage the flexibility (i.e. adaptive capacity) of these systems in the face of exogenous shocks. Agents solve problems associated with the environment by "hybridizing modular elements", creating new structures. Similarly, Earl (2013) describes that "individuals generate connections that are good enough [i.e. satisfice] for the context in question". Potts and Earl (2004, p.323) also describe how the particular structure of elements and connections at the point in time that a shock takes place will affect the events that unfold for that system. People who, for example, build their entire life around the assumed durability of a particular connection might well be devastated if that connection fails as they have little flexibility afforded by other connections (Potts & Earl 2004, p.325). On the other hand, if there are too many connections the system might freeze up and lose its dynamic capabilities (i.e. it becomes 'hyper-coherent') (p.326).

However, the argument presented by Potts and Earl (2004) could have been expanded to say more about the link between the agent and their socio-economic context. The linkage they

⁷ Dunbar (2008) argues a similar point in terms of social networks. The work of Potts and Earl (2004) is however preferable for the argument of this chapter as they develop an idea of creative action.

present is of a rather restricted one way nature, from the micro to the macro. Although they provide an understanding of how individual decision-making can shape socio-economic systems through the process of decomposing and creating connections, they do not provide a mechanism which tells us why agents might go about creating change this way in the first place. (Apart from "the irrepressible drive for creativity" that they describe. This, however, does not succeed in linking the agent to their socio-economic environment.) Simon's (1996) concept of 'aspirations' can, however, help us connect the whole process of an individual creating and decomposing connections to the wider socio-economic context within which that individual is embedded.

Using the argument developed earlier in the chapter, we could assume that if the agent is meeting their aspirations, even given some disturbance (i.e. they are in a state of resilience), they are likely to continue acting in the habitual ways described in the previous section. If, on the other hand, some shock from the environment play inimically with the agent's ability to meet their aspirations, that is to say the socio-economic context negatively affects the 'variables being controlled' by the agent, then they will be more likely to change the elements and connections which they have access to in an attempt to offset any negative changes. The agent might try out new adaptations in these situations, tinkering with the combinations of elements available to them, their adjacent possibilities, aiming to find new ways to satisfice their aspirations. (Buckley [1967] might say that the process of satisficing aspirations is the 'selective criteria' that selects adaptations that closely map the environment and discards those that do not.) So, in these cases, the environment provides a stimulus that leads the agent to experiment with new connections and also gives the criteria for choosing among these connections, i.e. if they are productive in helping achieve aspirations.

The argument of Potts and Earl (2004) presented above leaves us with an economic 'connective geometry' largely devoid of social institutions and other social structures that influence action and social action (such as social networks). Room (2011), though, shows that their argument is applicable to the structure of institutions. Like Potts and Earl (2004), Room (2011, p.51), argues that it is through creating and decomposing connections between the elements of a system that actors are able to shape the dynamic possibilities of the systems of which they are a part and achieve their desired outcomes. In terms of the institutional landscape, social agents tinker with rules, with 'if/then' heuristics, to enrich their capacity to exploit the resources of a particular social niche8. Current rules can be "subverted from below, as actors lift their gaze, reflect and either reinforce or reshape the rules" (Room 2011). Similar to the argument presented earlier regarding 'feed-forward', Room (2011, p.38) argues that it is by reflecting on the future that the human agent might come to create such changes in the 'connective geometries' that they are associated with. This is what Room (2011) calls 'agile action' (or, 'agile entrepreneurship'). It is a form of action which takes as its aim the active husbandry of the social fabric to discover combinations and re-combinations which are fit for purpose and better adapted to a specific social or natural environment (Room 2012). However, given the fact that humans are not

⁸ Systems thinker Arthur Koestler (1978) also shares a very similar theory of creativity, noting that the Latin cogitio comes from coagitare, which means shake together. For Koestler (1978), social agents work, rework, shake together, and reweave different social structures to achieve desired outcomes (such as adaptation). Given that humans are not computation machines, these creative acts usually take the form of trial and error. People tinker and experiment in relation to the emerging situations they face.

computational machines, these creative acts usually take the form of trial and error. People tinker and experiment in relation to the emerging situations they face. It is through this 'combinatorial tinkering', Room (2011) argues, that actors evolve the 'connective geometry' of the institutional landscape⁹.

To summarise this section, although Potts and Early (2004) are interested in the structure of the economy, and Room (2011) in the emergence of new institutional forms, the principles of creative and agile action that have just been outlined are applicable to different types of social agent and social system. Room (2011) notes "Agile [action and] entrepreneurship, we might say, is ... 'scale free'. We might then also deploy the language to ... those in more constricted circumstances, as they seek to reweave the bricolage amidst which they live and to create thereby new opportunities for themselves and their communities." In particular, this thesis suggests that the argument developed above is applicable to individuals and their personal social networks, their ego-systems¹⁰.

4.4. 'Spheres of influence', structure and agency

The picture of action built up so far is one in which habitual responses are more likely when a given individual is fulfilling, or satisficing, their aspirations. If they are not meeting their aspirations, then they might be pushed to seek new ways of doing things. This section links this argument to the system structures that individuals have access to, structures that enable their agency.

The whole idea of individual agency, choice and decision-making, presupposes some individual sphere of control, and thus only becomes possible when the individual interrelates with the world and structures around them. Bateson's (1972) cybernetic notion of "the self as a circuit" can help us further explain this notion of agency. Bateson (1972, p.319) describes that the decisions made by agents cannot be found 'within their skin'. Rather, decisions are made within a total system of relations:

"The total self-corrective unit which processes information, or, as I say, thinks, and acts and decides, is a system whose boundaries do not at all coincide with the boundaries of either the body or of what is popularly called the 'self' or 'consciousness' ... The agent is part of a much larger trial and error system ... This system includes all the pathways which are relevant at any given moment to any given decision."

⁹ It is also worth noting that what was once a creative and agile action might well become habituated. Bateson (1963), for example, discusses how what was once creative thought and behaviour might transmute into habituated behaviour to restore flexibility to the system. This is because using the deliberative mode of creative thought, tinkering and adapting, is cognitively demanding and thus flexibility reducing. For example, when we encounter a new problem for the first time we might deal with it by trial and error, but later we form the habit of acting in the way that seems to work (or that satisfices aspirations). To continue using trial and error would be wasteful of cognitive resources.

¹⁰ A similar argument is offered by Emibayer and Mische (1998) who view human agency as the capacity not only to reproduce, but also to creatively reconfigure and transform relational structures (i.e. structures which the agent has some power over) and the structures within which future actions unfold. In their argument, habitual action is equated with the reproduction of relational structures and creativity with the transformation of such structures. However, the arguments presented above in this chapter can build on their argument by offering hypothesis of when such reproductive or transformative actions are likely to occur.

It is on these terms that Bateson (1972) makes the language of systems commensurable with the language of agency, action, choice and purpose. Building on Bateson's argument, we argue that the agent will have control over some of the 'pathways' relevant to any given decision, and less control over others. We can take a bit of instruction here from ancient philosophy. Roman philosopher Epictetus suggested that the world could be divided into things that people can control and those which they cannot. For Epictetus, the only thing over which people have true control is their faculty of reason and judgement. Things outside of their control, for Epictetus, include personal health, relationships, what people think of you, and the decisions made by politicians. In reality, the world is not quite as black and white as this. Yes, there are things over which people have no personal control (or, at best, only some in-direct influence), such as government policy or the macro-economy. But, there are also some things over which people have some, but not complete control, such as their personal relationships and mutual interactions with others. This leads us to introduce the concept of spheres of influences, which denotes the particular connections that an agent has access to and some personal control over in their 'self-corrective' unit. The individual will adapt to what they can't control (but which is still relevant to a given decision of theirs, i.e. government policy) by changing what they do have some power to control, what is within their 'sphere of influence'11.

Connecting these ideas directly to network thinking, the language of directed-graphs can help us explain such dynamics in a bit more depth. We might say that causal influence spreads through the 'out-connections' that a given agent has (including to their personal relationships) and is received via 'in-connections'. We might say, in language from Chapter 2, that inconnections structurally couple a social agent to their environment. Connections that come in, but do not go out, are parts of the 'boundary conditions' over which the agent has little control. These connections are not within their sphere of influence. On the other hand, the local egosystem that people have is likely to have a more balanced in and out degree of influence. We might say, using Bateson's (1972) terminology, that the ego-system is part of the 'regulatory circuitry' that a social agent has access to in their 'self-corrective' unit. By activating, deactivating, and reweaving this 'causal circuitry', people can have some influence over the systems within which they live (and any associated outcomes). The dynamic processes that help people maintain a certain way of life, we argue, take place within such a sphere of influence.

To offer a more nuanced perspective on the interaction between 'structure' and 'agency', it is worth articulating the position that has been developed thus far with sociological work which seeks to show how social structure relates to individual agency. To start with, linking the argument back to the discussion of complex adaptive systems in Chapter 2, Buckley (1967) argues that dyadic interdependencies help people adapt to wider socio-economic change. He argues that interaction models of social life (such as the social network perspective outlined in Chapter 3) should account for individuals, their goals, their impulses to action, as well as other

¹¹ An early sociology study, The Polish Peasant by Thomas and Znaniecki (1918), can help us illustrate the argument. Thomas and Znaniecki (1918, pp.98-106) argue that socio-economic change (towards the 'modern conditions of industrial life') could potentially create a discrepancy between resources and goals and lead to, for example, feelings of economic insecurity. The loss of control over resources and life outcomes, they argued, prompts the Polish peasant to regain control, to adapt to new socio-economic circumstances, through the means available to them, means under their control. Such means might include migration to a nearby city (an easy form of adaptation, they note) or through rising in the social-hierarchy (through, for example, inter-class marriage - a more difficult form of adaptation they note, but still within the realms of possibility).

individuals so endowed and 'environmental objects' towards which individuals orientate themselves. He argues that people become linked together by information and resource exchange and reciprocally adjust their behaviour towards one another in response to their environment, thus constituting a complex adaptive system (Buckley 1967).

Margaret Archer (1995, 2003, 2007), building on the work of Buckley, argues that at any particular moment in time social structures (which, as already discussed, can be considered to be either relational or institutional [López & Scott 2000]) set the range of opportunities and constraints that are faced by individual social agents. However, agents are able to exercise choice and creativity within these structural conditions, adapting to the logic of the situation as they define it. Archer (1995) argues that social structures are able to have their causal effects on human action through the ways in which individuals receive and interpret these structures in light of their particular 'projects' (i.e., their goals and aspirations). It is through the 'reflexivity' of social agents that structural conditions are able to operate. By reflexivity, Archer (2003) means an internal conversation which people have with themselves, which enables them to construct their actions based on an interplay between their own personal projects and the objective situation within which they find themselves. Economic and social structures thus condition people's actions in so far as social agents grasp how these structures impinge on their goals and change their actions and interactions in response.

In light of the internal conversation that social agents have, they have the capacity to design and redesign their projects, as well as their means to achieve their projects, in relation to any ongoing developments they perceive to be taking place in their environment (Archer 2007). Moreover, the actions and interactions that they take, based on their subjective understanding of antecedent existing objective structures, can lead to either the reproduction of the structure or its transformation. As Scott (2011) argues for relational structures:

"They [social agents] reflect on their social context and conditions in an assessment of the resources available within the relational structure in relation to the demands and contingencies of the immediate situation. It is the moment of deliberation and decision through which structures can be redesigned."

The elaborated relational structure that results from the interactions of various social agents, acting and reacting to the ways in which they perceive social structures are impinging on their projects, becomes the basis of a new set of conditions under which social agents can construct any further actions. As the elements of a social system react, the aggregate structure changes in intended and unintended ways; as that structure changes, the elements react anew. Thus, whilst recognising the interdependency of structure and agency, Archer (1995) argues that they can be unpicked analytically. Social scientists can isolate the objective structural circumstances which provide the context for action and investigate empirically, with the help of social agents, how these circumstances shape the actions and interactions that result, and how the actions and interactions that result lead to the reproduction or transformation of social structures.

4.5. Conclusions

The agent centric focus of this chapter has allowed us to conceptualise and theorise the micro mechanisms behind the trajectory of change in social networks and social systems. It has been argued that certain mechanisms will systematically trigger a certain set of reasons and motivations for an individual to act in certain ways. If an individual is in a resilient state, we have argued, they will be more likely to act in habitual ways. On the other hand, if they cannot ensure the persistence of their aspired towards way of life, then they might change their ego-system to offset these changes. To use terminology from Chapter 2 (section 2.4.2), to keep x (aspirations) constant the agent might tweak properties of M (the set of connections in their ego-system) or seek to change the set of N (the set of nodes in their ego-system) to offer new opportunities for corrective actions.

Finally it is worth noting that, in terms of methodology, the types of argument presented in this chapter, in Room's (2011, p.107) words, link well with "longer-standing analytical traditions that use an action frame of reference, including Weber's Verstehendesoziologie' (see also Esser [1993] and Castellani [2013] who both highlight the commensurability between theories of bounded rationality and interpretative sociology). We will pick up this point again in Chapter 6.

Critical notes: The concept of 'resilience' in academic social policy scholarship

In the recent past, scholarship in social policy has tended to focus on concepts with a negative connotation, such as poverty and social exclusion. However, in the last two decades ideas with a more positive connotation, such as wellbeing and resilience, have increasingly come into the fold. Social policy scholarship is starting to see a shift in focus from what might be called a deficit, or pathology, model of social problems and towards one which also emphasises positive social functioning¹². (This shift in emphasis is also seen in politics, and is evident in David Cameron's commitment as part of his 'Big Society' agenda to facilitate 'national happiness', 'wellbeing' and 'community resilience'.)

What are the benefits of such a shift in social policy? Such a shift does not deny that there are social problems, that people suffer poverty and social exclusion, but rather that a focus on such problems would lead to an incomplete view of social conditions. Although a focus on social problems is certainly necessary, a shift in focus towards positive states offers a deliberate correction. In terms of the practical application of ideas, an emphasis on deficit and pathology will arguably emphasise the removal of negative states, the treatment of an illness, but not necessarily the facilitation of more positive states. In this sense, ideas such as 'resilience' can complement and extend existing work in the field through highlighting potential ways of facilitating positive and desirable outcomes.

¹² Analogous shifts have already taken place in psychology, especially since the mid 90's and the birth of 'positive psychology' (but perhaps going back to Maslow's idea of 'self-actualisation' at the top of his hierarchy of needs). This shift has seen the emphasis of psychology move away from characterising psychological pathology, such as anxiety and depression, and more towards a focus on positive psychological states, such as wellbeing, happiness and resilience (see for example Robertson 2012).

Definitions of 'resilience' in social policy: There is no one consistent definition of resilience to be found in the social policy literature. And, the main definitions that are used are drawn primarily from psychological literature. Firstly, resilience is often defined in a narrow sense as the ability to 'bounce back' from adversity (a phrase that has clear parallels to the idea of 'engineering resilience' described in Chapter 2, footnote 10, but one which has been popularised in the psychological literature) (see Mohaupt 2009, Harrison 2013). Secondly, again drawing upon psychology, resilience is defined as making positive responses, positive adaptations or achieving positive outcomes in adverse conditions (see e.g. Batty & Cole 2010, Mohaupt 2009, Canvin et al. 2009). It is not clear whether 'positive outcomes' refers to psychological outcomes or outcomes such as living standards. Some definitions also emphasise flourishing and thriving (Mohaupt 2009, Hickman et al. 2014), whilst others have argued that resilience is more about coping, about 'getting-by' and not being overcome by problems (Davidson 2009, Batty & Cole 2010, Hickman et al. 2014).

As might be evident, 'resilience' is an underdeveloped concept in the social policy literature. Indeed, recent research by Hickman et al. (2014) suggested that future work in the area needs to answer the following questions: "What precisely is resilience? Is it an attribute or a process? Or is it merely an outcome? And can it be (quantitatively) measured? How? And should it be measured? Is resilience finite? And can it be replenished? If so, how? And do resilience levels vary?" It is for such reasons that this thesis has not drawn explicitly upon this literature, emphasising instead the systems and ecology literature described in Chapter 2, which is conceptually at a greater stage of maturity. Indeed, the conceptualisation of resilience adopted in this research can, we argue, help answer most of the questions posed by Hickman et al. (2014).

Unresolved issues: This thesis agrees with Harrison (2013) that it is not the concept of resilience itself that is problematic, but that the ways in which it is used and applied that are deficient. This is, we suggest, because of the following unresolved issues in the social policy literature:

- Drawing upon psychological definitions leads to a focus on the individual: The fact that the social policy draws largely upon psychology to help define resilience leads to an inordinate focus on the individual. Focusing on the individual leads to an inadequate conceptualisation and neglect of other different levels of analysis. For example, can anything beyond the psychology of the individual be called resilient? How might levels of analysis beyond psychology, such as social networks, organisations ('social foci') and public policy influence resilient outcomes? Answering such questions, we argue, could open up exciting new areas for future research on how people cope with adversity. However, doing so will require moving beyond psychological definitions of resilience.
- The concept is misused when applied to undesirable circumstances, such as 'extreme poverty': Even given the conceptual shift in emphasis from deficit states to positive states, much of the empirical social policy literature applies the concept of resilience to people living in extremely undesirable circumstances. That is to say, although researchers have not found it difficult to switch conceptual emphasis, they have found it difficult to switch empirical emphasis. The empirical emphasis is still on

poverty, but resilience within poverty (see for example Okech et al. 2012, Hickman et al. 2014, Batty & Cole 2010). This, we argue, leads to somewhat of a disjointedness between conceptual apparatus and empirical research. Again, this is likely due to the fact that psychological conceptualisations of resilience highlight that it is possible to achieve positive psychological outcomes in undesirable circumstances. However, for social sciences such as sociology and social policy, which are largely concerned with social outcomes beyond the psychology of the individual (i.e. living standards, ways of life etc.), the situation described above is comparable to a psychologist studying 'positive thinking' with depressed people.

- Practical policy applications are one-sided and emphasise responsibility: Critics have suggested that individualistic conceptualisations of resilience can lead to victim blaming in which people who are not resilient might be considered less moral, deviant or failing (see especially Harrison 2013, p.104, Mohaupt 2009). Individualistic conceptualisations, the same critics suggest, might also lead to a neglect of people who are not resilient. Harrison (2013) also argues that the concept might lead to policy prescriptions that shift responsibility away from the public sphere and towards individual responsibility¹³.
- The social policy literature is largely conceptual, not theoretical: Without an adequate conceptualisation of resilience theorising is made increasingly difficult. For such reasons, in the social policy literature there is a lack of evidence on processes and mechanisms underlying resilience (see e.g. Davidson 2009). For such reasons, even though there are clear nods towards the important role that is likely to be played by social support networks (see Harrison 2013, Hickman et al. 2014), the literature has yet to properly assimilate with research on social networks, community influences, and how these interrelate with resilience (see e.g. Mohaupt 2009, p.67).

Critical note conclusions: The conceptualisation of resilience offering in Part 1 of the thesis, and the fact we have tied it to the concepts of 'adaptive capacity' and 'aspiration levels', can help overcome the unresolved issues described above.

- Tying the concept to aspiration levels means that people living in poverty cannot be considered resilient (unless, of course, their poverty is aspired to, which is probably only likely to be the so in cases of religious/spiritual asceticism). A researcher cannot, therefore, just apply the term 'resilience' to people living in 'extreme poverty' (as done by Okech et al. 2012). The linkage with aspirations also suggests that what ultimately matters when operationalising the concept is the subjective experiences of people living in challenging circumstances. What do they count as desirable in such circumstances?
- The conceptualisation given in Part 1 does not place full emphasis on the individual. As has been described, resilient outcomes in social systems are constituted by micro (aspirations), meso (social networks) and macro factors (wider socio-economic factors).

¹³ For example, a recent Demos report (Edwards 2009) subtitled 'Resilience relies on citizens and communities, not the institutions of state' has influenced the Coalition's stance on 'community resilience'.

Practical applications of the concept will thus not focus solely on individual characteristics.

- Furthermore, the fact that some people are not resilient does not mean they are neglected in the framework that has been offered in Part 1 of this thesis. The conceptualisation offered in Chapter 2, for instance, covers other adaptive outcomes such as 'vulnerability'. And, we argue, it should be of upmost interest for researchers to understand what differentiates between vulnerable outcomes and resilient outcomes (such that resilient outcomes might be facilitated by policy makers).
- The linkage with adaptive capacity also enables us to go beyond conceptualising resilience and actually theorise the ways in which social networks, their consequences, their formation and decay, are likely to influence the development of adaptive outcomes. This goes beyond most of the literature described in the critical note above.

Part 2

Context, Methodology and Empirics

Chapter 5: Lone mothers, the 'Great Recession' and government austerity

5.1. Introduction

"One cannot understand social life without understanding the arrangements of particular social actors in particular social times and places [...] no social fact makes any sense abstracted from its context in social space and social time. Social facts are located." Andrew Abbott (1997, p.1152)

One of the arguments of this thesis is that lone mother households adapt to additional socioeconomic pressures through changing the way they interact with their social networks. To consider how these socio-economic pressures might affect the individual lone mother (and consequently her relationships) it is important that we draw upon relevant knowledge and research regarding the state of the economy and public policy. This is one aim of the present chapter. It describes a number of factors - recession, austerity, welfare changes and public service cuts - that are likely to impact on people's ability to ensure the persistence of some desirable living standard (and thus, as theorised in Part 1 of the thesis, change the ways in which they interact with and draw upon their social support networks).

The layout of the chapter is as follows. Section 5.2 starts by acquainting the reader with some pertinent demographic statistics and trends that highlight the decrease in "traditional" family households and an increase in other family structures, such as lone parent households. Then, section 5.3 describes a range of statistics associated with lone parents, examining, for example, their rates of poverty and employment. These early section serve the purpose of contextualising the focus that lone parents have received in social policy as a significantly sized group at risk of negative socio-economic outcomes (Rowlingson & McKay 2002). Having contextualised lone parents as a group (with a focus on lone mothers), the chapter then moves on (in section 5.4) to examine the recession that took hold in late 2008, the so-called "Great Recession". The focus is on how the crisis has affected the labour market and in particular how lone parents have fared in terms of their employment.

Section 5.5 then examines recent public policy of relevance. Particular attention is given to the current government's response to the economic crisis - their austerity package - and some policies that affect lone parents in particular. Section 5.6 examines the combined effect of recession and austerity on households in the UK generally and more specifically the impact on lone parent households¹. It is highlighted that the combination of the recession and government austerity has led to a 'living standards crisis' for many households with a low income. The

¹ Indeed, it is worth noting that the chapter focuses on no one single economic factor or social policy. This is because, as recognised in much recent research (Cribb et al. 2012, Clark & Heath 2014, O'Hara 2014), what matters for living standards is the combination of the effects of all the relevant changes that particular individuals are exposed to. Evidence from this research, presented later in the empirical chapters, shows this to be the case for lone mothers.

chapter concludes by reflecting on how the economic crisis and government austerity might have affected people's personal relationships.

5.2. Trends in family life

Drawing on data from the early 1970's to the present-day, this section outlines a number of pertinent demographic trends. In doing so, the section serves as a backdrop for understanding the focus that lone parents have garnered from policy makers (and also from researchers). Indeed, population trends have implications for public policy (even if the recognition of these implications does tend to lag the trend) and the type of demographic data described in this section therefore helps plan for the needs of a population through highlighting policy areas that require attention. As will become clear later in the chapter, the change in the demographic profile of the UK that took place in the latter half of the twentieth century had a profound and lasting impact on social policy. The increase in lone parent households, for example, brought to the fore questions related to child poverty, access to an adequate income for lone parents, appropriate access to the labour market and access to childcare.

The latest edition of the General Lifestyle Survey shows that since 1971 the number of households² in the UK has increased from 18.6 million to 26.4 million in 2011 (ONS 2013). Over the same period the average household size has decreased from 2.9 people per household to 2.3. This can in part be attributed to an increase in lone parent households and a decrease in the birth-rate (ONS 2013). Of the 26.4 million households in 2011, 18.2 million were families³ (not necessarily with dependent children⁴). Around 43% of these families had dependent children (that is around 7.8 million families). On average each of these families had 1.7 dependent children (compared to 2.0 per family in 1971, a decrease of roughly 10%). The number of dependent children living in families in the UK has remained fairly stable between 2001 and 2010 at 13.3 million.

However, though the absolute number of dependent children has not changed significantly, the types of family in which they live has changed. The last 30 years of the twentieth century witnessed a rapid diversification of family relations and structure. The traditional family structure, a married couple living with their children, unquestionably declined in the latter half of the twentieth century. On the other hand, other family forms, including lone parent families, saw an increase. This is a trend which continued into the new millennium. The proportion of families with dependent children headed by a married or cohabiting couple in 2011 was 78% (see Chart 5.1 below). This proportion has declined gradually since the General Household Survey was first conducted in 1971, when 92% of families with dependent children were of this type (headed by a couple). Thus, over the same time period (1971 to 2011) the proportion of lone parent families has multiplied almost threefold from 8% to 22% (ONS 2013). There are current 1.9 million lone parents with dependent children living in the UK. Of these, 91% are lone mothers.

² Defined as people who live and eat together and/or people who live alone.

³ Defined as a marriage, civil partnership or cohabitation, or where there are children in the household.

⁴ Dependent children defined as a child under the age of 16, or aged 16 to 18 in full-time education.

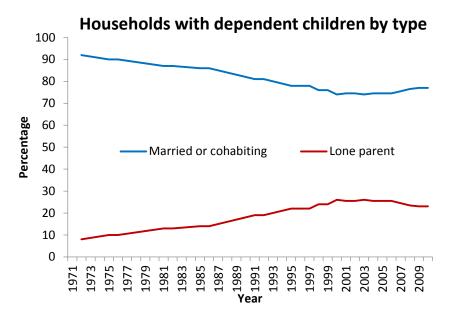


Chart 5.1: Households with dependent children, by type (data source: ONS 2013)

These trends are attributable in part to the rising number of couples seeking a divorce (over half of divorcing couples have at least one child under 16) and in part that rates of marriage are in decline (Beaujouan and Bhrolcháin, 2011). Godelier (2012, p.6), in his study The Metamorphoses of Kinship, notes similar trends across all advanced economies and highlights two main reasons for these developments. Firstly, there has been an increasing emphasis on the individual's right to freely choose the person with whom they couple. In the UK, this has been facilitated by changes to legislation which make it easier to divorce. Perhaps for these reasons there has been a general attitude change in the UK regarding marriage and divorce. Whereas divorce has historically been morally charged, those who divorce tending to be viewed as "personally weak or morally deficient" (Allan 2001), this is no longer the case (Finch 2003, Hall 1993). Secondly, gender relations have changed dramatically (Godelier 2012). There has been an increase in social pressures for greater gender equality in all areas of social, political and economic life. This particular change has led to increasing numbers of women entering the economy and making an essential contribution to the material life of their family (Harkness 2013a). In so doing it has also enhanced their autonomy, meaning that marriage has become less of an economic necessity for women (Finch 2003). Harkness et al. (2012) also highlights that a lack of economic opportunities for men has to some extent reduced the value of marriage for women (see Giddens [1992] and Beck & Beck-Gernsheim [1995] for similar arguments). We would add that these factors have taken place alongside, and have probably been largely facilitated by, advances in medical technologies that have given women greater choice over childbearing.

5.3. Lone parents in the UK

In this section we examine a number of salient features of lone parenthood. We see that lone parents are disproportionately affected by poverty, unemployment as well as negative health and wellbeing outcomes. (These figures have been easier to source for lone parents more generally. However, it is made clear when considering data on lone mothers in particular.)

In terms of the marital status of lone mothers, there has been a shift in the proportion of divorced, single, separated and widowed mothers. In 1971 only 1% of families were headed by a single never married mother. In 2011, on the other hand, 10% of families in the UK were headed by single, never married, mother (ONS 2013). Indeed, as the chart below shows, although divorce and separation have contributed to the increase in lone mother households, the growth in never married single mothers is by far the greatest⁵.

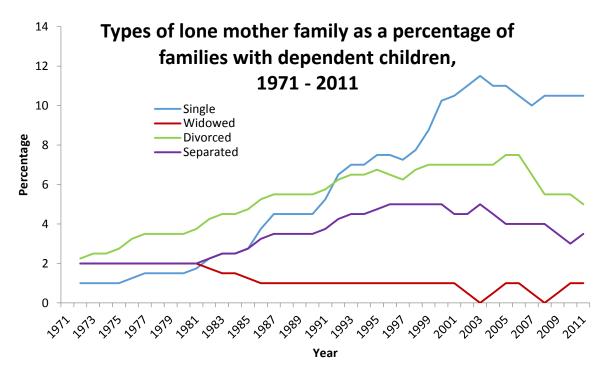


Chart 5.2: Types of lone mother family, source General Lifestyle Survey 2011 (data source: ONS 2013, authors own data smoothing) 6

It is worth noting, however, that one thing the statistics presented above do not pick up is that lone parenthood is more often than not a transitory stage. As longitudinal research by Marsh and Vegeris (2004) has shown, there is a high occurrence of re-partnering over time (a large proportion of which, 59% of their sample, resulted in marriage). Skew's (2009) analysis also suggests that the average length of lone parenthood is 5 years.

The median age of lone parents is 38 (ONS 2012a). Overall, they care for approximately 3 million children in the UK, that is to say, around one in four dependent children in the UK

⁵ It is worth noting that the marital status of lone parents is associated with a number of outcomes. For example, it has been shown to be an important factor associated with subsequent employment trajectory (Gregg et al. 2009). ⁶ These figures do not include cohabiting parents. They do however include those lone mothers who live with other family members, such as grandparents. However, overall this is likely to be a small percentage. As Graham and McQuaid (2014) note, only 11% of children aged five live with a grandparent and this figure decreases as the child gets older.

(ONS 2013). The proportion of children being brought up in lone parent families has increased pretty much year on year since 1971. Having said this, lone parents care for fewer children than coupled families on average (1.5 versus 1.8) (ONS 2013).

Lone parents and poverty: In terms of living conditions, statistics suggest that, before accounting for housing costs, in 2013 22% of children living in a lone parent family were living in poverty (defined as 60% below median income) (DWP 2014, table 4.14ts). When housing costs are accounted for (which gives more of an idea of disposable income) this figure rises to 42%, and compares to 23% of children in a coupled family living in poverty (DWP 2014). Positively, lone parent relative poverty rates have shown a marked decrease between 1997 and 2013 - in 1997 67% of children in lone parent families were defined as living in poverty (after accounting for housing costs) (DWP 2014)⁷.

Economic inactivity is very strongly associated with the financial problems and poverty discussed above. DWP (2014) figures suggest that in 2013 59% of children who lived in a workless lone parent family were living in relative poverty (after housing costs), compared with 30% of children of lone parents who work part-time (less than 30 hours a week) and 22% of those in full-time employment (30+ hours a week). So, clearly financial problems decrease upon entering work (see also Coleman & Lanceley 2011). Indeed, there is now a large body of evidence regarding the positive outcomes, such as positive impact on material living standards, which result from encouraging and supporting lone parents into work (see Millar 2008 and 2011 for reviews). Millar (2011) also highlights a number of other important reasons for getting lone parents into work - it increases their self-esteem, enriches their social networks and enables them to act as a role model for their children: "[Lone parents] thought it [work] provided them with a quality of life that is impossible to achieve on benefits". However, it is also worth noting that work is not always a 'silver bullet' - working lone parents are still more likely to experience financial hardship than in-work coupled parents.

Lone parents and employment: We have seen that lone parent families experience poverty at a greater rate than coupled parents, and that this seems to be associated with economic activity. For these reasons it is worth looking in a bit more depth at their employment rates. The overall employment rate of lone parents at the end of 2013 was 61.4%, meaning that over 1.1 million lone parents are in work (ONS 2014a). This compares to an employment rate of 71.3% for married/cohabiting mothers. It is worth noting that economic activity varies for lone parents by a number of factors, such as age of first child, age of youngest child and educational attainment. Education is one of the best predictors - an analysis of Labour Force Survey data suggests that 83% of lone parents with a degree are in employment compared to just 28% with no qualification (Tinsley 2014). The same data shows that in 2012 14% of lone parents held degrees compared to the general population average of 25%.

Another barrier to employment for lone parents is lack of access to childcare (Haux 2009, 2013). A recent survey by Coleman and Lanceley (2011) highlighted that lone parents are more likely to use informal care than formal care (36% versus 16%). Given the prevalence of such informal support it is somewhat surprising that there have not been more studies on lone mothers in the UK that examine their informal support networks. It isn't clear, for example, which aspects of

⁷ It is also worth noting that lone parents are more likely than coupled families to experience persistent spells of poverty (Graham & McQuaid 2014).

support networks are associated with favourable outcomes such as informal childcare support. Clearly, if social networks are associated with outcomes of interest to policy makers this gap needs to be addressed. In fact, a DWP report has highlighted this as a significant gap in the policy research literature and a gap that needs addressing in future research (Collins et al. 2006).

Finally, it is worth noting that static measures, as presented above, are in some cases likely to distort thinking about an issue through hiding important variations in the experiences of those involved. For example, in terms of employment Evans et al. (2004) show that there are four dynamic elements to the employment profile of lone parents: "work entry, persistent work, job exit and persistent non-employment". They noted that "lone parents are still in 2002-2003 almost twice as likely to leave their job as non-lone parents and are a third more likely to leave their job compared to single childless women". Recent longitudinal research by Gingerbread (2012) corroborates this, suggesting that 22% of lone parents who enter employment experience unemployment or inactivity in the following 12 months. They conclude that there is still a "high churn rate among single parents who enter work". Furthermore, Harkness et al. (2012, p.22) note that research suggests that "in spite of lone mothers having a strong commitment to sustaining employment, they face difficulties in ensuring adequate income or progression to better pay."

Lone parents, health and wellbeing: Prior to the New Labour Government, lone parents had been identified as a group with below average levels of mental wellbeing and high levels of depression (Payne 2000). This is for a number of reasons. It has, for example, been demonstrated that changes in family structures are more often than not associated with changes in income and the wellbeing of family members, particularly in those families affected by conflict and stress (Aassve et al. 2007). As well as the mental turmoil and anguish often caused by a breakup, a vast literature shows that unemployment, which as we have seen disproportionately affects lone parents, has an unambiguously negative impact on mental wellbeing (see Paul & Moser [2009] for a recent meta-analysis). It is also well-known that income and employment insecurity negatively affects wellbeing and mental health (e.g. see De Witte [1999] for a review), a pertinent finding considering the insecurity lone parents face in the job market (Evans et al. 2004). Indeed, in terms of lone parents, Harkness and Skipp (2013) show that paid work has a positive impact on mental health outcomes and wellbeing with those in employment less likely to suffer depression. They also found that being able to achieve a balance between work and childcare was important for these outcomes.

Of interest to this research, social support has been shown to help alleviate the negative effects associated with unemployment (Gore 1978; Paul & Moser 2009), especially so amongst women (Leana & Feldman 1991). Graham and McQuaid (2014) also highlight that lone parents with good social support networks are less likely have adverse mental health outcomes when faced with adversity. Also, for those lone mothers in employment, the lack of an appropriate social support network might be associated with increased levels of stress, as they parent must juggle family and work by themselves (Millar & Ridge 2009).

Lone parents' children: In terms of the wellbeing of the dependent children in lone parent families, a number of studies have shown that children who grow up with married parents generally do better than children in lone parent families on a range of measures such as educational, emotional and wellbeing outcomes (see e.g. Amato 2005, Mooney et al. 2009). Also, children

who grow up in lone parent families are less likely to have a salaried occupation in adulthood (Lampard 2012). A recent analysis has shown that the most advantaged group of children live with continuously married parents, followed by those who live with cohabiting parents who go on to marry (ONS 2010b). However, there is some evidence that this is less to do with the type of family structure and more to do with conflicting parents and poverty (Mooney et al. 2009, Lampard 2012, Graham & McQuaid 2014).

To conclude this section, it has been shown that lone parents are more likely than coupled mothers to experience poverty, they are less likely to be in employment and more likely to have health problems. It is also seems very likely that social networks are important for buffering against these adverse outcomes (Collins et al. 2006, Graham & McQuaid 2014). As Graham and McQuaid (2014) note, "[The] presence or absence of social support networks is crucial to the wellbeing of lone parent households and can make or break lone parents' abilities to sustain employment".

5.4. The economic landscape: the 'Great Recession'

A financial crisis began in the summer of 2007 when a shortage of credit for inter-bank lending in the financial markets (the "credit crunch") and the repercussions of bad lending practice in the US ratcheted through the entire global economic system. Much recent research has suggested that the magnitude of the crisis and financial contagion was intensified by the structure of the banking system. A paper co-authored by the Chief Economist at the Bank of England uses a network science framework, a framework that focuses on Simon's (1996) work on complex adaptive systems, to explain how the structure of the financial system played a role in the crisis:

"In recent years, it [the banking system] has become much more complex, concentrated and interconnected [...] In Simon's words, the financial system has become less modular, less hierarchical and thus less decomposable. In consequence, it became markedly more susceptible to systemic collapse. This sowed the seeds of the global financial crisis of 2007/2008." (Gai et al. 2011)

In the UK the financial crisis led to the first recession that we have experienced since the early 90's. After 15 years of steady growth the UK economy officially entered recession in Q3 2008⁸ (see Chart 5.3 below). At its worst point GDP was down around 7% on pre-recession levels. After three quarters positive (but weak) growth in early 2011 the economy became mired by a brief double dip recession early in 2012 (as Chart 5.3 shows). Seven years on and the UK has started to see economic recovery, with GDP figures nearing pre-recession levels in Q1 2014. However, because of the depth and length of the recession, it has become known as the "Great Recession" (Farnsworth & Irving 2011). Indeed, the economic crisis was considered of such a scale in the UK that there even seems to be some political consensus that the capitalist system needs to be reformed (with talk about, for example, 'compassionate capitalism'). (There was

⁸ The technical definition of a recession is two consecutive quarters negative growth; the UK economy contracted in Q2 & Q3 2008.

even some poignant talk at the start of the crisis about the end of capitalism itself – this however quickly abated.)

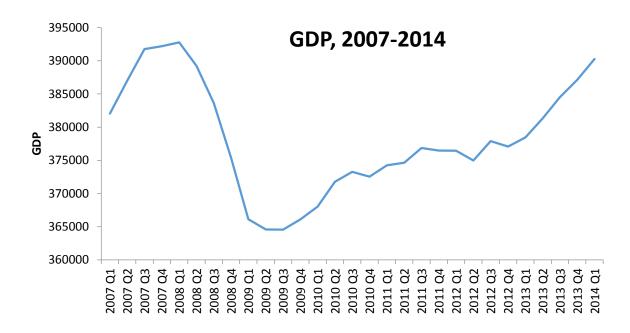


Chart 5.3: GDP 2007-2014 (source: ONS 2014b)

5.4.1. The labour market in the recession

Going into the recession the labour market unemployment rate in the UK was at its lowest in 30 years, hovering at around 5% (Gregg et al. 2011). However, when the recession hit unemployment rose to a peak of 8.6% in late 2011. Roughly speaking, this was the worst unemployment rate seen since 1995 (ONS 2014c). Recent statistics (for July-August 2014), suggest that it has dropped back to 6% (ONS 2014c)9. Having said this, compared to previous recessions, unemployment has not soared. As noted by Gregg and Wadsworth (2011), even though there has been a large cumulative loss in GDP, employment rates have remained higher and unemployment rates lower than would have been expected from our experience of previous recessions. During previous recessions the fall in the labour market was roughly equivalent to the fall in GDP. For this reason, considering that at the peak of the recession the UK economy lost around 7% of GDP, the loss of employment seemed "rather benign" (Gregg & Wadsworth 2011 p.11). This, however, says little about the quality of work available nor real wages. For example, Gregg et al. (2014) describe that real wages have fallen sharply since 2009 and that this may have actually "been instrumental in preventing a much larger increase in unemployment".

In terms of who is affected by labour market adversity, evidence suggests that it is low educated, low skilled workers, young people, ethnic minorities and men whose employment prospects have suffered the most (Vaitilingam 2009, Clark & Heath 2014, Harkness 2013a). Clark and Heath (2014, ch.3), for example, describe how unemployment during the recession has

⁹ At the time of fieldwork (mid 2013) it was hovering around its peak of 8%.

disproportionately affected those with lower levels of educational attainment. Nowadays a degree is really needed for financial security. They conclude that in terms of labour market adversity, "we are not all in this together ... the economic tornado has cut a narrow swathe". Women have also fared better than men since 2008 (Harkness 2013a). Levels of female employment were roughly same in 2012 as in 2008.

Of particular interest for this research is that the lone parent employment rate has actually continued to go up during the recession (Gregg & Wadsworth 2011, ONS 2014a, Tinsley 2014). In 2007, 55% of lone parents were in employment. At the end of 2013, this figure was 61% (ONS 2014a). Chart 5.4 below compares the lone parent employment rate to that of the general population. Just before the recession struck the gap between lone parents and the general population was 19%. In late 2013, however, the gap had closed to 11%. Given the depth of the recession this is perhaps somewhat surprising. However, this rise is in all likelihood attributable to some of the policies that will be described in section 5.5 below (e.g. increased obligations to enter the labour market), along with the fact that the tougher financial circumstances mean that living exclusively on benefits (the value of which have eroded in real terms, as we will see) is probably no longer a feasible option for many lone parents.

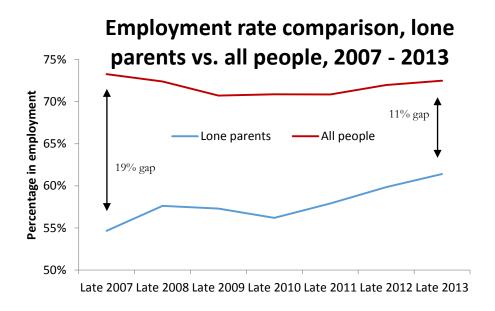


Chart 5.4: Employment rate comparison, lone parents vs. all people (author's calculations with ONS 2014 data)

In terms of the general population, although employment has stayed relatively high, especially so for lone parents, there has been a contraction in the amount of hours worked and wages. According to Gregg and Wadsworth (2011) the total hours worked fell faster than employment. Part-time working also saw a rise. Indeed, compared to before the recession, many more employees are now what Bell and Blanchflower (2011) call 'underemployed'. This means that there are more people active in the labour market who desire more hours, but struggle to find them. (This includes people out of work but looking for work, so is essentially spare labour market capacity.) Analysis by Tinsley (2014) describes that the rise in the employment rate of lone parents is mainly due to a rise in part-time workers, who also tend to want more hours. Indeed, the 'underemployment' rate of lone parents in 2012 was 21.8% compared to 14.4% prerecession (Tinsley 2014, p.32). This compares to the general underemployment rate for all people in 2012 of 9.3%, compared with 4.9 pre-recession (Tinsley 2014, p.31).

All this means that even though the picture in the labour market for lone parents seems positive, for many the burden of low pay, being unable to get the hours wanted, in addition to the increasing restrictions on claiming in-work benefits (described further in section 5.5) and higher living costs means entering employment does not necessarily mean escaping poverty. Indeed, research by the IPPR (Gottfried 2010) describes how the tough labour market conditions seen during the crisis are likely to lead to the increase of in-work poverty. The same research shows that lone parents as a group are likely to be the worst affected by such in-work poverty¹⁰.

Furthermore, instability and uncertainty have also increased. For example, 'zero-hour contracts' have seen a drastic increase in usage. These contracts offer no guarantee of work and generally require employees to be available at all times of the day, at the behest of the employer. This makes it extremely difficult to plan financially (as well as plan in family time) (Clark & Heath 2014). Estimates of current usage levels vary widely between the official 250,000 and unofficial (and what seem exaggerated) estimates of 5 million (Clark & Heath 2014, p.85).

At the time of writing, the labour market has almost fully recovered in terms of employment levels. It has witnessed a quicker recovery than in the 80's and 90's. However, this says little about the type of low quality, short on hours, employment opportunities that have appeared.

5.4.2. Section conclusions: The economic recovery?

Chart 5.3 at the start of this section shows that the economy has almost fully recovered, even if it has been the slowest recovery in the history of recessions. In terms of what the recovery means for people's living standard, a recent analysis by the IFS on 2012-2013 data suggests that average incomes have started to stabilise after falling sharply during the beginnings of the recession (Belfield et al. 2014). Having said this, the IFS highlight in another report that the poor have become worse off and will continue to fare worse in the years to come as more austerity measures are put into practice: "Lower-income groups will fare considerably worse over the post-recessionary period (between 2011–12 and. 2015–16) [...] The key explanation is that those on lower incomes are most affected by the substantial cuts to the welfare budget"

¹⁰ For those who have lost work, or are struggling to find it, the cost of the recession is not only financial. There is an associated loss of self-esteem, loss of skills and also damage to future career prospects: "people out of work for long periods become stigmatised, depressed, and hard to place. They become separated from the labour market. So, even when economic recovery comes, unemployment can remain unnecessarily high" (Gregg & Layard, quoted in Vaitilingam 2009). The scarring effect of job loss has also been shown to be intergenerational, affecting the level of educational attainment and wages of those children whose parent loses a job. As noted by Gregg, MacMillan and Nasmi (2012), "the recent recession may have significant long-term consequences for the children of those who have lost their jobs". The stress of recession, of losing a job, of struggling to find work are also all known to be damaging to health and wellbeing (Vaitilingam 2009, Brenner & Mooney 1983, Stuckler & Basu 2013). In terms of health outcomes, Stukler and Basu (2013) argue that people can be protected from the 'ravages of recession' through social protection spending. Some countries, such as Iceland for example, protected their citizens through public spending and this is reflected in their health statistics. However, one only needs to look at Greece, which has had the severest of austerity measures applied, to see the health impact - from rising HIV figures to rising suicide, which analysis shows is attributable to hard financial times (Stuckler & Basu 2013)

(Brewer et al. 2013a). So, even though we are seeing an economic recovery, it is quite lopsided. Because of the government's austerity measures the most economically vulnerable in society will continue to feel the pinch for a while to come yet.

5.5. The policy landscape: Austerity

This section outlines recent policy changes that have affected lone parents in the United Kingdom in terms of their labour market status and their finances. The majority of the section describes the Coalition's policies. However, before discussing the Coalition's policies it is worth briefly considering their inheritance from the preceding New Labour government.

5.5.1. The inheritance from New Labour

When New Labour came to power in 1997 they inherited from the previous Conservative government one of the worst rates of child poverty in the developed world. Roughly a third of all children lived in a household with below 60% of the median income (Klett-Davies 2007). It is an inheritance which Gordon Brown described as a "scar on Britain's soul" and one that went on to define much policy associated with New Labour. Another associated issue was that the UK was one of a few OECD countries whose employment rate for lone parents was much lower than those of other mothers (Gregg et al. 2009). These issues drove the government to set targets to reduce child poverty by 50% by 2010 and abolish it completely by 2020. As the child poverty level of lone parent households is higher than coupled families, they also pledged to get 70% of lone parents into employment by 2010.

Aiming to meet these targets, New Labour introduced a number of policy reforms which aimed to help low income families with dependent children, especially lone parent families, enter gainful employment. For example, in terms of lone parents, they introduced 'Lone Parent Obligations', which by the end of their time in office required lone parents with a child aged 7 or over to transfer from Income Support to Job Seekers Allowance, requiring them to actively seek employment. It is beyond the scope of this chapter to describe other changes introduced by New Labour¹¹ (but, see Haux 2012). Suffice it to say, however, that the policies introduced by New Labour were not enough to meet their targets of child poverty reduction (Stewart 2012; Brewer 2012). Having said this, progress was made. For instance, financial support for a workless lone parent with one child was 20 per cent higher in 2010 than in 1997; and 36 per cent higher for a low wage lone parent working in a part-time job (Brewer 2012). And, for such reasons, 600,000 fewer children were living in poverty in the period 1997 - 2010 (Thane & Evans 2012).

However, recent policy developments associated with the Coalition risks reversing the progress described briefly above. Indicators suggest that what has been gained in terms of equality and child poverty will be lost in the coming years under the Coalition Government (Brewer et al. 2011).

¹¹ For example, they introduced the National Minimum Wage and the Working Families Tax Credits, to offer greater incentives to work, and the New Deal programmes to enable and activate key groups, lone parents included.

5.5.2. The 2010 Coalition Government and their austerity package

After 13 years in power New Labour was defeated in the 2010 election, in-part because the public blamed them for the economic crisis described in section 5.4 above. Unable to secure an absolute majority, the Conservative party formed a Coalition government with the Liberal Democrats.

As described by Deacon (2011), in the run up to the general election both parties of the Coalition promised great change. Iain Duncan Smith, for example, promised nothing less than a "welfare revolution". Prior to the election David Cameron had also sought to distance the Conservative party from the "nasty party" image of the Thatcher years. He promoted a form of progressive "compassionate Conservatism" and claimed that "it is the Conservative Party that is the champion of progressive ideals in Britain today ... If you care about poverty, if you care about inequality ... forget about the Labour Party ... If you count yourself a progressive, a true progressive, only we can achieve real change" (Cameron, 2008 quoted in Lister & Bennet 2010). The rhetoric was even extended directly to lone parents: "to that single mother struggling and working her heart out for her children, we can now say: We're on your side; we will help you work" (Cameron 2010).

The focus of the rest of this section is on the most controversial aspect of the Coalition's public policy – their deficit reduction strategy and austerity programme. It is unfortunately beyond the scope of the chapter to describe other aspects of their policy, such as their labour market policy and their tougher sanctions for those claiming Job Seekers Allowance (JSA) (see however Bochel 2011, Lister & Bennet 2010, Haux 2011). It is worth mentioning, however, that they did change the entitlement conditions for lone parents wishing to claim income support. Since May 2012, lone parents whose youngest child is aged five or older have been moved from Income Support to JSA (it was previously seven or older). As a result, an estimated 124,000 additional lone parents have been required to look for work (Gingerbread 2012).

One of the central claims of the Coalition government is that spending got out of control under New Labour and that this contributed to the depth and severity of the UK's recession. To get things back on track, they claimed, would require deep cuts to government spending, essentially reducing the size of the state. So, the economic crisis facilitated a new age of government austerity. Although something similar happened in the wake of 1980s and 90s recession, the current cuts are the biggest since the Second World War. As noted by Timmins (2011) "there is no doubt that what is happening is historic".

The government pledged to reduce the deficit by £81bn by 2014/2015. It was initially claimed that 80% of this would be funded by spending cuts and 20% by increasing taxes¹². But, it is worth noting, a large proportion of the tax increases are VAT based – a fairly regressive form of taxation (see HM Treasury 2012)¹³. In terms of the spending cuts, roughly 64 billion will eventually be trimmed from public expenditure (O'Hara 2014). O'Hara (2014) describes how over half of these cuts fall in just two areas; benefits and local government, despite the fact that they only make up around 27% of government expenditure. In terms of the welfare state,

¹² Recent estimates by the WBG (2013) suggest this is more like 85% cuts to 15% tax increases.

¹³ The increase in VAT will, for example, disproportionately negatively affect lone parents. ONS (2013) research shows that VAT constitutes 9% of spending of those on the poorest incomes and only 4% for the richest.

initially Osbourne outlined £18bn cuts to the welfare budged by 2015. The biggest saving on welfare comes from linking tax credits to CPI rather than RPI, as CPI is a lower measure of inflation (Brewer et al. 2011). On top of the welfare cuts, cuts to local government mean that local services are being affected all over the country, with services such as libraries and Sure Start Centres being shut down in some areas.

The following changes, all brought in before April 2013, are likely to have directly affected many lone parent families. Starting in April 2011 child benefit was frozen until April 2014¹⁴. (From April 2014 it increases at 1% per year.) This means that families with children will lose out in real terms (what their money can buy) because the price of food, electricity and gas are all increasing. Analysis by the Women's Budget Group (2012) suggests this means a 10% reduction in value in real terms. Moreover, 95% who claim child benefit are women (WBG 2012)¹⁵. There was also a cut in the childcare element of WTC from 80% to 70%. Alongside this has been a general increase in cost of childcare – Orton (2015) suggesting that it has risen by 63% since 2003 - that will make it harder for women to stay in employment (see also Hurrell 2012). Of the families that receive Childcare Tax Credits, 64% are single parents. As noted by Gingerbread (2011) this "[will] lead to substantial losses for working single parents who, in many cases, may have no alternative but to use paid childcare if they want to carry on working". There has also been a tightening of criteria for those claiming WTC. Those wishing to claim now need to be working 24 hours a week (moved from 16 hours a week). This change will likely penalise many in a time when full-time employment is hard to find because of the labour market in recession. 36% of lone parents receive WTC (compared to 15% of couples) (Gingerbread 2011).

Changes that have taken place post April 2013 include the following. The yearly increase in working age benefits from April 2013 is 1%. This is lower than the rate of inflation, meaning that those on benefits will see the value of their income eroded over time. Council Tax Benefits were abolished on 1st April 2013. They have been replaced with new local schemes that will reduce the amount of tax relief councils can pay out by 10%. The reduction in benefit will depend on the particular local council, some reducing the benefit for those living in the most expensive houses, some spreading the pain equally or covering the cost of the tax relief entirely from their budget so that the lowest income households will not experience the cut at all.

Perhaps the most controversial policy under the Coalition is the 'under-occupancy charge' (widely known as the 'Bedroom Tax'). The amount of housing benefit received has been restricted to the number of bedrooms that the household technically needs¹⁶. Those with one spare bedroom lose 14% of housing benefit. Those with two spare bedrooms lose 25% of their benefit. The government has calculated that those with one spare bedroom will lose on average £12 a week. Those with two spare bedrooms will lose on average £22 a week. Nearly a quarter of those affected will be lone parents. This reform has been dubbed the "greatest single threat to the ties of family and community life" (Clark & Heath 2014, p.189).

¹⁴ The rate will be kept at £20.30 per week for the eldest child and £13.40 per week for each other child.

¹⁵ Moreover, the amount of child benefit received will be reduced if an individual earns over £50,000 pounds. If over £60,000, then the benefit stops altogether.

¹⁶ A child over 16 is entitled to a room of their own. Same sex children will be expected to share until one reaches 16. If children are not of the same sex then they will be expected to share a bedroom until one is aged 10.

The academic and scientific response to the Coalition's austerity programme has been largely negative. For example, there is actually little and contradictory evidence regarding whether or not austerity works. One of the initial justifications for austerity was that the IMF assumed a fiscal multiplier of 0.5 on government spending¹⁷. In reality, the IMF ended up conceding they underestimated the multiplier and in a recent publication suggest that it is more likely to be 1.6-1.7 (Blanchard & Leigh 2013). Reeves et al. (2013) use the IMF's methodology to estimate the multiplier across spending areas. Their evidence suggests that if the government was really wedded to the idea of austerity as a tool of deficit reduction, their strategy would be to cut defence spending (which has a negative multiplier) and keep spending on areas such as health and social protection which have positive multipliers. The opposite seems to have happened. The response from the economic profession more generally has been polarised. However, notable economists such as Joseph Stigliz are scathing: "Reward structures have allowed those who led the economy to the abyss to walk away with billions—less than they would have had if their flawed analyses had been right, but far more than they deserve, given the costs that they have imposed on the rest of society" (Stigliz & Greenwald 2014, p.162).

All of this suggests that whilst those who caused the economic crisis have been bailed out, those reliant on state welfare, like some of the lone mothers interviewed in this research, have been differentially exposed and their living standards negatively affected as a result of failures in the wider economy.

5.6. The impact that the recession and austerity has had on poverty levels and living standards

When the recession first struck, relative poverty levels actually fell, reflecting the fall in average incomes (Clark & Heath 2014, p.180). Moreover, according to the OECD, between 2007 and 2010 the UK sheltered the worst-off in society pretty well, better than any other western country in fact (Clark & Heath 2014, p.181). This was because security and welfare available during the onset of the crisis was adequate to do so. However, after the panic about public finances and the implementation of austerity "all serious thought of protecting the poor from hard times evaporated" (Clark & Heath 2014, p.182). Linking this to the recession, Clark and Heath (2014) describe the state retrenchment as 'knocking down the storm defences of the vulnerable'.

Whilst the Coalition claims that the cuts have been fairly done, and that 'we are all in this together', analysts and critics vehemently oppose this statement. As Clark and Heath (2014, p.184) describe, their 'lop-sided brand of austerity' (80% spending cuts, 20% tax increases) was bound to hurt the vulnerable more (see also Hills 2015, ch.8, Cribb et al. 2012, Gough 2011, Sinfield 2011, Farnsworth & Irving 2011). As noted by Taylor-Gooby (2011) "the 2009-15 cuts impact on poor groups in a way that previous cyclical shifts in public spending have not". Early indicators and modelling suggest that what has been gained in terms of equality and child poverty will be lost (Brewer et al. 2011). Brewer et al. (2011) also predict that relative poverty and inequality will rise by 2020 as a result changes in the tax and benefit system. And, those who

¹⁷ A fiscal multiplier is the ratio of the change in a national income measure (e.g. GDP) to changes in government spending that caused it.

are better off have been left relatively unscathed (Clark & Heath 2014, O'Hara 2014, Crow et al. 2009, Hills 2015). In some cases, the wealthiest in society are even better off, leading to growing levels of inequality and an exacerbated class divide (Seery & Caistor-Arendar 2014, Clark & Heath 2014).

In terms of living standards, a recent analysis by the IFS suggests real median income in 2012-2013 was 5.8% below its 2009-2010 peak (Belfield et al. 2014). They also highlight that after taking housing costs into account, 14.6 million in UK were living in absolute poverty in 2012-2013, an increase of 600,000 since 2011-12. Moreover, this figure stands at 3 million above its low point in 2004-05. Another report by the IFS described how "In the aftermath of the recession, average incomes have fallen by near-record amounts. Inequality has fallen back to levels last seen in the mid-1990s. Relative poverty continues to fall, but only because the poverty line is also falling: the poor have undoubtedly been getting worse off in absolute terms, on average" (Cribb et al. 2012 p.1). Similarly, a recent report by the ONS (ONS 2012b) highlights that the "net national income" (a better indicator of living standards than GDP per capita) fell by 13.2% on average between 2008 and mid-2012. This is a more marked and lengthier drop than seen in the previous two recessions (in the 80's there was a 5.7% drop and in the 90s there was 3.6% drop - both recovered in 3 years).

One other factor (alongside the cuts described in section 5.4 above) driving down net national income and people's living standards is inflation. Inflation peaked at 5.2% at the height of the recession. Of greatest relevance to lone parents is the large increase in cost for gas, electricity, food and childcare. As the Family Spending and Expenditure Survey (ONS 2010a) highlights, lone parents spend a higher proportion of their income on these costs. Analysis by Oxfam shows that in the 5 years from 2007 – 2012 inflation in the food market approached nearly double that of the average inflation rate (30.5% vs. 17.4%) (Haddad 2012). This is perhaps one of the reasons that we have seen a rise in 'food poverty' and an increased usage of food banks. Medical doctors have described how this rise in food poverty has led to a 'crisis of malnutrition' for children and adults alike (Taylor-Robinson et al. 2013). In terms of utilities, Gingerbread (2013, p.15) describe how over the 10 years up to 2012 electricity bills saw a 50-60% increase. Needless to say, the rising costs in these areas are disproportionately affecting the living standards of lone parents.

Specifically in terms of lone parents' living standards, Cribb et al. (2012) highlight that working lone parents lost roughly 4% of their income in one year between 2010 - 2011 and those on benefits around 2.7%. Another analysis by Browne (2012) predicts that households with children that tend to have lower incomes, and in particular non-working lone parents, will have lost in excess of 12% of their income on average: "such a steep drop for lone parents is of very real concern; in order to find work they will have to confront the dual challenges of finding a flexible job in a highly uncertain labour market and meeting the costs of childcare". Similarly, an analysis by the Women's Budget Group (2013) shows that as a result of the austerity measures single parents have lost 15.1% of their net disposable incomes (15.6% for single mothers, 11.7% for single fathers) compared to couples with children who have lost 9.7%: "single parents as a group lose the most" (see also Annesley and Weit 2010).

5.7. Conclusions: The 'social recession'?

The economic and policy context outlined in this chapter represents a set of interconnected changes that are likely to have affected the livelihoods of lone parents and their ability to ensure the persistence of some desirable standard of living. Given this, the theoretical framework presented in Part 1 suggests that these conditions are likely to be accompanied by a qualitative transformation of social relations. What does previous research say about the relational impact of the recession and austerity?

Robert Putnam (2000) in Bowling Alone had predicted that a resurgence of civic participation, and thus social capital, might result after "a palpable national crisis, like war or depression or natural disaster". This, however, doesn't seem to have been the case for the recent economic hard times. Research by Clark and Heath (2014, see esp. ch.6) sheds light on the overall impact of the economic crisis and austerity on society, volunteering, family relationships and informal support (see also Lim and Laurence forthcoming). Clark and Heath (2014) ask "is there any serious reason to think that disruptive events in the alien world of Wall Street or the City of London would leave us all living in a world turned upside down?" They answer the question with an anecdote from one of their interviewees:

"Six years on, 'Winston' find himself uprooted and living alone, miles from his family, and with every aspect of his life, from his diet to his dwindling dealings with relations, warped by the fall-out from those far-away financial dramas".

Data that they present suggests that there was a proliferation of anxiety during the crisis¹⁸ and that this led to what they call a "social recession". However, the social fall-out, they claim, is less like that of a storm, and more like that of a tornado which cuts a very specific path through the terrain: "hard times have landed a very particular blow on community life in the UK". The social recession has been concentrated amongst those who are already disadvantaged. That is to say, those who are the most vulnerable to economic adversity have seen their intimate relationships, communities and informal care networks damaged. The recession, they argue, has converted unequal economies into unequal communities. Those with the greatest exposure to economic adversity are, for example, more than twice as likely to report arguing with their intimates (14% versus 31%). Clark and Heath (2014) note that this is not the case in countries which have greater social protection and labour market regulation (such as France).

They also demonstrate, with figures on volunteering, that community level social capital has also shrunk. At the onset of the crisis, 42% of the population was involved in some sort of volunteering. This had fallen to 37% by 2010. Moreover, volunteers are putting in on average fewer hours than before. One explanation for this might be the financial costs of volunteering. Others explanations include the fact that zero-hour contracts make it harder to commit to anything but work. This might lead us to hypothesise that volunteering is hit harder in more vulnerable communities. Looking at data on volunteering in local Wards (composed of roughly 5000 residents) Clark and Heath (2014) are able to show that the burden did indeed fall on poor communities. The decrease in recessionary volunteering rates was a "mere blip" in richer

¹⁸ Insecure pay, lack of savings, rising prices all help form day-to-day worries. Recent data suggests that of those who perceive themselves to be the most exposed to the recession, 80% claim they have experienced rising levels of anxiety since the start of the crisis (Clark & Heath 2014, p.103).

neighbourhoods, from 42% to 41%, versus a much larger 6% drop in poorer neighbourhoods from 36% to 30%.

They also look at "informal networks of kindness". Informal kindness actually seemed to erode more deeply than formal volunteering, dropping by 10% points between 2008 and 2010, a reduction of about a quarter (p.125), suggesting that the "UK's 'social recession' was considerably larger than its financial one". In terms of the concentration of the "social recession", richer neighbourhoods saw a 10% decreases in informal kindness, compared to 15% in impoverished inner cities.

"The Great Recession stifled spontaneous kindness right across England, but did so more aggressively in the communities that started out poor."

However, whilst the data presented by Clark and Heath (2014) suggests that informal support seems to have decreased, the role that informal support plays in such times has not yet been researched. An observation made by Mark Carney (2014), Director at the Bank of England, describes the probable role social networks play in such times: "The rolling back of the state in times of crisis or 'adjustment' often means that this substitution of social capital is a necessity rather than a choice." Whilst the research by Clark and Heath (2014) described above is relevant because it gives us an indication that vulnerable groups are more likely to have lost valuable support in these tough times, this thesis can build on the understanding they offer by describing the actual role played by social support networks in such times.

One could thus view the current economic climate as an opportunity for what Garfinkel calls a "breaching experiment", in that the shifts described above are likely to bring about behaviours that are not likely to have been present before (or at least not present to the same extent). In a benign economic environment we may learn little of the inner environment of the social network. In a taxing environment, in contrast, we argue that we are more likely to learn something about the internal structure and processes at work in the social networks of lone mothers because those networks can potentially become life savers when emotional and economic support is needed.

Chapter 6: Methodological strategy

6.1. Introduction

The foregoing chapters have outlined the research challenges of the thesis, the conceptual and theoretical framework and the context of the research. This chapter moves to address the methodology of the research. By methodology it is meant the whole design of the empirical investigation; from the methodological requirements of the theoretical framework, to sampling and data collection, to the analysis of data, and also the ethical practice adopted through each of these stages.

The logic of the chapter is as follows. The chapter starts in section 6.2 by outlining the more abstract part of the methodology, the explanatory framework, and describes how it links to the preceding chapters. This discussion acts as a bridge between the theoretical framework, the empirical research questions and the actual methods of the research. In brief, the explanatory framework is derived from 'analytical sociology', and focuses on what are called 'generative mechanisms/processes'. This is a framework that fits well with the analysis of complex adaptive social systems. Following on from this, the research questions are introduced and linked with the explanatory framework (section 6.3). Given the research questions, the chapter then asks, what are the specific types of data that are required to answer the research questions, and what methods of data collection are suitable (section 6.4)? In summary, two different types of data were collected: open qualitative data and structured ego-network data. To gather both types of data, semi-structured interviewing was used.

Then, the chapter moves on to outline the actual sample of lone mothers that was interviewed for the research (section 6.5). The research adopted a case-study sampling logic and purposively sampled lone mothers to facilitate the empirical examination of the theory presented in Part 1 of the thesis. Following on from this, the chapter describes the 'fieldwork instrument' (i.e. the interview guide) and some of the actual questions that were asked to the interviewees (section 6.6). Then, the actual analysis that was conducted on the data is elaborated in section 6.7. Each type of data that was collected (open qualitative data and structured personal network data) required its own methods of analysis, which are outlined separately. The chapter finishes with a consideration of the ethical practices adopted in the research (section 6.8) and also by giving a short roadmap for the empirical chapters that follow (section 6.9). Finally, it is worth noting that although the chapter reflects on the potential strengths and limitations of the methodology throughout, these strengths and limitations are also considered in the concluding chapter of the thesis, when such considerations help us consider the potential generalisability of the argument of the thesis.

6.2. The explanatory framework

This section asks, how can social scientists generate coherent knowledge of the social world? As scientific knowledge is grounded in the adequate explanation of empirical regularities, we focus on what it means to offer such an explanation. There is a body of work on explanation in

the social sciences that fits well with the explanation of the behaviour of complex adaptive systems. In particular, modern scholarship concerned with "generative mechanisms" fits well with the analysis of complex adaptive systems (Room 2011, 2013, Pawson 2013, Byrne & Ragin 2009). However, before describing this literature in more depth, it is worth briefly considering historical scholarship on the subject of explanation. In particular, the thought of Durkheim and Weber can help us develop the groundwork for our account of social scientific explanation.

Durkheim argued that sociology deals with empirical regularities that are of a social not a psychological nature. In Rules, Durkheim (1895 pp.xlvii-xlviii) noted that "Whenever certain elements combine and thereby produce, by the fact of their combination, new phenomena, it is plain that these new phenomena reside not in the original elements but in the totality formed by their union ... The hardness of bronze is not in the copper, the tin, or the lead, which are its ingredients and which are soft and malleable bodies; it is in their mixture". On these terms he went on to criticise the idea that a given social phenomenon can be explained solely in terms of the elements that make it up - individuals and their psychology. Social facts exist in their own right, independently of their individual manifestations. For example, in Suicide Durkheim (1897) argued that social integration existed independently of its individual manifestations such as suicide.

Similarly, in Chapter 2 we saw that when elements come together in particular combinations, or one might say when they self-organise, emergent properties are generated (Goldstein 1999). One emergent property of the particular combination of connections within a social system is the adaptive capacity of that system in relation to its environment. We have defined adaptive capacity as a being composed of a repertoire of potential adaptations to unforeseen problems (e.g. Parsons 1964) that gives a system the ability to adjust to environmental disturbances, moderate damage and potentially to also take advantage of opportunities (Smit & Wandel 2006). Concepts such as vulnerability and resilience, on the other hand, describe the state of a system and its outcomes after some perturbation has taken place.

We have also argued that the particular phenomenon of interest in this thesis, the adaptive outcomes (e.g. vulnerable, resilient) of lone mother families that have been exposed to economic adversity, is a regularity of social origin. The capacity to adapt arises in part, it has been argued, from mutual interactions between the lone mother and her personal support network, her egosystem. So, having an understanding of the individual characteristics and psychology of the lone mother would not cover all relevant aspects of social reality to offer an adequate explanation of adaptive outcomes. (Psychological resilience, for instance, would tell us little about the processes that the lone mother must go through to ensure the persistence of some aspired towards standard of living.) On this point, we agree with Durkheim - regularities of a social nature cannot be explained solely in terms of individuals and their characteristics. However, we cannot accept his position that they are independent of the individual's conceptual and cognitive apparatus (see e.g. Lukes' [1973, p.9] explication of Durkheim's faits sociaux). For this reason, to decide what will count as an adequate explanation of social regularities, Weber's thought is preferable to Durkheim's.

Weber (1949) was concerned with the similarities and dissimilarities between explanation in the social sciences and explanation in the natural sciences¹. He attempted to bridge, and ultimately transcend, the division between the positivist and hermeneutic schools of his day (who were engaged in a 'strife over methods', the so-called Methodenstreit). Weber (1949, 1922) agreed with the positivists (and thus, indirectly, Durkheim) that sociology should make use of an empirically established knowledge of social regularities. Weber (1922, p.11) called an explanation causally adequate if it made reference to empirical generalisations (which could be of a statistical nature, although empirical generalisation is not limited to statistics) that highlight regularity in the social world: "the interpretation of a sequence of events will ... be called causally adequate insofar as, according to established generalizations from experience, there is a probability that it will always actually occur in the same way". However, for Weber (1949, p.64) these social events are "conditioned by the orientation of our cognitive interests". For this reason, a description of social regularities is not by itself scientifically adequate. Once social regularities are empirically established they need to be causally explained and made intelligible by reference to the individual behaviour through which they are created and sustained. Doing so leads to what Weber called adequacy at the level of meaning. The best way to achieve this is to empathetically analyse and reflect upon the reasoning, rationality and affective qualities of action which make it intelligible and at the same time gives it causal force (erklärendes Verstehen - explanatory interpretation) (Goldthorpe 2007b, p.218, see also Giddens 1984, p.329). To arrive at sociological knowledge Weber (1949, 1922) asks us to combine causal adequacy with adequacy at the level of meaning².

Interestingly, the current day realist tradition in the social sciences argues very similar points to Durkheim and Weber. Realists too state that, before advancing an explanation, there must be sufficient evidence, or sufficient regularity in the world and in our corresponding data, to allow for a generalising explanation of that regularity (Harré 1971). Once regularity is established, the fundamental task of the researcher is to explain how the regularity came about. To do so, realists argue the researcher must delineate the processes and causal linkages that connect one event, context or situation to another. Harré (1971) terms these processes and linkages generative mechanisms (synonymous in this thesis with *generative processes*³).

Modern scholarship in sociology has adopted this use of mechanisms as an explanatory tool⁴. In this literature, though, there is a wide array of meanings applied to the term mechanism (see Mahoney 2001 and Hedström & Ylinski 2010 for reviews). The particular view that is taken in this research is adopted from contemporary 'analytical sociology', which states that mechanisms

¹ Weber's (1949, p.74) starting point was that "In the social sciences we are concerned with psychological and intellectual (geistig) phenomena, the empathic understanding of which is naturally a problem ... [for the] natural sciences".

² Weber (1922, p.12) highlights links between the two in Economy and Society: "Statistical uniformities constitute understandable types of action, and thus constitute sociological generalizations only when they can be regarded as manifestations of the understandable subjective meaning of a course of action. Conversely, formulations of a rational course of subjectively understandable action constitute sociological types of empirical process only when they can be empirically observed with a significant degree of approximation".

³ The term 'mechanism' implies causal processes in a non-evolutionary / non-changing frame of reference. For this reason, the term "generative processes" is actually preferred. However, it is used synonymously with 'mechanisms' when referring to the work of other scholars who specifically use the term 'mechanism'.

⁴ Mechanistic / process driven explanations are generally contrasted as an alternative account of causality to the one offered by the 'covering law' model of causality. Such explanations also aim to move beyond the limitations of 'variable-based analysis' by specifying in clear and precise ways the social mechanisms (or, generative processes) through which social phenomena are brought about (see Hedström 2005, ch.2, Goldthorpe 2007a, p.203).

provide an explanation of the causal linkages that run through the micro-level between phenomena of a higher and more inclusive level (Hedström & Swedberg 1998). (Interestingly, Boudon (2012) argues that this stream of scholarship recovers the ambitions of the classical sociologists: "analytical sociology ... revitalizes the principles more or less implicitly used by classical sociologists, notably by Weber and Durkheim.")

Hedström and Swedberg (1998) develop this notion that social mechanisms refer to the ways in which micro and macro levels interact. They aim to explain social processes by dissecting them and accentuating their most important features and component parts (see also Hedström 2005, p.1). To do so, they use the macro-micro-macro schema of James Coleman (1990, p.8) to distinguish between what they call "situational mechanisms", "action formation mechanisms" and "transformational mechanisms". Their formulation is shown in Diagram 6.1 below. It is only by understanding the whole chain of mechanisms, from situational, to action formation, to transformational, that we can make sense of observed macro-level regularities (Hedström & Ylinski 2010).

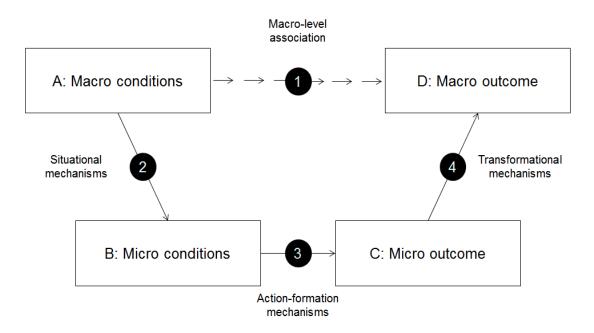


Diagram 6.1: Macro-micro-macro schema, adapted from Hedström & Swedberg (1998)

Box A and D above represent the macro-conditions and the macro-outcome respectively. Coleman's (1990, ch.1, esp. pp. 21-22) particular usage of 'macro' is adopted in this research. He uses the term to refer to the behaviour of social systems above the level of the individual, i.e. a dyad, family, community or society (conversely, micro refers only to the individual). The term macro may thus refer to very large social systems as well as smaller social systems. Arrow 1 (Diagram 6.1) represents empirical regularity (or, association) between macro phenomena. Both the macro outcome and the empirical regularity (between conditions and outcome) represent explananda (Raub et al. 2011). Goldthorpe (2007a, pp.52-58) argues that explanations that refer to only macro-level phenomena create what he calls 'the black-box problem'. That is to say, such analyses tell us little about what is going on at the level of social processes, of why

there is a connection between macro conditions and macro outcome⁵. This type of explanation fails to make sense of empirical findings and consequently weakens theory (Goldthorpe 2007a, p.58). The black-box can be opened, however, by delving into the processes at a micro level that link the macro phenomena.

The first step is to establish how events or conditions at the macro-level affect the individual (Arrow 2), what Hedström and Swedberg (1998) call "situational mechanisms". To do so, we must have some idea of micro-conditions. Box B represents relevant micro-conditions. Here we must describe regularities of individual motivation, or even more ambitiously a fully blown theory of individual psychology (Raub et al. 2011). Situational mechanisms then describe, for example, how wider macro conditions (Box A) shape an individual's motivations and goals, as well as their beliefs about how to reach these goals (Box B). It is this aspect of the framework that distinguishes it from more naïve versions of methodological individualism, in which the agent is the sole causal force, and is also the reason the framework is sometimes referred to as 'structural individualism' (Udehn 2001, p.318, Hedström & Bearman 2009, p.8).

The next step (Arrow 3) is to show "how the individual assimilates the impact of these macrolevel events" into their consequent actions (Hedström & Swedberg 1998, p.21). This is what Hedström and Swedberg (1998) label "action formation mechanisms". Action formation mechanisms comprise the regularities of individual action, or a theory of human action. Here, the social actor, driven by their motivations, chooses which action to take from among feasible alternatives with the aim of realising the conditions which they desire. Hedström (2005), for example, outlines how action is formed through the particular concatenation of an actor's desires, beliefs about how to achieve these desires and the opportunities available to them (the 'DBO' model) (see also Elster 2007, Hedström & Bearman 2009). However, it is worth noting that the mechanism schema is not dogmatic about the use of a specific theory of action (Raub et al. 2011, Hedström & Ylinski 2010). Box C then represents the micro-outcome, descriptions of individual action which result from these processes.

Finally, the sociologist must show (Arrow 4) how the outcome of a number of individuals acting and interacting with one another at the micro level is transformed into a collective outcome at the macro level (be it intended or unintended). This transition is what Hedström and Swedberg (1998) label "transformational mechanisms". To give an example, Schelling (1978) describes a model of neighbourhood racial segregation in which the agents, driven by an aspiration to live next to a certain proportion of neighbours of the same race, move home whenever their aspiration level is not met. They act and react anew to the neighbourhood situation that presents itself. Previous actions resonate in the present, waiting to be built upon with further actions. This is how complex patterns and regularities arise, one action and one interaction at a time,

⁵ To give an example from Sociology, Skocpol's (1979) explanation of revolution could be termed 'black-box'. She explains revolution using only structural factors (firstly, intensified pressures from more developed countries and secondly agrarian socio-political structures that facilitated widespread peasant revolts). Her structural conceptualisation and the Millian methodology she adopted led her to neglect causal explanations of an intermediary nature, for example, micro level individuals and their meso level networks. Although Skocpol's analysis highlights the macro inputs and macro outputs it supplies us with no knowledge about how they are linked. She removes the individual from the picture. In psychology the term "black box" has also been applied to Skinner's behaviourism. The analogy between Skocpol and Skinner is actually quite fitting: Skocpol's macro historical analysis is much like behaviourism in that it specifies a "stimulus-response" without the "cognition" that goes into it.

through time. Schelling (1978) shows that, somewhat unexpectedly, even mild level of racial antipathy can generate large scale racial segregation.

We are now in a position to derive our own approach to explanation. The framework described above is a useful reference point, but one that must be built upon with concepts and theory from Part 1 of the thesis. Indeed, it is because of the theoretical assumptions outlined in Part 1 that our approach is quite different from Hedström's. To show how, it is worth briefly looking at Hedström's application of the framework. He applies the framework to help explain youth unemployment in Stockholm during the 1990's, showing that rates of youth unemployment in Stockholm are not just dependent upon the characteristics of individuals, but also community effects such as the unemployment rate of an individual's peers (2005, ch.6). Analogously, in this research we have argued that the ability to cope with and adapt to economic hard times is not just dependent upon individual characteristics. Social networks play an important role. However, one of the main points where we differ from Hedström is in our theoretical assumptions about the agent. Hedström's (2005) adoption of agent-based modelling (ABM) leaves him with an explanation that has a quite narrow view of the social agent. As Room (2011, ch.13) argues, social agents are hardly present in his model. There are no real assumptions about motivations and certainly no empirical data that might help examine the rules of interaction in terms that might be recognisable to the actors involved (his model thus lacks adequacy at the level of meaning). The approach that we take in this research allows for a more nuanced picture to emerge, as will be described below.

The approach taken in this research is demonstrated in Diagram 6.2 below.

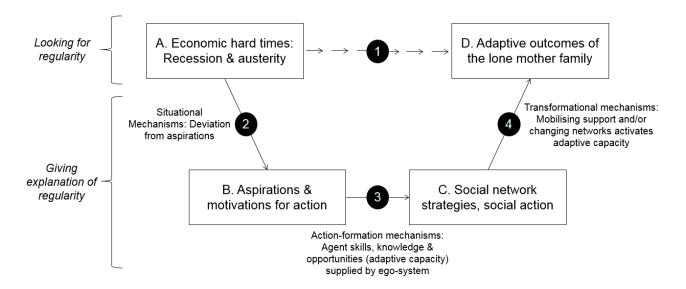


Diagram 6.2: Schema of explanatory framework

Our explanatory scheme starts with the macro socio-economic context of the research (Box A). This refers to the economic hard times, recession and government austerity described in Chapter 5. We must empirically establish the social regularity of interest between this context and the final outcome, the adaptive outcome of a given lone mother family (the top half of Diagram 6.2). Here, we might find that a given family is vulnerable to economic adversity in terms of their living standard outcomes. On the other hand, we might find that a different family is resilient (in terms of outcomes) to the same adversity. Indeed, lone mothers as a group are likely to vary in their ability to cope. We need to explore and describe if there are any differences in the outcomes amongst lone mother families, as well as what economic hard times actually mean to the lone mothers in their own terms, and how they actually feel they are coping. So, the regularity in this research does not refer to the statistical prevalence of outcomes, but to mapping the "breadth and nature of the phenomena under study" (Lewis et al. 2014, p.351).

Then we seek to explain the outcomes, and any differences in the outcome across lone mother families, with reference to the causal processes and linkages that connect the context of the research to the outcomes of interest (bottom half of Diagram 6.2). At the micro level we start with assumptions related to the aspirations of the lone mother (Box B). As described in Chapter 4, we assume on the basis of a sound theoretical and evidence base (e.g. Simon 1996, Kahnemann & Tversky 2000, Goldthorpe 2000) that people in general, lone mothers in particular (Millar 2007), desire to maintain the persistence of some aspired towards way of life (which, in this research, will likely be based on experiences of pre-recessionary times). However, exposure to the recession and government austerity will, in all likelihood, negatively affect the persistence of an aspired towards way of life. That is to say, less economic resources will likely create a negative deviation from the lone mother's aspired towards living standards. This, we have argued, will motivate the lone mother to take action to rectify or improve her situation. As wider socio-economic conditions change, people will vary their actions (between habitual and creative forms) in order to maintain their target aspirations levels.

Having described how motivation for action is created and situationally embedded, we come to one aspect of the framework that differentiates us further from Hedström (2005). Social networks and their nuances play an important role. In terms of action formation mechanisms (Arrow 2), social networks supply opportunities for action, creating adaptive capacity. Chapter 3 highlighted some particular types of social support (e.g. emotional support, support finding a job etc.) that are likely to be important to the lone mother at this step, types of support that she might mobilise in times of need. Chapter 3 also described which types of individuals, relationships and networks are more likely to supply opportunities for these types of support. Also at this stage we should, following Simon (1992), try and gain some understanding of the ways in which social agents solve problems by examining what they know, the information they have access to, their skills and their strategies. Given these mechanisms, Box C refers to the particular social actions that are resultant. For example, actions in which the lone mother mobilises and reshapes the social networks of which she is a part.

Finally, we have the outcome of our explanatory scheme (Box D). At this part of the framework we have the manifestations of adaptive capacity at the level of the family system, rather than the conditions (e.g. social networks) which contribute towards adaptive capacity. In terms of the transformational mechanism (connecting social action, Box C, and adaptive outcome, Box D) we need to highlight how social action, e.g. the mobilisation of latent resources in a social network, leads to adaptive outcomes. One way of demonstrating the transformational aspect is by seeking out cases in which the outcome is different and examining any relevant differences in Box C and the transition between Box C and Box D.

Having described the theoretical and explanatory framework, we can now think about the actual research questions this thesis aims to answer.

6.3. Research questions

The argument so far has been that social support networks are likely to be one of the main ways that lone parent households obtain resources to deal with daily life, seize opportunities, and reduce the uncertainties associated with new social environments. In light of this, we have suggested that social networks might offer adaptive capacity and thus resilience in times of uncertainty. However, although we know about the material effects of recession and the associated government austerity (outlined in Chapter 5), very little is known about the relational effects of the recession, nor how relational processes might buffer and aid the lone mother in coping with adverse material effects. Do people, lone mothers in particular, use their social networks to help them adapt to hard economic times as the theoretical framework suggests? The aim of this research is to address this overarching question and thus shed light on the social aspect of adaptive capacity. To do so requires answering four questions (each question number relates to the respective arrow number on Diagram 6.2).

Q1: How do lone mothers vary in their capacity to adapt to hard economic times in terms of their adaptive outcomes?

Q2: Does exposure to recession and austerity alter the lone mother's motivations for action? If so, how?

Q3: How do the individual characteristics of the lone mother, such as her skills and knowledge, shape the actions she takes in response to exposure?

Q4: Do social support networks supply lone mothers with the adaptive capacity to construct desirable adaptive outcomes in adverse socio-economic times? If so, how?

By asking Q1 first, we start by mapping the transition between Box A and Box D on Diagram 6.2 above, i.e. describing the phenomenon of key interest, the explanadum of the research. The answer to this question, however, leaves us with a 'black-box' to open. Answering the rest of the research questions helps open that black-box. Question 2 is concerned with situational mechanisms, whereas Question 3 is concerned primarily with action formation mechanisms related to the knowledge and skills that the lone mothers have. Then, Question 4 is concerned with social networks and the link between social networks, adaptive capacity and adaptive outcomes. All of the questions are important for the logic of the research. However, the primary research focus is on examining the potential linkage between social networks, adaptive capacity and adaptive outcomes during times of socio-economic change (Q4). The next section looks at what type of evidence are required to answer the research questions and the data collection methods that have been used.

6.4. The evidence required and the data collection method used

Two different types of data can help address the research questions. Firstly, it is argued that data of a more intensive qualitative sort will allow us to empirically examine the proposed generative processes. Secondly, what is termed 'ego-network' data will allow us to investigate the social networks that lone mothers have.

Given that all of the research questions are concerned with generative processes, qualitative data will help address all of them. In terms of the framework described in section 6.2 above, analytical sociologists are generally not dogmatic about the type of evidence/data that is used with the framework. However, the methodological writings aligned with analytical sociology tend to focus on methods of analysis such as mathematical and agent-based modelling (methods which are arguably tools of the theorist, not the empirically oriented researcher). These methods leave the researcher with little understanding of social agents and their motives and actions in the real world. For this reason, this thesis argues that qualitative methods should be seen as an essential tool for analytical sociology, especially if it wishes to adhere to the criteria for social scientific explanation outlined by Weber (1949). Moreover, qualitative methods bridge micro, meso and macro levels of analysis with ease (Pawson 1996, Lewis 2007). Such methods can draw upon the knowledgeability of the social agent regarding how their decision-making (micro) links with wider socio-economic factors (macro) and social networks (meso). In particular, longitudinal qualitative methods have been shown to be especially good for, in the words of Lewis (2007), canvasing 'context-process-outcome configurations'.

On top of this, there are qualitative methods for generating, in Schutz's (1972) words, 'little or medium level causal stories'. These are stories which claim to have some wider generality, much like the causal mechanisms/processes that analytical sociologists seek to describe. Such linkages between well-established qualitative methods and analytical sociology have, to date, received little attention or explication (although there had been a nod towards the potential of such linkages, see e.g. Manzo [2010, p.148] and Elster [2007, p.447]). This is thus a convergence ripe for demonstrating.

On top of the qualitative data, to offer a comprehensive answer to Q4 will require gathering ego-network data. This data consists of information about focal individuals (egos) and those with whom they are connected (alters), as well as information on alter-alter relationships. In contrast to qualitative data, the format of this data is fairly standardised. Each case needs to be completely comparable to every other (Hanneman & Riddle 2005). Thus, to collect ego-network data requires structured techniques drawn from the social network literature. Consequently, even the most open ended of social network interviews is typically combined with some sort of standardised inquiry to help deal with the nature of the relational data that is required (Hollstein 2011).

It is worth noting that the researcher looked into potential sources of secondary data to check if there was any data available that would be appropriate to answer the research questions and matched the specification given above. A range of archival qualitative and quantitative material offered by the ESRC was found. However, the data was inappropriate for a number of reasons. Only a small proportion of the data focused on relational issues. Moreover, the archival data

would not have permitted us to define the particular issues of interest. It did not, for example, contain any evidence regarding socio-economic change and adaptation to such change. Therefore, it was decided that new data, of the types outlined above, needed to be collected.

To collect the different types of data outlined above, the decision was taken to use semistructured interviewing. Semi-structured interviewing was chosen primarily because of its suitability to address the multiple data needs of the research questions. Semi-structured interviewing allowed for a combination of structured questions to help address the network related research question (Q4) and open ended questions to explore and probe the proposed generative processes. Pawson (1996) advocates a similar data collection strategy in such circumstances. He suggests that combining structured questioning with more open questioning allows the researcher to combine what they know about the context of the research and social structures (e.g. wider socio-economic change and social networks) with the knowledge of the actor regarding their own decision-making process in relation to these (Pawson 1996, p.302).

It was also decided that some of the interviews would be conducted longitudinally. Longitudinal interviewing allows for the examination, in more depth than cross-sectional data allows for, of the interplay between individual change and change in the wider socio-economic context, as well as the ways in which the respondents understand and respond to change (Corden & Millar 2007, Thomson 2007, Lewis 2007).

Given the different types of data that were collected, a mixed-method analysis was conducted. The analysis was composed of well-known methods of qualitative analysis and ego-network analysis. Each of these aspects of the analysis is described in greater depth in section 6.7 below. Overall, the combination of both types of data has given us a better understanding of the social networks of lone mothers than either type of data could have given alone. As noted by Hollstein (2011), in social network research "the most fruitful results are achieved when qualitative methods [and] more standardized methods used to describe network structure ... are employed in concert" (see also Fuhse & Mützel 2011).

Before continuing to discuss the sample in the next section, it is worth reminding ourselves of the reasons for our focus on recession and austerity, as well as thinking about how the different types of data discussed above can address these central concerns (and any limitations with the approach). The introductory chapter described how the aim of this thesis is to investigate if social networks help people adapt to wider socio-economic adversity, and if so it seeks to explain how. The introductory chapter also outlined three challenges that through addressing this aim we would also be able to contribute towards. Firstly, policy makers are being challenged to learn from the recent hard economic times to ensure they can help individuals and families remain resilient against future socio-economic adversities. Secondly, as it currently stands social network theory tells us little about the interaction between people's personal relationships and their wider socio-economic conditions. Thirdly, there is little empirical evidence that sheds light on the role that people's networks play in adverse economic conditions (although, as highlighted in the concluding section of Chapter 5, there is some evidence which highlights that in general people's relationships are damaged by hard economic times). The economic crisis and consequent government austerity provided the imperative to address these challenges, as well as provided an opportunity to collect empirical evidence and advance social theory in these

directions. Given this, clearly the recession and austerity is of great interest and relevance to this thesis and social research more generally.

How is this thesis able to address the challenges outlined above with the type of data collection methods already discussed in this section? It is firstly important to highlight that the focus of this thesis on lone mothers is strategic in light of the aim and challenges the thesis seeks to address. As research evidence described in Chapter 5 made clear, lone mothers have been particularly badly affected by the government's austerity agenda. But what is unclear is how they might adapt to or buffer against such changes, and the role that their social networks play in such a process. To address such a research challenge, it would be of little use researching a group which has, comparatively speaking, been only slightly, if at all, affected by the wider socioeconomic adversity (for example, married couples without children).

In terms of how the data collection methods outlined above can address the recession and austerity (and thus the aims and challenges of the thesis), we must firstly, following Giddens (1984), Pawson (1996) and Archer (2007), assume some level of knowledgeability on the part of social agents. To use Archer's (2007) terminology, agents will have an understanding of their 'projects' and how wider socio-economic structures impinge on these projects. Clearly, exposure to the recession and government austerity will have, in all likelihood, negatively affect the persistence of an aspired towards way of life. The theory and empirical research described in Part 1 of the thesis suggests that people will act in response to such circumstances, drawing upon resources available in their social networks to try and work through any problems they face. In terms of researching this process, we must assume that social agents are aware of and have the capacity to discuss the reasons for their actions and social interactions. That is to say, we must assume that social agents will have knowledge of the trajectory that their lives have taken since the economic crisis of 2008, of how their living standards have been affected by changes to the economy and government policy, and how they have acted in response to the circumstances that they find themselves within. To assume otherwise would violate a premise that is central to much social research, and especially qualitative research – that we can find out about social reality (in particular, about social processes that might have taken place in the past) by talking to and surveying individuals about their experiences (see e.g. Pawson 1996).

Having said this, clearly the research cannot explicitly address what was happening before 2008, i.e. with data collected in the same timeframe. Only longitudinal research that was undertaken before the recession and austerity would be able to do so (see e.g. McKenzie 2015). Does this mean that we should not ask questions about the recession and austerity? Clearly not. Such a stricture would make a great deal of post hoc investigative and evaluative research impossible. It is still of great value, even in the absence of the perfect set of evidence and conditions from which to undertake research, to ask questions about past processes and seek to address the types of aim and challenges that this thesis does. Even in the absence of longitudinal data which covers the whole period of the economic crisis, we are still able to draw upon retrospective assessments made by individuals of their situation through time. This does, however, require the caveat that the research can only address what happened before the recession and austerity through self-reporting. Self-reporting of past events relies upon respondent memory, which can potentially introduce bias into research (see e.g. Bryman 2004, p. 165). To work around this problem the research asked a mix of both general questions (e.g. how did the interviewee feel

they had been affected) and specific questions (e.g. about the trajectory of a respondent's employment throughout the economic crisis). Asking more specific questions is known to increase the accuracy of interviewee response when they are relying upon memory, especially in relation to social networks (Prell 2012).

6.5. The sample and sampling strategy

In terms of finding people to interview, the research followed the logic of qualitative and case study sampling, rather than sampling for statistical inferential (Yin 2009, Perri 6 & Bellamy 2012). With case study sampling the aim is not to exhaustively test theory, or to offer statistical generalisations, but rather it is to probe the plausibility of some novel conceptual/theoretical approach (Moses & Knutsen 2012), as well as to examine social processes in empirical detail, and develop and refine theory (Perri 6 & Bellamy 2012). Generalising the relative prevalence of different outcomes and processes might take place in later research, designed specifically for that purpose. (See, for example, Abell (2009) who argues that the study of cases can serve exploratory purposes, generating insights about causal mechanisms that can be used later in context of 'large N research'.)

With regards to the actual selection of cases, King et al. (1994, sec. 4.3.2 and 4.4.1) suggest that in qualitative research cases should be selected in an intentional/purposive manner (i.e. nonrandom) that has consistency with the research questions being asked. They suggest that ideally the researcher should "select observations to ensure variation in the explanatory variable without regard to the values of the dependent variables" and that "the research itself, then, involves finding out the values of the dependent variable." Similarly, Perri 6 and Bellamy (2012, p.106) suggest that when sampling cases the researcher should ensure an adequate diversity of the specific factors of interest: "Most important, we need adequate diversity on some factors or processes that we expect to be causally important". If the proposed relationship between explanans and explanandum is evident in the data, then the explanandum should vary between observations as well. It is then up to the researcher to excavate any actual empirical linkages and causal mechanisms evident in the data.

It was proposed in Part 1 that social networks influence adaptive capacity and thus adaptive outcomes when exposed to some perturbation. For this reason, we have chosen to sample with the following characteristics in mind, characteristics that have all been shown to affect the size and composition of personal social networks⁶ (albeit, given the qualitative sampling strategy, quantitatively defined quotas have not been used):

The sample includes a spread on the age of the lone mother's youngest child, from 2 to 16. The difficulties of caring for and coordinating young children have been shown to be related to the social networks that mothers and lone mothers have (Cochran et al. 1993, Small 2009). However, we did not include mothers with very young children in the sample as this might have complicated the analysis, introducing additional factors not of direct theoretical relevance (e.g. being a new parent and 'learning the ropes').

⁶ It would be difficult to inform sampling directly based on a potential respondent's social network without indepth questioning before the interview.

- The sample includes a mix of lone mothers with higher and lower educational attainment. Any level of qualification below that of a Bachelor's degree (e.g. GCSE, A Level) has been classified as "lower". Bachelor's and above has been classified as "higher". As seen in Chapter 3, those with a higher level of educational attainment are likely to have larger networks and more social capital compared to those with lower educational attainment (e.g. Fischer 1982, Cochran and Niego 2002).
- Finally, the sample includes a mix of lone mothers working in different occupational classes, as well as lone mothers who were at the time of the interview currently unemployed (but all claimed to be looking for work). (Occupational-class, it must be noted, is highly correlated with educational attainment, see Halsey et al. 1980.) In terms of occupational class, it is well-documented that those with a professional job are likely to have a very different type of network to those with no market power at all (Perri 6 1997, Lin 1999, Scott 2002). The researcher judged and inferred the fit of the interviewees' occupations with a very simple two-class scheme which had some purchase in describing the dividing lines in the sample in terms of the class resources available to interviewees. (A more elaborate class scheme would have been difficult to account for, given the qualitative nature of the sample). One group of interviewees was deemed to be in 'higher managerial, administrative and professional occupations' (as outlined by the ONS [2010c] class classification guidelines). These occupations are likely to require a significant amount of knowledge, experience and probably a degree or some equivalent qualification. We refer to this group by Goldthorpe's (2007b, p.103-104) term, the 'service class', as they are likely to regulated by a 'service relationship' (see also ONS 2010c, sec 2.9). The second group contains respondents who worked in what have been called 'intermediate occupations' and also 'routine and manual occupations' (see ONS 2010c for a description of these). Even given the fact that intermediate occupations generally have aspects of both the service and 'labour contract', this group is referred to as 'labour class' as the term seemed to capture the occupations, the actual nature of the work, and potential remuneration of the mothers in this group. In terms of also interviewing those out of employment, we wanted to gauge if, how, and for what reasons, those who are unemployed plan entry into the labour market (and if, for example economic conditions and available support from their social network factor into such decisions)⁷.

It could be argued that all of the factors outlined above are also likely to exercise some direct influence on the ability of the lone mother to cope with socio-economic change. For example, Tinsley (2014) describes that highly educated lone mothers are more likely to be financially secure. Similarly, Scott (2002) describes that service-class workers are significantly advantaged relative to labour-contract workers in terms of income and job security. We would thus expect highly educated and higher occupational-class lone mothers to be able to cope better with economic uncertainty. For this reason, the analysis also attempts to account for and gauge the relevance of these factors alongside the factor of key interest – social networks.

⁷ The unemployed are sometimes categorised according to previous occupation, or father's occupation. However, they have been kept separate in this thesis for the analytical reason that doing so allows us to represent, to some extent, the economic resources they had available at the time of the interview.

We also wanted to limit potential variation on other factors that might influence the outcome of interest. Taking account of too many factors might hinder the ability to develop and refine theory. For example, people living in urban versus rural communities are likely to have different economic opportunities and social networks. Theoretically we are not interested in the different geographical opportunities that lone mothers have (this might be an interesting extension of this research, however). For this reason, all of the lone mothers that were interviewed came from Bath or Bristol in the South West of the UK. Confining the study to these cities minimises heterogeneity of the local geographical context and available economic opportunities. Also, those lone mothers who have just gone through a separation or divorce are also likely to be in quite a different situation financially and socially from those who have been single mothers for a longer period of time. Accounting for this would add additional complication and complexity to the analysis. For this reason, we only sampled lone mothers who had been separated for longer than 6 months.

The researcher was able to inform the selection of respondents through the sampling procedure. For example, most of the interviewees had been met face-to-face before the actual interview was conducted and the researcher was able to gauge through discussion if they met the criteria outlined above. Or, in some cases, through the exchange of emails or text messages.

In terms of sample size, Ritchie et al. (2014, p.118) describe that the ideal sample size in qualitative research is between 12 and 60. There isn't much more guidance given in the literature than this rather arbitrary range. This research decided to interview 30 lone mothers⁸. These respondents described a total of 387 active relationships in their personal networks (more on how information about relationships was gathered in section 6.6 below). Thirty cases was chosen because it was deemed to be a large enough sample size to use descriptive statistics to describe the overall pattern of relationships and any differences between subgroups of interest. (See e.g. Wellman [1992] who interviews 29 individuals with 343 active relationships and also used descriptive statistics to describe differences between subsamples of networks.) Moreover, in research of this kind, in which theory probing and development is the ultimate aim, large sample sizes are not necessarily needed, as duplicated information is somewhat redundant in terms of the analytical map that is developed (Lewis et al. 2014, Perri 6 & Bellamy 2012). The 30 participants have given us more than enough data, rich in-depth, for exploration and development of the theoretical framework. In terms of the second interviews, a small subset of six of the original thirty interviews was selected. These cases were chosen because of their theoretical relevance (mainly, for illustrative purposes, a spread of different adaptive outcomes and those with different types of personal social networks).

However, the relatively small sample size does limit the type of generalisations that can be drawn. As noted before, external statistical generalisations are out of the question. But, other types of generalisation are possible. However, a discussion of these types of generalisation is perhaps better suited in the concluding chapter of the thesis after the empirical evidence has

⁸ Two of these were pilot interviews (but their data was sufficient to inform the analysis).

⁹ It could be argued that all interviews should have been conducted longitudinally. However, due to the rich and voluminous data collected in longitudinal research, and given the time limitations of the research, it would not have been possible to collect and analyse all of the data longitudinally.

been presented (we can then be explicit as to which aspects of the argument are potentially generalizable, and in what ways).

The researcher gained access to the sample through a number of different means¹⁰:

- The Bristol based charity, Single Parent Action Network (SPAN): The researcher contacted the CEO of the charity who was supportive of the research and offered to help. During the preliminary stages of fieldwork the researcher spent five weeks volunteering at the charity. On top of helping the researcher find interviewees, this volunteering offered insight into the issues faced by lone mothers in their day-to-day lives during hard socio-economic times. This allowed for the fieldwork materials to be adapted accordingly and also for the researcher to develop a better empathetic understanding when conducting the interviews. In total, SPAN resulted in six interviews.
- Childcare providers: The researcher contacted thirty childcare providers across Bath and Bristol. Seven of these childcare providers agreed to help, but only two centres resulted in any interviews. In total, childcare providers resulted in six interviews.
- Primary schools: The researcher contacted ten local primary schools. One of these agreed to put a small advert in their school newsletter. This resulted in one interview.
- Advertisements were placed on the internet and in newsletters in the following places:
 Netmums, Mumsnet, OneSpace, VOSCUR (a local Bristol newsletter), and various local
 Facebook groups for lone parents. These adverts resulted in seven interviews.
- Other: The researcher visited a number of potential meeting places for lone parents, including play groups and a discussion on welfare change for single parents hosted by the local MP for Bristol. Overall these resulted in three interviews.
- Snowballing resulted in seven interviews (2 from personal contacts, 5 from within the sample).

The actual interviews generally took place one-on-one in either a local coffee shop or on the premises of the gatekeeper organisation (say SPAN, or a childcare centre). The researcher also gave potential interviewees the option for the interview to be conducted at the interviewee's home (to ensure flexibility of approach). Six interviewees requested that, for convenience, the interview was conducted at their own home. Having received ethical guidance from a number of sources, the researcher took a female friend along to these interviews (more on this in section 6.8).

It is worth noting that an £80 prize draw incentive was offered to all interviewees (this was suggested by SPAN, who had recent experience of sampling for lone mothers). It is hard to say to what extent the £80 prize acted as an incentive or not – some interviewees claimed it did, whilst others said they hadn't paid attention to the incentive.

A summary of the interviewees' characteristics is given in Table 6.1 below and an analysis of these characteristics is conducted afterwards. In order to protect anonymity, all of the names in the table are pseudonyms.

¹⁰ The sample would have arguably been more biased if it was drawn from a single source. Moreover, it would have been a struggle to achieve the desired sample size from one source alone.

			Ė				-		
			Ime	Number	Age of		Employment		Interred
Name	Age	Marital Status	single	children	youngest	Education	status	Primary occupation	occupational-class
Jan	21	Single	9	1	Primary	Lower	Part time	Charity worker	Labour
Sarah	45	Single	2	1	Primary	Higher	Part time	Translator	Service
Rachel	45	Divorced	10	2	Primary	Higher	Part time	Psychotherapist	Service
Celina	35	Single	4	3	Primary	Lower	Unemployed	1	
Elizabeth	45	Single	5	2	Primary	Higher	Unemployed	ı	
Kate	37	Single	9	1	Primary	Lower	Unemployed	1	
Abigail		Single	5	1	Primary	Lower	Unemployed	1	1
Imogen	35	Divorced	3	1	Nursery	Higher	Unemployed	ı	•
Louise	27	Single	4	1	Primary	Higher	Unemployed	1	
Rita	20	Single	15	1	Secondary	Higher	Part time	Academic researcher	Service
Rosy	47	Single	15	1	Secondary	Higher	Full time	Council worker	Service
Lynn	40	Single	14	1	Secondary	Higher	Part time	Library assistant	Labour
Maria	40	Divorced	16	1	Secondary	Higher	Part time	Council administrator	Labour
Debbie	36	Single	1	2	Nursery	Higher	Part time	Ecological consultant	Service
<u>બ</u>	52	Single	7	1	Primary	Higher	Full time	CFO at charity	Service
Julie	39	Single	18	4	Primary	Lower	Unemployed	1	
Daniella	45	Divorced	2	2	Primary	Higher	Part time	Financial manager for NHS	Service
Gemma		Single	4	1	Nursery	Higher	Part time	Project manager for civil service	Service
Laura	53	Divorced	16	1	Secondary	Higher	Full time	Secretary	Labour
Sharon	27	Single	3	3	Nursery	Lower	Unemployed	ı	1
Sophie	23	Single	4	1	Nursery	Lower	Unemployed	ı	
Valerie	45	Single	20	7	Secondary	Higher	Full time	Senior secondary school teacher	Service
Milly	23	Single	3	1	Nursery	Lower	Unemployed	1	1
Jody	37	Divorced	2	2	Nursery	Lower	Unemployed	1	
Melanie	38	Single	2	2	Secondary	Lower	Full time	Childcare	Labour
Emily	34	Single	1	2	Nursery	Lower	Unemployed	ı	1
Emma	31	Single	2	1	Nursery	Lower	Unemployed	ı	1
Kirsty	44	Single	5	2	Nursery	Higher	Unemployed	1	•
Claire	36	Single	1	1	Nursery	Lower	Unemployed	ı	•
Eve	26	Single	4	1	Primary	Higher	Part time	Charity administrator	Labour

Table 6.1: Summary of interviewees and their characteristics

To ensure some consistency with the analysis conducted in Chapter 5 (e.g. Chart 5.2), the martial status of the interviewees in Table 6.1 above is categorised according to definitions outlined by the *General Household Survey* (see ONS 2011). The category 'Single' implies that the interviewee was single at the time of the interview and had never been married, whereas 'Divorced' implies the legal definition of the term. It is worth noting that a large proportion of the mothers who classified themselves as single (rather than divorced) did highlight that they had been in a long-term relationship (which might have involved cohabitation) which had subsequently broken down. The martial status of the sample is, broadly speaking, what we might expect given the total population of lone mother families (e.g. Chart 5.2) – it contains more 'Single' lone mothers and a smaller proportion who identify themselves as 'Divorced'¹¹.

In terms of employment status, the definitions of the International Labour Organisation (see ONS 2011) have been used in Table 6.1. Those who described being in part-time or full-time employment are considered 'Working persons', i.e. they at the time of the interview described working for wages, salary or other types of cash payment (e.g. sales commission or tips). Voluntary work is excluded. On the other hand, 'Unemployed' refers to persons who were out of work at the time of the interview but who had recently been looking for paid employment¹². Somewhat unexpectedly, none of the lone mothers described themselves as falling under the definition of 'Economically inactive' (i.e. neither working nor looking for work)¹³. Indeed, all of the lone mothers who were out of work described how they wanted to get into work and had recently looked for employment but had been unable to find work suitable to combine with family life. In contrast to the general population of lone parents, approximately 20% of the lone parent population are economically inactive and don't want paid work (Labour Force Survey 2011). This research cannot claim to explicitly account for the experiences of this particular group of lone parents. Rather, as all of the interviewees claimed to be economically active, the research can only account for those mothers who are in work and those mothers who are out of work but looking for work¹⁴.

As Table 6.1 above also makes clear, the lone mothers in the sample ranged between the age of 21 and 52. The average age of the participants was 37, very similar to the general population of

¹¹ However, none of the interviewee's identified themselves as 'Separated' (i.e. a marriage that has broken down but not been annulled through the process of divorce) or 'Widowed'. The research thus cannot explicitly account for the experiences of these categories of lone mother.

¹² However, one limitation of the categorisation in this research is that the researcher did not explicitly ask if the interviewees had looked for work in the last 4 weeks (as per the ILO definitions), just if they were looking for employment at the time of the interview. So, the categorisation does not follow the strict definition outlined by the ONS (2011).

¹³ However, it is worth noting that a number of the women who described how they had recently looked for employment might technically have been considered 'Economically inactive' by the government given the fact that they were on Income Support and were not actively obliged by the state to seek employment (e.g. they had not met yet met the criteria for 'Lone Parent Obligations'). We have chosen to report the interviewee's description of their working status as this is likely to give a better idea of whether or not they were looking for employment as well as their likelihood of taking employment if they were able to find and secure a suitable job.

¹⁴ It is also worth noting that it might be possible that the fact the sample contains no 'Economically inactive' lone mothers is attributable to some form of interview bias. For example, the interviewees might have deemed it more socially acceptable to say they were looking for and wanted employment (versus saying they were economically inactive and not looking for paid employment). It would be difficult to account for this type of bias unless the research tracked the lone mothers over time to examine if they were applying to jobs (through, for example, time use diaries). However, it was deemed that this would be too intrusive and might put potential participants off taking part in the research.

mothers (ONS 2012a). Moreover, half of the sample described being in paid employment at the time of their interview, compared to just over half (61%) in the general population (ONS 2014a). However, there is more of a difference between the sample and the population in terms of educational attainment. In the sample just over half of the participants had an undergraduate degree or higher, whereas, in the general population of lone mothers only 15% have a degree or higher (Tinsley 2014). Nevertheless, even given the potential limitations of the sample discussed above, the interview evidence can still cast light on a range of different experiences amongst lone mother families during tough economic times, the "breadth and nature of the phenomena under study" (Lewis et al. 2014), and give some insight into the role that social networks play in such times. (A further discussion of what the sample characteristics mean for the potential generalisability of the argument is had in Chapter 7.)

6.6. Questionnaire design

This section gives a summary of the design of the fieldwork instrument used for the interviews. The questions asked to each interviewee were spread over four sections:

- Section 1, Family background: This section gathered information about relevant individual and family characteristics.
- Section 2, Name generators: This section gathered information on relationships relevant to the research interests.
- Section 3, Name interpreters: This section gauged the content of the relationships, information on the alters and on network structure (alter-alter relationships).
- Section 4, Open exploratory section: This section asked questions about the recession, austerity and any associated social support dynamics.

The first section allowed us to capture relevant information about the lone mother family. For example, data was gathered about entry into lone motherhood, number of children, socioeconomic status as well as any particular goals they had at the time of the interview. The next two sections focused on social networks. In measuring social networks several steps need to be taken. Firstly, the structure of the network must be illuminated (section 2). Secondly the relationships must be interpreted and the actual content of the network uncovered (section 3). As section 2 and 3 of the interview needed to be relatively standardised, the majority of this section focuses on them. The final open section of the interview was concerned with the recession, austerity and the role played by social support networks in such times. Aspects of section 1 and 4 helped address all of the research questions, and section 2 and 3 specifically helped address Q4 (although, due to the often conversational nature of these sections, they did also touch upon issues relevant to the other research questions).

The first step in collecting personal network data is to uncover relationships of relevance. This is generally achieved through what are termed "name generator" questions. However, as noted by Scott (2012a, p.42) it is generally not feasible to ask people in any great detail about all of the contacts and acquaintances they know. Therefore, the approach we have taken is similar to other studies on social support which seek to detail 'active contacts' (e.g. Wellman 1992). To gather information about these contacts, the initial stage of the name generator section was conducted

using visual techniques to help map the interviewee's network. Visual methods are an extension of traditional name generator questions which provides a more participatory experience (Hogan et al. 2007). More specifically, Antonucci's (1986) *hierarchical mapping technique* was used.

Diagram 6.3 below gives an example of the template that was used in each interview. The technique involves placing three concentric circles around the respondent to represent their personal network. In the centre is the word "You" and the respondents are asked to order their connections, in terms of tie strength, in the three concentric circles on the map (McCarty et al. 2007). Following a similar strategy to Antonucci (1986), the inner circle represented "people who are important to your life right now"; the second "people to whom you may not feel quite that close with at the moment, but who are still important to you"; and the third "people whom you haven't mentioned but who are close enough and important enough in your life that they should be placed in your personal network" The visual nature of this name generator allowed the researcher and respondent to keep track of the relationships that had been discussed during the interview and also produced a stimulus for the production of network focused narratives later in the interview (Hollstein 2011)¹⁶.

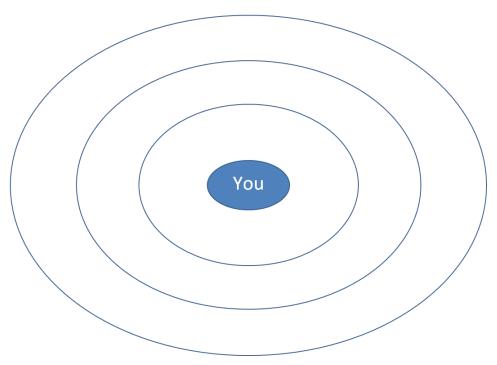


Diagram 6.3: Hierarchical personal network mapping technique

¹⁵ And, following Lubben and Gironda (2004), the respondents were asked to arrange sticky labels on the map (each sticky label representing a particular connection). Whilst they were arranging the sticky labels they were asked to talk through the decision-making process so that their considerations and justifications for including people was available for analysis at a later point.

¹⁶ It is worth noting the technique described above is termed 'non-roster' and 'free recall'. That is to say, the interviewee can nominate as many people as they want based on memory recall (but guided by the researchers questioning) (see e.g. Prell 2012, p.70). Some scholars have argued that this type of technique increases validity, in that it produces a more accurate picture of the respondent's actual network versus research in which the number of contacts that can be named is limited to a certain number (Prell 2012, p.78). Still, as we will see below, there needs to be careful consideration of the questions being asked (and the potential meaning of these questions) in order to improve accuracy (Prell 2012, Scott 2012a, p.43).

Marsden (2011) highlights that socio-metric questions of the type described above may be misunderstood or understood in variable ways when they are asked about diffuse or behaviourally nonspecific relationships (e.g. "close relationships", "distant relationships"). This is especially the case for so-called weaker ties that may be instrumental for certain functions such as supplying information about the job market. To overcome such issues, it is generally considered good practice to have more than one name-generator (Prell 2012, p.120). So, in this research multiple name generators were used. The other generators that were used are what might be termed 'support generators' (see e.g. Marden 1991, 2011)¹⁷. All of the 'support generators' that were asked in the interview were deemed relevant to the theoretical argument of the thesis as they are types of support that conceivably provide the lone mother with capacity to adapt to change (types of support touched upon in Chapter 3):

- Emotional support generator
- Childcare support generator
- Job related assistance support generator
- Financial support generator

The elicitation of a personal network, as outlined above, is only the beginning of the social scientific inquiry into networks (Crow 2004). The interview then moved on to examine the characteristics of the 'alters' and the relationships in the networks in more depth. To do so, we asked what have been termed 'name interpreter' questions (section 3 of the interview). The following theoretically informed information was collected (all discussed in Chapter 3):

- Occupation of the alter (used to infer occupational-class)
- Gender of alters
- Role-type of relationship (friend, family etc.)
- Geographical proximity of alter
- How the relationship had formed (e.g. structural balance or social foci formation)

The visualisation of the personal networks that was put together in the name generator phase simplified these name interpreter questions by offering a stimulus for this style of questioning (McCarty & Gouindaramanujam 2005). This part of the interview also included an important question on the relationships that exist between alters, as perceived by the respondent, a technique called 'cognitive networks' or 'cognitive social structure' (see e.g. Marsden 1991). This involved asking the interviewee to point out the people on the map who had a close relationship. The interviewees then physically drew links between the people on the map who they deemed to be close to one another¹⁸. This question is of particular importance to help estimate some

¹⁷ A similar strategy is taken by Lubben and Gironda (2004) who also start with the affective generator (using Antonucci's concentric circle method) and then move on to ask respondents who they exchange support with in certain situations.

¹⁸ There are a number of points that we should remain aware of when analysing the data gathered from these sections. Namely, memory on others is less systematic than about the self (Marsden 2011). For example, in terms of cognitive social structure, Freeman (1992, discussed in Marsden 2011) shows that people tend to overestimate the relationships that exist between their alters, recalling connections when there might not be one. It is also fact that the greater the proximity between persons the more accurate their statements concerning the other are (Marsden 2011). The only true way to overcome these problems would be to interview every member of the network, as done by Bott (1957). However, this strategy is extremely time consuming. It took Bott (1957) roughly two years to interview twenty families.

structural properties of the ego-networks described in Chapter 3, such as ego-network density and access to structural holes.

Having developed a picture of the interviewees' social networks, the interview then questioned them in a more open and qualitative manner on their experiences of the economic recession and government austerity (section 4). They were, for example, asked if exposure to these changes had affected their livelihoods and if they have subsequently changed their needs and goals. Finally, they were asked how these experiences might relate to their social networks and the role that their personal networks played in hard economic times. The strategy used in this open section was to produce the richest data possible. For this purpose, the stimulus of their network map (Diagram 6.3) was extremely helpful, allowing us to gauge the interplay between the socio-economic context and the interviewee's aspirations, their decision-making and their personal network.

In terms of the second longitudinal interviews, very similar questions were asked. However, the question wording was changed to focus on any changes since the first interview. The interviewees' were asked, for example, if their experiences of the recession and austerity had changed at all in the year since the first interview. Moreover, before the repeat interview the initial interview was analysed and summarised thematically (as suggested by Lewis 2007) so that the researcher could ask questions that allowed the interviewee to build on the narrative that they had started in the first interview.

6.7. Data analysis

As described in section 6.4 above, the different types of data that were collected require different methods of analysis. This section introduces the qualitative techniques used in this research and the techniques used to analyse the ego-network data. The particular details of the analysis will, however, be described throughout the empirical chapters that follow.

Section 6.7.1 is concerned with the qualitative aspect of the analysis. It starts by describing how the interviewees were categorised according to their adaptive outcomes (to answer Q1). The section then describes the interpretative method that was used, the style of the qualitative coding, as well as the nature of the case-oriented analysis ('between-case' and 'within-case' analysis). Each of these different techniques are used to help develop an understanding of the causal processes and mechanisms evident in the data. So, the qualitative analysis helps address aspects of all of the research questions.

To give a comprehensive answer to Q4, however, requires a different (and complementary) type of analysis. Section 6.7.2 describes the ego-network analysis that was conducted and outlines how descriptive statistics were used to map and describe the relationships and social networks that the interviewees have. Descriptive statistics are used, for example, to compare the networks of those mothers who have vulnerable outcomes and those mothers who have resilient outcomes. However, as noted earlier in the chapter, these techniques are generally limited in terms of excavating the underlying processes in the data. As such, the results from this analysis are interpreted in light of the qualitative analysis and theoretical framework.

6.7.1. Qualitative categorisation, the interpretative method, thematic coding and case-oriented analysis

Categorisation of the interviewees according to their adaptive outcomes: To address Q1 the researcher generated an empirical typology for descriptive purposes which constituted the explanandum of the research: an empirical understanding of the different adaptive outcomes in the sample. That is to say, each case (interviewee) was categorised according to the whether they had vulnerable, resilient or transformable outcomes. The process that was used to categorise the cases followed Bailey's (1994) guidance on constructing qualitative categorisations (Spenser et al. [2014, p.314] was also consulted). Bailey suggests starting with a priori concepts and then categorising empirical cases according to their fit with these concepts. So, we categorised each interviewee by aligning the answers they gave to certain questions (questions about coping with the impact of the austerity and recession) with the descriptions of the different adaptive outcomes given in Part 1 of the thesis (a more in-depth explanation of the actual process of categorisation is given in Chapter 7)¹⁹.

However, highlighting how lone mothers vary in terms of their ability to cope with economic hard times is not an explanation in itself. This stage of the analysis is essentially a descriptive exercise that gives us an outline of the empirical regularity that we then aim to explain. Indeed, categorisation of this sort is a necessary precursor for explanation (Bailey 1994, Perri 6 & Bellamy 2012, Hantradis 2008)²⁰. To offer an explanation we must uncover the generative processes that connect the context of the research to the adaptive outcomes. To do so, the interpretative method was used.

Explanatory interpretation: The qualitative approach taken in this research to investigate generative processes was, broadly speaking, modelled on Weber's (1949) erklärendes Verstehen. In particular, Schutz's (1972) development of Weber's technique guided our understanding of the interpretative method.

Schutz (1972) advocates a technique in which Verstehen is comprised of two levels: first order common sense constructs and second order ideal typical constructs. First order constructs are used by social actors in their everyday lives. Second order constructs on the other hand are used by researchers to tackle a specific research problem. Schutz (1972) argues that relying on a thick description of first order constructs is not causally adequate, as this type of analysis is only applicable to the individual(s) under investigation. As a result, first order constructs may not have wider contextual and/or temporal significance. For this reason, Schutz's (1972) 'second level' of Verstehen involves distilling the first order constructs into an 'ideal typical' explanation that potentially does have wider significance - 'a little, or medium level, causal story' that is recognizable from one context to another. These second order constructs may not actually occur in everyday life, but they are still realist in the sense that they aim to capture something important about the social world. Pre-existing theory may play a role here in establishing the second order

¹⁹ A similar approach was taken to qualitatively categorising the occupational-class of interviewees and their alters. ²⁰ Bailey (1994) gives the example that for a medical doctor to properly understand the causes of an illness (and thus its potential treatment), that illness must first be distinguished from other different types of illness.

constructs used to interpret first order constructs. And, a clear linkage between the two types of construct must be demonstrable in order to demonstrate adequacy at the level of meaning²¹.

Schutz (1964, p.17) summarises the technique described above as follows: "The technique consists in replacing the human beings which the social scientist observes as actors on the social stage with puppets created by himself, in other words, in constructing ideal types of actors". So, essentially Schutz (1964) uses models of action as interpretive devices to help construct (or, reconstruct) causal stories about the actual actions taken by real world human beings. It is interestingly to note that some of the particular models of action used by Schutz (1944, 1964) to interpret everyday behaviour are strikingly similar to the model of aspirations and action described in Chapter 4 (see footnote 3 in Chapter 4 for an example of the convergence)²². (See also Goldthorpe [2007a, p.161] who argues that Verstehen sociology requires models of action – reasonable action is understandable and at the same time 'is its own explanation'.)

There are, however, some limitations of the interpretative method that need to be acknowledged, especially if they are to be overcome. Much interpretative work presupposes that we can learn about the causes of action and the decision-making process through just talking to actors. However, some scholars are not convinced that this is possible in all cases. Kanazawa (2001), for example, argues that much action is subconsciously determined and not explicitly cognised, so a richer psychological theory is needed. Similarly, we argue that a richer sociological theory is needed. For example, social network concepts such as 'network density', or 'bridging social tie', may not be directly derivable from the interviewees' first order constructs if they do not have an understanding the wider network structure within which they are embedded. Nevertheless, these concepts are very useful for explaining some social phenomena.

People are generally knowledgeable about the proximate reasons for their actions, but are generally not completely aware of the structural conditions within which they are embedded (Pawson 1996, Giddens 1984). For this reason, and this point links to the data collection method described in section 6.4, Pawson (1996) argues that during the interview and subsequent analysis an understanding of social structure and of the wider social context should be led by the researcher's conceptualisations. However, because mechanisms are micro based, and rely on reasoning, choices, mental modes, the researcher should assume that this expertise lies with the informant. The task of the research is thus to combine the researcher's knowledge of contextual and structural factors with the interviewees' knowledge of their own decision-making. (Using models of action, however, to interpret and empathetically understand this decision-making.) Again, the researcher must be able to clearly demonstrate the link between the two forms of knowledge. Thematic coding (described below) is, we argue, a method that allows the researcher to demonstrate the link. Furthermore, the researcher sought respondent validation with the interpretations of the first four interviews, asking the respondents to check how well subjective meanings had been captured and interpreted and if anything of importance had been left out.

²¹ It is worth noting that this divide between two different types of construct (first order, second order) is evident across an array of methodological literatures. Perri 6 and Bellamy (2012) for example distinguish etic from emic interpretation in anthropology. Similarly, Spenser et al (2014) distinguish explicit vs. implicit analysis.

²² Having said this, some interpretative sociologists have criticised the type of model of action outlined in Chapter 4 (i.e. bounded rationality) (see e.g. Collins 1981). However, we agree with Esser (1993) that such criticisms are misplaced and that the model of rationality, of routine habitual behaviour and creativity, used by Schutz (1944, 1964) as an interpretive device is very similar to models of bounded rationality.

The feedback from participants was unambiguously positive. (The processes of respondent validation also helps enhance 'measurement validity' of qualitative research, Ritchie et al. 2014.)

Thematic coding: Thematic coding (Braun & Clarke 2006) was used to develop the explanatory interpretations of the generative processes at work. Thematic coding is like 'grounded theory' (Glaser & Strauss 1967) in that it follows the same type of coding scheme. However, it is unlike grounded theory in that it is allows for an explicit input from pre-existing theory and is also commensurable with the interpretative method outlined by Schutz²³ (Fereday & Muir-Cochrane 2008). It is thus an ideal method for interpreting what people say, and the decisions that they make, within a theoretical framework that covers social structures and contexts that they may not directly experience or explicitly cognise.

Following the thematic coding schemes discussed by Braun and Clarke (2006) and Spenser et al. (2014), the actual process of coding was as follows. Firstly, we familiarised ourselves with the data by transcribing and reading through the transcripts (as also suggested by Boyatzis 1998). A theoretically informed thematic coding framework was then drawn up (as also suggested by Crabtree & Millar 1999). These codes were then applied to the transcripts and the researcher also searched for new codes that emerged from the data. Then, the researcher looked for any general themes across the interviews. Finally, the codes and themes were reviewed and summarised before being written up for analysis. All thematic coding was conducted in NVivo and Excel.

Between-case and within-case analysis: Having thematically coded each of the thirty cases, a betweencase analysis was conducted with Nvivo. The between case analysis was conducted with what are known as 'framework matrices' or 'thematic matrices' (Spenser et al. 2014). Such matrices cross-tabulate themes with cases. Each cell in the matrix is a summary of everything coded under a specific theme (represented by columns) for a specific case (represented by rows). This allows the researcher to compare explanatory interpretations across cases, mapping the diversity present within a theme, and also gaining some understanding of whether an explanation might have wider application within the sample of cases. It also allows the researcher to read across columns (i.e. within a case) to gain some understanding of how certain processes might come together.

However, between-case analysis tends to abstract from the context of the generative processes of interest. Once any processes in the data have been identified, it is possible to reconnect them to their original context and validate the explanations given through within-case analysis (Ayres et al. 2003, Perri 6 & Bellamy 2012). Within-case analysis also serves the purpose of showing how the generative processes that have been identified in the data might fit together within a single case. Thus, in the final part of the qualitative analysis, the evidence accrued from the prior analysis is used to inform a within-case analysis that re-contextualises our understanding of the processes at play in the data. Whereas the between-case analysis was conducted on all thirty cases, the within-case analysis was performed only on a handful of the interviews conducted longitudinally (due to the intensive nature of within-case analysis).

²³ It is argued that because of the limitations of the interpretative method (e.g. Kanazawa 2001), that the theoretically bounded nature of grounded theory (Glaser & Strauss 1967), which gives primacy to what people say happens and their everyday experience of reality, is not suitable for studying phenomenon that people do not necessarily experience directly, or take for granted, i.e. social networks.

6.7.2. The ego-network analysis

The qualitative analysis outlined above helps us to describe the explanandum of the research and investigate any processes that seem to be at work in the data. However, in terms of giving a comprehensive answer to Q4, it is necessary that we are able to also describe and compare (in a standardised manner) the relationships and social networks that lone mothers have. To understand and explain any variation in outcomes of interest, following the argument from Part 1, we need to take a closer look at personal social networks. For this reason, an ego-network analysis was conducted. Although this type of analysis is not generally considered to have the power of whole network methods, i.e. it cannot tell us much about the overall embeddedness of individuals in the wider social network, it can give us information about the interviewees local connections that most directly offer them opportunities and potentially also constrain them. The relational and ego-network analysis is comprised of two stages, both described briefly below. Both stages are described in more depth when the analysis takes place in Chapter 8.

Stage 1 - Ego-network analysis: The ego-network data was stored in Excel and SPSS spreadsheets. Following Müller, Wellman & Marin (1999), the data was stored in two datasets: 'tiewise' data (each row containing personal characteristics of the 'alters' and ties) as well as in a 'netwise' data (each row containing information about ego and their network characteristics). The datasets were combined for some of the analysis.

The analysis performed on this data mirrors the presentation of the social network literature given in Chapter 3 in that it examines the characteristics of the interviewees' alters, of ego-alter relationships (dyads) and also of the personal networks as a whole (using measures such as egonetwork density). A basic analysis of how the networks might have formed overtime was also conducted. The analysis was conducted using Excel, SPSS and E-Net (Müller, Wellman & Marin 1999, Halgin & Borgatti 2012).

The core of the analysis is to examine subsamples of networks – those with different adaptive outcomes - rather than each personal network individually. (As noted by Müller, Wellman & Marin 1999, "You can use information about focal individuals to study subsamples of networks".) Examining the interviewees' personal networks in this manner, and interpreting the findings in light of the theory described in Chapter 3, tells us something about the opportunities and constraints faced by the lone mothers and helps shed some light on why some lone mothers might have more capacity to cope with economic adversity than others. Having said this, all this analysis essentially does is correlate adaptive outcomes with certain types of personal network. And, as the adage goes, correlation does not equal causation. Yet, the analysis can still play an important role in probing the theoretical framework described in Part 1. If, for example, the analysis suggests that lone mothers with vulnerable outcomes have more social resources available in their social networks than mothers with resilient outcomes, then we could say that the theoretical framework does not offer much (if any) explanatory leverage within the sample.

Stage 2 – Descriptive statistical analysis: Following on from the analysis described above, a regression analysis was conducted to examine how factors identified in Chapter 3 (e.g. the occupational-class, gender, etc., of the alters) interrelate with the social support that is received by the lone mothers. The purpose of this analysis is to help us say something about access to and mobilisation of social resources amongst the lone mothers. Such regression analysis on small qualitative samples for the purposes of description (not inference to a wider population) is becoming increasingly common (see especially Small 2011, Sandelowski et al. 2009).

It is worth noting that when ego-networks are studied, the data has a clear hierarchical structure: individuals are nested in ties and ties are nested within networks. As noted by Wellman (2007), for decades this clustering had been ignored in much social network research. However, in recent years multilevel models (also known as hierarchical linear models) have been shown to help researchers account for the nested structure of ego-network data, allowing the researcher to disentangle the relationship(s) between levels and ask novel questions of the data. Therefore, multilevel modelling was the particular statistical technique that was used in the analysis. The actual nature of the statistical analysis is outlined in greater depth in Chapter 8. All statistical analysis was conducted using SPSS and MLwiN (Field 2009, Rasbash et al. 2009).

The combination of the methods described above (ego-network analysis and descriptive statistics) allows us to describe the relationships and networks that the interviewees have and associate these with social support outcomes of relevance, such as childcare (Wellman & Frank 2001). However, the description offered by this stage of the analysis can be thought of as evidence that needs to be embedded within a wider explanatory narrative. Indeed, the methods described in this section do not allow us to answer the research questions concerned social processes. So, we must interpret the findings from this stage of the analysis within the wider qualitative analysis. As noted by Byrne (1998, p.84), the type of modelling discussed above generates "pieces of evidence which can then be interpreted and used as part of a general account of changes in the social ... order".

6.8. Reflections on research ethics

Given the potentially sensitive subject area (i.e. lone mothers are often a stigmatised group and this research has sought to find out about personal issues that might affect them as a group, regarding, for instance, personal relationships, coping financially, and government policy) careful consideration was given to ethical concerns. Ethical practices factored into the decisions made by the researcher throughout the whole research process. As groundwork for the ethical practice used in the research, the ethical codes set out in the British Sociological Associations (2002) and the ESRC's (2010) Framework for Research Ethics have been adhered to. Also, in terms of research governance, advice was taken from the University of Bath's research ethics committee.

However, the research did not just passively follow standardised ethical codes. The researcher thought through what the research and actual interview process might mean for the interviewees and stakeholders. Such ethical consideration was especially important during the fieldwork stage. During fieldwork steps were taken to ensure researcher integrity and transparency, especially with the interviewees. All gatekeepers and participants were fully informed about the purposes and intended methods of the research, making sure each interviewee understood what the interview would entail. This was done through personal communication, as well as sending written material about the research and interview process to stakeholders and interviewees.

Indeed, the sampling strategy allowed interviewees to opt-in fully informed after gaining an understanding of the research and its objectives (i.e. there was no coercion to take part in the research). Explicit voluntary consent was also acquired from each of the participants, at first verbally and then before the interview written consent was obtained. Standard privacy and confidentiality practice was also applied. The data was depersonalised, anonymised and held securely by the researcher. No data that can be used to identify participants has been presented in the findings. The research was also as flexible as possible to the needs and wishes of the participants in relation to the actual timing and place the interview took place.

Given that the researcher is male, interviewing often vulnerable lone mothers, there was also a gendered element to the research that had to be considered. The gender dynamic was only deemed to be a potential ethical issue when the interview was conducted in the home of the interviewee (as described earlier, this was the case with six interviews). Upon taking advice from a number of sources (e.g. colleagues at the University and SPAN), to alleviate the potential risks this might create the researcher took a female friend along to these particular interviews. To minimise the impact of her presence on the dynamic of the interview, she attempted to sit in a discrete location and was not involved in the process of interviewing. Her presence did not seem to impact on the quality of the data from these interviews. In terms of the thirty interviews more generally, the gendered dynamic of the interview might have actually helped generate richer data, as it seemed that what might otherwise have been left implicit between two lone mothers was made explicit for the researchers understanding.

During the actual interview process, there was no 'undue intrusion' (Webster et al. 2014). The interview guide, for example, did not include any questions on potentially personally sensitive topics, such as mental health. Having said this, in some cases the interviewees' felt comfortable talking about these topics and naturally led the discussion to these areas²⁴. Moreover, interviewees were also informed they could refuse to answer any questions or withdraw anything they had said. To aid with this process, complete transcripts were sent to the interviewees after the interview. If they felt they wanted to delete anything they had the option to do so (this only happened in one case). A handful of mothers did, however, email to clarify certain things they had said or offer further elaboration of particular points.

Furthermore, research which seeks to understand social networks creates, in Kadushin's (2012) words, "special challenges for research ethics" (see also special issue, Social Networks 27 (2), 2005). In social network research, the research has potential implications for all the persons that the interviewee is connected to. These contacts, unlike the core target, did not give explicit consent to the research. There is no convenient way of gaining consent unless the design involves snowballing (Kadushin, 2005). Indeed, if the researcher is not careful with the data, social network information can expose individuals who may not have given their consent for personal information about them to be used in the research. To overcome this problem the

²⁴ Some interviewees discussed other problems they were facing and sought advice from the researcher (during and after interviews). One interviewee even mentioned that the only reason she was taking part in the research was to get advice (more on this in Chapter 7 and 9). The particular stance that was taken on this was that it would have been unconscionable to not help, if help seemed possible and not likely to cause any harm. For example, a few participants sought guidance on potential impending changes to the welfare system that might impact on them. Explicit advice was only offered in cases in which the researcher had a detailed knowledge of the changes in question. In some cases, interviewees were referred to specialist services and information. Direct assistance was not given to interviewees for issues of a more personal nature, such as feelings of loneliness and anxiety. In such cases, the researcher was prepared to direct any distressed interviewees to relevant support services after the interview if need be (such as services offered by SPAN).

interviewees were only asked for the first names of their alters. Moreover, all precautions taken to guard the privacy and confidentiality of the interviewees has been applied to the third parties²⁵.

6.9. A roadmap for the empirical chapters

We are now in a position to offer a roadmap to the empirical chapters that follow. The chapters that follow in the rest of Part 2 are largely differentiated by the types of question being addressed, and thus, the corresponding theoretical material.

- Chapter 7 is concerned with the regularity of interest (adaptive outcomes) as well as factors of theoretical importance that relate to the individual lone mother, such as her lifestyle aspirations. It starts by describing the different experiences of lone mothers during the economic hard times and uses conceptual material from Chapter 2 to categorise these according to the particular adaptive outcomes (Q1). The chapter then examines how exposure to economic hard times impacted on the interviewees' aspirations and motivations for action (Q2). The chapter finishes with an examination of how individual characteristics of the lone mother are important in terms of the 'corrective actions' that she takes in response to exposure (Q3).
- Chapter 8 then shifts the focus of the analysis to social networks. It maps the personal support networks of lone mothers, laying the necessary foundations for answering Q4. These social networks, we have argued, are likely to be crucial for the eventual actions that the lone mother takes in response to her exposure. The chapter investigates differences in the relationships, relational resources and social networks that mothers with different adaptive outcomes have access to.
- Chapter 9 then continues the investigation of social networks by asking about the role they play in adverse socio-economic times, answering Question 4. It brings together the findings presented in the two preceding empirical chapters into a coherent story about the role that social networks play in supplying adaptive capacity in adverse socio-economic circumstances.
- Finally, Chapter 10 illustrates, in relation to a handful of specific longitudinal cases, the explanation given in the preceding chapters. Ch.10 brings together the answer given to each of the research questions to illuminate, in a more dynamic longitudinally analysis, a handful of individual cases.

²⁵ Also, for those who face might be experiencing social exclusion and isolation, it is possible that an interview regarding social networks may enhance feelings of isolation. Contrary to this, however, previous research has highlighted that this type of research can be a positive experience for interviewees (e.g. through enabling an expanded knowledge of their social networks and their relationships). As noted by Lubben & Gironda (2004, p.94) "our elucidation of our participants personal communities helped them to recognise what they already 'knew', just to see it in a different way: they became conscious of the processes of which they formed a part". This seemed to be the case for most of the interviewees in this research. After the interview, participants were asked about their experience of the interview. Some highlighted the illuminating nature of mapping their social networks and realising of the importance of their support network (e.g. "I'm not in this alone!"). If this was not the case, the researcher was prepared to direct the participant to relevant support services if required.

Chapter 7: Exposure to economic adversity: Lone mother adaptive outcomes, aspirations and action formation

7.1. Introduction

This chapter starts in section 7.2 by describing how lone mother families vary in terms of their adaptive outcomes when exposed to wider socio-economic adversity (Q1, Arrow 1 on Diagram 6.2). We see that some lone mothers struggle to get-by, while others have coped to a standard that they are happy with. This is perhaps not such a surprising finding; people cope differently and to different degrees in all types of situation. However, the finding does raise additional questions which are of interest. Indeed, although section 7.2 reveals the 'regularity of interest', adaptive outcomes, it leaves us with a 'black-box' to open in the analysis that follows. Why are some families capable of coping and adapting whilst others have found it increasingly difficult to feed their children? It is the answer to this question that will be of interest to policy makers resolved on helping people cope with economic adversity in the future.

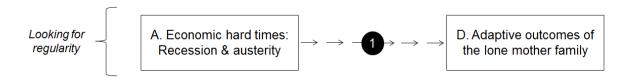
The analysis and explanation that follows seeks to open the black-box by examining the causal processes that led to the different adaptive outcomes. The explanation given is structured around Diagram 6.2 (and the associated theory from Part 1). However, it is necessary to note that although Diagram 6.2 plays a structuring role in the analysis, it acts principally as a signpost, pointing towards the direction of the analysis and the research questions that are being addressed. The actual landscape of the explanation is provided by the interviewees and what they have to say about their experiences of living through hard economic times. Each stage of explanation is concerned with a different arrow in the overall causal process. Section 7.3, for example, looks at how the recession and government austerity has shaped the lone mothers' needs and motivations to act (Q2, Arrow 2 on Diagram 6.2). It is described how exposure to economic adversity makes it increasingly difficult for some of the interviewees to maintain a standard of living that they desire (their 'lifestyle aspirations'). This, we see, shapes their actions and interactions with others – for example, they might be motivated to ask their social network for additional financial support.

Moving along the causal chain, section 7.4 examines the lone mothers' decision-making in response to adversity (Q3, Arrow 3). We see how a handful of personal characteristics shape the actions that the lone mothers take in response to economic adversity. In particular, we see how the knowledge the lone mothers have access to, their skills and their economic resources, shape their response to economic adversity. Section 7.4 also describes a certain type of 'corrective action' which does not relate to social support networks – most of the lone mothers described how they had changed personal habits and made financial trade-offs or sacrifices.

This chapter, however, does not look beyond Q3 to the central research question, Q4. That is to say, at the end of this chapter we are still left with the task of mapping the lone mothers'

personal support networks and examining how these networks shape the corrective actions that are taken in response to financial adversity.

7.2. How do lone mothers vary in terms of their 'adaptive outcomes' when faced with hard economic times?



Chapter 2 outlined a typology of potential adaptive outcomes when a system is perturbed by some exogenous shock. Systemic outcomes can be categorised according to whether or not a given system can achieve desirable outcomes when exposed to some perturbation. Underlying these outcomes is the level of 'adaptive capacity' that the system has. Adaptive capacity is a measure of a system's potential capacity to adjust to disturbance, moderate actual or potential damage, or even in some cases take advantage of opportunities that might be offered by a perturbation. This capacity, we have seen, is linked to a given system's ability to make adjustments to its characteristics and its behaviour. Systems with little or no adaptive capacity are said to be vulnerable when exposed to some exogenous perturbation. Undesirable outcomes associated with vulnerability might include, for example, system deterioration and breakdown. On the other hand, systems with high levels of adaptive capacity are said to be resilient or transformable depending on the type of change that the system makes when dealing with a shock. Adaptive outcomes include the persistence of some previously desirable system characteristics when exposed to perturbation. We have argued that this typology is a useful schema for understanding how individuals, families, communities and even societies cope and deal with changing circumstances.

This section examines the financial situation that the interviewees reported to be experiencing at the time of the interview, what we term 'the present' in the analysis that follows, using the typology outlined above as a lens through which to categorise these experiences. The 'present' is defined as the period of time at which the interview was conducted and to which the interviewees had immediate cognitive access, distinguishing it from their past and potential futures. It relates to their immediate personal experience of their situation in the 'here and now'.

Bailey (1994) advises that there should be three levels to the (qualitative) classificatory process: i) *a priori* concepts are used to ii) identify and categorise empirical cases iii) from which empirical indicators are drawn up. The *a priori* concepts in this research relate to the different adaptive outcomes described in Chapter 2 (and briefly at the beginning of this section): vulnerability, resilience and transformability. Each interviewee was categorised into one of these groups on the basis of the descriptions they gave of how exposure to austerity and/or the recession was affecting their family, their living standard and how they felt they were coping in the present

period¹. The categorisation is thus resultant from the subjective self-assessments of the interviewees about what it means to be able to cope (or not) to their own aspired towards level given the extant economic crisis at the time of the interview². Then, after categorisation had taken place, a list 'empirical indicators' was drawn up. A schematic representation of each category is given in the subsections that follow and a summary of the empirical indicators in the section conclusions.

It is necessary to note that no case is a member of two categories (i.e. there is no overlap in the categories). Having said this, it is possible to rank within each category which case is at the higher or lower end of that category (i.e. which interviewees seem to have more or less desirable outcomes within each category). Moreover, as Perri 6 & Bellamy (2012) might describe, each category has 'fuzzy boundaries'. That is to say, there is no definite set of quantitative criteria available through which the categorisation was facilitated³. Categorisation was conducted on the basis of the subjective assessment of the interviewees, and of the researcher's juxtaposition and judgement of how these assessments fit with the conceptual definitions given in Chapter 2. Moreover, it is important to note that there is likely to be some movement between the categories through time. That is to say, at the time of the interview a mother may have been classified as resilient to economic adversity, but, if the factors which condition her resilience fall away, she might become vulnerable to economic adversity at a future point in time. Or, a mother currently classified as resilient may only be so because of previous transformations in her way of doing things. This point will be picked up again later in the analysis.

7.2.1. Lone mothers vulnerable to economic adversity

The lone mothers categorised as vulnerable to economic adversity find it a 'constant struggle' (as Abigail, one of the interviewees, described) dealing with adverse socio-economic change. Some of the mothers in this group had already been vulnerable to poverty before the economic crisis; some, on the other hand, had been pushed to the limit by the economic crisis and the government's austerity (by losing a job, for example, or suddenly having to pay the 'bedroom tax'). What is clear, however, is that the wider socio-economic adversity had made existing financial problems and vulnerabilities more evident for this group of mothers. Abigail, for example, described that the traumatic nature of her relationship breakdown had left her with little as it was, and that her difficult situation had subsequently been compounded by wider economic trends.

Abigail: I have worked since I left school and I have always worked, and Robert [her ex-husband] worked and had his own business... but then the nature of what happened with Robert meant that his

¹ The argument is that under the impact of hard economic times, the differences between families in their capacity to adapt is likely to have become more evident, more marked, and more significant for lone mother families. That is to say, although differences in adaptive capacity are likely to exist prior to exposure, it is through exposure to socio-economic adversity that the adaptive potential of each family becomes more evident and important, manifesting itself more clearly in these outcomes (vulnerable, resilient, transformable). In 'normal times' such potential 'adaptive outcomes' would be harder to categorise.

² No consideration was given during classification to the personal characteristics of the lone mother (i.e. her occupational-class or human capital) or of her personal support network.

³ This is because, as noted by Giddens (1984, p.333), the collection and interpretation of quantitative material depends upon gathering data of a more intensive qualitative sort first. So, the categorisation presented in this section is a necessary precursor to quantification and might well be quantified in future research.

addiction got out of control and finances rapidly disappeared and then we had no choice but to claim benefits [...] But because the yearly rise is not keeping up with the cost of living even within the last 3 years I have been on benefits I found it tougher to manage on the money I do get.

Even though the mothers in this group are thrifty, they talked of struggling to afford even basic necessities for family life. Some mothers in this group described finding it difficult to afford food, gas to heat the house and public transport. They might just be able to 'keep their heads above water' by making cuts and personal sacrifices to get-by, but in so doing it seemed they were undermining their own mental and physical health. As Kate described "Tve got to put the children first. Often, like, you might neglect yourself to put them first. I realised I was buying him new school shoes when all of mine have holes in. That's how I work." In some cases, the lone mothers in this group forwent food themselves to ensure that their children had enough to eat. For these reasons there was a sense of anxiety amongst all of the women in this group. Their living standards seemed far from what they considered to be desirable.

Indeed, the language they used was pessimistic and negative. Talking of their financial troubles provoked a kaleidoscope of emotions: anxiety, sadness, surprise, anger. Some of the mothers talked of suffering from stress, depression, and other mental health problems because of their financial situation. A few of the mothers in this group were also scared and confused about the changes going on and how they'd be affected. As Kate described "I am scared. I try... well, I'm resigned to it. I am angry." Kate also described feelings of shame and guilt that she is not able to cope financially and she was worried that she might lapse back into depression and generalised anxiety if her financial situation got any worse. She had recently started visiting a food bank. Her narrative continued as follow:

Kate: The food bank - I feel like its temporary. But actually my financial situation is going to get worse if anything, rather than better. So I might have to keep relying on that, which is something I never thought I'd do [...] I have plans to do training, become mobile, get a good job that pays a lot of money, maybe even move house, meet a man, have another baby! But, in reality it's quite bleak really. I try and ignore it really, because it is, when you look into the reality of it, it's just surviving on a day to day basis at the moment. That might sound a bit melodramatic, but if I'm being honest, that's what it is about. Have I even got any gas and electric?

In this quote we can see Kate's lifestyle aspirations, but we can also see that the reality of her situation is quite different and in all likelihood getting worse over time, potentially causing her mental health problems. This point regarding mental health problems reinforces conclusions reached by medical sociologists such as Brown and Harris (1978), who argue that wider socioeconomic conditions which trigger loss can lead to mental health problems such as depression and anxiety, especially when the individual in question has not been able to work through the loss and find new ways of doing things (e.g. through adaptation to the new circumstances).

For the reasons described above, the mothers in this category have little or no scope to make further cuts and sacrifices. They have little capacity to deal with future financial adversity and would not be able to fund personal financial emergencies, such as a washing machine breaking. Jody even said she would struggle if she dropped a carton of milk on the floor. Their economic resources are already stretched to the limit.

This category of lone mothers had 13 of the 30 interviewees in it. Three quarters of the group had a lower level of educational attainment at the time of the interview and only 1 out of the 13 lone mothers was in work. For this reason, most of the group relied on benefits and welfare for their income. Consequently, as we will see, they described being very sensitive to any changes made to the welfare state. On average, their youngest child was around half the age of those in the other two groups (5 years old versus 9 years old). They are also on average around 5 years younger than the other groups (35 versus 40). They had also, on average, been single for less time than the other two groups (5 year average versus 7 for resilient and 10 for transformable). They also named half the amount of personal network connections compared to the other two groups (8 named contacts versus 16). One reason for this is that they seemed to be becoming increasingly isolated due to their financial problems. They described having no time or energy to connect with others (a point which is explored in greater depth in Chapter 9). Their focus is instead on just getting-by and providing for their children (Jody: "I just want to be able to provide for my children without anyone else doing it!")

In terms of their goals, 10 out of 13 said their primary goal was to get into paid employment because they were struggling financially. They wanted to be able to take care of their family properly and had been finding it hard to do so on benefits. (Celina described "My children are my priority at the moment. I'm working on my financial strength. I know I will do it.") Getting into work, they hoped, was one way of coping better with the adverse socio-economic context and to regain some lost financial ground. As Celina described, "If I buy food, clothes, it's not enough at all. It's not. So, I just want to go back to a job. If I have the chance to go back to work, I would go." The one mother in this group who was in employment wanted to move from part-time work to full-time work (she felt underemployed). One mother's goal was to deal with stress related health conditions (stress which was related to her difficult financial situation). One other mother wanted to improve her education in the hope of increasing her chances of finding a suitable (flexible) job.

7.2.2. Lone mothers resilient to economic adversity

At the time of the interview the lone mothers in the resilient group had displayed a capacity to buffer and/or adapt to wider socio-economic changes that had already taken place, to an extent they were happy with. Having said this, some of the mothers in this group might have previously been considered vulnerable, but had managed to make changes that had improved their situation. Sarah, for example, described that she had struggled financially before finding work:

Sarah: I wasn't employed for quite a while actually, I would say over two years it seems to me. Very tough actually. There was nothing [work related] you know. That was really quite depressing and discouraging

Interviewer: But you eventually found something?

⁴ In the analysis that follows, additional qualitative evidence of potential interest is given in the footnotes. In this case, Jody said: "I can't imagine that many people like being on benefits, not being able to buy what they want to buy, not being able to take their kids on trips. Most people I imagine are like me and want to get back into work."

Sarah: Yes through a friend! 5

A number of mothers in this category hadn't noticed any changes in their financial situation at all and seemed to be continuing life as they had done before the economic crisis. For example, Gemma commented "I am extremely fortunate, my job pays well enough so I can cover everything and I don't need a penny help from a man [...] The economic climate is more on the news than in my life". Some mothers in this group (such as Gemma) even described that they had been able to continue saving money each month (unthinkable for the mothers in the vulnerable category). These mothers had been able to continue acting in the often habitual ways which they had done prior to the recession and austerity. They had not been challenged to find new ways of doing things.

On the other hand, some mothers in this category had noticed that their financial situation had been negatively affected (e.g. their outgoings might have increased because of inflation) but they reported being able to manage to a desirable level by making small scale adjustments to their behaviour. They might, for example, act thriftily and make cut-backs. This group of mothers might also be creative with the personal and social resources they had access to. For instance, they had the capacity to make changes to the support content of their relationships if need be (more on this in the chapters that follow). Essentially, when new circumstances come along these mothers find it easy to reach for material and resources to hand and adapt to a desirable level by stretching it to cover the new circumstances that they find themselves in. The resilient group thus encompasses those who are managing their household finances fairly easily and those who manage by making small-scale adjustments to do so. Overall, this group of women felt able to live to a standard in the present that they were happy with and they didn't necessarily see things getting worse in the immediate short term⁷.

This does not mean that all of the mothers in this group would be considered 'financially well off', nor that they will necessarily be resilient to future financial adversity. Indeed, the mothers in this group had derived no additional positive benefit from being resilient against socioeconomic adversity. It was more of a neutral state. For Daniella it just meant that, in her words, "I don't feel that I will go under". In hard socio-economic circumstances it was desirable to just have not lost ground. One of the main differences between the mothers in this group and those in the vulnerable group is that the mothers in this group had not (at the time of the interview) made sacrifices that would jeopardise the health and well-being of themselves and their family. (Those who had made such sacrifices, such as going without food or heating, have all been classified as vulnerable.) They felt at the point of the interview sheltered from the worst of the socio-economic adversity.

⁵ Another mother, Rosy, described how she had previously been homeless and sold the Big Issue for a living. She had now "made it happen" and was working in a financially secure job for the council.

⁶ Gemma described that "I wouldn't need to go to anyone for money; I have a lot of saving and wouldn't need to rely on anyone. I am and have always been very good with money"

⁷ This does not mean that they did not worry about the future, as Sarah described: Interviewer: Would you say anything in particular has affected you in the current time? Sarah: The worry, every time you hear there is a cut somewhere, you stress that you're not going to be able to make ends meet, you know. I think I am not in a had position. Some people are in a worse position than I am, but then when you hear all the news of the cuts you think gosh am I going to get there.

⁸ For these reasons, when comparing themselves to other lone mothers, the mothers in this group quite often said they felt 'lucky' for themselves but worried for other people who were being affected. For instance, Rosy started by describing "I feel very lucky", but then went on to say "Its more seeing what is going on around me. You just see people

Compared to the mothers in the vulnerable group they have a greater capacity to deal with future financial shocks (albeit, this might push them towards or into the vulnerable category). Having said this, as we will see in the analysis that follows, resilience (in the sense that we are talking about it) is not a personal attribute and if the resources upon which resilience depends are worn down then a resilient mother might well become vulnerable in the future.

This group is composed of 12 lone mothers. On average, their youngest child is 9 years old (compared to 5 years old in the vulnerable group). Around three quarters of this group have higher educational attainment (defined as Bachelor's degree and above). Ten out of twelve are in employment. Of those in work, half were classified as 'service workers' and half as 'labour workers'. So, the categorisation highlights that it is clearly possible that both labour and service class workers are able to maintain a standard of living that they are happy with (i.e. have resilient outcomes). What seemed most important for the mothers in this group was being in, and being able to sustain, work. Class, however, does seem to play an important role in terms of the types of resources available for the mothers to draw upon (this point will be elaborated in the chapters that follow). Of the two out of work, one, Kirsty, had a financial buffer from previous employment that enabled her to cope ("It is enough to have a nice life") and the other, Sharon, had enough resources embedded in her network to not worry about work ("Life is pretty good at the moment, I've got so much support"). Furthermore, on average the mothers in this group have double the amount of network contacts compared to the vulnerable group (16 versus 8 contacts). Although some of the mothers described changing their patterns of sociability (e.g. not eating out with friends as much), they did not describe having become increasingly isolated like the mothers in the vulnerable group.

Because of their greater sense of financial security, the goals of the mothers in this group are more diverse than the goals of the mothers in the vulnerable group. This reflects the fact that they are not coping with dashed financial aspirations to the same extent as those in the vulnerable group. Their goals include: getting a boyfriend, buying a house, spending more time with family, studying for a Master's degree, getting more of a social life. Having said this, 5 out of 12 did mention that their primary goal was work related (e.g. "flourishing in work" as Eve described).

7.2.3. Lone mothers transformable in response to economic adversity

The lone mothers in this group had very similar outcomes at the time of the interview to the resilient group. For example, like the resilient group, they can stomach financial loss in the present more than the vulnerable group. Rita, for example, described "I'm quite sheltered [from the economic storm] and one reason is that I own my own house outright. What that means is that the money I get is money I can spend on bills and food and so on. So it gives me a freedom that other people don't have. I'm incredibly grateful to it. So, I'm not affected personally". Overall, the mothers in this group seemed content with their present situation, as Louise noted "I am happy with my current circumstances". Given these similarities with the resilient group,

struggling with rent, to eat, people getting depressed and the kids running wild... I find it really scary; I don't really want to think about what is going to happen".

this category can for the purposes of the empirical typology be considered as a subset of the resilient group.

Having said this, looking into the future the mothers in this group saw the need for wider reaching changes. For this reason, compared to the other two groups, they were (at the time of the interview) engaged in a more radical restructuring of the way they do things to ensure that they would be able to deal with potential future adversity. Some of the adjustments that the lone mothers in this group had made to deal with change were similar to those made by the resilient group. They might make cut-backs on spending; they use their resource creatively and they change the content of their social support networks. However, what distinguishes this group is that they actively seek to change the way they do things, to create new social connections and change the opportunities that they have access to. Rita, for example, having described that she was not affected in the present by the economic crisis, did say that she could potentially lose her job in the not so distant future (because of funding cuts in her area of work). In response, she had started to expand her professional network, what she called 'extending her tendrils', to build potential opportunities for the future:

Interviewer: Do you think that there is anything that might affect you over the next few years?

Rita: I might not have work. That's one reason I'm doing that [referring to community work to 'extend her tendrils']. I want to position myself as a certain kind of actor in the city and internationally as well. I believe that if you follow a purpose, get good at things, and allow people to see what you do, then you might be able to get some money out of it eventually.

Each mother in this group had different reasons for transforming her way of doing things. To give one example, at the time of her first interview Rachel was resilient to economic adversity. Indeed, Rachel was in a better financial position than most of the other interviewees, having had a financially lucrative career before having children, and no longer having a mortgage to worry about (she said "I'm relatively lucky on the finance front compared with many single parents"). However, looking into the future she could see that there were certain vulnerabilities in her current way of doing things. Her greatest vulnerability was that she still relied on financial support from her ex-husband. Without this money, Rachel said she would no longer be financially resilient. We might say that she felt 'robust yet fragile'. This fragility gave her the motivation for creating personal change.

Rachel: The big problem would be if something happened to my ex. Because, literally, if he was knocked over by a bus tomorrow my maintenance would stop at that very moment. Then I'd be very insecure financially!

Interviewer: You haven't got any other financial options?

Rachel: No, this is it, you know, that's why I need to be financially independent. I don't have the fall back.

Aiming to become financially independent, Rachel had been retraining to become a clinical psychotherapist ("I would hope that would give me a whole different array of work options within the NHS"). She had also undertaken unpaid work to further her career prospects. And yet she said she still managed to maintain a good standard of living. This was possible because of the financial support she received from her ex-husband as well as savings she had built up

during her first career ("You know, that first career has gone towards funding what I am doing now").

This category had 5 lone mothers in. They have similar characteristics to the resilient group. The only difference is that they are all highly educated. At the time of the interviews, one had a Bachelor's degree, two had a Master's degree, one had high level professional training, and one held a PhD. Four out of five are classified as 'service workers' and the other was technically unemployed. On average they also had double the number of contacts in their social networks versus the vulnerable group (16 versus 8). They are network aware, but to a greater extent than the resilient group; to the extent of talking about the importance of their social resources (as we will explore later in the chapter). In terms of their goals, one mother's main goal was to challenge the political justification for austerity. The other four mothers were all driven to transform their situation by improving their employment opportunities. For instance, Debbie described that she had not had a pay rise since starting work and she foresaw in the current tough labour market that she was not going to progress in her current line of work. So she had recently started a Master's degree (facilitated by her support network) to expand her opportunities: "One of the things about the recession, because of the job shortage, I haven't had a pay rise since I started working, I am not going to scream and shout about it because I am happy I have got a job! But, once I have a Masters it'll stand me in good stead for another place". Creating this type of change in response to socio-economic adversity was not an option for the mothers in the vulnerable group.

Having said all of this, there was no guarantee that the changes the lone mothers in this group were making would be successful in helping them cope with the future hardships that they foresaw. This was most obvious in Valerie's case. Valerie described that she was trying out a new way of doing things to offset the rising cost of living. Her skills (she had 4 Master's degrees) meant that she was able to do lots of different types of work, and had recently taken on 4 different jobs: "Well, I start work at 5 every morning. I usually do my Council work in the morning. I then go and work in the teaching job. Then I'll do some editing work in the evenings, as well as examining work". Whether or not this lifestyle was sustainable was not yet obvious to Valerie. If not, she said she could always go and live in Brazil as a last resort (where she had family connections).

7.2.4. Summary of the empirical regularity

In this section we have seen the different outcomes that lone mothers have when faced with socio-economic adversity. Just under half of the sample have been categorised with outcomes associated with low adaptive capacity; they are vulnerable to adverse socio-economic circumstances. The other half had outcomes associated with higher levels of adaptive capacity; they felt they could cope adequately with exposure to socio-economic adversity (at the time of the interview). The mothers are thus heterogeneous in their ability to build resilience against hard economic times (Box D in Diagram 6.2). The empirical indicators for each category described in this section are summarised in Table 7.1 below⁹.

It is necessary to note that the proportions in each category would likely be very different in the wider population of lone mothers. The sample has a similar proportion of employed versus unemployed lone mothers compared to the general population (just over half). However, in terms of education, around 60% of the sample has a University degree or higher. As we saw in Chapter 5, only 15% of lone mothers in the wider population have a degree or higher (Tinsley 2014). (Indeed, only 25% of the wider general population has a degree or higher.) Those with a higher level of education are likely to have access to a greater diversity of opportunities (financial and in terms of social capital) that might help them cope with economic adversity. Consequently, in the wider population of lone mothers we would expect to find a much greater proportion with vulnerable outcomes.

⁹ The indicators describe commonly found characteristics of the cases within each category at the time of the interview, and are thus analogous to a measure of central tendency (Bailey 1994).

Typological category	Conceptual description (given in Chapter 2)	Adaptive outcomes, empirical indicators from research data
Vulnerable to adverse socio-economic circumstances	Vulnerable systems have little or no ability to self-repair. Consequently, their response to stress will either be to degrade over time or suddenly flip into an undesirable state.	Feels financially insecure and uncertain in the present Cannot afford the same lifestyle they had pre- exposure Find it tough to manage on what they do get Some cannot afford basic necessities (e.g. food) It is a constant struggle to make ends meet Could not cope with any further financial adversity Very aware of all changes to family income Feels pessimistic about the future Sees things getting worse for their family over time Difficult decisions and trade-offs are made Personal sacrifice
Resilient to adverse socio-economic circumstances	Resilient systems have the capacity to buffer or absorb changes in their environment to ensure the persistence of desirable outcomes. Some resilient systems achieve this by tweaking system parameters, explicitly adapting to change. In this research, only the continuity of desirable system states is called resilient.	Feels financially stable in the present Has greater financial certainty than the vulnerable group They may realise some difference to their finances, but able to adapt and still feel relatively secure Some have the ability to stomach future financial loss Perceive themselves to not be struggling as much as other lone mothers If they are receiving benefits, they might not have even noticed if welfare changes had affected them Given the wider economic circumstances, they generally feel positive and happy about their situation Doesn't see things getting worse over the short time
Transformable in the face of adverse socio-economic circumstances	Transformable systems change the way they function and interrelate with their environment to achieve desirable outcomes (when existing arrangements become untenable).	Adaptive outcomes in the present are similar to those in the resilient category. The main difference is that the mothers in this group anticipate some potential adversity in the future Anticipating future scenarios pushes them to create change

Table 7.1: Summary of empirical indicators associated with each category (vulnerable, resilient, transformable)

It is also worth noting that the mothers were categorised based on their circumstances at the time of the interview. For example, a mother has only been classified as 'transformable' if she was at the time of the interview going through the process of constructing a different way of coping with her circumstances to ensure desirable outcomes. It is more than possible that some mothers in the resilient group are likely have the capacity for this type of change. Moreover, it is possible that those in the resilient group felt resilient because of previous transformations they had made to their ways of coping with adversity. However, to pick this up would have required more extensive longitudinal data collection and analysis (although, this issue is touched upon in Chapter 10).

A number of population groups have been found to have outcomes associated with lower adaptive capacity; those with fewer social connections (i.e. those who are presumably more socially isolated), those receiving benefits, those out of work and those with lower educational attainment. The evidence suggests that 'intersectionality' is at play here – each of the factors just highlighted is likely to reinforce and compound the disadvantage associated with the other factors. Thus, it is likely that none can claim exclusive rights on explanation. And, indeed, it should not be surprising that those with greater financial resources, i.e. those in work and those with higher educational attainment, are able to cope better with financial variability and uncertainty. As described in Chapter 5, research has identified that it is those at the lower end of the income scale that are affected the most by the economic crisis in terms of living standards (Cribb et al. 2012).

However, is the fact that the adaptive outcomes seem to be related to working status and education the explanation that we are looking for? The evidence to be presented in the next two chapters shows that it is not. The generative processes that supply adaptive capacity are conceptually distinct from 'human capital' and 'employment status'. Using just these concepts to explain the adaptive outcomes described above would leave us with a thoroughly incomplete explanation, an explanation which would just give rise to additional questions. For instance, these concepts (human capital, employment) say little about the conditions that facilitate the lone mother entering and sustaining work. They also say little about the resources that the lone mothers draw upon when work does not supply an adequate income. We will see in the chapters that follow that personal support networks play a crucial role, alongside employment, in keeping some mothers resilient to wider economic adversity.

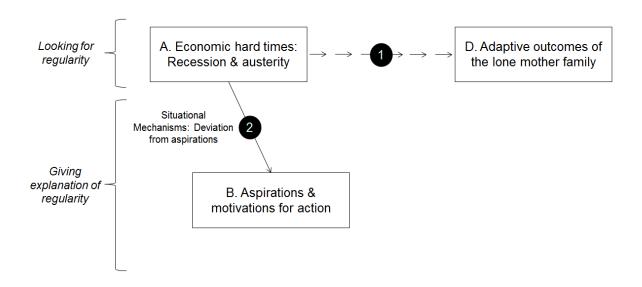
In conclusion, the typology presented above allows us to examine the similarities within each category and the differences between each category. If these similarities and differences are not identified then the causes of a specific condition may go undetected (Bailey 1994). Such typologies, although they provide important evidence in their own right, do not give an explanation of the evidence (Bailey 1994, Perri 6 & Bellamy 2012, Hantradis 2008). Saying, for example, that a particular lone mother is vulnerable to adverse socio-economic circumstances is not an explanation in itself. In fact, it says little about the causes of her vulnerability. Having said this, the typology presented above is a necessary precursor and foundation for explanation. The task now becomes to delineate the processes that link the socio-economic context of the research to the adaptive outcomes just described.

7.3. Exposure to the recession and government austerity

This section examines the impact that exposure to economic adversity had on the (reported) past financial situation, aspirations and goals of the interviewees (addressing Q2). In doing so, we are not aiming to prove that the wider socio-economic changes in question have affected lone parent families. They definitively have, and this point is accepted in the research literature present in Chapter 5. However, the majority of the research described in Chapter 5 was quantitative in nature. So, this section contributes by giving a qualitative understanding of what it is like for some lone mothers, in their own words, to experience and deal with wider socio-economic change. What is of particular interest to the analysis of social networks that follows

in later chapters is the changes in needs and goals that the lone mothers describe. Overall what is described in this section corresponds to what Hedström & Swedberg (1998) call 'situational mechanisms' – the socio-economic context shaping the conditions for individual action and social interaction.

Before continuing, it is necessary to say something about how the previous section (7.2) relates to the analysis that follows. When talking about adaptive outcomes in section 7.2 above we talked of 'the present' (i.e. the time of the interview). We assume that these outcomes are conditioned by processes that have taken place in the past, and it is these processes that we seek to uncover in the analysis that follows. To do so, specific events and processes of relevance (narrated by the interviewees) are demarcated with the help of theory presented in Part 1 of the thesis (theory that links to the arrows of Diagram 6.2).



At the heart of analysis is a comparison of the relevant generative processes (e.g. 'situational mechanisms') between the different categories (vulnerable; resilient; transformable), looking for any differences and similarities at each causal link. The aim, in Schutz's (1972) words, is to construct 'a little, or medium level causal story' that goes beyond the 'thick description' (i.e. narrative) given by the interviewees, a story that potentially has some wider significance and some level of generality within each of the categories. Abbott (2001) suggests a similar strategy, of finding categories in which stories have a similar 'narrative structures'. The evidence presented below suggests that the different categories described in section 7.2 above have similar narrative structures. (Having said this, each case's narrative clearly has its own idiosyncratic structure. But, the general processes within each category are similar at an abstract level.) Given

all of this, the categories described in the previous section play a role in the analysis that follows¹⁰.

7.3.1. The different facets of adverse exposure

The different facets of exposure (Box A on Diagram 6.2.) can be grouped under the following headings: cost of living, labour market change, welfare changes and service cuts. The first two are related to recession; the latter two are related to government austerity.

The increasing cost of living

The particular change mentioned the most by the interviewees (across all groups) was the cost of living increase. There seemed to be a consensus in the sample that the cost of living had increased rapidly over the past few years. The interviewees described that rising food and utility prices had been increasingly squeezing their budgets, many reporting they were now getting much less for their money. As Eve (resilient) described:

Eve: As for the recession, food is soaring at the moment, every time I do my shopping I notice. I'm only feeding me and my son, I used to do £25 a week shop, and it would last, now it is £35 and I don't buy anything different, and I go to ASDA, so I can't get any cheaper than what I am trying. Recession has hit, it has hit massive....

Similarly, Abigail (vulnerable) described the fallout of the inflation and the anxiety it created for her family - "Prices have affected us, mainly utilities, it's been much harder to keep the house warm. Gas has become so expensive, in the winter it has become a massive anxiety for us." Building on this, Jody (vulnerable) described that the rising prices had been putting a strain on families "Something has got to break. It is scary." We saw earlier that Kate (vulnerable) had come to rely on a local food bank (7.2.1). As the quote below demonstrates, this was linked to rising prices.

Interviewer: Are the rising prices we've talked about the main reason you've gone to the food bank?

Kate: Uh, yeah. I was really embarrassed about doing that. I've been more open with some people about it now. I just feel like the lowest of the low. I'm like "that's not me, that's not what I'm like, I'm not that person". But, I am. Part of me wants to get work, get a job, but it just seems like they want you to do it now when there is less and less work out there! And more competition. And it's lower paid work.

Changes in the labour market

Exposure to adversity in the labour market differed for those mothers in work and those out of work. For example, those looking for employment described struggling to find flexible work

¹⁰ To give an analogy, if a social scientist wanted to explain the evolution of different types of welfare-state they would not construct a typology of welfare-states and then agglomerate them back together to ask 'What factors shaped the development of this particular type of welfare-state?'.

suitable for a lone mother. The labour market contraction meant there was a lack of adequate flexible jobs, as noted by Celina (vulnerable):

Celina: I don't have somebody to help me with them [her children]. If I had somebody I might be able to work [...] Two weeks ago I went for an interview. I said let me try this one, maybe they will have flexible shifts for me. I went through the interview. The last minute the lady asked me "So when are you available to work". I told her, maybe night shifts or weekend [when her oldest daughter could help with childcare]. Then she said "Oh, how about the whole week? Day shifts?". I said I don't think I will work because I do not have somebody to look after the children. She said they needed more people to work in the week. "11

On the other hand, those in work described being affected by low pay, increased work load, salary cuts or lack of salary increase. Melanie (resilient), who was working in the public sector, noted that the cuts to public services had rippled through to her everyday job in a number of ways. Working in childcare she had noticed that cuts to social services meant that she was taking on 'work intensive cases' that she probably wouldn't have done before the government austerity:

Melanie: We have to do a whole lot more for less now. We take on more responsibilities. The deputies have to take on a lot more, so they free up themselves a lot by delegating to us. It is like a ripple effect really. Erm, you know, also with social services and that, their threshold has risen, so we get a lot more of their work that actually in the past we wouldn't have taken on. We have to now because they just haven't got the capacity.

A handful of mothers also described terrible job insecurity. Rachel (transformable), for example, described that she had been unfortunate to experience the insecurity of the zero-hour contract (the back story is that she had been working for NHS on a 'verbal contract' since September the previous year):

Rachel: By February, they had put us on the payroll, but still hadn't given us our terms and conditions in writing, which legally they are required to do within two months [of starting the job]. And they suddenly turned around and said "Oh, by the way, you are on a zero-hour's contract". They hadn't said any of that to start with. So the grievance is around breach of verbal contract [...] and having your legal rights stripped away and having the potential uncertainty of that what you have been told you are going to be earning over the next few months not materialising through no fault of your own. So effectively the employer, in that case the NHS trust, shifted all of the risk of the line manager not getting the project started in time, on to us! Which is hideous, appalling. Especially as I am a single parent trying to budget and trying to make progress towards saying one day that I will no longer be dependent on that [maintenance of ex], if things like this happen, oh my god, you know it makes it very difficult!

Rachel also went on to describe how she might have taken her employer to an employment tribunal (for breach of verbal contract) only to find that fees had been introduced by the Coalition government which made it difficult for her to do so.

¹¹ Abigail (vulnerable) also highlighted that caring for a child makes you inflexible and this goes against you in the job market that is already inflexible. "They might be much more available and flexible as they aren't a single parent, and don't have to worry about their kids being ill with half terms to consider and a 6 week summer. It does worry me, it worries me that really 20 years of work and experience and qualifications and has almost been made redundant by me having time out to look after my child. It annoys me that it's the case."

Welfare changes

Changes to welfare had been noticed in day-to-day life mostly by those mothers out of work. The various changes that the interviewees mentioned included: the under-occupancy charge, local council tax benefit changes, the benefit freeze and/or below inflation increases in other benefits. Eve (resilient), for example, described that the low yearly rise in benefits was making it increasingly difficult to get-by, linking the freeze directly to the fact that inflation was outpacing the amount she received from benefits.

Eve: The other thing that has affected me is that Child Benefit is frozen, not going up. At least before [the recession] benefits kept pace with inflation, now they aren't. I will feel a lot of things over the next year or so because inflation is going up, working tax credits have been going up by 1%, that is nothing.

Having said this, Eve was in the group of resilient mothers and was not overly worried about not being able to cope. She knew she could get financial support from her extended family network if she needed it. Lynn on the other hand, a mother in the vulnerable group, was worrying about what the benefit changes would mean to her and her son's life. The benefit changes had in her words "been a constant source of stress". She was being affected by changes to housing benefit and council tax. She described "I have to find between £45 - £50 a month to pay towards council tax. It's the difference to me to feeling paying for Scouts or other lessons without worrying about it. But now I have to start worrying and thinking about where I am going to pay for it all. I am as frugal as I can be, it does feel that my money is being clawed at." We will see how Lynn dealt with this stressful exposure in the sections and chapters that follow.

Service and organisational funding cuts

Support services that had been helping some of the mothers cope had also been cut back. Rosy (transformable) who was working on the front line of council services described the effects that the cuts would likely have:

Rosy: The cuts in services will be really massive, as things get harder for the individual and family, it'll be families that are affected and there won't be anywhere to go. Things like mental health, debt advice, child care — I think that is getting worse to find and getting more expensive. I just see that the external support won't be there and everything is going online, and the face-to-face is going, it's all disappearing.

A number of mothers worried that service cuts would mean that there would be less opportunities in the future to meet people and make new friends. Louise (transformable) commented "Services like this [specific support organisation] should be maintained as they really help you make friends and gain skills – the government should recognise the importance of it and keep funding it." This point, about making friends through local services and organisations, will be given more prescience in the following chapters when we examine how the interviewees' personal networks had formed over time.

In terms of how the facets of exposure described above link to the outcomes described in section 7.2, they are clearly important in the causal chain, but they are not the whole story. A mother might, for example, have been exposed to some of these adversities in the past (at say T–1) but had the ability to modulate or offset her exposure (at T=0). That is to say, a given lone mother might be affected by all of the changes described above at previous points in time. Yet,

she might not be financially insecure in the present period. So, although these facets of exposure describe the macro conditions putting pressure on the financial situation of the lone mother families (Box A, Diagram 6.2), they are not describing financial outcomes in the present.

For instance, as we saw in section 7.2 it just so happens that at the time of the interview the resilient group of mothers tended to be in work. Most of the mothers in this group had entered work during the previous 5 years. One reason these mothers were resilient at time of the interview was that they had displayed the capacity to modulate their exposure to labour market adversity (and thus their reliance on welfare as a source of income). As we will come to see in the chapters that follow, this modulation of exposure through time was facilitated in nearly all cases by social support networks¹². On the other hand, it seemed that at the time of the interviews the vulnerable group of mothers lacked the capacity to change or alter their exposure to adversity.

To advance our analysis of adaptive capacity, we need to examine how exposure to economic adversity is a triggering stimulus that changes the lone mother's motivations for action (as per Arrow 2 on Diagram 6.2).

7.3.2. The impact that exposure has on motivations for action

This subsection examines how exposure to adversity affects the lone mother's motivations for action and interaction. The premise of the section is that no social action can take place without sufficient motive (Chapter 4). Actions are preceded by goals and motives that condition them (Box B in Diagram 6.2). The motive for creating change, that is demonstrated in this section, is that people aspire to maintain a desirable lifestyle (a lifestyle that they might have experienced prior to the socio-economic crisis) or that they simply want 'to keep the show on the road' as best they can without transitioning into food or fuel poverty. The importance of maintaining aspirations for wellbeing has also been documented by other researchers looking at the effects of the recession (Clark & Heath 2014 ch.4, Atkinson et al. 2012 ch.2). However, as we saw above, some of the valued resources necessary to enable a desired lifestyle are likely to be altered by exposure to wider economic adversity.

The ways in which any deviation (actual or potential) from lifestyle aspirations was realised by the lone mothers was different between the categories. As hinted at earlier, there is a distinction to be made between those lone mothers who react to things in the present and those who react

¹² On top of social networks, it is also worth describing that exposure to the wider socio-economic factors through time seems to be socially differentiated in other ways. Adverse exposure through time seems to hit harder the lower occupational classes, those with lower educational status, the lower paid, and those on benefits. Not everyone, for example, is subject to the same exposure to a tough labour market. Those who cannot afford childcare and do not have adequate informal support are more exposed to labour market adversity as they can only consider looking for and accepting flexible jobs (their choices are narrowed). On the other hand, those who have formal and informal childcare can generally find their way into employment, even if it is inflexible work. (In contrast, their exposure in the present is related to not getting a pay-rise.) Those out of work were also affected the most by welfare changes, as they relied on benefits for a greater proportion of their income. Moreover, whilst all of the mothers are subject to inflation, it is those whose income is the lowest that feel it the most (as the areas with the highest levels of inflation, such as food and household utilities, take up a greater proportion of their income – as described in Chapter 5). Finally, those lone mothers who struggle the most tend to seek out support services from either the government or the local community. So, when these services are cut, it is the most vulnerable groups that feel it the most.

to an anticipated future (to use Simon's [1996] terminology, those who use 'feedback' versus 'feedforward' respectively). The vulnerable group is characterised by the former position. The transformable group on the other hand by the later position. The resilient group is somewhere in the middle, but closer to reacting in the present. This is a rough divide and each mother will mix these strategies to some extent according to the information they have access to and their abilities.

What might be called a 'warning signal' can help us explain this in a bit more depth. By warning signal we mean the specific conditions that trigger new motivations for action. Lynn, from the vulnerable group of mothers, gives an example of reacting in the present, linking this to her specific warning signal:

Lynn: I adapt to things as they happen really. But always keeping a bit of a float in the bank. I've never run things right down. I've always kept something there. The point at which I panic is if I am eating into my £,1000 float, which does not often happen. I keep that buffer there.

Now, hypothetically speaking, let us say that for a lone mother such as Lynn, x is the amount of resources that are needed (£1000 in Lynn's case), below which it becomes increasingly difficult to 'keep the show on the road'. That is to say, x resources are needed to ensure some level of continuity with lifestyle aspirations, to avoid transitioning into food or fuel poverty for instance. This means that any variation that pushes the lone mother's resources below x will need correcting. So, any departure from the amount of resources needed to sustain a given family's desired lifestyle will trigger cognitive dissonance and change the lone mother's goals and actions. This might be called 'aspirational dissonance'.

Lynn was at the higher end of the vulnerable group and had quite a specific quantifiable warning signal for 'panic', i.e. eating into her financial buffer. (As we will see, Lynn had been forced to take corrective actions to ensure that she kept above her £1000 float, 'to keep that buffer there' in her words.) Other women in the vulnerable group did not describe having a financial float like Lynn. These women's warning signals might be more general, based on subjective feeling. For example, not being able to buy as much food, gas or electricity with their income. As Kate described "It's just surviving on a day to day basis at the moment [...] Have I even got any gas and electric?"

Both examples given so far in this section (Lynn and Kate) have been from the vulnerable group, and both highlighted that they focused on the present (Lynn: "I adapt to things as they happen", Kate: "It's just surviving on a day to day basis"). One potential reason for this focus on the present is that it is hard to look ahead to the future when struggling with problems in the present. Claire, also from the vulnerable group, made this quite clear:

Claire: I can't even look that far ahead! I'm still trying to get my head screwed on. I'm living quite in the moment with things. Right now this, then the next hit. If you open up too far, you are on a slippery ground, it will just add more stress.

In contrast to those in the vulnerable group, those with resilient and transformable outcomes tended to adapt in the present to possible events in the future. Foresight and anticipation was important for these mothers. Rachel (transformable), for example, imagines what it would mean if she no longer had the maintenance payment from her husband: "as long as my ex doesn't suddenly die, then I'll be very insecure financially [...] That's why I need to be financially

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independent. I don't have the fall back". Rachel told the researcher that this is a future in which she imagines being financially insecure, perhaps reliant on a number of different benefits, in which she imagines being depressed and unable to give her children as much love and care as they need. This imagined future is motive enough for her to aim at becoming financially independent. As we will explore in more depth throughout the next two chapters, Rachel uses her resources (her human, financial and social capital) in the present to make sure financial independence in the future is a feasible outcome.

Across all groups once a given warning signal had been realised (i.e. Lynn dipping below £1000, or Rachel imagining what it might be like to lose her maintenance), various emotions such as stress and panic were described by the mothers. As philosophers and sociologists have argued, these emotions act as a cue that a given individual must take corrective action¹³ (see Nussbaum 2009, Elster 2009). It is worth noting, however, that the level of emotional intensity present in the different groups was quite different. This can be attributed to the fact that if aspirations are dashed in the vulnerable group it would likely mean not being able to afford the basic necessities of family life (i.e. they might not be able to afford to pay for gas or electricity that month). On the other hand, if aspirations are dashed in the resilient group it might mean not being able to save money every month.

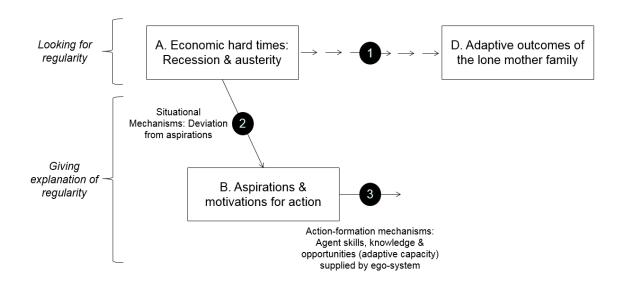
So, the same extent of exposure has quite different motivational effects across the groups. A little earlier we saw a quote from Eve (resilient) in which she described being affected by rising cost of living. Straight after this quote she noted "But, because I survive I don't feel it the same that others do." Similarly, asked if she talked to other people about increasing prices, Gemma noted: "Not really, because it isn't a problem". On the other hand, for mothers in the vulnerable group the increased cost of living was much more problematic. Kate for example had been pushed to use her local food bank. Indeed, we saw earlier (7.2) that most of the mothers in the vulnerable group wanted to get back into work to offset their tough financial situation. On the other hand, we saw that lone mothers in the resilient group had more diverse goals because they were not struggling in the present. For, example, Kirsty described "Err, I don't have any personal goals. No, I'm personally happy."

Overall, for the interviewees it is their representation of their family's financial situation which gives them cause to change their goals and take corrective actions to offset any potential negative effects. In the cases in which some warning signal had been fired (and, a 'warning signal' had not gone off in all of the cases, especially those mothers with a large financial buffer), the automatic ways of acting, the habitual ways in which the lone mother relates to her finances, her family and her networks, may no longer be adequate. So, it is this representation, working alongside the desire to meet lifestyle aspirations (or, just trying to 'keep show on the road'), that acts as motive for action. For these women, new habits, new few forms of action and social action are required. As noted in Chapter 4, if individuals were slaves to habitual ways of thinking and acting they would not have the flexibility to adapt to exigencies of a changing environment. In new situations, deliberation and creativity is required.

¹³ The oft given example in psychology is the "fight, flight or freeze" response to anxiety.

7.4. Action formation and adaptive capacity

Thus far this chapter has linked the agent to their wider social environment through describing situational mechanisms. We have described how exposure affects the motivations of the lone mother by reducing the resources that she has available to meet her desired lifestyle aspirations. However, as argued in Chapter 4 & 6, an adequate explanation requires not only that we link the agent to their environment and wider circumstances, but that we also attempt to understand how the particular knowledge, information and skills the agent has access to affects the corrective actions that they take in response to their environment or adversity (Simon 1992, Hedström 2005). So, in this section we describe how a number of personal factors, i.e. knowledge, skills, and resources, might shape actions aimed at meeting desired outcomes. Broadly speaking this corresponds to what Hedström & Swedberg (1998) call 'action formation mechanisms'. The other type of action formation mechanism that we have discussed, i.e. opportunities supplied by social networks, is examined in the chapters that follow.



7.4.1. How knowledge, skills and economic resources shape the adaptive responses that are taken to adversity

We have seen that if aspirational dissonance is present, then motivation for taking corrective action arises. The evidence suggests, however, that the process of representation (described in the previous section) and the subsequent actions that are taken is linked to the knowledge, mental models and skills that the interviewees have access to.

It seemed, for example, that the vulnerable group relied more heavily (versus those with resilient outcomes) on their social connections for decision-making (even though, as seen in section 7.2, they had less social connections overall). Their connections might, for instance, supply them with vital information that is needed for making appropriate decisions. Kate (vulnerable) described how not having access to appropriate information was a major problem for her and obstructed her adapting to new circumstances. For this reason, she had been participating in

various research projects (including this one) in the hope of gaining information to help her prepare for change.

Kate: One of the reasons I got involved with the research project is I'd like to know as much as I can in advance. I'm slow. I'd like to be prepared, you know. I'm quite slow at adjusting to things. I have a history of depression and anxiety. I put a lot of work into becoming better.

Similarly, Julie (vulnerable) had been finding it difficult to make adequate decisions about her finances and her future. She had little understanding of the ongoing welfare changes and how they might affect her. The reason for this was that she lacked appropriate information. She brought to the interview a range of official documents and letters, worried about what they might mean, and wanted the interviewer to help her understand what was going to happen. The researcher's estimation was that the information included in these documents and letters was confusing at best, gave her irrelevant information and did not make explicit what she should expect in terms of her future finances.

This type of problem was most evident for those mothers with a higher level of reliance on welfare for their income. Part of the reason for this was the perceived complexity of the welfare system and the fact that a lack of adequate information on what to expect had been given to those affected by policy changes. As Jody (vulnerable) noted:

Jody: It does feel like a real minefield thinking about going back into work... Should I claim this, should I claim that. No one seems to know the answers... I can understand why people stay on benefits. It is just so complicated, they have made it a nightmare.

Daniella (resilient) similarly noted that "The system is such a headache, I can't tell if I'll be better off or not, it seems like a guarded secret which they won't tell you, so making a decision with my finances is impossible." However, those with resilient outcomes (such as Daniella) seemed able to reason more independently about their financial situation because they did not rely as much on an income source as complex as government welfare.

Other types of information, knowledge and skills also shaped the actions taken in response to actual or perceived adversity. As we have seen, Rita (transformable) imagined a future in which she might lose her job because of funding cuts. She had access to information that suggested funding cuts meant her job was potentially on the line. The strategy and actions she took in response involved, in her words, 'putting energy into my connections'. This strategy, she explained, was partly informed by reading a popular sociology book which had brought her awareness to the benefits of cooperation:

Rita: This thing that I keep coming back to, that ability to construct networks and nurture networks that support other people and that ultimately these things come back to support you. [...] There is a book I am reading at the moment, it's really relevant, it's about sociality and connectedness. Richard Sennett. Together $\lceil \ldots \rceil$ It has become central to the way that I think about the world.

As we will see later, Rita's knowledge of the advantages associated with cooperation and social networks shaped the actions she took in the present in response to her foresight about the potential loss of her job. Debbie (transformable) also highlighted the important role of gathering the appropriate information: "what's helped me so much [in coping with adversity] is my

nerdiness for research, so researching everything, what can I get out of this, what can I get out of that. It does take research, and a lot of letter writing!"¹⁴

Other lone mothers in the sample had certain capabilities and skills that enabled them to generate resources and create social connections when needed. For instance, Louise (transformable) had artistic skills that meant she was able to create economic opportunities from her social contacts. Her skills shaped the corrective actions she took through enabling her to transform the relationships she had made with other mums at the school gate into economically productive relationships. She made cakes, cards, and pictures, selling them to other mothers at her local school (for children's birthday parties perhaps). She even did some modelling work from time to time. If all else failed though, she could rely on her Dad to bail her out.

Other lone mothers, mostly in the resilient group, used their current economic resources creatively to generate opportunities. For example, a number of mothers described that they rented out their spare rooms to students to offset any loss of income (a practice also documented by Atkinson 2012). Melanie (resilient) described how she felt she could no longer continue asking her mother for financial help with every little thing that came along. So, she combined her mother's financial help with renting out her spare bedroom to a student:

Melanie: My mum helps with major things, but I don't feel I can turn to her for little things. I wouldn't have taken students in before, but now I have had to. I have enough to pay the mortgage, the bills, to provide the things my daughter needs, but if we want anything extra... I was thinking of getting an evening or weekend job. But rather than do that I thought I'd get students in.

For Debbie (transformable) it was renting out her room that enabled her to finance her Master's degree¹⁵ (which as we saw earlier she had been motivated to do to enhance her career prospects as she hadn't had a pay rise since starting work). This course of action was only possible for those women who owned their own house and had enough space to allow for it. Interestingly, Laura described that her network had highlighted this as a potential course of action and had persuaded her to give it a go (her reason for renting out a room was that she had found herself in the undesirable situation of "relying on a credit card to pay for food and bills"). Clearly, having access to material and economic capital creates opportunities for corrective action in these cases.

In what has been described above we have seen how characteristics of the lone mother, her access to information, her knowledge, skills and even her financial capital (e.g. having a house with a spare bedroom) might impact on the corrective actions she takes in response to economic adversity and aspirational dissonance.

7.4.2. Personality and adaptive response

The evidence also suggested that personality (meant in the colloquial sense) was an important factor in the adaptive responses taken, especially related to whether or not a mother mobilised social support in response to adversity. The importance of personality was also described by

¹⁴ Claire noted something similar "I'm a bit of a self-helper. It is finding the time to get somewhere and talk to people about it. I sit and home and do it on the internet. I try to find information out there that will help. Netmums for example."

¹⁵ As Debbie described: "To be able to afford all of that, including the fees of course, I have to rent out a room in my house"

early pioneers of the social network perspective. Personality, argued Bott (1957, p.97), is an important factor affecting choices related to social networks.

As seen above, Rita's strategy for insuring against future adversity was to 'put energy' into her connections (informed by her knowledge of the potential benefits of cooperation). Nevertheless, this seemed possible for her because of her outgoing personality. Rita was aware of this:

Rita: You don't know where these tendrils will extend to. But if you believe it is there, and by the force of your interest, your passions and your skills, that things will come travelling back down those tendrils. I think it does work like that! Your personality, who you are, is your biggest asset. Grow it, develop it, allow it to be. I can see all my bonkerness, my slight nerdiness, is what has made all of this [her network building] happen.

However, it is particularly illustrative to examine those cases in which the lone mother's personality seemed to inhibit her seeking social support as an adaptive response. The most explicit examples of this came from Claire and Elizabeth, both in the vulnerable group. Both talked about the perceived importance of self-sufficiency and their distaste of asking for help. For these reasons they struggled to ask for support, even though both admitted they desperately needed help. They felt ashamed admitting to other people that they might need help. They used their network for only the most basic of emotional support. (In Elizabeth's case, she didn't even talk to anyone about her problems, saying that simply hearing the voice of her friends and family on the telephone helped her to maintain sanity.) Claire was at the time of the interview struggling with the stress of being a lone parent, of managing her finances, crying at one point during the interview she described:

Claire: It is important to create relationships that allow people to support you in, that is the main thing [in terms of dealing with change]. [However] I've chosen not to let and allow people to support me, because 'I'm so capable, I can do it" ... It is not pride or anything, it is how I have grown up [...] But if I'm not well and I can't do it then there is the breakdown for me. It has taught me that you can actually count on people and it doesn't have to get that extreme. How sick do you want to be before saying "Help?!"

Claire highlighted that her inhibition was essentially a problem of socialisation, 'of how I have grown up'. In Claire's case, however, she eventually felt so sick and stressed that she was forced to ask for help.

7.4.3. Financial trade-offs and personal habit change

Most of the mothers described how they had made some sort of personal changes and tradeoffs. For those in the vulnerable category, unable to get into work¹⁶, it seemed to the researcher that the personal changes they made would ultimately compromise the wellbeing of themselves

¹⁶ Nearly all of the women in the vulnerable group wanted to get into work (as already mentioned 10 out of 13 had the primary goal of getting into employment). However, this seemed an impossible task to many in the vulnerable group. Labour market conditions made it nearly impossible. When asked what type of work she would look into, Emma answered "Any job! Any job! Because I'm really struggling with money. It is really really tough at the moment." However, without adequate childcare support, many in the vulnerable group could not consider taking on "any job", taking on inflexible work that might have been on offer.

and their families. Those with higher adaptive capacities were able to make other wider changes (e.g. getting into work with the help of their support network) which meant for them that the degree of personal change required wasn't quite as damaging to their and their family's wellbeing¹⁷. These mothers might make cut backs, but in areas that do not directly influence the current wellbeing of the family. Jo (resilient), for example, talked about cutting back on the amount of money she put into savings. However, for those unable to make such changes, "stretching money", as one mother described it, was the only option available for creating change to offset their adverse exposure.

The changes made by the vulnerable group might involve cutting back on food, utilities, transport or their children's activities. For example, Abigail, Celina, Jody and Kate all explained about the trade-offs they make such as cutting back on the food they eat themselves to ensure their children were properly fed (a response to the recent adversity also documented by Clark & Heath [2014] and Atkinson [2012]). Abigail described the situation as follows:

Abigail: It's not easy, but you do adapt to it. There have been times when us, the single parents, would have said that we have gone without proper food to make sure that the kids have eaten.

Some of the women also described their struggle with utility bills. As Abigail also described "I joke about how we visit people because they have central heating, so we can turn the gas off. Gas and electric, mainly the gas has been a major struggle this year. I know all of the girls talk about this constant struggle, not putting the heating on during the day if the kids are at school and putting on layers". Because of rising food prices, Abigail, Kate and Louise were also inventive with their shopping. They noticed that every Tuesday their local supermarket had buy 2 get 1 free deals on, so they grouped together and saved money on their shopping by taking advantage of the deal (a practice also documented by Clark & Heath 2014, p.45)¹⁸.

7.5. Conclusions

This chapter started by examining how lone mothers vary in their capacity to cope with and adapt to socio-economic adversity (establishing the *explanandum* of the research). Moving on from this, the chapter started the process of explanation by examining how exposure to wider socio-economic adversity had affected the lone mothers' motivations for action. We saw that the vulnerable group tended to set their goals in relation to current realities, whereas the transformable group set their goals in relation to anticipated future adversity. This was because those in the vulnerable group tended to be drawn into the present by problems such as not being able to afford enough food, gas or electricity. Mothers without these problems had a greater ability to plan for the future. Finally, we examined how characteristics of the lone mother shape the actions she had taken in response to economic adversity. We have also highlighted how the different groups differ at each of these stages.

Overall the argument of the chapter has been that the wider socio-economic changes in question change the amount of resources (e.g. financial resources) available to lone mothers, which

¹⁷ These mothers might also make cut backs, but in areas that do not directly influence the current wellbeing of the family. For example, Jo talked about cutting back on the amount of money she put into savings for her son's future.

¹⁸ As Abigail described: "Have you heard about Tesco Tuesday? Every 6 weeks they do a buy one get 2 free. [We] will go together and buy those items, for like washing powder etc. It makes a massive difference to us."

changes their needs and motivations for action and interaction. We argue that what matters for change in social networks is not so much specific policies or economic effects, but rather how these, having transformed the resources available to the lone mother, affect their needs and goals. However, we have yet to fully explore how access to social resources (through support networks) shape any corrective actions that are taken by the lone mothers in response to wider economic adversity. Exploring this is central to the next two chapters.

Chapter 8: Lone mothers and their social support networks

8.1. Introduction

So far we have seen how lone mothers vary in their capacity to cope with economic adversity. We have also examined how exposure to the recession and austerity affects the motivations of the lone mother. However, the actual capacity to adapt to wider socio-economic change, it was argued in Part 1 of the thesis, is likely to be a regularity of social origin. The theoretical argument is that social networks supply opportunities for action (Arrow 3 in Diagram 6.2) that, through the activation of these opportunities, might help the lone mother buffer herself against adversity and correct 'aspirational dissonance' (Box D & Arrow 4). We have yet to empirically examine this part of the argument, yet to look at the role that social support networks play for lone mothers in adverse socio-economic circumstances (Q4). This chapter and the next are dedicated to this central aspect of the research.

This chapter starts the process of addressing Q4 by examining the personal support networks of lone mothers. Ideas from two complementary fields of research assist with the task: firstly, ideas related to alters, relationships and the structure of personal social networks ('egonetworks') and secondly ideas related to the consequences of these networks in terms of social support outcomes (literatures presented in Chapter 3). In section 8.2 we start by examining the characteristics of the alters in the personal networks, we then look at the characteristics of the relationships and finally the structure of the ego-networks. Differences between lone mothers with different adaptive outcomes are investigated throughout. Looking at the interviewees' personal networks in this manner tells us something about the opportunities and constraints faced by the lone mothers and helps shed some light on why some lone mothers have more capacity to cope with economic adversity than others. Indeed, as we will see, the different groups (e.g. vulnerable versus resilient) have access to quite different personal networks and social resources.

Section 8.3 then examines the formation of the interviewees' personal networks. The evidence shows that the personal networks, between groups, are formed in quite different social settings. These differences in network formation can go some way in explaining the different types of social resources available to the vulnerable and resilient groups. Section 8.4 onwards then examines the activation of social support. Chapters 3 and 6 described a handful of different types of support that we argued would plausibly be useful in adverse circumstances. The activation of such social support, we have argued, is likely to vary because of the wider socioeconomic context¹ and is a factor which also causes the outcomes of interest – vulnerability, resilience, transformability – to vary². For this reason, it is of particular interest to understand what factors are associated with receiving support from particular relationships. The section

¹ Because, as we have seen, economic adversity causes aspirational dissonance which in turn creates motives for action and social action.

² That is to say, we have argued that social support is an intermediate variable, a linkage in the causal path between the macro conditions and the outcomes for the lone mother families.

develops a number of regression models that enable us to examine how certain characteristics of the alters, of the relationships, as well as characteristics of the ego (i.e. the interviewees) affect the activation of different types of social support.

However, whilst this chapter offers a description of the personal networks that the lone mothers have, and the potential link between these structures and the adaptive outcomes, it does not yet fully describe the role played by social networks in challenging socio-economic times. Rather, this chapter offers a description of the potential link between different types of social network and the adaptive outcomes. It does this through highlighting the differences between the social support networks of those with vulnerable and those with resilient outcomes. (So, this chapter essentially correlates adaptive outcomes with certain social network factors.) Consequently, the next chapter seeks to link the evidence presented in this chapter with a qualitative understanding of the role that social networks play in adverse socio-economic circumstances.

It is necessary to note that the resilient and transformable groups have been combined for the analysis in this chapter (terming the combination 'resilient outcomes'). One of the main reasons for doing so is the small size of the transformable group. However, as we saw in the previous chapter, the two groups share many similarities. We argued that the transformable group was a subset of the resilient group. To start with, they share similarities in terms of the characteristics of the individuals within the groups (i.e. both groups tend to be in employment and highly educated). More importantly, however, both groups have resilient outcomes in 'the present'. What differed, it will be remembered, is that the transformable group saw potential adversity in the future and had set about changing their ways of doing things to ensure desirable outcomes in the future. It was argued that the mothers in the resilient group likely had the capacity to create this type of change, and that some had done so in the past. Therefore, it is argued that the combination of both groups is theoretically justified in principal.

The ego-network analysis was conducted in SPSS (Müller, Wellman & Marin 1999) and E-Net (Halgin & Borgatti 2012). The regression analysis was conducted in MLwiN (Rasbash et al. 2009) and SPSS (Field 2009). These analyses have also been interpreted in the light of the qualitative data (as suggested by Hollstein 2011 and Fuhse & Mützel 2011).

8.2. The social networks of lone mothers

This section describes the social networks that lone mothers have and examines differences between the vulnerable and resilient groups. Mirroring Chapter 3, the section first examines the characteristics of the alters, followed by the characteristics of the relationships, and, finally the structural characteristics of the ego-networks. The analytical steps were as follows: summary statistics for each of the 30 ego-networks were generated (e.g. 'netwise summaries of tiewise information', Müller, Wellman & Marin 1999), then information about the adaptive outcomes of the focal individuals was used to study subsamples of networks (e.g. Wellman 1992)³.

³ It is worth reiterating that the use of descriptive statistics in the following sections is non-inferential (and for this reason statistical significance testing is not presented). Although we are not generalising the differences we find to the wider population of lone mothers, we do claim that what is presented offers what might be termed 'hypothetical generalisations' about the differences between the vulnerable and resilient groups in the wider population (we are mindful, of course, that these are claims which would require further empirical examination).

8.2.1. The alters in the lone mothers' personal networks

In Chapter 3 we saw how social capital is, in part, a function of the characteristics of the individuals involved in a given social network (Wellman & Frank 2001, Lin 2001). For example, an individual who is connected to someone who occupies a position of wealth is more likely to have access to valued resources ('it's not what you know, it's who you know'). Or, someone with a greater proportion of females in their network is more likely to have access to greater levels of certain types of support, such as emotional support. With these points in mind, this section examines the characteristics of the alters in the personal networks.

In terms of gender, the data shows that there are high levels of gender homophily in the egonetworks (see Table 8.1): 70% of all dyads mentioned by the interviewees are to other females. Looking specifically at the proportion of males in the ego-networks, by adaptive outcomes, those with resilient outcomes had more males in their networks (and, proportionately 31% versus 22%). Krackhardt & Stern's (1988) E-I homophily statistic also confirms high levels of homophily. A statistic of -1 represents complete homophily on an attribute (such as gender), whereas +1 represents complete heterophily on that attribute⁴. For gender, the statistic is -.55 for those with vulnerable outcomes and -.43 for those with resilient outcomes. Box 8.1 below examines some reasons given by the interviewees for preferentially interacting with other women.

The high level of gender homophily in the personal networks might have consequences for the types of support and social capital that the lone mothers have access to. They are, for instance, likely to have good access to emotional support and support in emergency situations, which is predominantly supplied by females (Wellman & Frank 2001, Plickert et al. 2007), but perhaps less access to job related advice and financial support which are predominantly supplied by men (Wellman & Wortley 1990, O'Conner 2013).

	Total dyads			Respondent Adaptive Outcomes			
				Vulnerable (N=13)		Resilient (N=17)	
	Count	Total %	Valid %	Mean #	0/0	Mean #	0/0
Female	261	67%	70%	6.2	78%	10.6	69%
Male	112	29%	30%	2.2	22%	4.9	31%
Missing	14	4%					
Total	387	100%	100%	-	-	-	-

Table 8.1: Mean number and percentage of males and females in the networks, by adaptive outcome of respondent (right of table)

⁴ The statistic is calculated at the level of the ego-network and then averaged over the two groups. It is calculated as follows: (E - I) / (E + I), where E denotes alters from different groups and I alters from the same group.

Box 8.1: Reasons for gender homophily

The qualitative evidence suggests that there are a number of reasons for gender homophily. Some interviewees described that they found it difficult to make friends with men because, as a single woman, men might perceive them as showing interest in them as a partner. This was especially difficult if potential male friends had a wife or partner. As Sarah noted of a friendship that broke down, "I had this male friend, a guy I used to chat to at school, and our children are in the same class, and so we spoke quite a lot. But his wife became jealous. So I'm trying to, you know, not get into that sort of situation anymore."

One other reason for gender homophily was that the interviewees showed a strong desire to interact with other mothers, especially other lone mothers. Again, Sarah described "These [friends] are single mums. So I think there is a good understanding between us [...] you've got to be in the situation to understand it [...] you feel more comfortable asking [for support from] people who are in a similar situation".

Finally, the evidence corroborates the hypothesis that social foci are a cause of homophily (Kossinets & Watts 2009). The interviewees described that the social foci associated with children (such as schools, playgroups etc.) are more likely to have a higher proportion of mothers versus fathers (as also suggested by Small 2009, Cochran et al. 1993).

In Chapter 3 we saw that other forms of capital, e.g. linked with occupational class, are likely to be fungible with social capital (Bourdieu 1986, Lin 2001). Lin's (2001) theory would lead us to suggest that those lone mothers with a greater proportion of service class workers (versus labour class workers) in their network have access to a greater range of valued resources⁵. Moreover, if the activation of these resources helps constitute adaptive capacity, as we have been arguing, then we would expect those mothers with resilient outcomes to have more service class workers in their networks.

As hypothesised, the data shows that there is a stark difference in the class composition of the personal networks between the groups (see Table 8.2). Compared to those with vulnerable outcomes, those with resilient outcomes mention a much greater proportion of service class workers in their networks (52% versus 16%). One reason for this seems to be that the mothers

⁵ A brief guide to how the occupational-class of alters was classified. It was not possible to ask in detail about the occupational-class of alters for two reasons. Firstly, it would be been demanding of time in the interview. Secondly, the knowledge that the interviewees had about their alters occupations was likely to be limited (see also next footnote on the same problem). As such, the researcher just asked a simple questions on the occupational type of the alter, and then inferred occupational-class from this information. Alters were categorised as per the simple twoclass scheme described in Chapter 6 based on whether their occupation was deemed to be 'higher managerial, administrative and professional occupations' (labelled 'Service') or 'intermediate occupations' and 'routine and manual occupations' (labelled 'Labour') (see section 6.5). All similar occupational-types across alters were classified consistently. For example, routine childcare, sales and retail occupations have been classified as 'labour' and occupations such as doctor, lawyer and academic roles as 'service' across interviews. Clearly, this has approach has limitations and is perhaps not as rigorous as questioning in more depth about occupational class (as per the ONS [2010] NS-SEC scheme guidelines). However, for the purpose of this analysis we argue this categorisation does give some indication of the classed resources available to the interviewees.

with resilient outcomes generally had higher educational attainment and hence were more likely to be in service class work themselves and have service class colleagues. However, Krackhardt & Stern's (1988) statistic shows that homophily for occupational class is not as strong as it is for gender. Those with vulnerable outcomes have an E-I statistic of .39 and those with resilient outcomes .02. The vulnerable outcome group have more heterophilious networks because most of the lone mothers in this category are unemployed but the majority of their contacts (on average nearly 60%) are in some form of employment. The resilient group have equal amounts of contacts in the same occupational class and contacts not in the same class (e.g. labour class or otherwise unemployed or retired) (but, 77% of their contacts are in employment). Box 8.2 investigates further if there is a preference to interact with other people in the same class.

	Total dyads			Respondent Adaptive Outcomes				
				Vulnerable (N=13)		Resilient (N=17)		
	Count	Total %	Valid %	Mean #	%	Mean #	0/0	
Labour	65	17%	24%	2.3	43%	2.1	15%	
Service	120	31%	45%	1.2	16%	6.2	52%	
Unemployed	43	11%	16%	1.5	29%	1.4	11%	
Student	9	2%	3%	0.1	2%	0.5	6%	
Retired	32	8%	12%	1.1	11%	1.1	11%	
Missing ⁶	118	30%						
Total	387	100%	100%	_	-	-	-	

Table 8.2: Mean number and percentage of (inferred) occupational class of alters, by adaptive outcome of respondent (right of table)

⁶ There is a relatively large amount of missing data for this question for two reasons. Firstly, mothers were not able to answer the question for all of their contacts (especially for ties in the outer circles). For example, they might not talk to other mothers at their child's school about work. Secondly, unfortunately the question had to be skipped for a small amount of alters if the interviewee had a large personal network (to make sure that interview length was not too long, if for example the mother needed to get back to work after talking to the researcher during her lunch break).

Box 8.2: Is there a preference to interact within the same occupational class?

Although the data presented above suggests that homophily is not as prevalent for class as it is for gender, the qualitative data does suggest that the interviewees prefer to associate with individuals in the same profession or class. This was made most explicit by those mothers in a higher occupational class. For example, as Gemma described:

Gemma: They [her friends] are all working, all mothers, all earning, all a very similar age to me, maybe a couple of years older, but very similar. I think we get on because, cliché, they are very middle class, very nice, very educated! Sorry, very patronising or whatever, but it is true, we are a similar social grouping, similar backgrounds.

Moreover, friends might also converge on the same occupation through time. Sarah, for example, explained that one of her good friends persuaded her to work in the same profession as she did. Sarah then suggested that another one of her friends joined the same profession so they could job share (she said: "Rachel was the first person doing translation, she got me to do some translations for her. Then Sophie got me to work for her but I couldn't work full-time so I asked Kara to do the rest"). The evidence thus suggests that homophily is both chicken and egg, i.e. people choose to befriend similar people, but also that people become more similar through interacting with one another, lending qualitative support to the work of Kossinets & Watts (2009).

Given the literature described in Chapter 3, which demonstrates that alters with a higher occupational class are likely to give access to more valuable resources such as economic resources and job related information (e.g. Lin 1999), it is fair to say that lone mothers with resilient outcomes seem to have more of such resources (opportunities) available in their networks. What this actually means in terms of the quality of the support received, and the potential impact on adaptive outcomes, will be explored in the next chapter.

8.2.2. The relationships in the lone mothers' personal networks

This section examines characteristics of the relationships (the 'dyads'). Generally speaking, characteristics of the dyad are not directly reducible to the individuals involved. They are rather a property of the connection between the two individuals. This section starts by examining the strength of ties, which as we saw in Chapter 3 is likely to be a good indicator of support available. The section then looks at role-relationships; different role-relationships are likely to give access to different types of support. Finally, the section looks at the geographical dispersion of the ties. Clearly, if a personal network is geographically dispersed then practical support (such as childcare) might be an issue.

Chapter 6 described how the interviewees were asked to place their contacts in concentric circles, depending on the perceived interpersonal closeness of their relationships. The first concentric circle represents the closest contacts, and the outer circles represents decreasing levels of closeness, but still people considered important enough to be in the respondent's

personal network⁷. At noted by McCarty et al. (2007) "The resulting map gives the researcher some sense of the size of the network and the distribution of their network based on closeness." Given this, it also gives some indication of the quality and type of support likely to be available.

The data shows that there is a stark difference between the two groups in terms of the closeness of their networks. Both groups have a similar number of the closest type of interpersonal relationship (albeit, those with vulnerable outcomes have a greater proportion of the closest ties because their networks are smaller in size). These close ties are likely be especially helpful in terms of support, particularly emotional support. However, those with resilient outcomes mention many more of the weakest ties (the third concentric circle; people that are distant but still important in some respect to the lone mothers). That is to say, the resilient group have a greater diversity of different degrees of closeness in their personal network. From this, we might hypothesise that those with resilient outcomes are more likely to have access to what Granovetter (1973) has called 'weak ties'. Though this categorisation is not directly equivalent to Granovetter's operationalisation of weak ties, it can, we argue, be used as a proxy indicator (based on our understanding of the nature of the interviewees' networks). Weaker ties might be valuable for the flow of information from otherwise distant parts of the wider network, information which might not be available from strong ties (e.g. regarding job opportunities). So, the data suggests that both groups are likely to have similar access to emotional support, but, compared to the resilient group, the vulnerable group are probably likely to lack the benefits supplied by weaker ties.

	Total dyads			Respondent Adaptive Outcomes			
				Vulnerable (N=13)		Resilient (N=17)	
	Count	Total %	Valid %	Mean #	%	Mean #	%
First circle	179	46%	46%	5.6	72%	6.2	42%
Second circle	156	40%	40%	2.6	24%	7.2	41%
Third circle	52	13%	13%	0.2	4%	2.9	17%
Missing	0						
Total	387	100%	100%	-	-	-	-

Table 8.3: Mean number and percentage of the different tie strengths, by adaptive outcome of respondent (right of table)

Alongside the closeness of relationships, the role-type of a given relationship is likely to partially determine what type of support is more accessible from that relationship. It is, for instance, more acceptable to ask for financial support from family versus friends (Wellman & Wortley 1990). The data shows that friends make up the greater proportion of the total dyads mentioned by the respondents, around 50% (similar to data presented by Wellman & Frank 2001) followed by family at 34% (see Table 8.4). However, those with resilient outcomes mention a greater number and proportion of friends (53% versus 37%). Box 8.3 below examines what the

⁷ Qualitative analysis suggests that the lone mothers choose to put people in the circles based on the amount they interact with them and the level of support exchanged/reciprocated. However, reasons differed between interviewees. Sarah suggested that the first circle helped with practical support such as childcare and the outer circles with work related issues. On the other hand, Jacqui described "the people I feel close to are not necessarily the people I can get childcare from."

qualitative data says about the differences between family and friends when it comes to social support.

It is worth also noting that those with vulnerable outcomes seem to make up for having fewer friends with the addition of support workers, who make up on average 17% of their networks (versus virtually no support workers in the resilient outcome group). By support worker we mean formal support or organisational workers whose job it is to support and offer advice (but, who the lone mothers considered close enough to regard them as an important part of their personal support network). For example, Jody, having described that she lacked emotional support from friends and family, described that she covered this gap with support workers: "There is times when I don't have anyone I can speak to about what is going on. But I have got Kym [support worker] ... [so] I know they are there if I need them."

Examining the data in a bit more depth we find differences between the two groups for the occupational class of friends and family. The family members of those with vulnerable outcomes are over three times more likely to be unemployed (see appendix table 2.1). On the other hand, the family members of those with resilient outcomes are roughly three times more likely to work in a service class profession. As family are more likely to supply financial assistance and other types of support (Wellman & Wortley 1990) this is likely to be important in terms of the resources that the lone mothers have access to. This will be examined in more depth in the next chapter. Moreover, in terms of friends, for those with vulnerable outcomes around 40% of their friends are unemployed. On the other hand, only 17% of the friends of the resilient group are unemployed, and 59% of them work in a service class profession. The evidence suggests that these differences are a result of homophily and the social foci that the lone mothers are associated with8.

	Total dyads			Respondent Adaptive Outcomes			
				Vulnerable (N=13)		Resilient (N=17)	
	Count	Total %	Valid %	Mean #	0/0	Mean #	0/0
Colleague	18	5%	5%	0.2	1%	0.9	5%
Ex-partner	15	4%	4%	0.3	$4^{0}/_{0}$	0.6	$4^{0}/_{0}$
Family	131	34%	34%	3.1	37%	5.4	34%
Friend	190	49%	49%	3.3	37%	8.6	53%
Neighbour	17	4%	4%	0.5	4%	0.6	3%
Support worker	16	4%	4%	1.1	17%	0.1	1%
Missing	0						
Total	387	100%	100%				

Table 8.4: Mean number and percentage of the different types of role-relationships, by adaptive outcome of respondent (right of table)

⁸ Moreover, when we look at the percentage of friends that are female, we see that 86% of friends are female (see appendix 2.2). Friendship arguably reflects more of an active choice. Other 'non-choice' relationships, e.g. neighbours, colleagues and family, are all closer to a 50/50 split (see appendix 2.2).

Box 8.3: The importance of family versus friends

As we saw in Chapter 3, family are more likely to supply a greater variety and quantity of support than other role-types (such as friends) and are more likely to stick by people in tough times (Wellman & Wortley 1990, Roberts & Dunbar 2011). Indeed, there was a sense amongst most of the interviewees that support from family members (especially the interviewees' parents) was particularly important. As Gemma described: "I would have fallen apart without my family, I don't think I realised how hard it would be being a single parent."

The qualitative evidence suggests that family are especially important because they tend to provide a broader range of social support than friends. (As Jody described "For the financial and emotional support, as well as childcare. So all of those things really! Literally everything! I couldn't have done it without them.") Particularly important seemed to be financial support, which the interviewees' struggled to ask for from friends. Kirsty gave a potential reason for this difference between family and friends. Implicit in her account below is that friendships tend to demand reciprocity, whereas family are obliged to help:

Interviewer: So you're saying it is especially hard [being a lone mother] if you don't have a network of people around you?

Kirsty: A family around you particularly. My brother lives in Marlow, but he is very busy he has three kids of his own. He couldn't take mine for the weekend. There are mothers at the school that are always saying they'll take him. [But] you can't reciprocate [...] If you are living with your brother and sister next door and your mum around the corner, you can do what you want. You can have a life without paying for it. For someone like me, I don't have that option. It becomes very expensive. I have a budget for childcare.

Laura gave a similar elaboration on the difference between family and friends: "I think family is different from friends [...] with friends I feel that I might push limits, whereas with family it's expected and you can do whatever with them". Having said this, friends do seem to play an important role, especially when family are distant. For example, as Sarah noted, "I'd say my friends are more important [than family] because they, well, they are more present. I can fall back on them more than I can on family."

In terms of geographical spread in the ego-networks, proximity is important because, in the words of Ajrouch et al. (2001), "it may indicate the feasibility and likelihood of support exchanges with network members, that is, the availability of social capital". The data shows that, compared to those with vulnerable outcomes, those with resilient outcomes described how a greater proportion of their connections are geographically dispersed (see Table 8.5). The evidence suggests that this is driven by the geographically mobile nature of those with higher levels of educational attainment (as seen in Chapter 7, resilient mothers are more likely to be highly educated). Those with higher education are likely to have relocated for University. This is seen in appendix 2.3 - respondents with higher education are more likely to live at a geographical distance from family. In terms of friendship, we would expect a greater proportion of friends to live in the same city, as proximity is generally required to keep friendships going (Fischer 1982). As expected, appendix 2.3 shows that friends are likely to live in the same city. However, there is quite a difference between groups; 88% for vulnerable outcomes, 66% for those with resilient outcomes. The qualitative evidence suggests that having geographically local ties is very important for practical support as well as a sense of wellbeing. For example, Gemma described moving to be closer to family for more practical support: "My parents persuaded me to move here, they offered support and wanted to see my son more often [...] Now I look back and I'm so glad I moved here, it was the best decision I had made, they were right, I did need the support and help" (see Box 8.4 for more on the same topic).

'	Total dyads			Respondent Adaptive Outcomes			
				Vulnerable (N=13)		Resilient (N=17)	
	Count	Total %	Valid %	Mean #	0/0	Mean #	0/0
Same city	229	59%	62%	6.1	76%	8.8	56%
In the UK	104	27%	28%	0.9	12%	5.4	36%
Abroad	34	9%	9%	1.0	12%	1.2	8%
Missing	20	5%					
Total	387	100%	100%				

Table 8.5: Mean number and percentage of the geographical spread of ties, by adaptive outcome of respondent (right of table)

Box 8.4: Geography and support networks

For some of the lone mothers, the geographical dispersion of their personal network made it difficult to access certain types of practical social support such as childcare. As Rachel described:

Rachel: I think there is the broader issue that I face of people being more socially fragmented, you know the advantage of it being more geographically mobile, that's lovely, but the flip side is the fact that then you can find your closest friends, Hong Kong, Scotland, Dubai, London, do you know what I mean? That's a challenge... Say no more in terms of childcare situation!

However, even though Rachel struggled with informal childcare, she was able to pay for formal childcare when needed. In a similar situation, Lynn described how she had moved from Bath to Cumbria, closer to family, thinking that her move would equate with more support. However, she soon realised that her friends had actually been much more supportive than her family. She became lonely and decided to move back to Bath.

Lynn: I felt that my son was missing his dad, cousins and grandparents; I thought I could move back and I'll let the family be a family again. But it didn't work out that way. Tiffany [a friend] was supportive and didn't make a big deal of me asking for help, but family weren't really that way, I felt guilty for asking and they made it a big deal for asking.

Interviewer: Is that why you chose to move back to Bath?

Janine: Yes, as soon as I got there I realised how good my Bath friends were and it made me realise I shouldn't have left, and made it feel like I had left my family to go to the middle of nowhere.

So, Lynn had moved away from Bath with the idea of having more supportive relationships, but then realised her most supportive relationships were actually in Bath, so moved back. Indeed, it was not only her close friends that had been important for the decision, Lynn realised that even so-called 'acquaintances' were important for a sense of place and wellbeing. "I have been reflecting on how very important these 'acquaintances' all are to me in order to make me feel, basically, like I'm living. Without them, up North, I became very depressed indeed."

To conclude, compared to those with vulnerable outcomes, those with resilient outcomes are likely to have access to a greater diversity of different degrees of closeness in their social networks. Those with resilient outcomes also tended to have a greater number of friends in their network compared to the vulnerable group (but, the vulnerable group seemed to make up for this with the addition of support workers). The mothers with resilient outcomes also tended to have more geographically dispersed networks, reflecting the fact that they tend to move around more than those with vulnerable outcomes (e.g. for education and work). This, however, is likely to disadvantage them in terms of the practical support, such as childcare, that they have access to.

8.2.3. The structural characteristics of the lone mothers' personal networks

Chapter 3 described theory and evidence which suggests that the structural characteristics of personal networks are important for certain outcomes (Coleman 1988, Burt 1992). This section examines a range of structural measures that have been shown to impact on individual and social outcomes.

Table 8.6 below shows that the average number of connections (the 'degree') that the lone mothers had. As we saw in Chapter 3, personal network degree can be interpreted as a basic local centrality measure, as those who are more central in a network generally have a larger personal network (Christakis & Fowler 2010, Scott 2012a). The data shows that lone mothers with resilient outcomes had nearly double the amount of connections, on average, compared to lone mothers with vulnerable outcomes. This suggests that those mothers with resilient outcomes are more likely to be key nodes in the wider social network, and, as we saw in Chapter 3, key nodes have greater access to whatever is flowing through the network (e.g. resources, support, and information) (Travers & Milgram 1969).

The qualitative evidence suggests that the social foci associated with higher education and employment have a positive impact on the number of contacts that a lone mother will have. There are also a range of reasons (outlined further in Chapter 9) why lone mothers, especially those with vulnerable outcomes, are likely to see their networks decay and face networked disadvantage (or, 'network poverty' as Perri 6 [1997] has termed it).

		Adaptive outcomes		
		Vulnerable Resilient		
	Total	(N=13)	(N=17)	
Degree	12.9	8.6	16.2	

Table 8.6: Mean degree, by adaptive outcomes

In terms of network structure, Chapter 3 also described how 'network density'9 is likely to affect social and individual outcomes. Coleman's (1988) argument, for instance, suggests that the denser a network is the more social capital there is in that network. This is because in denser networks people are better able to coordinate their actions with one another. One interviewee, Debbie (transformable), suggested that there are indeed coordination benefits to be had from having a network that knows one another:

Debbie: It is all built on trust and relationships and co-dependency I suppose, whereas I look after Barbara's and Tracy's children, in turn they will look after mine [...] It is all ad hoc, we tend to have a joint email chain going when people might ask when people can look after other kids. You know "Can anyone look after kids between here and here [times]? One or more of us will type in "Yeah, no worries".

The data shows that those with vulnerable outcomes have higher density networks (see Table 8.7). Having said this, it is hard to compare density across different sizes of network as the more nodes there are in the network the lower density that network is likely to have (Scott 2012a, p.74). (And, as we saw above, the vulnerable group has half the number of contacts on average, giving one potential explanation of why their networks are denser.)

Given this, a better comparison is perhaps to look at the number of distinct 'connected components' in the personal networks as well as what we call the 'embeddedness of alters' within the personal networks. By connected component we mean that each individual within a component could potentially access the other individuals within the component without taking a path through the interviewee (ego). By embeddedness of alters we mean the average number of alters within a given component that can be accessed by each alter. The data presented below (Table 8.7) shows that lone mothers with resilient outcomes are connected to a greater number of distinct groups (components). Furthermore, the average alter (for both groups) is embedded in a component with access to between four and five other people.

So, those with resilient outcomes have a lower overall network density, but bridge a great number of different network components (components which are roughly the same size between the two groups). Consequently, one would expect that the lone mothers with resilient outcomes have access to the same benefits in terms of dense networks, but that they have access to and bridge more different groups of individuals. Perhaps, then, Burt's (1992) idea of structural holes is better suited to describing the type of networked advantage that resilient mothers have.

		Adaptive outcomes				
	Total	Vulnerable (N=11)	Resilient (N=14)			
Ego-network density	0.20	0.27	0.15			
Connected components	5.4	3.5	7.0			
Embeddedness of alters (average)	4.6	4.7	4.5			

Table 8.7: Mean network density and clustering, by adaptive outcomes

⁹ Density, as described in Chapter 2 and 3, is the percentage of possible ties that are actually present (Scott 2012a). For personal networks, density is calculated with ego removed (as the relationships ego has with alters will swamp information on the relationships between alters) (Scott 2012a, p.72).

Burt's (1992) theory is that positional advantage results from the particular way in which individuals are embedded in their network. As was described in Chapter 3, those with more 'structural holes' in their network have access to more 'non-redundant' information. Nonredundancy of information has been shown to improve decision-making and creativity (Burt 2004). As we have already seen, one of the interviewees, Rita, seemed to sense this implicitly and, to insure against potentially not having a job in the near future, had been trying to position herself across a number of different groups. She described the potential benefits of creating relationships that extended beyond her immediate group and suggested that her network might be instrumental in finding her a new job if she suddenly lost her current one.

The density statistics above give an indication of structural holes; as density decreases, structural holes open up in the social fabric. There are a number of other measures associated with Burt's (1992) theory. These are presented in Table 8.8 below (following Halgin & Borgatti 2012). The effective size statistic shows us the number of alters the ego has, minus the number of redundant ties. If, for example, an individual has 3 individuals in their network, but they are all connected to one another, then effective network size will be 1. Efficiency on the other hand is effective size divided by actual size. It gives an idea of the proportion of ties that are non-redundant. Constraint on the other hand is a summary measure that captures the extent to which an ego's connections are to others who are also connected. If alters are friends with one another, then ego is highly constrained and might lose some freedom of action. If, for example, a husband conducts business with his wife's brother and father, then, if things go wrong in the marital relationship, the wife might feel constrained in terms of divorcing him. So, we can see from the table below that those with resilient outcomes have a much greater effective size and their ties are more likely to supply non-redundant information. They are also less likely to be constrained by their network.

		Adaptive outcomes			
	Total Vulnerable (N				
Effective size	10.2	6.6	13.1		
Efficiency	.82	.78	.86		
Constraint	.29	.41	.20		

Table 8.8: Mean of Burt's structural hole statistics, by adaptive outcomes

To summarise, those with resilient outcomes tend to have a larger social network with less redundancy versus those with vulnerable outcomes. They also bridge a greater number of separate groups and the statistics presented above suggest they are less likely to be constrained by their social network.

The formation of the personal networks: The 8.3. structuring role played by different types of social foci

As described in Chapter 3, the particular context within which a relationship is formed affects the outcomes associated with that relationship (Feld 1981, Small 2009). The salient characteristics of a given social foci are also likely to direct relationships associated with it in certain directions. For instance, if a mother makes a friend through her child's school, the relationship is likely to centre on children. This is what Baker & Faulkner (2009) have called "double embeddedness": individuals are embedded in networks and networks are embedded within a wider system of social organisations and institutions that shape the interactions that take place within the network.

The data presented below shows that across both groups, 68% of contacts (excluding family members) were met through some form of social foci (Table 8.9)10. This statistic is the same for both the vulnerable and resilient groups. However, a difference between the groups emerges in the type of social foci where those contacts were met. Those with resilient outcomes are more likely to have met their contacts through educational foci (such as University) and through employment. They are also more likely to make friends at their children's school or nursery. Evidence presented in the next chapter suggests this is because they are more able to strike up reciprocal relationships. On the other hand, those with vulnerable outcomes are much more likely to have met their alters through local social support organisations. For instance, a number of mothers had experienced domestic abuse and had been to local support groups to help them recover from their experience. In the process they had made friends with other mothers in a similar situation.

Moreover, the qualitative evidence corroborates the argument that the particular context within which a relationship is formed influences the outcomes associated with that relationship. For example, Jody mentioned that she felt much more at ease discussing her problems with people in a similar situation to her, who had also experienced a violent ex-partner. They 'got it'. Similarly, Kate described that she had been attending educational courses at a local support organisation for lone parents: "I've got a couple of good friends that I met through doing courses here [...] They are very caring and obviously understand your situation a lot more and we try and help each out as much as we can, take turns and things". For this reason, Kate went on to describe how she was concerned about what cuts might mean for such organisations: "Things like that are really vulnerable to being closed down [...] It's just really really valuable to any parents, regardless of if they are single or not. Just to have a break and get yourself together". Furthermore, support organisations seemed valuable in other instrumental ways during hard economic times (see Box 8.6 below).

¹⁰ The analysis is based on a question asked to all interviewees about how they met their contacts. Ideally, for this analysis the data would have been collected longitudinally. However, the analysis presented in this section does, it is argued, give us a good indication of the how the lone mother's personal networks formed over time.

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	Total dyads			Adaptive	outcomes
				Vulnerable	Resilient
				(N=13)	(N=17)
		Total	Valid		
	Count	0/0	0/0	%	0/0
Social foci total	155	62%	68%	68%	68%
Educational foci (e.g. University)	29	12%	13%	6%	15%
Employment	27	11%	12%	3%	15%
Community foci (church, book group)	18	7%	8%	6%	9%
Children's school/nursery	48	19%	21%	13%	24%
Local support organisations	33	13%	15%	40%	5%
Structural balance	39	15%	17%	13%	19%
Local (e.g. neighbour, in the local pub etc.)	33	13%	15%	19%	13%
Online	1	0%	0%	0%	1%
Missing	24	10%			
Total	252	100%	100%	100%	100%

Table 8.9: Network formation, by adaptive outcomes

Box 8.6: Support organisations as 'Neighbourhood Resilience Centres'?

Support organisations were in many cases instrumental in helping the lone mothers cope with adversity. For this reason they might well be called 'Neighbourhood Resilience Centres'. They seemed especially important for lone mothers who lacked support from their own personal network. As Imogen noted: "Support is crucial, but with my situation it has been a lot more organisational support more than from friends and family. I've had to make new friends [nearly all through the organisations], and I've lost family because of the separation."

The support given by some of these organisations (support which might not even have been the primary function of the organisation) meant that they acted as a 'safety net' for some lone mothers. As Sophie described of her local childcare centre:

Sophie: They do everything. Some people I know, they come down to get help with budgeting. They do finance for them, I know people that haven't had a mattress for their children, [but] they got them a mattress and stuff like that. What else do they do? They got the fire brigade to come to my house and put smoke alarms in. The police came up and put window alarms and stuff on. They are really good. They could just give you basic information, and send you on your way, but they don't. They even done my washing for me when my machine broke! They washed and dried it and folded it up and delivered it. It's better than Dot Cotton on Eastenders, she don't do home delivery! [...] It is like a safety net, like a fall back net.

Similarly, Jody described that support from organisations in following terms "It is brilliant. It totally changed my life basically".

8.4. Social support outcomes

This chapter has so far described the general characteristics of the interviewee's ego-networks and also briefly examined the formation of these networks. In this section we examine the social support that the lone mothers mobilise from their networks. Section 8.4.1 introduces the dependent variables related to social support. Several different types of support are examined: emotional support, childcare support, financial support and job related assistance (types of support described in Chapter 3 and Chapter 6). Then, in section 8.4.2, the independent variables are introduced and the regression models are constructed. The regression models examine how certain characteristics of the respondents' alters and relationships interrelate with the support that the lone mothers receive.

8.4.1. The activation of social support

Table 8.10 below shows the rates at which the relationships provide certain types of support. The evidence shows that emotional support is the most often received type of support, with around half of all relationships engaging in it. Emotional support meant various things to the lone mothers, including psychological support to help cope with uncertainty, support with decision-making and also moral support bringing up children. On the other hand, around a third of relationships were involved in childcare support. Childcare support could mean having someone available for a one off episode of care, or if the lone mother was in work it might mean some ongoing arrangement. Even fewer relationships seemed involved in giving financial assistance. Financial assistance might include small loans and gifts to help the lone mother getby, or much larger loans or gifts (such as help buying a car or a house). Of interest, those with resilient outcomes receive financial support from a smaller proportion of their contacts. The evidence suggests this is because financial support is most likely to come from family, and family make up a smaller proportion of the networks for those with resilient outcomes. Also, as we will see in the next chapter, those with resilient outcomes don't have as much need to ask for financial support (compared to the vulnerable group)¹¹. Finally, even fewer relationships gave job related advice (a similar finding is described by Wellman & Wortley 1990). Job related assistance included advice about solving problems at work (for those in work), or help finding work (for those both in and out of work). Those with resilient outcomes are, however, more likely to receive job related support from their contacts, perhaps because they are more likely to be in work themselves.

It is also worth mentioning that the dimensions of social support are hardly correlated with one another. The average correlation is .07, making clear that the different types of support come from different relationships (see appendix 2.4).

¹¹ Having said this, it is worth noting that the qualitative data suggests that the scale of financial assistance given is quite different between groups. The rates of financial support are thus quite deceiving. Those in the vulnerable group generally ask for smaller sums of money, just to keep going and to buy necessities such as food and clothing for their children. On the other hand, those with resilient outcomes tended to get more significant financial support, for example, as already notes, help buying a car or even a house.

	Total dyads	Adaptiv	e outcomes
	·	Vulnerable	Resilient
		(N=13)	(N=17)
Emotional support	43%	52%	47%
Childcare	33%	32%	33%
Financial assistance	19%	29%	18%
Job related assistance	14%	5%	18%

Table 8.10: Support activation, the percentage of relationships in the networks giving support, by adaptive outcomes

The majority of all ties mentioned gave at least one type of social support: 71% of ties gave at least one form of support, 32% gave two or more forms of support, 5% gave three or four types of support (and only 1% of ties gave all four types of support) (appendix 2.5). The multiplexy score in Table 8.11 below shows how many different types of support, on average, each relationship gave. Examining this statistic in conjunction with the degree of the networks gives us an idea of the total amount of support that the lone mothers had access too. Those with resilient outcomes receive more support in total. This finding is similar to other research described in Chapter 3. Cochran et al. (1993), for instance, found that mothers in 'white collar' families reported involvement with a larger number of network members (they had a higher degree) for all types of social support. To this we can add that those who are more adaptable in the face of adverse socio-economic circumstances reported contact with a larger network and a greater total amount of support received.

	Total	Adaptive outcomes		
		Vulnerable	Resilient	
Multiplexy	1.1	1.1	1.1	
Degree	12.9	8.6	16.2	
Proxy for total support received	14.0	9.4	17.5	
(degree*multiplexy)				

Table 8.11: Proxy for total support received, by adaptive outcomes

8.4.2. Selected output from regression analysis of social support outcomes

The section that follows examines if a number of variables (outlined as the section progresses) associate with each of the different types of social support described above. The independent variables have been chosen because they are factors that are likely to be interrelated with access to and mobilisation of social support (based on the understanding of social networks developed in Chapter 3). Although the adaptive outcomes are not explicitly considered in these models,

the models will be embedded within the wider explanatory narrative surrounding vulnerability and resilience (especially in the next chapter).

The units of analysis in the regression models are the undirected relationships between the lone mothers and her alters. The dependent variable is whether a particular relationship is supportive in a certain capacity, offering one of the types of support described in section 8.4.1 above. Each relationship has a dichotomous value, 1 when the relationship supplies a specific type of support and 0 when it doesn't. The aim of the models is to determine the factors that are associated with an increase in probability of a given relationship offering a given type of support. As we are interested in examining which of two categories that a relationship falls into, either supporting or non-supporting, logistic regression was chosen as a method of analysis.

Furthermore, the data has a two-level hierarchical (nested) structure with characteristics of the alters and alter-ego relationships embedded within the overall ego-network configuration. That is to say, the characteristics of the alters and the relationships are not independent of other relationships in that personal network or the interviewee (ego) that connects them all. Technically speaking, the characteristics of the alters and relationships are 'Level 1' and are clustered around the ego and their personal network, 'Level 2' (Luken & Tranmer 2010). With this type of data, a 'multilevel modelling' approach should be considered (Rasbash et al. 2009). Indeed, recent literature on the analysis of ego-networks suggests that multilevel models should be considered when the variable to be explained is related to the alter or to the tie (as social support is) (Wellman & Frank 2001, Luken & Tranmer 2010, Scott et al. 2013). For example, Scott et al. (2013) and Luken and Tranmer (2010) use a similar model used to estimate the likelihood of specific type of tie existing or not (1, 0). As noted by Hall (2010), "analysis of egocentric SNA data can be greatly improved by utilising multilevel modelling". The application of multilevel models allows us to ask certain questions of the data, such as "What proportion of variation in the support outcomes is attributable to characteristics of the alters and relationships and what proportion is attributable to ego's characteristics?" For a more in-depth discussion of the particular approach to multilevel modelling used in this thesis, please see the technical appendix (appendix 2.2).

As already discussed, the total number of egos in the sample is 30 and the total number of alters is 387. However, around 30% of the alter data was excluded (listwise) from the regression analysis because of missing data¹², and this resulted in the exclusion of 3 egos from the analysis. The total sample size included in the regression analysis is thus: 262 alters (Level 1) and 27 egos (Level 2). Similar sample sizes are reported by Wellman (1992) and Hall (2010). However, the sample size is comparatively small compared to other ego-network studies such as Luken & Tranmer (2010). The relatively small sample size has implications for the ability of the research to highlight significant results. One limitation of the analysis presented in this section is thus that a larger sample would have had more statistical and analytical power.

¹² Reasons for missing data are described in footnote 6 of this Chapter.

Independent variables relating to characteristics of the alter and the alter-ego relationship, which are termed Level 1 variables and treated as fixed effects, are described in Table 8.12 below alongside the reason for their inclusion¹³.

Independent variable	Reason for inclusion
Gender of the alter	Gender predicts what type of support is given. Females are more likely to give good emotional support and childcare. Males on the other hand are perhaps more likely to give financial support and job related assistance.
Occupational-class of the alter	Occupational-class is indicative of valuable resources that are likely to be available from a relationship. Service class workers are, for example, hypothesised to be more likely to give job related assistance.
Strength of the tie	Stronger ties are predictive of most types of social support. They are likely to supply a variety of different types support.
Role-type of the tie	Different role-types are likely to give different types of support. Family are hypothesised to give more childcare and financial assistance. Friends are likely to give emotional support.
Geographical proximity of the tie	Geographical proximity is hypothesised to be predictive of practical hands-on support (such as childcare) but less so with other types of support (such as emotional and financial support).

Table 8.12: Level 1 variables included in regression analysis

On the other hand, the Level 2 independent variables relating to characteristics of the interviewee and their overall ego-network are described in Table 8.13 below. These are what are known as Level 2 contextual variables¹⁴. As noted by Rasbash et al. (2009): "If contextual effects are of interest, it is particularly important to use a multilevel modelling approach because the standard errors of coefficients of level 2 variables may be severely underestimated when a singlelevel model is used."

¹³ Level 1 variables means that all dyads have the possibility of varying on these factors. But, 'fixed effects' means that in the model each independent variable has the same effect across the units of analysis.

¹⁴ These vary by the ego, i.e., all relationships within a given ego-network have the ego and their network in common.

Independent variable 15	Reason for inclusion
Human capital of ego	Those with higher levels of human capital are expected to receive more social support. Although, the literature presented in Chapter 3 does not differentiate between different types of support.
Employment status of ego	Those in work are expected to receive more social support. Those out of work are expected to receive less because they are more likely to have problems with reciprocity. Again, it is not clear how this might work for different types of support.
Age of youngest child	This has been included as, intuitively, those with younger children are likely to need more support, but it is uncertain if this translates into actual support.
Number of children	Intuitively, those with more children at home are likely to need more support. However, the literature suggests women with children receive less support – so the relationship is unclear.
Degree of ego-network	Smaller networks are generally more cohesive and supportive. But, larger networks contain a greater variety and diversity of resources. So, again, the relationship between network size and activation is somewhat unclear.

Table 8.13: Level 2 variables included in regression analysis

The procedure is to first look at Level 1 variables and then adds the Level 2 variables into the model.

It is worth noting that before fitting the regression models between the dependent support variables y and explanatory variables x, we first examined bivariate relationships between y and potential predictors x1, x2, x3 etc. The bivariate analysis is available in appendix section 2.3. Aspects of this analysis will be drawn upon when interpreting the regression models below.

What factors are associated with receiving emotional support?

In Table 8.14 below, B tells us of the probability of the outcome going up or down versus the reference group. It is the change in the logit of the outcome associated with the difference between the predictor and its reference group. The direction of the relationship is indicated by a positive or a negative value. One benefit of the logit model is that after a simple transformation the coefficients can be interpreted as odds ratios – Exp(B). In the analysis that follows, only coefficients that are significant at the 5% level are discussed (statistical significance is marked with bold in the model summary tables).

Model 1 contains only independent variables which relate to the characteristics of the alters and

¹⁵ Not all factors described in previous sections of this chapter have been included in the regression analysis. Variables related to the structure of the personal networks (density, structural holes) had too much missing data to include in the analysis. Other variables, such as the formation of the network overlapped too much with other variables included in the model (e.g. formation and role-type), as was confirmed with multicollinearity tests.

the relationships between alter and ego. It shows that the interviewees are most likely to receive emotional support from strong relationships (the innermost concentric circle), compared to alters in the two outer circles from whom they are much less likely to receive emotional support. In terms of role-types, the lone mothers are also most like to receive emotional support from friends. Compared to family, friends have a much greater likelihood of supplying emotional support. Furthermore, support workers, for those who have them in their networks (predominantly those with vulnerable outcomes), offer a great source of emotional support as well. Somewhat surprisingly, the interviewees seemed to have a greater likelihood of receiving emotional support from those who live further afield geographically (i.e. alters who do not live in the UK). This is perhaps because this group of alters tended to have been known the longest (as shown in appendix 2.6) and also one might expect that only supportive relationships survive geographical distance.

One benefit of the multilevel model is that a statistic called the variance partition coefficient (VPC) can be estimated. VPC is the proportion of total residual variance attributable to level 2 of the model, e.g. ego and their ego-network. Rasbash et al. (2009) note that VPC can be interpreted as is intra-unit correlation, i.e. the correlation between Level 1 units in the same Level 2 unit. So, it tells us to what extent the outcomes of interest seem to be affected by Level 1 or Level 2 in the model. VPC was estimated using a method outlined in Rasbash et al. (2009)¹⁶. For Model 1 the VPC is .4, suggesting that in this sample 40% of residual variation is attributable to differences between egos and their networks. So, it is estimated that in this data set, 60% of the variation in emotional support can be attributed to Level 1 of the model – the characteristics of the alters and the relationships.

Model 2 shows what happens when we add the lone mothers' characteristics to the model¹⁷. The model tells a very similar story to Model 1. However, it also shows that those lone mothers who are employed receive emotional support much more than those who are not in employment. Qualitative analysis suggests that this is because the pressures of combining work and family life require greater support in this area. With the addition of level 2 explanatory variables, the VPC increases slightly: 44% of variation is now attributable to the differences between individual respondents. (Although the increase is small, the analysis suggests that it is in most part attributable to the employment status of the mother.)

¹⁶ The statistic was estimated as follows. Firstly, the logistic model is assumed to be a linear threshold model, meaning there is assumed to be an unobserved continuous variable underlying the binary response, which can be thought of as propensity to be in one category. VPC, when assuming this, can be calculated as between ego variance/(between ego variance+3.29). See Rasbash et al. (2009, pp.132-135) for more details.

¹⁷ Adding these does not improve the fit of the model (as the DIC statistic shows). However, the difference between the two models is not that great, so Model 2 is still analysed.

	Model 1			Model 2		
	В	S.E.	Exp(B)	В	S.E.	Exp(B)
Between ego variance	2.214	1.243		2.658	1.666	
Gender: Female vs. Male	.656	.452	1.927	.776	.459	2.173
Class: all vs. Unemployed						
Student	3.142	1.586	23.150	3.335	1.771	28.078
Labour class	.508	.584	1.662	.608	.638	1.837
Service class	.961	.539	2.614	.865	.594	2.375
Retired	-1.325	.857	0.266	-1.394	.891	0.248
Circle: all vs. First circle (strongest						
ties)						
Second circle	-2.750	.533	0.064	-3.160	.586	0.042
Third circle	-3.774	.796	0.023	-4.357	.880	0.013
Type: all vs. Family						
Friend	2.516	.533	12.379	2.697	.646	14.835
Colleague	-1.316	1.219	0.268	-1.951	1.403	0.142
Neighbour	093	1.088	0.911	208	1.152	0.812
Support worker	2.448	.880	11.565	2.900	1.015	18.174
Ex-partner	.333	1.013	1.395	.369	1.118	1.446
Distance: all vs. Local city						
Within UK (other cities)	.401	.509	1.493	.298	.558	1.347
Abroad	1.588	.705	4.894	1.576	.765	4.836
Interviewee characteristics:						
Education of interviewee (Higher vs. Lower)				.144	1.062	1.155
Employment (Employed vs. Unemployed)				2.490	1.032	12.061
Age of mother (Over 37 vs. Under 37)				0.235	.898	1.265
Child: Older vs. Nursery				-1.224	1.170	0.294
Number of children				0.071	.309	1.074
Ego-network degree				0.030	.083	1.030
Constant	-1.269	.679	0.281	-1.894	1.216	0.150
DIC	268.57 0			269.57 0		

Note: Model 1 VPC: 0.40, Model 2 VPC 0.45

Table 8.14: Multilevel logistic regression analysis of emotional support, numbers in **bold** significant at 5% level

What factors are associated with receiving childcare support?

In terms of childcare support, Model 1 Exp(B) in Table 8.15 shows that the interviewees are mostly likely to receive childcare from the strongest ties (the innermost concentric circle). Also, for those interviewees who have an ex-partner in their personal network, they offer the greatest likelihood of helping with childcare. (Although, this is only for ex-partners mentioned by respondents. Only around half of respondents mentioned an ex-partner.) Colleagues and support workers, on the other hand, have a low likelihood of helping with childcare. Unsurprisingly the model also shows that childcare will most likely be received from those who live in close proximity. Finally, the VPC statistic for Model 1 suggests that 40% of variation is attributable to differences between the egos.

When the characteristics of the lone mother are accounted for (Model 2¹⁸) what is noticeable at first is that the VPC statistic increases from 40% to 57%, suggesting that a greater proportion of the variance is attributable to the characteristics of the lone mother. Although, it is unclear why from the data. None of the level 2 variables are statistically significant in the analysis.

¹⁸ Adding level two explanatory variables does not improve the fit of the model (Model 1 DIC: 273.93, vs. Model 2 DIC: 279.47). However, the model is still analysed for interest and purposes of comparison to the other models.

	Model 1			Model 2		
	В	S.E.	Exp(B)	В	S.E.	Exp(B)
Between ego variance	2.221	1.296		4.436	2.573	
Gender: Female vs. Male	.742	.433	2.100	.873	.460	2.394
Class: all vs. Unemployed						
Student	.401	1.097	1.493	0.750	1.356	2.117
Labour class	.561	.597	1.752	.724	.676	2.063
Service class	1.031	.549	2.804	1.263	.727	3.536
Retired	.405	.771	1.499	0.727	.839	2.069
Circle: all vs. First circle						
(strongest ties)						
Second circle	-1.273	.469	0.280	-1.479	.487	0.228
Third circle	-1.189	.695	0.305	-1.419	.757	0.242
Type: all vs. Family						
Friend	611	.510	0.543	-0.570	.570	0.566
Colleague	-2.684	1.118	0.068	-2.652	1.211	0.071
Neighbour	1.195	1.148	3.304	1.305	1.224	3.688
Support worker	-2.275	1.024	0.103	-2.345	1.135	0.096
Ex-partner	2.334	.952	10.319	2.775	1.046	16.039
Distance: all vs. Local city						
Within UK (other cities)	-1.959	.566	0.141	-2.189	.596	0.112
Abroad	0	0	0	0	0	0
Interviewee characteristics:						
Education of interviewee (Higher vs. Lower)				.617	1.196	1.853
Employment (Employed vs. Unemployed)				0.066	1.352	1.068
Age of mother (Over 37 vs. Under 37)				0.291	1.125	1.338
Child: Older vs. Nursery				0.194	1.247	1.214
Number of children				0.042	.364	1.043
Ego-network degree				-0.014	.076	0.986
Constant DIC	328 274.930	.769	0.720	-1.032 279.470	1.000	0.356
N-+ M- 1-11 VDC: 0.40 M-1-123	4/4.930			4/9.4/0		

Note: Model 1 VPC: 0.40, Model 2 VPC: 0.57

Table 8.15: Multilevel logistic regression analysis of childcare support, numbers in **bold** significant at 5% level

What factors are associated with receiving job related assistance?

In terms of job related assistance, Model 1 in Table 8.16 below shows that the interviewees are mostly likely to receive job related assistance from those in the most prestigious jobs (i.e. service class workers). Moreover, the interviewees are most likely to receive this support from the strongest ties. (This, however, says little about Granovetter's [1973] strength of weak ties argument as we are not assessing the quality of the job related support, but rather just the likelihood of a specific tie providing support.) Moreover, colleagues and support workers give greater support in this area than family. Unsurprisingly, colleagues give the greatest level of support in this area. The model suggests that for those lone mothers out of work, support workers fill in for colleagues, giving support in this area. Finally, the VPC statistic suggests that 44% of variation in Model 1 is accounted for by individual differences amongst the interviewees.

Quite a shift takes place in Model 2¹⁹. The VPC increases, now suggesting that 72% of variation can now be explained by individual differences between the mothers and their network configuration. As might be expected, the model suggests this is largely because of the effect of the lone mothers' employment status. Those mothers who are in employment are much more likely to receive job related assistance. Also, the probability of both colleagues and support workers offering job advice goes up when accounting for the lone mothers' employment status.

¹⁹ It is worth noting that this is the only model with level 2 explanatory variables added in that is an improvement on the model with alter and tie characteristics included (as the DIC statistics show).

	Model 1			Model 2			
	В	S.E.	Exp(B)	В	S.E.	Exp(B)	
Between ego variance	2.656	3.333		8.592	6.976		
Gender: Female vs. Male	.323	.614	1.381	.247	.725	1.280	
Class: all vs. Unemployed							
Student	0	0	0.000	0	0	0.000	
Labour class	2.363	1.690	10.623	2.311	1.402	10.085	
Service class	4.074	1.489	58.792	3.780	1.292	43.816	
Retired	0	0	0.000	0	0	0.000	
Circle: all vs. First circle							
(strongest ties)							
Second circle	-1.212	.616	0.298	-1.853	.698	0.157	
Third circle	947	.998	0.388	-1.914	1.317	0.147	
Type: all vs. Family							
Friend	.733	.653	2.081	0.844	.822	2.326	
Colleague	3.957	1.152	52.300	4.770	1.580	117.919	
Neighbour	0	0	0.000	0	0	0.000	
Support worker	2.818	1.372	16.743	6.918	2.068	1010.297	
Ex-partner	0	0	0.000	0	0	0.000	
Distance: all vs. Local city							
Within UK (other cities)	693	.735	0.500	-1.286	.846	0.276	
Abroad	747	1.056	0.474	-0.993	1.128	0.370	
Interviewee characteristics:							
Education of interviewee				999	1.634	0.368	
(Higher vs. Lower)				,,,,	1.054	0.300	
Employment (Employed vs.				4.289	1.837	72.894	
Unemployed)				7.207	1.057	12.074	
Age of mother (Over 37 vs.				-1.521	1.751	0.218	
Under 37)							
Child: Older vs. Nursery				1.923	1.612	6.841	
Number of children				-0.045	.684	0.956	
Ego-network degree				0.238	.126	1.269	
Constant	-5.809	1.724	0.003	-8.375	2.134	0.000	
DIC	166.070			154.810			

Note: Model 1 VPC: 0.45, Model 2 VPC: 0.72

Table 8.16: Multilevel logistic regression analysis of job-related support, numbers in bold significant at 5% level

What factors are associated with receiving financial support?

Financial assistance was the only type of support for which a multilevel model was not warranted (see appendix section 2.2). This suggests that individual differences between interviewees do not account for much variation in the outcome. As such, Table 8.17 below presents the results for a single level model with all explanatory variables included.

What is striking at first is that the model suggests that males are much more likely to give financial assistance. Also, perhaps somewhat surprisingly, those in higher occupational classes are about as likely as those who are unemployed to supply financial assistance. (Remembering,

however, that these models only measure the probability of receiving support from a specific tie, not the quality of support received, in this instance, not the amount of financial assistance in pounds.) The closest interpersonal ties are also more likely to supply financial support. In terms of the types of role-relationship that supply financial assistance, family seem to supply the greatest amount of support in this area compared to other role-types. Friends, for example, have much lower odds of supplying financial assistance versus family members.

The model suggests that lone mothers with a higher level of education are less likely to receive financial support from their relationships. The qualitative evidence suggests this is because this group are likely to have higher paying jobs and are consequently less in need of financial assistance.

	В	S.E.	Exp(B)
Gender: Female vs. Male	-1.475	.444	0.229
Class: all vs. Unemployed			
Student	-2.149	1.375	0.117
Labour class	1.189	.623	3.283
Service class	070	.651	0.933
Retired	1.180	.693	3.254
Circle: all vs. First circle (closest interpersonal			
ties)			
Second circle	-1.788	.530	.167
Third circle	-0.509	.651	.601
Type: all vs. Family			
Friend	-1.714	.532	0.180
Colleague	-1.808	1.128	.164
Neighbour	0	0	.000
Support worker	-3.313	1.212	0.036
Ex-partner	582	.715	0.559
Distance: all vs. Local city			
Within UK (other cities)	392	.589	0.676
Abroad	-1.051	.745	0.350
Interviewee characteristics:			
Education of interviewee (Higher vs. Lower)	-1.823	.711	.162
Employment (Employed vs. Unemployed)	0.560	.676	1.750
Age of mother (Over 37 vs. Under 37)	0.171	.475	1.187
Child: Older vs. Nursery	0.983	.632	2.673
Number of children	-0.045	.191	0.956
Ego-network degree	-0.003	.039	0.997
Constant	0.852	1.053	2.344

Table 8.17: Logistic regression analysis of financial support outcomes, numbers in **bold** significant at 5% level

Summary of regression models

This brief summary brings together the analysis presented above, highlighting how each of the independent variables of interest (e.g. class, role-type etc.) is likely to affect the mobilisation of each different type of support. Only statistically significant results are discussed.

Gender: The only result that is statistically significant is that males are more likely to supply financial assistance compared to females.

Class: The regression models suggest that the service class are more likely to supply job related assistance (i.e. help finding work and help with work related problems).

Interpersonal closeness: The models suggest that the inner circle, the strongest interpersonal ties, are more likely to supply each different type of support: emotional, childcare, job related assistance and financial support.

Role-types: Friends are more likely to supply emotional support (compared to family). Family, compared to other groups such as colleagues and support workers, are more likely to supply childcare. Family are also the role-type that seems the most likely to give financial assistance. Colleagues are the most likely group to offer job related assistance. Support workers are likely to supply emotional support, as well as give job related advice and assistance. Ex-partners (for those who have them in their personal networks) are the group that is most likely to help with childcare.

Geographical distance: The data suggests that surprisingly those who live at a greater distance (i.e. abroad) are more likely to supply emotional support. However, the results are clear that alters who live close by are the most likely to supply childcare.

Interviewee characteristics: Lone mothers in employment are more likely to receive emotional support (the qualitative data suggests this is because they have more stress in their lives), as well as more likely to receive job-related assistance. Furthermore, those with higher educational attainment are much less likely to receive financial assistance (the evidence suggests this is because they have less need to activate financial support).

8.5. Conclusions

We saw in Chapter 3 that Perri 6 (1997) described a number of types of 'network poverty'; being relatively isolated, lacking weaker ties and lacking the transitional ability afforded by the appropriate type of support network for the specific stage of life and circumstances. He linked network poverty to lower occupational class and educational attainment. In this chapter we have seen that such an argument also applies to lone mothers who are vulnerable to the effects of economic adversity. The lone mothers in the vulnerable group seem to be, relatively speaking, more isolated. They lack the same occupational-class resources as the resilient group and they tend to have fewer ties and they receive less social support overall. They are, compared to the resilient group, more likely to fall under Perri 6's (1997) definition of network poverty. This is perhaps one reason that the vulnerable group lack the flexibility to adapt. Although highlighting such correlation does not alone explain causality, it is an important part of probing theory. If, for example, those mothers with vulnerable outcomes had more social resources then our argument that social networks supply adaptive capacity would be much weakened.

Indeed, as we will see in the next chapter, each of the forms of social support described in this chapter is useful for dealing with problems arising from economic adversity. This is one reason that understanding the bases of support (section 8.4) was an important step in understanding why some mothers may not have appropriate support. However, as Lieberson (1987, p.215) has argued, regression coefficients do not speak for themselves. The specific variables outlined in the regression models do not cause support. It is the lone mother who must ask for and receive support. What the models do tell us is which particular types of alter and relationship might be useful for specific types of support. We must leave it up to the respondents to tell us how and why they activate social support and how such support benefits them in times of economic crisis. Indeed, it is by understanding their motivations for activating support and the outcomes of receiving such support (or not having opportunities for type of support needed) that we can further address Q4.

Chapter 9: Social support, adaptive capacity and adaptive outcomes

9.1. Introduction

In Chapter 7 we saw that lone mothers vary in their ability to cope with and adapt to adverse socio-economic conditions. We also saw that a contraction in available resources spurs some lone mothers into taking corrective actions to ensure that they are able to maintain their lifestyle aspirations, or just 'keep the show on the road' as best they can. In Chapter 8 we saw that those with resilient and those with vulnerable outcomes seem to have very different social networks and social resources to hand. This chapter is concerned with expanding upon this analysis by investigating the role that social support networks play in tough socio-economic circumstances (Q4) and how differences in the social networks (as outlined in Chapter 8) might influence adaptive capacity. What was presented in the last chapter as aggregate descriptions across the sample (e.g. of social support) are in this chapter broken down into intelligible patterns of action and interaction. These patterns of action and interaction are made intelligible with reference to the motives that condition them, which as we saw in Chapter 7, link to the wider social and economic circumstances.

The last chapter could be said to have mapped the options available for social action, and also aggregate descriptions of the activation of social support, but it did not connect this with the wider socio-economic context that gives the lone mothers impetus for using the options available to her from her personal network, nor the adaptive outcomes that result. This chapter does exactly this. In this sense, this chapter is concerned with uncovering and understanding what Hedström & Swedberg (1998) have termed "transformational mechanisms".

The layout of this chapter is as follows. In the previous chapter we saw how some lone mothers, particularly in the vulnerable outcome group, might fall under Perri 6's (1997) definition of 'network poverty'. We, however, gave no concrete reasons for this. So, section 9.2 begins by outlining a number of reasons why lone mothers, especially lone mothers in the vulnerable group, face a relative poverty of network options. Then, section 9.3 builds on this analysis by investigating if social support networks seem to have been brought closer together or pushed apart by wider socio-economic adversity. This section situates the research in this thesis in relation to other research on people's relationships in hard socio-economic times (e.g. Clark & Heath 2014). However, as argued in Chapter 5, for the purposes of this research it is not enough to examine whether or not people's relationships have strengthened or weakened because of economic adversity. We must also examine the role played by social support in such adverse times.

Section 9.4 onwards discusses the different ways in which the activation of social support helps the respondents adapt when exposed to adversity. The evidence shows that lone mothers mobilise their social networks, and in some cases reweave their networks (discussed in Section 9.5), to achieve their goals and their lifestyle aspirations. We see how mobilising resources embedded within personal support networks helps some mothers offset the worst of the

economic hard times, allowing them to achieve a certain level of resilience against adversity. Section 9.6 then builds upon the preceding analysis by highlighting the importance of what we termed 'network depth' and 'network diversity' in Chapter 2.

It is worth noting that the analysis in this chapter treats the resilient group and transformable group as one for the most part (for the reasons given in Chapter 8). Having said this, they are separated out when the chapter comes to section 9.5, in which the particular changes made by the transformable group of mothers are examined in more depth.

9.2. Reasons for 'network poverty' amongst lone mothers

Chapter 3 described previous research that suggests that lone mothers' social support networks differ markedly in terms of size, generally being much smaller compared to mothers in two parent families (e.g. Cochran et al. 1993). The previous chapter also described how some of the lone mothers interviewed for this research had relatively small social networks and sparser social support. However, no definitive reasons for why this might be the case are given in the research literature. A number of points emerged during the interviews which help shed some light on why lone mothers, some more than others, might face 'network poverty'. These points also help explain some of the differences between the personal networks of those with vulnerable and those with resilient outcomes.

'Structural balance' and social network decay: From the moment of separation/divorce it is likely that the lone mother will lose social connections related to the father. As noted in Chapter 3, structural balance theory tells us that 'the enemy of a friend is an enemy'. When balance does not exist, i.e. the enemy of a friend is a friend, the individual is expected to feel cognitive dissonance and pressure to change their sentiment towards one of the individuals in question (Heider 1946). The lone mothers in the sample had experienced this dynamic in relation to both friends and family. However, the loss of family-in-law was potentially the most damaging in terms of options for support. As we saw in Chapter 8, family tend to be more supportive than other role-types (such as friends). To give an example, Kirsty noted how as a lone mother she would conceivably have higher costs than a coupled family because she lacked support from family-in-law:

> Kirsty: If you are a single parent like me, you don't have the other side of the family to take the children. If you are married you potentially have two sets of grandparents to take the children. Or the husband. I don't have any of that. That is quite tough. Even to go for an xray at the hospital, I have to pay for someone. I can't leave him in the corridor. Invariable often these nannies have a minimum of 4 hours charge as well. For something that takes you 5 minutes!

In some cases this mechanism of network decay might work in conjunction with other processes. For example, upon getting divorced Rachel moved from London to Bath for financial reasons. This meant that she no longer had access to certain types of practical social support from her family and friends in London (e.g. childcare).

The stigma of lone motherhood: In social network terms, the stigma of being a lone mother manifested itself in a number of ways. As we have already seen, Sarah described a situation in which being a single parent made it hard for her to make friends with men (especially with men who had a partner). She felt stigmatised because she was seen as 'available'. Debbie also vocalised it as follows "It was really evident that because of their relationship insecurity they perceived me as a threat. As a relationship threat." This evidence supports prior research that suggests single mothers may be viewed as a threat to stable relationships (Anderson 1999, Åberg 2009). Some interviewees also described finding it difficult socialising with coupled parents. Abigail, for instance, described what happened when other mothers at the school gate found out she was a lone mother.

> Abigail: I think it [stigma] comes from the assumptions made about how you are if you are a single parent [...] I know for a fact, there are a couple of mums that didn't know I was a single parent, and seemed to want to be friendly and wanted their children to play with my child, and I know it was met with some surprise when they found out [her son] didn't have a dad. I saw a change who, and how much time they spent with me in the school yard and $\lceil \ldots \rceil$ when they found out I was a single parent I think their belief system or their preconditioning to single parents kicked in and overrode what they had seen of me in a short space of time. 1

Perhaps for these reasons, a large proportion of the interviewees described that they felt it was easier to socialise with other lone mothers. Although stigma seemed relevant to all of the lone mothers, it was most salient in the vulnerable group. Those with resilient outcomes tended to have other facets of identity, such as their career, or even being 'middle class' (as Gemma described) that they could readily identify with. Doing so seemed to help them outmanoeuvre, to some extent, the stigma of lone motherhood.

Problems with reciprocity: We saw in Chapter 3 that reciprocity helps cement relationships. However, as Offer (2012) has noted, lone mothers quite often suffer from circumstances that potentially make them 'unattractive network members'. This seemed the case for some lone mothers that were interviewed for this research. They perceived that they lacked resources valued by other parents (especially married parents). This made it more difficult to create reciprocal relationships. Some of the interviewees felt they could not enter into obligations that they might not be able to see through. Rachel, for instance, described that a lot of the other mothers at school had a husband or familyin-law to take care of their children. They did not need her support. For this reason, Rachel avoided asking these particular friends for childcare, preferring instead to pay for it when needed. Daniella described a similar situation, albeit she wasn't able to pay for childcare like Rachel, the consequence being that she socialised less.

> Daniella: When we were together [ex-husband], we [Daniella and friends] would do babysitting swaps. But I can't do that now because it is only me. Socially things became really hard to go out, as I had to pay before I left the house!

> Interviewer: You say you can't do babysitting swaps because you are on your own, why is that? Daniella: It is because I can't return the favour, I couldn't have someone else's kids on top of mine. I needed their father to be able to help out. So I ended up going out less than I want to.

¹ Sarah also described how she felt she was "going to disrupt family life... you know, they are having Sunday roast and all this, so you don't want to interfere." This supports the findings of Wellman and Wortley (1990) who show that married couples tended to interact predominantly with other married persons.

The situation seemed slightly different for those interviewees (such as Abigail, Kate and Louise) with more lone mothers in their social network. As described in Chapter 3, people in similar situations generally need the same types of support and are thus easier to reciprocate with (Haines et al. 1996).

Fewer opportunities for interaction: Some interviewees described how they had fewer opportunities to interact with others. Caring for a child is demanding work (as Abigail described: "at the end of the day 99% of your headspace and energy is consumed by your child"). Free time is scarce, especially if the lone mother is in employment. For this reason, some of the interviewees seemed to find it harder to create new relationships (a finding also described by Small 2009). In addition, those lone mothers with less money (mostly those with vulnerable outcomes) found it even more difficult to socialise. Kate described that even if she did somehow find money for a babysitter she wouldn't have the money to go out to the pub or for a meal anyway: "once you become a single parent you let go of people who help you get out of the house". This absence of interaction contributed to feelings of loneliness and isolation. Indeed, around a third of the mothers (nearly all from the vulnerable group) described that they struggled with feelings of loneliness and isolation. Jody described:

> Jody: Loneliness. It is hard. Even if I did have childcare I couldn't go out on the evening or for meals. It limits what you can do if you have got friends [...] How can I justify going out to spend money on a meal when I have nappies to buy? You can't do it.

Furthermore, as we will see later in the chapter, a few lone mothers described fears that the government's housing policy would push them further into isolation and loneliness.

Prior domestic violence inhibits support networks: Domestic violence was another factor that a number of mothers (again, mostly in the vulnerable group) described as having affected their ability to construct social support networks. In a few cases, domestic abusers had stopped the interviewee from sustaining relationships with family and friends and developing new relationships. These lone mothers, upon becoming single, had to start from scratch. As Jody described:

> Jody: So my ex was very... he didn't like me having friends at all. It was very hard. I was very isolated. He even tried to separate me from my sister and my parents. So, I wasn't allowed friends basically.

All of the points described above can limit the size of a given lone mother's social network and the opportunities she has for mobilising social support in hard socio-economic times. The greater the number of these problems that the lone mother suffers from, the less extensive her social network will be and the more likely she will be to experience network poverty and lack the flexibility to adapt.

Not all of the interviewees suffered from these problems, and those who didn't seemed in a better situation to deal with economic adversity. For example, Sharon, from the resilient group, might well have been categorised as vulnerable if we just looked at her individual characteristics and circumstances. She was at the time of interview unemployed, her main source of income was benefits, she had lower educational attainment and had previously experienced violent domestic abuse. However, the simple fact that she had not lost contact with her ex-partner's parents meant she had a lot more resources to draw upon in her network. Substantial financial and practical support from both sets of grandparents meant she was able to live the lifestyle she desired, having enough money to provide for her children, making sure they were able to go to sport classes; enough money and free time that she could train to work in a childcare centre; and enough money and time to socialise and develop new friendships.

Sharon: As a parent you want your kids to have. On benefits your kids can't have, what they would be able to have if their parents were working. My kids wouldn't be able to go to gym, for example, if I didn't have any of the other financial things happening, and if it was me alone with my money they wouldn't go to gym, football or swimming.

On the other hand, mothers (such as Jody) who lacked the financial and practical support, but in terms of their individual characteristics were very similar to Sharon, struggled to get by and were classified as vulnerable.

9.3. Does wider economic adversity bring support networks closer together or push them apart?

The section above investigated some reasons why lone mothers might experience difficulty with constructing and maintaining their social networks. The reasons given focused on general aspects of what it means to be a lone mother. However, there are other potential reasons why in hard socio-economic times some groups might experience increasing isolation. As described by Clark and Heath (2014), socio-economic hard times are also likely to negatively impact on relationships and 'informal kindness' (i.e. support), especially amongst groups vulnerable to poverty. Is this the case in our data – does wider economic adversity affect relationships in terms of their strength and intensity?

The evidence suggests a number of tendencies. Some of the interviewees (mostly the mothers with resilient outcomes) described how the crisis might have actually strengthened their relationships as people had increasingly come to rely on one another for support. Other lone mothers (mostly with vulnerable outcomes) described how a tightening of resources meant that they socialised less and had become increasingly isolated, pushed apart from friends and family².

In terms of the potential strengthening of relationships, Melanie summed it up as follows: "In tougher times, you are drawn together, your support network". A handful of other mothers were also cognisant of the fact that adversity was 'intensifying' their relationships. Valerie, for example, described that adversity was bringing her network closer together:

Valerie: When people are under pressure they get closer. So yeah. I've got a really close network of friends. We are all talking the same language. Relationships have been intensified [...] I just think when so many people are under pressure, you have to give each other support. It's a survival strategy.

² On the other hand, some mothers reported changes to their relationships, and the ways in which they'd socialise, which might be regarded as neutral. For example, some of the interviewees described that their nature of socialising has changed as the recession hit. Louise described: "The single parent friends [on the eco-map], we have definitely tightened our belt, over the last six months we do less days out, we got to people's houses and don't go out for lunch, we are all trying to do a lot more free things."

Interviewer: What types of survival strategies are you talking about?

Valerie: It is everything, emotional support, practical support, finding ways of doing stuff much more cheaply. On those kind of terms.

A similar finding is described by Aldrich (2012). He describes that when a natural disaster strikes, people come together, coordinating their actions to rebuild after the disaster. It seems that the same can be said of socio-economic adversities, for some people at least. The type of strengthening described by Melanie and Valerie clearly did not take place for all of the lone mothers that were interviewed.

On the other hand, amongst the vulnerable group it was clear that financial pressures had made it increasingly difficult to find the money, time and energy to spend time with friends and family. Jody described a Gordian knot of a situation related to a trade-off she faced when she was affected by the 'Bedroom Tax'. Told she must pay the additional charge, or move to another area, Jody decided to pay the so-called tax. She didn't want to move to a new area because she had built up a life around her local area, including her personal network of family and friends.

Jody: There is no way I could handle moving. It would mean losing my support network that I have built up around in the local area, my family support worker, the nursery in Saltford. So everything is close. It would mean setting back up again. It has taken me two years to get that all in place.

However, over time, the financial pressure of the bedroom tax meant that she was no longer able to socialise with her friends anyway (we will revisit this particular situation in greater depth in the next chapter). So, one of the primary reasons that she decided to pay the tax was to stay near friends and family. Nevertheless, the additional financial pressure meant that she spent less time with them anyway³.

Furthermore, existing problems with creating reciprocal relationships (as touched on in section 9.2 above) are likely to become intensified as the burden of a lower income and higher outgoings becomes a reality. For example, Celina described how financial pressures had made it increasingly difficult to reciprocate. Consequently, when she occasionally borrowed money from her close friend she felt a certain kind of awkwardness and stress in the relationship.

Given that only mothers who were resilient at the time of the interview described any strengthening of relationships, the evidence leads us to hypothesise that when financial adversity hits then the tolerance limits for the transition from positive to negative relational effects is linked to the initial resources available within the network. Whereas for a mother in the resilient category a given economic shock might just be brushed off, for the mothers in the vulnerable group the same adversity might well mean they cannot afford to socialise or reciprocate with friends. So, the same absolute magnitude of financial adversity is likely to have quite different relational effects across the groups. We saw in Chapter 5 and section 7.2 that exposure to financial adversity hits the lower class, lower educated, lower paid, and those on benefits, harder. It is not a surprise therefore that these are the individuals who seem more likely to go into social retreat, finding themselves increasingly isolated when hard times hit. Indeed, it is for this reason that Clark and Heath (2014) argue that the 'social recession has cut a narrow swathe'.

³ Rosy also described how this type of dynamic, i.e. people 'hunkering down' as they face additional financial pressures, might affect her local neighbourhood: "On a personal level it will affect the neighbourhood I live in, I think there will be more neglect because everyone will be wrapped up in their own world, they won't have the space to do the things they want to do."

In this section we have seen some potentially strengthening and weakening effects that wider economic adversity might have on people's relationships. However, the actual role played by social support networks in hard economic times has yet to be investigated.

9.4. The role social support networks play in constituting adaptive capacity

Adaptive capacity, we saw in Part 1, is a systemic property that maintains a repertoire of potential adaptations to unforeseen problems. The capacity enables a given system to adjust to its environment and disturbances, as well as moderate potential damage and take advantage of opportunities (and thus construct desirable outcomes, such as resilience or transformability, when needed). Chapter 2 and 3 suggested that adaptive capacity is likely constituted by the elements and connections that a given system has access to. Chapter 3 in particular argued that adaptive capacity, in the types of social system with which we are interested, i.e. families, is likely to be linked with the activation of social support.

Having some autonomy over the interactions within a personal support network, we have argued, helps the lone mother deal with exogenous socio-economic change when needed. When something happens outside of the control of a given individual (e.g. valued resources are less available because of economic recession) then in order to retain some level of autonomy that individual will change what is in their power to change. Social support, we have argued, is such a potential resource that can be activated in non-controllable, non-routine, situations such as changing socio-economic circumstances. In the sections that follow we investigate this argument empirically, as to whether support networks are a source of potential adaptations, a source of adjustments, that can potentially lead to the outcomes described in Section 7.2.

The sections that follow are divided such that they broadly correspond to the types of support that were investigated in the previous chapter. Within each section we look at the differences between those with vulnerable and those with resilient outcomes. This enables us to see how the activation of a particular type of support can help the lone mother adapt to her new social environment and conversely what the consequences of lacking support or resources in that area might be. Thus, the interactions discussed in the following subsections take place at final stages of Diagram 6.2 (Arrow 4), i.e., we describe how the activation of social support helped the interviewees adapt, and in some cases construct resilient outcomes.

9.4.1. Emotional support as a psychological aid and decision-making tool in tough times

Research described in Chapter 5 linked receiving emotional support to alleviating some of the negative effects associated with unemployment (Gore 1978, Paul & Moser 2009, Leana & Feldman 1991). For the interviewees in this research, social support alleviated some of the negative effects of socio-economic adversity more generally, including adversity induced by government policy changes, and helped the lone mothers adapt to change in a number of different ways. As will be seen below, for some respondents emotional support was essential in facilitating resilient outcomes.

Some mothers described how emotional support had helped them deal with psychological problems such as stress, anxiety and the uncertainty associated with their situation. As Sarah (resilient) noted "it was the strength behind everything [...] Being able to talk to people about what you are going through, moan, or you know [...] I mean the market is what it is so people understand it is difficult and not fun." She went on to say:

Sarah: When I was unemployed [2009-2012], that was very discouraging and depressing... We [friends] share the same experiences in most cases. And of course the uncertainty, you talk about what is going on, how it is going to affect you and 'what can be done'. Talking is very important.

Some of the interviewees lacked this type of support from friends and family, but sought it out from local organisations, online support forums or formal support workers. Sophie (vulnerable), for example, described that she only had a handful of friends and the only family she was in contact with was her dad. She said she didn't have many people she could trust. So, she sought out emotional support from local support workers. She described that her small network of support workers had helped her cope her emotionally and practically with the 'Bedroom Tax'. The council had been trying to move her to an area where she would become more isolated, on the "other side of Bristol", further away from her dad, friends and local support. However, through discussing the problem with her network of support workers, she described how she was able to find the strength to deal with the situation in a way that led to the best possible outcome for her and her daughter: they stayed in the local area. Her support workers even helped her get an audience with the Mayor of Bristol, George Ferguson, to plead her case. Essentially her support network had enlarged the sphere of influence in which her corrective actions could play out. Without their support, she described, "I'd be an emotional wreck right now. It'd be like a train crash waiting to happen. Without any of them... I dunno."

Emotional support was also quite often a gateway to other types of support⁴. In Sarah's case what started out as just talking to a friend about how hard looking for work was (as she described in the quote at the beginning of this section) eventually led her to make a career change. Her good friend suggested that she became a translator and would help her find her a job. So, discussing "what could be done" with her friends set Sarah on a course of action that she might not otherwise have considered.

Indeed, we saw in Chapter 3 that the decisions that individuals make are quite often embedded in their social networks and/or social foci (Kadushin 2012, Small 2009). For the lone mothers in this research, support with decision-making was one of the most important types of emotional and moral support that they received, especially for those in the vulnerable category. For instance, some of the interviewees did not feel capable of anticipating the future and deciding on how they should act in response. Lynn (vulnerable group), who was one of the few women who seemed to have a good relationship with their ex-partner, described how when she faced financial crisis she would turn to her ex-husband for solutions:

⁴ However, emotional support seemed to act more as a gateway for those with resilient outcomes. Those with vulnerable outcomes covered for gaps in their network by seeking out support workers or people from support organisations. However, as seen in Chapter 8, these contacts rarely gave other types of support, financial support for example.

Lynn: I know that if I was faced with a financial crisis or even an emotional one I could just call him and get some practical call. I would put him there [first concentric circle on her network map] because he is the one to come up with the solutions.

Unlike Lynn, however, some of the lone mothers did not have the resources available in their informal social network for this type of support. As already touched upon, Kate (vulnerable) described that she was taking part in this research to get as much information and advice as possible so she could decide on what course of action to take. She also relied on the suggestion of her local childcare centre before visiting the food bank (which she wouldn't have visited without being advised to by a local support worker). Jody (vulnerable) also described the importance of having people in your network who were, or had been in the past, dealing with similar adversities:

Interviewer: So it is important to have people who have been through similar things in your network?

Jody: Definitely, definitely, definitely. You can say "have you tried this", or "I've said this at their school". Just information sharing has been invaluable.

Jody described that her friends would report to one another their efforts, experiments and information about what is likely to work given a particular situation. The experiences they share can help one another deal with similar problems. Those in the vulnerable group seemed to rely more on support services (e.g. local charities and organisations) for this type of support. Either the support services would help directly with problem solving, or they would act as a social foci, introducing the mothers to similar people who they could share experiences, tips and information with. However, this does means that those in the vulnerable group are likely to be more exposed to future cuts in these services. One fall-out of local service cuts will be that vulnerable groups, such as lone mothers, might not have the appropriate decision-making support they need when navigating changes to the economy and/or welfare system.

9.4.2. Finding and sustaining work in tough times: The role played by informal job support and childcare

As we saw in section 7.2, being in employment was positively associated with having resilient outcomes. Most of the respondents who were in employment had entered work since the beginning of the financial crisis (during the previous 5 years). Those in work, by and large, felt able to cope with change. Indeed, it is for this reason that all of the mothers in the vulnerable group said they knew that getting into work would help them cope better with their stressful financial situation, and this was why they were actively looking for employment. Why had some mothers been successful in getting into work, whilst others had been struggling? The reason is, in part, linked to what informal social support is available. Firstly, a handful of the mothers found work through their contacts. Secondly, childcare from friends and family was instrumental to sustaining work.

Sarah's interview demonstrated both of these elements. As we have already seen, one of Sarah's good friends, knowing that she was struggling without work, persuaded her to become a translator and got her a job⁵. The company initially wanted to employ Sarah full-time. Yet, she

⁵ Similarly, Louise described that she found it much easier to find work through friends compared to the Job

did not feel that she was able to work full-time due to her son having special needs. So, she was allowed to share the job with one of her friends, another mother looking for work. To facilitate employment these mothers exchanged childcare with one another and other friends. Importantly, Sarah had a large support network with plenty of options which she could call upon if needed, which gave her greater flexibility.

Sarah: On Tuesday Jessica. On Wednesday it's his Dad. Friday is it Olivia. Myself Monday and Thursday. Monday I don't work and Thursday I finish early.

Interviewer: Do you think you'd be able to work part-time if you didn't have [various friends] looking after [son]?

Sarah: Ah, that would be very difficult! Because, well... obviously you'd have to look into afterschool clubs, I think there is some financial help for that. But, the thing with me, I just can't look into that. It's [referring to the support network] very important! 6

Sarah also described that with the plenty of options she had for childcare, making changes to her arrangements was a possibility. Her employment was thus not contingent on a given person, but the many options she had. A similar situation was echoed across many of those in work. Childcare from a social support network was a key ingredient in employment sustainability, especially amongst those mothers with younger children. Eve (resilient), for example, upon being asked if entering employment was making things easier, helping her cope financially with inflation, offered the following response:

Eve: Much better, much better without a doubt. It does make things better, but I can see why people don't do it. It is really hard if you don't... I'm lucky because I have a good support network. If you don't have that support network, first of all childcare is expensive. If the financial help isn't there for that type of thing, I can understand why people don't work – it is really difficult! If [friends & family] didn't take my son to school in the mornings, I don't know what I'd do... I'm really lucky.

Eve, like Sarah, had plenty of options for childcare and this made her working life much easier. So, for most of those mothers entering work, having an appropriate support network was necessary. The exceptions to this rule, the small proportion of mothers who relied on formal paid childcare, were either financially well off, relied on family to pay for formal childcare⁷, or their children were old enough to care for themselves.

What has been described above is only the case for those mothers with resilient outcomes. The situation for those in the vulnerable group was quite different. Although most of the mothers in the vulnerable group realised that getting into work would help with their difficult financial situation, they tended to lack the kind of contacts that might help them with informal job opportunities (as Sarah's contacts did). As we saw in the previous chapter, job related advice is

Centre: Interviewer: The work you mention seems to come through your network mostly? Louise: Yeah, definitely. I have to apply for two jobs a week [through JCP] and get nowhere, but from friends there are more frequent odd jobs where I get money from.

⁶ Sarah also described how balance and reciprocity was of key importance to keeping her bricolage of support going: "You know if there isn't a balance. Olivia looks after my son on Friday, when I work, but I look after her children on Monday because she works. So here, there is a balance. But with Jessica, she doesn't need me to look after her son. That puts me in a position in which I'd love to give something back. So I might change that, possibly."

⁷ For example, Daniella's family was not around to offer childcare. Without childcare, however, she would find it very difficult to sustain her professional job as a manager in the NHS, so her parents pay for her to employ an au pair to make it possible: "But now I have an au pair. My parents are finically really supportive as they aren't close by they can't help practically, so my Dad is funding the au pair and he lives with me and does 25 hours a week. And that's how I survive at the moment."

most likely to come from people with a higher occupational class – service workers. But, as also seen in Chapter 8, those with vulnerable outcomes had fewer service class workers in their networks.

On top of this, they tended to lack childcare support to make employment feasible. As Celina (vulnerable) noted "I don't have somebody to help me with them. If I had somebody I might be able to work". For Celina, her lack of childcare options was associated with having to search for flexible work (i.e. employment during school hours) in an already tough labour market. This narrowed the employment opportunities available, making it more difficult for her to find work. As she described, there was nothing out there suitable for her as a single mother with caring demands. Similarly, Jody (vulnerable) noted the problems that are created when family live at a distance and cannot offer childcare:

Jody: To work I need the childcare. That is the one problem that I have got. The [formal] childcare is so expensive. My mum and dad live close, but not close enough to pick them up from school or nursery or anything like that. My mum doesn't drive. They are the only people I have got to help me with childcare

As we saw in the previous chapter, the vulnerable group tended to fill gaps in their personal networks with formal support workers rather than friends. Jody's network was an example of this. Support workers, however, as we also saw in Chapter 8, give little opportunity for access to childcare support. (It is likely not a part of their job description.)

Jody's quote also highlights the fact that some mothers find it difficult to work around the geographical dispersion of their network. As the previous chapter showed, childcare support was unsurprisingly the most sensitive form of support to the geographical dispersion of social ties, especially family ties. A mother from the transformable group, Rachel, described her geographically dispersed network in the following terms:

Rachel: Socially it works. You can keep in touch by emails, Skyping and so on and you know especially before you have children, travel to see people and that's fun. That's nice. That's great. Socially it's not a problem. But in terms of the realities of needing support with childcare it's a whole different board game.

Unlike Jody, however, Rachel was able to pay for childcare to make work feasible.

Finally, it is worth also mentioning that childcare helped with other undertakings aside from employment. By freeing up the lone mothers time and resources, childcare also facilitated the mothers doing things that might expand their opportunities, such as educational training and socialising. The role played by childcare is thus largely one of facilitation. It gives leverage to achieve other things that might not be possible otherwise. Sharon (resilient) noted that "if she [mother in-law] wasn't around I wouldn't have as much time; I probably wouldn't have the friends I have. I'd be more secluded and more isolated than I am now".

9.4.3. Financial support to offset the worst of the tough economic times

The role played by financial support in buffering and helping lone mothers cope with the adverse economic circumstances was varied. One reason for this was that the type and extent

of financial support given to those with vulnerable and those with resilient outcomes was more often than not very different and served different purposes.

The qualitative evidence suggests that those with vulnerable outcomes activated financial support directly in response to adverse economic circumstances and government policy changes. They tended to borrow small amounts of money to offset negative circumstances, such as not being able to buy food or clothes for their children. These are the lone mothers that borrow money to "stay afloat". For example, Abigail (vulnerable) described that, in the absence of her own personal financial buffer (such as savings), when she had her benefits sanctioned the only way to buy food was to borrow from friends: "On an immediate basis it meant I had no money for food shopping, so I borrowed money off Ricky to do food shopping. I also came here [SPAN, charity] to use the phones to get all the benefits back." To give another example, in the quote below Lynn (vulnerable) demonstrates the reasoning process that she went through in response to an increase in council tax and housing benefit changes:

Lynn: The Local Authorities set their own rules, and they are making their own savings and initially they proposed the benefit would only cover 90% of it [council tax] and you find the rest... So I get less help for council tax... It's the difference to me to paying for scouts or other lessons without worrying about it, but now I have to start worrying and thinking about where I am going to pay for it all. [Also] last year when the housing benefits changed, and how it is calculated, means I can only get a certain % of my housing costs, I only get £675 a month of help. Shawn [ex-husband] has had to give me more money.

Elsewhere Lynn explained that without help from her ex-husband she would likely have had to move out of Bath (because of the housing benefit changes), the city where she works, where her son goes to school and where she feels comfortable: "Shawn helps and that's why I can stay in Bath." In Chapter 7 we described Lynn's use of a 'warning signal', i.e. the specific conditions that trigger new motivations for action. With the policy changes that were affecting Lynn (which we have seen her describe above) she seemed acutely aware of nearing her warning signal threshold and what going beyond it would mean for her family. She reasoned about the potential outcomes; not being able to afford to pay for her son to go to scouts, having to move out of Bath, things that she reasonably aspired to keep the same, and decided that one solution to offset these potential outcomes was to ask for more financial support from her ex-husband. Even given this support, Lynn felt that she struggled. Clearly, however, she would have struggled even more without her ex-husband's financial support.

This particular example shows how the imagined consequences of exposure to government policy change primed Lynn to take corrective social action. The example brings all the factors discussed thus far together; exposure to financial adversity, aspirations, and the mobilisation of social resources as a form of corrective action. Deviation was realised, motivation was created, and corrective action was taken. Not all the women in the vulnerable group had this type of corrective response as an opportunity.

⁸ An extended quote on the same subject: "Last year when housing benefit changed, it became apparent housing wasn't going to cover my rent, which was gutting for me, I was really distressed by it. I asked Shawn if he would put up the maintenance to cover it and he did [...] I might have found somewhere [an appropriate home with less bedrooms] in Midsummer Norton, but it was too far away to keep the same schools and everything, it is just too far away. Everything would have to change if I had moved out there, and I was very distressed thinking that I might have to do that. I have a 14 year old; I don't want to change everything right now"

Furthermore, the vulnerable group of lone mothers did not tend to borrow large amounts of money. One reason for this was that their contacts are less likely to have significant financial resources. As seen in Chapter 8, their contacts are more likely to be unemployed or in a lower occupational class. Unemployed alters are unlikely to be able to offer large scale financial assistance. Also, in a few cases the capacity of friends and family to help financially had eroded since the start of the crisis. For example, some of the lone mothers described that family members had been made redundant because of the tough labour market, or taken a pay cut, so couldn't offer much in terms of financial support. Jody (vulnerable) described: "My dad recently got made redundant, but he found another job. But he had to take a massive pay cut because he is 63, so he knew he wouldn't get the same. Hence why it has been really hard for me to ask them to help me financially, because they are struggling." Moreover, borrowing large amounts of money from friends was not always feasible because, as has already been described, some of the lone mothers simply wouldn't be able to pay them back.

On the other hand, those with resilient outcomes described the potential opportunities they had for financial support when needed. We saw in Chapter 8, for example, that the lone mothers with resilient outcomes had networks that would likely have a greater depth of valuable resources in (i.e. they had more service class workers in their networks). However, even though those with resilient outcomes seemed to have access to more resources, they didn't have as much need to activate financial support in response to adverse circumstances. Kirsty (resilient), for example, described how she had the option of borrowing up to £10,000 from a good friend (who was the CEO of his own company). He had explicitly told her he could lend her money if need be. However, she had no motivation for activating this potential support. She said that she felt fairly well off anyway. Even though she didn't work, she owned her own property and was managing to live comfortably. She hadn't deviated from her lifestyle aspirations. So, she had options for financial support in her network but no motivation for activating it. On the other hand, the lone mothers in the vulnerable group tended to have reasons to mobilise financial support, but they lacked the options.

The evidence also suggests that for those with resilient outcomes borrowing was generally not a response to economic adversity (in direct contrast to the vulnerable group). Nor did financial support serve the purpose of dealing with policy changes (such as the under-occupancy charge). Unlike the vulnerable group, they did not tend to borrow small amounts of money to offset negative circumstances. Rather, they seemed to borrow more substantial amounts of money to help, for instance, pay a deposit on a house (or even pay off the mortgage). Three women in the resilient group described how prior financial help from their parents had helped them to buy a house (in two cases, outright). This support had the unintended consequence of helping them buffer adversity in the current period. They talked of being 'sheltered' because they owned their own house. As Rita described:

Rita: I think I'm quite sheltered and one reason is that I own my own house outright [...] At the point when I bought my house, when I was 30, the market was low, and since then [my] parents gave me

⁹ Similarly, Kate described things getting tighter in her family: "He [her dad] used to work as a cameraman for the BBC, but he was made redundant". As a consequence, when Kate borrowed money from her family she found it difficult because she wasn't sure if they needed it back or not.

money to pay the mortgage off. What that means is that any money I get is money I can spend on bills and food and so on. So it gives me a freedom that other people don't have. I'm incredibly grateful to it.

So, even though this type of financial support was not activated in response to the adverse economic circumstances, it did have the unintended benefit of supplying additional economic resources to help buffer against economic adversity when it strikes. This type of large financial assistance was perhaps more available to these lone mothers because, as we saw in Chapter 8, they tended to have alters in their networks (i.e. in a higher-occupational class) who would be likely to have access to greater level of financial resources (compared to those in the vulnerable group). Given this, it is expect that relational processes (the giving and receiving of financial support, for instance) could lead to previous socio-economic inequalities being reinforced and/or exacerbated during an economic crisis. Those with class based resources seem more likely to be able to retain a desirable standard of living, those without these resources struggling more and moving towards vulnerable outcomes.

To conclude this section, it seems that those mothers who had the greatest level of exposure to economic adversity also seemed to have the smallest amount of financial resources available in their networks. In Part 1 we discussed the work of Harknett and Hartness (2011), who noted that poverty is associated with the absence of any financial support network. To this we can add that the extent of vulnerability to adverse wider socio-economic conditions is likely associated with lack of a financial support network.

9.5. Creating wider reaching change to protect against future adversity (but, sometimes it doesn't go quite to plan)

In Chapter 2 it was described how some systems use adverse circumstances (or imagined future adversity) as a potential source of innovation and re-organise their structure to create desirable outcomes. This section investigates this empirically.

A handful of mothers, all in the transformable group, described how at the time of the interview they were reweaving the social and economic elements that they had access to, in an attempt to rearrange their opportunity structure and respond to change in an improved manner. By adding new connections into their network some interviewees hoped to create opportunities that would help them around potential future adversity. Rita, for instance, hoped that through creating weaker bridging ties she would have the capacity to adapt if changing circumstances meant that she lost her job. She constructed her network to give her the best opportunities in case of future adversity.

Rita: I might not have work [in the future] ... [But] I always believe that if I put the right energy into my connections and contacts that something will happen, that I'll get paid for doing something. [...] So when somebody thinks they need someone, they think of me. When I see an opportunity I try to make a contact. I've become quite good at it I think.

Rita also described how she had always been able to meet her aspirations because of her network building: "I've been able to [...] have a very high quality of life precisely because of networking".

Actually, the other mothers in the transformable group were not as explicit about expanding their personal network. Rather, they used the resources in their personal network as a safety net whilst they searched out other opportunities that would help them in the future, such as further educational training or a new career. They used their network resources as a platform from which to build opportunities. They kept one foot on safe ground, and with the other searched for opportunities and new ways of doing things. These opportunities, however, might not always materialise in the ways imagined. The following example, from Rachel, gives an idea of how she used her network obligations as safe-ground from which to build something new. And, what happened when her expectations didn't play out as expected.

Rachel described that she had previously had a "lucrative, albeit soul destroying career" working in the finance industry. Her previous career had enabled her to buy her own house outright. However, at the time of the interview Rachel's main source of income was financial support from her ex-husband, which she was dependent upon for her aspired towards way of life. Given this financial support, she seemed economically resilient in the present (to a greater extent than most of the other interviewees) – her financial situation allowed her to cope with the economic hard times. For this reason, she said she was "lucky compared with quite a lot of single parents." However, we saw in Chapter 7 that Rachel is what could be called 'economically robust, yet fragile'. Rachel was very aware of the vulnerabilities of her current situation and for this reason was seeking to transform the way that she was doing things to ensure the financial viability of her lifestyle going forward. She was transforming her career options, using the support from her ex-husband as safe ground, to enable a more flexible and financially independent future. In particular, she was training to become a psychotherapist.

However, she had found self-employment (working as a therapist in private practice) quite financially precarious. For this reason she had sought out guaranteed counselling work with the NHS. Rachel had taken on work with the NHS, happy to feel as she might finally have some financial security (other than her ex-husband). Things, however, didn't go quite to plan. Oddly, the NHS had not given her a contract, even though she had been working for them on verbal contract for a few months. But, being the NHS, she trusted them. They even made excuses for not paying her on time: "We will get you the money, but we just don't know how to at the moment".

Rachel: And as a single parent you know, the really awful thing I found, I had budgeted based on the work they had told me I was going to get, for work I had done in October, November, December. I had budgeted on that for Christmas, but I didn't get it. Not getting it was really stressful. I was checking my bank balance all the time, having to reign in my Christmas spending, things like that, for this bloody paid work which they hadn't paid me for.

And after all of this stress, after 4-5 months of working for the NHS (by which point she had finally been paid) they suddenly turned around and told her 'Oh, by the way, you are on a zero hour contract'.

Rachel: We weren't told we were on zero hours contracts because there is meant to be something about no reciprocal obligation on a zero hours contract, whereas we were clearly obliged to produce this project. It has been a really horrible exploitative experience.

Interviewer: Do you think that is related to NHS funding issues?

Rachel: This is very controversial isn't it ... Yeah definitely it was!

This exposure would have likely caused serious problems for other lone mothers without the same level of personal resources. She said she felt "lucky to be ok, that I have that buffer" and that the experience "didn't kill me". The reason she was able to cope was because of her exhusbands financial support, which along with the fact she didn't have to worry about a mortgage, meant she could still afford to live to a standard which she realised was more than most other lone mothers could afford. Albeit, Rachel's aspirations for the future, to reduce her dependency on her ex-husband, seemed to have been damaged in the short term. She felt at the time like her goal had "suddenly vanished". She questioned what might have happened to other single mothers without any financial support to fall back on. Rachel was still working on becoming financially independent at the time of the interview.

In this section we have seen how some actors change their networks and how some use network resources as safe ground from which to build future security (albeit, this might not always work out as planned).

9.6. The importance of 'network diversity' and 'network depth' in creating adaptive capacity

We have seen so far that both the vulnerable group and the resilient group activated support in times of need. Social support was important for all groups. Indeed, for those in the vulnerable group, it was questionable whether without support they would be able to keep their heads above water at all. Given that social support was essential for all mothers, how can we further distinguish between the groups? Ideas from Chapter 2 can help here. Chapter 2 described how ecosystems have been shown to be more resilient if they have the properties of what ecologists call 'response diversity' and 'functional redundancy'. For our purposes, we have instead used the terms network diversity and network depth respectively.

The importance of network diversity

Chapter 2 argued that the more diverse the responses are in a given system, the more stable it will be when there are perturbations in its environment. A handyman with a diverse toolbox will be able to deal with a greater range of situations than a handyman with only one type of tool. Similarly, the argument goes, a network with a varied composition of resources is more likely to be of use when faced with some adversity.

This research operationalises the concept by comparing the diversity of support available to the vulnerable as against the resilient group. Chart 9.1 below shows that those with vulnerable outcomes tended to have only three or less types of support available. Whereas, those with resilient outcomes tended to have all 4 different types of support available.

Support diversity 0.90 0.80 Proportion of mothers 0.70 Vulnerable ■ Resilient 0.60 0.50 0.40 0.30 0.20 0.10 0.00 1 2

Number of different types of support

Chart 9.1: Support diversity, by adaptive outcomes

Rita was aware of the potential problems associated with only having limited types of support available. Although Rita showed resilient outcomes in terms of how she had coped financially during the economic crisis, and she had a network full of contacts that would be useful in terms of finances (her family) and work opportunities (weaker bridging ties), she described how she lacked emotional and practical support. Asked what would be hard for her over the coming year, she responded:

Rita: That thing about having to think when a [personal] emergency happens, or when something different happens. I have to think it through. There isn't any obvious fall-back. That sense of extreme isolation when that happens [...] In the middle of all of this lovely stuff, there is that sense of isolation.

Interviewer: It's interesting that even with all of these people around you, you feel isolated some times. Can you think why?

Rita: I think because, and this might sound bizarre, I think of the network as being a kind of transaction in a sense. I only feel free to ask people to do things for me, to the extent that I feel that they should feel free to ask me to do things.

This highlights that the concept of resilience has a potentially interesting nuance, linked to the concept of network diversity. Because Sarah had connections in her network that supported her financially and potentially also in terms of employment, she was able to cope with the effects of the economic crisis (and, she didn't need informal childcare support). However, she would not have been able to cope with other types of personal emergency. She described how she had once been hospitalised and had no one to take care of her son while she was in hospital. Her resilience was specific. Diversity then, it could be argued, is associated with having a general level of resilience against the unknown. Certain types of support are good for certain situations. So, having a diversity of support makes it more likely that any given person will be able to deal with a range of different adversities.

The importance of network depth

By network depth we mean the elements in a system which share the same function are duplicated or replicated. As these elements share the same function, adding more does not necessarily lead to an increase in system performance. However, it does give the system more options for change if one element in the system fails or a current arrangement isn't working out. If a system lacks these options it is more likely to depend for its persistence on a specific element, and thus the whole system is more prone to failure if that specific element itself fails.

The concept of network depth can be operationalised in social network terms by examining the 'degree' of a 'functional subgroup'. In this research, it means examining the degree of the different types of support. Table 9.1 below shows the average amount of contacts that lone mothers in each group had for each type of support. Clearly those with resilient outcomes have a greater number of contacts across all areas of support (the factor of difference is shown in the row termed 'High / Low'). They have a much greater depth of options for each type of support.

					Support
	Emotional	Childcare	Job	Finance	total
Vulnerable outcomes	3.7	2.8	0.4	2.3	9.2
Resilient outcomes	7.0	5.3	2.8	2.5	17.6
(High / Low)	1.9	1.9	7.3	1.1	1.9

Table 9.1: Network depth on the different types of support

It is interesting to examine what this might mean in a specific situation, such as the sustainability of employment. Chapter 5 described the work of Evans et al. (2004) who showed that "lone parents are [...] almost twice as likely to leave their job as non-lone parents and are a third more likely to leave their job compared to single childless women". Explaining the variability in sustaining employment within lone mothers as a group can perhaps go some way to explaining what Evans et al. (2004) describe between lone parents and other types of family. Celina (vulnerable) described how because she was reliant upon a single friend for childcare, her previous employment had been precarious:

Celina: I started doing a care job -I did it for three years. I had a friend who lives here and she used to help me with my kids at night. When I went to work and she would help me with my kids and I would go to the night shift. When she left, there was nobody to help me with them so I stopped working.

Because of Celina's dependence on a single friend, she did not have the capacity to continue working when that friend left to city. In fact, for Celina her employment, her whole livelihood and lifestyle, was dependent on that one friend. On the other hand, Sarah (resilient) described how she didn't need to worry about the impact that potential emergencies might have on her work:

Sarah: If there was a problem, last minute, or you know [...] I would probably call Francis, or Lynn, or Jo. These three, or Maria of course.

Sarah also went on to say she had neighbours: "We look after each other's children when the need occurs. We know we can back each other up if need be". Sarah had plenty of options and thus the capacity to adapt to emergencies that might crop up. Unlike Celina, if one of her friends was to move away she had a range of options available to replace that person. Her work and livelihood was not dependent on a single friend. Having options for the same type of support, i.e. childcare support, introduces a greater level of certainty and regularity with activities or ways of life that depended upon those forms of support. And, as Louise described "I need regularity to be able to plan things".

Coupled parents are more likely to have childcare options (what with both parents around, as well as both sets of grandparents, and a larger personal family network). So, one hypothesis to explain the findings of Evans' et al. (2004) is that compared to other types of family, some lone mothers lack depth of options and thus regularity in their childcare.

Vulnerable vs. Resilient case study

Measures of network diversity and depth could be used to examine individual cases and predict whether or not they are likely to have more or less adaptive capacity (relative to other cases). The radar chart below, for instance, shows the network diversity and depth of two lone mothers, Celina (vulnerable) and Sarah (resilient). Each line represents one connection that supplies support along the particular dimensions. The visual representation of the dimensions and depth of support gives us an idea of the opportunity space available for corrective actions when adversity strikes. One would presume, from examining the chart, that if adversity strikes both women equally, then Sarah would have a greater level of capacity to deal with that adversity (and, also, perhaps a greater range of adversities).

Network diversity and depth Emotional Celina Financial support Childcare Job assistance

Chart 9.2: Network diversity and depth, Celina and Sarah.

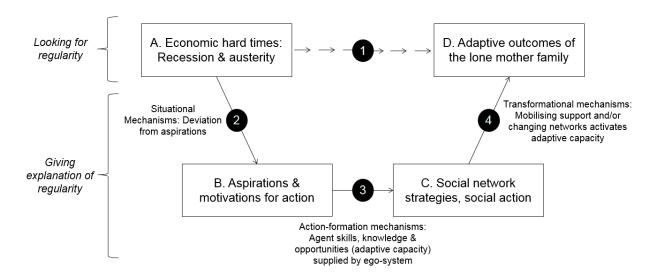
In this section we have seen that we can build on our analysis personal networks by examining some simple theoretically informed indicators of connectedness and support. These indicators, we have argued, can inform us of the probable level of adaptive capacity that a given family has, even prior to some adversity striking (and could thus potentially be used to prevent vulnerable outcomes manifesting in adverse times).

It has also been seen that even small changes in support might help the vulnerable mothers move towards resilience (and vice versa). Celina, for example, would have been much more likely to sustain her employment if she would have had even one or two other friends who had been able to take care of her children when her sole friend moved out of the city.

9.7. Conclusions

Sarah: I feel lucky. Now I think, it's funny, a friend of mine, we were discussing how you can end up with nothing. Some people end up with absolutely nothing. I said I worry sometimes that maybe that's going to happen to me. She said, no that's never going to happen to you, you've got a very good network around you. She said "you're lucky". I hope I can stay lucky.

The explanatory argument started in Chapter 7 by demonstrating that wider economic hard times generate regular changes in people's motivations for action (Arrow 2 in Diagram 6.2 below). People work with the general aim of retaining a given desirable lifestyle, and any events or situations that potentially damage that lifestyle will prime them to take corrective actions to offset or adapt to that damage. Chapters 7 and 8 argued that the particular actions that people take in response will be conditioned by the skills they have, the information they have access to and the opportunities available in their social network (Arrow 3). Finally, this chapter has shown how the mobilisation of support and/or changing a given social network will activate latent adaptive capacity and help the lone mothers interviewed to offset actual or potential damage to lifestyle aspirations (Arrow 4). Those individuals who lacked the opportunities to activate support (either through a lack of network diversity or depth), we have seen, are relatively speaking disadvantaged. So, certain types of network are likely to bring about particular outcomes.



In each case, the overall outcome, emerged from a combination of the factors described throughout Chapters 7 - 9. For example, Chapter 7 described how employment seemed important in constituting resilience. Although, as seen in this chapter, employment itself is quite often dependent upon certain social conditions. So, the outcomes are rarely caused by isolated factors or generative processes. However, the analysis thus far has largely examined the generative processes in isolation from one another. It is for this reason that we have also conducted a within case analysis, presented in the next chapter.

Chapter 10: Longitudinal case study illustrations

10.1. Introduction

The method of analysis in the previous chapter, between-case analysis, led us towards a somewhat decontextualized, abstract understanding of the processes at work in the data. Between-case analysis allowed us to highlight a range of factors, important across cases, which seem to increase adaptive capacity, facilitating the lone mothers creating resilience against economic adversity. However, we have not yet explored in any depth how these factors interrelate with one another within a given case. Moreover, how do the processes already described combine with the idiosyncratic features of each case? In this chapter we address these issues, re-contextualising the findings and showing how the processes uncovered in the previous empirical chapters fit together within a single case. To do so, we shift to within-case analysis.

The three cases examined in this chapter have been chosen because of their theoretical relevance. Firstly, they display a range of adaptive outcomes through time. Secondly, each case demonstrates a different combination of the factors already described and allows us to explore how these factors interlink to constitute the vulnerabilities and resilience of each case. Each of the cases analysed in this chapter was also involved in the longitudinal aspect of the research¹. The longitudinal data is not used to modify the argument that has been presented in the previous chapters. Rather, the processes uncovered thus far are used to help explain and illuminate the longitudinal data. Having said this, the utilisation of longitudinal data does allow us to deepen and enrich our understanding of change over time.

- With Jody (vulnerable) we see what happens when the family network is geographically dispersed and the family has very little economic capital. At the time of the first interview, Jody was receiving financial support from her parents to offset her exposure to the underoccupancy charge (the 'Bedroom Tax'). However, between the interviews Jody's support network had been unable to keep helping her financially. Consequently, her adaptive capacity had eroded and she had become more vulnerable to economic adversity.
- At the time of the first interview, Celina (vulnerable) was classified as vulnerable to economic adversity. However, by the time of the second interview her support network had helped her regain some lost ground and she felt more in control of her financial situation. She had moved from near the bottom of the vulnerable group towards becoming more resilient.
- Eve (resilient) demonstrated what a strong social support network looks like. Her strong support network enabled her to work and even to consider taking risks, building positional advantage between interviews. It is because of various types of support from her network that Eve considered herself to be resilient against the wider economic adversity.

¹ It will be remembered that six interviews were conducted longitudinally. Due to the intensive nature of withincase analysis, only three of these have been used for the purposes of this chapter (i.e. space does not allow for the within-case analysis of all six longitudinal cases).

Each case is also representative of the group from which they have been drawn. Jody and Celina both had a relatively small number of personal connections; both were out of work and both had lower educational attainment. Eve had more social connections, was in work and had higher educational attainment. Moreover, the narrative structure of each case is representative of the explanations given thus far. By this we mean that each case represents the general argument for their group at each stage of the explanation (Diagram 6.2). Overall, the chapter brings together the answers given to each of the research questions and shows how the answers can help us understand the outcomes of specific cases.

10.2. Jody's deteriorating capacity to cope

The queen... she has just been awarded more hasn't she. I don't think she needs it. Is she paying Bedroom Tax? She should be paying bedroom tax. She has so many spare bedrooms, it would probably sort us out. It is very unfair how they work to different things. It seems like the rich get richer and the poor get poorer. They don't help you get up.

At the time of the first interview Jody was 37 and had two young daughters. Her older daughter was 6 and her youngest was 4. She had been a lone mother for three years after leaving her alcoholic ex-husband because of violent domestic abuse. She had obtained GCSE's around twenty years ago and until four years ago had worked as a financial credit controller (so, she was experienced at budgeting and being thrifty). She had been made redundant at the onset of the economic crisis and had struggled to get back into work ever since (because, as we will see, she no longer had childcare). For this reason, her main source of income was a range of benefits (IS, CTC and CB). She was vulnerable to economic adversity at the time of both interviews. However, her situation had worsened by the time of the second interview, to the point that her mental wellbeing was so badly affected that she had attempted to commit suicide.

10.2.1. Jody's vulnerable outcomes and her goals in response

Jody felt that a range of adverse financial changes had affected her family. Indeed, she described being affected by the rising cost of living (her money was buying less at the supermarket), by an inflexible labour market, and by benefit changes. In terms of benefit changes, Jody described how she now had to pay a contribution towards her council tax. However, the particular change that was causing her the most problems at the first interview was the under-occupancy charge.

The bedroom tax, I've got two girls, so technically I'm only entitled to a two bed property. But because my ex-husband has multiple sclerosis they awarded us a three bed property because it has wider doorways. So after I kicked him out, I'm only entitled to a two bed, so I've been stung with the Bedroom Tax. It is almost like, "You kicked him out, well done, but here, have the Bedroom Tax". I can understand why people let them back in.

Jody's main goal was to provide for her children: "my goal is to provide for my children without anyone else doing it!" To provide for her children, Jody's wanted to get into work as soon as possible. To build her confidence for work she was volunteering with the hope of eventually finding a job (through her volunteering) helping people recover from domestic violence. When her husband had been around to help with the childcare, Jody had previously been able to manage work and family life. However, she now had no one to help her with childcare and was struggling to find a flexible job. She also wanted to remove her exposure to the under-occupancy charge by finding a suitable home in the local area. She said that her new home must be in the local area to ensure that she would not lose her local support, and also so she didn't have to move her children to a different school. Asked what had shaped these goals in the current time, she replied "well, when the bedroom tax came in, the council tax, my money went down by a tenth!" Having said all of this, when the researcher first met Jody, she seemed very upbeat about getting her life back on track after divorcing her husband.

However, by the time of the second interview, Jody was no longer upbeat. She described how in-between the interviews she had been let off the under-occupancy charge for a year, thanks to the efforts of a handful of local charities and her GP's letter writing. However, she had recently started to pay the so-called tax again. She was now down £77 a month on the bedroom tax and £21 a month on her council tax. On top of this, Jody had noticed that the cost of living has gone up again between the two interviews:

The food prices are going up, petrol prices are going up. It is scary. How am I going to do this? [...]Iliterally have nothing in the bank account at all, and I still need to do shopping. I haven't got any leeway. If I dropped my milk on the floor, what would I do?

When asked what she thought of the news that an economic recovery was taking place she commented "I haven't noted any difference at all. I think they are just making it up." Jody was no longer optimistic about getting her life back on track. She described how she could barely afford to feed herself.

I don't want to deprive them [her children], so I find that I am not eating as much. I'm cutting down on stuff for me. I'm finding I don't eat much. I don't have breakfast. I tend to have just one meal a day. And that is it. I cannot afford to keep me and keep them. It is crazy, but that's the way it is... I literally just live².

At the time of the second interview, Jody was also dealing with personal stressors that made coping with exposure to wider socio-economic adversity even more challenging. Her exhusband was seeking access to her daughters and had taken her to court to fight his case. This not only caused additional psychological turmoil, but it was costing her money to get the bus to court once a week. Her increasingly precarious financial situation meant that she no longer saw friends nor accessed support from local charities (as accessing friends and support meant spending money on travel which she could no longer afford). To improve her situation, Jody was "still concentrating on getting a job".

One reason that she had not found a job in-between the interviews was that she couldn't finance formal childcare and had no access to informal childcare. Her lack of childcare options (formal and informal) meant that she was searching for a flexible job when she felt like there was "no such thing". She was no longer able to volunteer (because she couldn't afford the cost of the bus fare) so her confidence about finding work was at a new low. Although Jody's motivations had changed because of the socio-economic crisis, i.e. she was desperate to find work, she lacked options for taking actions that might well have helped her with this goal. She had the motivation

² Jody also described how she had started to feed her children the cheapest food she could buy: "They live on pasta, pizza, very cheap stuff."

but not the options. For the various reasons described above, Jody felt so low that she had attempted suicide a few months before the second interview: "I took quite a few antidepressants and went to sleep".

10.2.2. Jody's faltering social support

At the time of her first interview Jody named 9 contacts who she felt close to. Her first circle consisted of family, who all lived in the same town, but far enough away that practical support with things like childcare was not possible. She also had four close friends in her first circle, two of whom she had met at a local support organisation for domestic abuse recovery. She had a lower proportion of friends in her network compared to those with resilient outcomes, but made up for this with the addition of two support workers (who had helped her get her life back on track following the divorce). She lacked weaker ties (the third circle) at both interview occasions.

At the time of the first interview, Jody's network was very emotionally supportive. This was certainly not to be underestimated. She said her personal network was a tremendous source of psychological resilience. The most important support that she received was help with decisionmaking from her support workers. They had helped her consider which careers would suit her situation and they also helped her plan financially. However, her network was limited to this type of support and could not help financially or practically. This was partly because the support workers in her network were limited to helping her emotionally and also partly because her family and friends lived too far away to help with childcare. She did, however, have supportive parents who helped her financially. In fact, at the time of the first interview their financial support was instrumental to help her deal with the under-occupancy charge.

As I said, I've been asked to pay the Bedroom Tax. I've found it increasingly difficult to do that. So I spoke to my parents at the weekend, and asked them to help me out on a regular basis.

This financial support from her parents provided her with some buffering from the worst effects of the policy. However, even given this support, she still described: "I go shopping and think I hope I have enough in the bank account to cover this".

By the time of the second interview Jody's network had shrunk. She was now suffering from all of the conditions of 'network poverty' described in the previous chapter, and this had been made worse by her deteriorating financial situation which had pushed her further into isolation. Even accessing her support workers had become difficult as it required getting a bus which she could no longer afford. So, by the time of the second interview she crossed them off her personal network map. She suffered terribly from isolation and loneliness, in part because she had no money to socialise.

In a day I might have a 10 minute conversation with an adult. Weekends... I could be stuck in for 48 hours with 2 kids, no one to speak to. There isn't that many things you can do that are free.

Indeed, by the time of her second interview, things seemed to have become much worse: 'hard times' had really hit. Although her parents still seemed to help her out occasional, the monthly financial support they had been giving her at the time of the first interview to help her deal with the under-occupancy charge had come to an end. Her father had been made redundant and in

order to find another job had accepted a big salary drop. For this reason, her parents were now struggling financially as well. Other friends had been made redundant or had experienced taking a pay cut, and her sister hadn't had a pay rise in a long time; "they are all literally just covering the basics" she said. As a result she no longer had anyone she could ask for financial support.

The result, as we have seen, is that Jody was only eating one meal a day and had cut back on socialising. Because she was no longer socialising and no longer had access to her support workers, most of her sources of emotional support had withered away.

10.2.3. Case summary: Deteriorating adaptive capacity due to weakening social support

Jody was initially categorised as vulnerable to adverse socio-economic circumstances. By the time of the second interview Jody's ability to cope had eroded even further. Asked what factors had led to her situation, Jody summed it up as follows: "Money. Loneliness. Lack of support. Stigma. I would say money and support are the two [main] things". In between the two interviews, the main factors that had led to her deterioration of adaptive capacity were the following:

- A loss of financial support from family. The indirect cause of this was that her father had been made redundant because of the tough labour market.
- Because Jody had less money in her pocket she had become increasingly isolated and had lost some sources of social support.

As a result, the wellbeing of herself and her children had declined further. She was now exceptionally sensitive to even the smallest financial shock. Because she lacked a social support network, she lacked options for social action that might have helped her make adjustments to adapt to the socio-economic adversity. Indeed, given that Jody had previously managed to combine work and family when her ex-husband was around to help with childcare, it is possible that even a small change in support, for example if she had lived closer to her parents, might have better enabled her to enter employment (which would have pushed her towards resilient outcomes).

10.3. Celina and her increasing resilience to adversity

Things have changed, the cost of living has become very high. Let them [the Government] consider people. We are all just the same. How can you cut all the things that people rely on? I remember he David Cameron] said he was going to make more johs, make life easier, but now, life is becoming difficult and there is no jobs. The government is catering for the higher levels.

At the time of her first interview Celina was 35 and had three children, aged 5, 7 and 18. She had been a single parent for 4 years, separated from her husband. She had lower educational attainment and had previously worked as a hairdresser and care-worker. But, she was not working at the time of the first interview. Having said this, she 'hated' being on JSA and wanted to get into work as soon as possible. She was, however, struggling to find work because she couldn't afford to pay for formal childcare and had few options for informal childcare. This

meant that she was searching for flexible work – in school hours – which she was finding very hard to come by.

By the time of the second interview, Celina had been in two jobs, but had left both because of their demanding hours which she struggled to combine with being a mother. For these reasons, she had recently started training as a child-carer, with the hope that this would equate with a flexible job. When Celina was first interviewed, she said she was really struggling to get-by and was vulnerable to wider economic adversity. Even a small financial shock would mean that she struggled to feed her family or pay her utility bills. However, by the time of the second interview, even though Celina was still not in employment, she felt more able to cope. As we will see, her local priest had been instrumental in helping her deal better with her financial situation.

10.3.1. Celina's vulnerability: Struggling to feed her family when times are tough and aspiring to find flexible work in response

At the time of the first interview Celina relied on a mixture of benefits and tax credits for her income. She was getting no child maintenance from her ex-husband. She was extremely sensitive to any financial uncertainty and variability. She talked about struggling, about being stressed, about being anxious and depressed. To try and get across how bad her situation was, Celina showed the researcher her recent food shopping (she had been grocery shopping just before the interview). Although her shopping was meant to feed a family of four for a week, the researcher's estimation was that it scarcely seemed enough for one person.

If everything is rising rising rising everyday, then yeah [it is a financial struggle]. The money will not buy anything properly. Just now I have 30 pounds, and look at the small bag I have got [shows shopping to researcher]. The money is gone. Finished. It's bad! For me to even have food for my kids is going to be very difficult. If you don't have money to buy something for your child... well [...] You wonder how you are going to survive tomorrow. That child is depressed already! They are thinking about how they are surviving the next day.

Celina attributed the fact she was struggling so much to the fact that food and utilities prices had been going up sharply and she had also noticed that she wasn't getting as much from her benefits: "This benefit they have cut down. It's too bad... It's affecting me. I know it will continue to affect me because I don't have no other source of income." Because Celina's sole source of income was benefits she was especially sensitive to any changes in that income³.

Because of her financial struggles, Celina, like Jody, wanted to get into work to ensure she had enough money to be able to take care of her family. The only way that Celina could see out of her financial struggles was to find a job: "If I buy food, clothes, it's [her benefits] not enough at all. It's not. So I just want to go back to a job. If I have the chance to go back to work, I would go. I just want to go back." However, the fact that Celina was looking for flexible work had really put her on the back foot:

Sometime they will offer me a job. Two weeks ago I went for an interview [...] The last minute the lady asked me "So when are you available to work". I told her [...] Then she said "Oh, how about the whole

³ A handful of similar mothers whose main source of income was benefits, but crucially they had access to other sources of financial support, were classified as resilient.

week? Day shifts?" I said I don't think I will work because I do not have somebody to look after the children. She said they needed more people to work in the week [...] If I had somebody [to help with childcare] I might be able to work.

By the time of the second interview, Celina was aspiring to become a child carer with the hope that it would provide the flexible career she was looking for: "With [employment in] childcare I can go in the morning, go to work, leave, pick my kids up. Holiday time we are all together. I think that is most important. It is very simple for me. That is why I am doing it."

Celina now seemed a lot more positive about her situation, even though she said her income was 'at the same level'. In Celina's words: "So now since I have changed everything, I can see a way. Hopefully." She said she had 'changed everything' with the help of her local support network. Now, she said, "It isn't too tough".

10.3.2. Celina's small but cohesive and supportive network

Celina had one of the smaller networks in the research, with only 4 named relationships, but the network was very caring and helpful. Similarly to Jody, she suffered from a number of the conditions of network poverty. She described how being a single mother the children always need her attention and how she had little money to socialise. However, she relied on her network, as well as on support from charities and her local church, for emotional support and even small amounts of financial support on occasion.

Her inner circle consisted of three people, a close friend, her local priest and her eldest daughter (18 years old) whom she had come to see as more of a friend (but who was studying hard with the hope of going to University, so was not around to help much). Her second circle consisted of only one other friend (who she had been introduced to by her good friend in the first circle)⁴.

Celina had two key elements of support: Emotional support and the odd bit of financial support. She lacked support around childcare and job related advice. The financial support that she had was not extensive and generally consisted of little bits here and there if, for example, her benefit payment had been delayed. Having said this, Celina described how if she had not had her close friend to borrow money from, then it would have been even more difficult on the occasions when she had no money. She would end up not being able to feed her children. However, she didn't like asking for this support because she knew her friend wasn't well off:

Sometime I feel so embarrassed that on the day we meet I will not look at her. She will say though "come on, that money is nothing". Sometimes you embarrass someone as well. Maybe they don't have the money. I just want to stop it [asking for financial support]. Sometimes money can create a lot of problems. Maybe we are friends but if she gives me money and I'm not able to give her back, she will be start doubting the relationship. All of these things I'm scared of. I don't want it to work like that. She is very important to me.

⁴ She frequently went to support groups and training, but hadn't met anyone that she felt close enough to include on her map. They were, she said, "people I mingle with. But they are not close friends. I wouldn't ask them for these types of

⁵ Celina said that even though her friend had a Master's degree in Microbiology she had been unable to find work and to meet her financial needs had all but given up on her degree ("the degree is fruitless!"). She had instead taken a job working in Carphone Warehouse.

Emotional support was the only type of support that she felt she had enough of. Her priest was very important here: "He is really helping me psychologically. Whenever I am depressed, or really stressed, I call him and he talks to me. He prays for me. He helps me with lots of things... He is very important to me. Sometimes even helps me financially. Sometimes." When asked about childcare, Celina said "I don't have anybody to help me with them". Her close friend was

herself working, so was unable to help.

In Celina's second interview her network of important people had grown from 4 to 6. "It is becoming better" she said. An extended family member, her aunty, had recently moved into the area and was offering her all types of support. She had also been introduced to another person by her close friend. They regularly cooked for each other, and this made things slightly easier than before. Moreover, she now felt that she had three options for childcare: "I know amongst the three of us it will not be tight. Not all three of us will be so busy we cannot do it". She described how she had informed these people that she was looking for work and hoped they would help her out if she found some. She also described how she had more emotional support and more practical support.

During the second interview it became clear that her priest had become an instrumental source of resilience between the interviews to the point where she was able to cope better, showed a buoyant mood about the future and no longer talked of struggling. Her priest had offered her practical advice and decision-making support around her finances. This support had made things much easier for her. (He was "much better than Citizen's Advice Bureau" she said.) Upon receiving his advice, she had completely reworked her financial obligations. She had changed her utilities contract, had gotten rid of her TV package and mobile phone contract. All of these practical financial decisions had made life a lot easier for her:

Yeah it is becoming easier! Father Richard told me to do all of these things. I told him all of my bills and everything, I wrote everything down. He said "Do you prefer watching movies without food?" I said, "Oh yes, you are right, I think movies should go". So, he said, "Celina, go home and write all of your spending". I wrote everything and we then had a meeting. He told me everything that was unnecessary. So I went through that [...] With him by my side I feel secure. I really feel secure. And my kids feel secure [...] Now I can monitor it [her financial situation], I know what I am doing. We have more control.

Even though Celina's financial situation might seem horrific to some of the women with resilient outcomes, she felt that with the help of her priest she had been handed back control over her finances. She now had hope and was no longer worrying constantly about not having enough money.

10.3.3. Case summary: Increasingly financial control and stability because of decision-making advice

In summary, when the interviewer first met Celina she described how she was struggling to cope with increasing financial pressures. She was struggling to find flexible work and lacked childcare options to take on inflexible work. However, by the time of the second interview she felt that her situation had changed quite dramatically. With the help of her priest, she had moved from feeling financially insecure to feeling on top of her financial situation, in control at last.

Moreover, now that she felt she had informal childcare option she was also much more confident about finding work (she might even be able to take on inflexible work).

10.4. Eve's lifestyle aspirations and her support network that 'make it all possible'

So it has mostly been me and Uma [sister-in-law] juggling the childcare between the two of us, trying to make sure our work hours are covered. It is me and Uma against the world... I don't know how either one of us could survive without each other.

Eve was 26 years old at the time of the first interview and had one seven year old son. She had been single for four years. She had a degree in Business Studies and recently completed a graduate diploma in law. She said that because of her dad's influence she had always been motivated to achieve 'greater things', and she hoped that her ongoing studies would similarly set a good example for her own son. At the time of the first interview she was working parttime for a local charity. She had just been promoted to a management position. However, the charity could not afford to pay her a full management wage, so she spent 50% of her time doing her old admin job and the other 50% on management responsibilities. She was paid just over the personal tax allowance, but believed if she was on a full management salary it might be closer to $f_{20,000}$ a year. She also relied on some CB, CTC and WTC and child maintenance⁶.

10.4.1. Eve's financial resilience and lifestyle aspirations

Eve was categorised as resilient. When asked how she was coping with the hard economic times, Eve was more positive than all of the mothers in the vulnerable group. She was happy with her lifestyle and that she could feed her son, clothe him and live comfortably: "As long as I've got enough money to take care of my son, feed him, clothe him and look after him everything else is not really important. As long as we can be comfortable I am happy with it." She was meeting these aspirations. She felt she had the ability to buffer the worst effects of the economic storm and had not resorted to some of the detrimental tactics used by those in the vulnerable group (i.e. not eating, cutting back on utilities etc.)

She felt that her resilience was only possible because of her employment (which, as we will see, was contingent on her local cohesive family network). She said that she struggled to get-by before entering employment. Asked if work had made things easier she replied: "Much better, much better without a doubt. It does make things better, but I can see why people don't do it. It is really hard if you don't... I'm lucky because I have a good support network... Working has made a massive difference in my life and my son's life." Having said this, at the time of the first interview Eve did say that things where getting tighter for her because of rising prices.

As for the recession, food is soaring at the moment, every time I do my shopping I notice. I'm only feeding me and my son, I used to do £,25 a week shop, and it would last, now it is £,35 and I don't buy

⁶ She, however, only got £5 per week maintenance, because in her words the dad "is lazy and spends half of his time out of work".

anything different, and I go to ASDA, so I can't get any cheaper than what I am trying. Recession has hit, it has hit massive.

However, she felt more than capable of coping and had a belief in her ability to deal with future changes. She also realised that in her circumstances other people might struggle, but that her budgeting skills (learnt from her dad) and the financial support she received from her parents had really helped her manage. Her goals were to "flourish in the new job" and to "work work work. Save save save to buy a house." Indeed, unlike those mothers in the vulnerable group who aspired just to have enough money to take care of their family, Eve was able to live in hope that one day she would be able to buy her own house: "All I've got to do is get a salary that is enough for me to get a mortgage. But I have the money. I'm a lucky single mother; I come from a family that help me a lot."

At the time of her second interview, Eve had managed to make headway on her goal of improving her salary and felt she was nearing the point when she might be able to afford a mortgage. She had moved jobs twice (within the year) to find a better salary, and had managed to increase her salary by a substantial amount, by £400 a month she said. She felt 'much much better off as a result. Yet, she said she still felt the pinch of the rising cost of living. Asked if her goals had changed, she replied:

Salary to be honest. What I get paid for office manager in a charity is nothing compared to what I could do in the private sector. So I think I will build up as much experience as possible, take what I have learnt, and transition over [to the private sector]... It is a lot of factors that have gone into the decision. Increasing prices are making a massive difference and I think it is also the reality of having to pay all my rent, all my council tax. Going shopping has gone up massively. Food shopping used to cost me about 80 quid, now it is 120 quid. It has gone up drastically. Trying to keep up with everything. Also I want to have a mortgage, but that would be hard to get something decent working in charity

Eve said that it was her strong network that made her aspirations a possibility.

10.4.2. Eve's cohesive family network

Eve's network was a similar size to other mothers in the resilient group. She mentioned 16 relationships. However, one thing that made her different from other mothers in the resilient group was that over half of her network was made up of a tight and cohesive local family network. Even though her immediate family (dad, mum and brother) had recently moved to Spain, her ex-partner's family had become an amazing local support. Indeed, the support given to her by this network enabled her to work she said.

If you don't have that support network, first of all childcare is expensive. If the financial help isn't there for that type of thing, I can understand why people don't work — it is really difficult! If Uma didn't take my son to school in the mornings, I don't know what I'd do.

What made life so much easier for Eve was that she had a great diversity of support available and many different options for each type of support. She had the most supportive network out of all of the mothers that were interviewed. Two-thirds of her network was available to help her with childcare when needed: "I always go to his parents. If his grandparents can't do it then I would go to Uma. If Uma couldn't do it I'd go to John. If John couldn't do it I'd go to Tom or

Rob. Then I'd go to his Dad." This was just a handful of her options; she had more friends from her son's local school that could help out. Moreover, Eve had the most options out of all interviewees for financial support and emotional support.

One reason that Eve had access to all of this support was that she had recently moved home to be closer to her in-laws. She said this move had made a "massive massive difference" to her life. She now lived very close to her sister-in-law (another single mum), who had a daughter of a similar age. They exchanged childcare with one another, which enabled both of them to work. Eve described how her sister-in-law took the children to school and that she picked them up from school herself - "it is all about helping each other".

We sat down and talked about it. She was like "I want to go work, but I can't, I feel awful, no one can help me" and I was like "Yeah I want to get a job as well" and she said "You know what, let's move back to St. Pauls" and I was like "Cool". She got a swap from the council. I moved quickly. Everything else fell into place once we moved back.

Moreover, Eve said she got 'a lot' of financial help from her dad: "I still have an allowance, and I'm 26!" He gave her £100 a month for buying anything her son needed. She also had other options for financial support in the family, including her in-laws (who always bought her son new clothes and shoes, she said). Sometimes, she'd even look at her bank account and be surprised to find more money than she thought she had. Her grandmother, she said, transferred her money sporadically, occasionally without even telling her.

At the time of her second interview, Eve largely had the same level and elements of support. However, she had changed the actual configuration of support, asking some people for more support and others for less. Changing her configuration of support had enabled her to change jobs and take on more hours. Without the many options for childcare she had, this would have been a struggle she said.

In her new job she felt like she needed less financial support from her family, but she still received it and was extremely grateful for the 'bank of mummy and daddy!' In fact, her parents had recently given her a deposit for a house. Indeed, if it wasn't for their support she said she would probably 'be in the red'. For all of these reasons, all related to the 'amazing support' she received from her personal network, she said she "I am one of those people who is resilient". She could work around change, she said. The researcher further probed and asked why she felt resilient and she said that she was resilient because she didn't rely on one single person (with the exception of her mum and dad). If she relied on one person, and they let her down, she knew her "world would crumble". She had enough support options to make sure that her world didn't crumble.

10.4.4. Case summary: Social support provides necessary background conditions for creating change

In this section we have seen that when the interviewer first met Eve, although she did not consider herself well-off, she was happy with her way of life. She had previously experienced being unemployed, surviving on welfare, and had desired to move into work. She had managed to get into and sustain work with the help of her support network. In comparison, lone mothers

in the vulnerable category (such as Jody and Celina) might have the desire to get into work, but struggle to do so because they lacked the informal support. Indeed, Eve's network provided her with extensive support for childcare and extra finances that enabled her to build up her own life. She, however, aspired for greater things. She wanted to build her financial strength with the hope of being able to afford her own home. By the time of the second interview, she was well on her way working towards these goals. By changing her informal childcare arrangements she had been able to take on more hours. Her family had also recently given her a deposit for buying a house. Without her extensive social support it is questionable if Eve would have been able to achieve what she desired. What seemed to be of upmost importance was the fact that Eve did not rely on any one single source of support: she had plenty of options to draw upon if need be.

10.5. Conclusions

In conclusion, the analysis of the individual cases over time in this chapter has allowed us to examine, in more depth than cross-sectional data would allow, the interplay between individual change and change in the wider socio-economic context, as well as the ways in which the respondents understand and respond to change (as suggested by Corden & Millar 2007 and Thomson 2007).

With the first two cases we saw that adverse socio-economic conditions had made it increasingly difficult to maintain a desirable standard of living. This, what we have called 'aspirational dissonance' in earlier chapters, had motivated both mothers to look for work (and both had also been training or volunteering to try and improve their chances). However, what was clear was that although both mothers had the motivation to create change, to get into work, they lacked support options that would allow them to do so. Furthermore, both Jody and Celina had little in terms of financial support that could help them afford to live a desirable lifestyle. Both mothers described having been in productive employment before becoming single. What they lacked now was the conditions that would facilitate them entering and sustaining work.

Similarly, Eve had experienced being unemployed and living on government welfare in the recent past. She had also been motivated to seek work. What makes Eve's case different is that she had support options that helped her into work. Whereas Jody and Celina had motivation but no options, Eve had motivation and options.

Part 3

Policy Applications and Conclusions

Chapter 11: Social networks, resilience and public policy. Or, 'What can (and should) be done?'

11.1. Introduction

Much has been written about what the state of tomorrow's world will be like. It has become increasingly commonplace for politicians and the media to speak of accelerating rates of social, economic, technological and cultural change. We are quite often presented with dystopian situations in which inequality has reached grotesque new levels, in which we are under the constant threat of war (and in some countries, revolution) and fighting over natural resources. This is not even to mention the constant threat from climate change and the prospect of the radical socio-economic transformations that are needed to mitigate and adapt to it. In the UK, the Government's 'Risk Register' (Cabinet Office 2013) outlines an array of other possible events, situations and threats that we might someday face and that threaten our current way of life. Whether or not these particular situations arise, one thing is certain: change is guaranteed. There is no end of history, history will march on.

It seems, however, that less has been written about preparing ourselves to cope with the changes and challenges that we are sure to face. Individuals, families and policy makers must constantly navigate the reefs of uncharted and uncertain waters. A failure to engage on the part of policy makers will lead to a future in which we will not be as prepared as we might have been. This chapter outlines suggestions, linked to the theory and evidence presented earlier in the thesis, which might help policy makers develop strategies to build the social aspects of adaptive capacity. The aim of these strategies is to help individuals and families retain some control over the trajectory that their lives take, whilst managing the demands of changing socio-economic circumstances. To give additional credibility to the policy suggestions, other research which lends support to the argument is also drawn upon.

So far in this thesis we have examined causal processes that link wider socio-economic factors, individual aspirations, decision-making, social support networks and adaptive outcomes. Resilience emerges from the ability to adapt to change, to withstand socio-economic stressors without degrading into an undesirable state. Social support, we have seen, is crucial for lone mothers to construct resilience and regain some control over their livelihoods. On top of this, we have also seen that resilience relies upon deliberation and the capacity to plan for the future. This, in turn, is dependent upon having adequate information to hand (e.g. about changing circumstances) and appropriate mental models which inform strategic action. Assuming that the argument presented in this thesis is correct, what follows?

Firstly, to answer the question of 'what follows?' we need to decide what the goal of policymaking should be. What ought to be the case? Is it desirable that the state should help foster support networks and create social resilience? Answering this question is beyond the scope of social science. It requires recourse to political and moral philosophy. Section 11.2 describes current political discourse which point towards what ought to be the case. (The focus

is on political discourses connected with ideas about people's relationships, social networks and resilience.) This helps ground the policy suggestions that follow within contemporary currents in political thought. Section 11.3 then considers policies that would have a positive impact on the development of relationships, networks and communities. Some of the policy suggestions are going to be familiar; others less so. Some suggestions already have an evidence-base; others would need piloting and researching. Furthermore, the participants in this research were asked at the end of their interview if they had any suggestions for the government – their suggestions are drawn upon in appropriate places. Finally, the suggestions that are offered are deemed to have a wider scope of application than to solely lone mothers, so the discussion reflects this wider framing.

11.2. Social resilience in current policy rhetoric: The 'Big Society' and 'One Nation Labour'

"If one does not know to which port one is sailing, no wind is favourable." - Lucius Annaeus Seneca

Current political debate has moved beyond arguments related to New Labour's 'Third Way'. Third Way policies have been criticised (by both left and right wing politicians) for being more concerned with the market and the state, forgetting about civil society, people's personal relationships and reciprocity (Norman 2010, Glasman 2010). (This is despite the fact that Giddens' [1998] thought on the Third Way focused, at least in part, on developing civil society.) A similar point is made by a recent Institute for Public Policy Research (2014, p.53) report: "The balance between state, market and civil society is one of Britain's strengths. However, it has been undermined in recent years by the dynamics of the market economy and the central state".

The Conservative party, arguing that civil society had been neglected by New Labour, constructed an alternative to the Third Way: "The Big Society". In response Labour have sought, in the words of Labour policy chief Jon Cruddas, to "reclaim the Big Society" for the left. Both major political parties also have something to say about the construction of social resilience and 'resilient families'. As a consequence of this renewed focus on society and people's relationships, both major political parties now share what Lord Glasman (2012, p.11) calls an Aristotelian conception of the good life and politics: "of a politics that puts relationships and institutions in a very important place". Aristotle argued that for the good life individuals need virtuous habits, but also crucially that they needed external social and political conditions that would enable them to achieve a state of 'flourishing' (what the Greek's called *eudaimonia*, which translates literally as being protected and looked after by a benevolent deity)¹. For Aristotle, for individuals to be able to construct a good life and good relationships depends crucially upon whether or not they live in a good society that promotes these ends².

Whether or not the good society is being achieved at the current time is debatable. This chapter argues that the failings (and neglect) of 'the Big Society' suggests not.

¹ Whereas the Stoic philosophers, who came after Aristotle, thought that individual virtue was entirely sufficient to lead a good life.

² This is why Aristotle's *Nicomachean Ethics*, a book about the virtuous habits that lead to *eudaimonia*, was conjoined with his writings in the *Politics*, the prime concern of which was to aid in the development of a good society that would enable people to achieve *eudaimonia*.

11.2.1. The 'Big Society' and the 'Community Resilience Programme'

"We want to give citizens, communities and local government the power and information they need to come together, solve the problems they face and build the Britain they want. We want society — the families, networks, neighbourhoods and communities that form the fabric of so much of our everyday lives — to be bigger and stronger than ever before" David Cameron (see Cabinet Office 2010)

David Cameron launched the 'Big Society' in response to his own claim that Britain is a 'broken society'. Voluntary action and informal kindness, so Cameron argued, could help fix our broken society (Alcock 2010). (The Big Society is also an attempt to rebrand away from the Margaret Thatcher's statement that 'there is no such thing as society'.)

Under the guidance of Jesse Norman MP (2010), Big Society ideas have been shaped by Burkian conservative thought³. For Burke, as with Aristotle, humans are a social species. Burke attacked earlier social contract theorists, such as Thomas Hobbes, for their negative vision of human nature. Hobbes envisaged that without the institutions of the state "the life of man [is], solitary, poor, nasty, brutish, and short." Only with the birth of the Leviathan could humans enter into productive association with one another. In contrast, for Burke we naturally enter into civil association with others. We are, in fact, defined by our propensity to associate with other people. For these reasons, Burke sought to establish the ethical priority of the community (as against the individual and the state)⁴.

Before the general election of 2010, the Conservatives claimed that New Labour's 'Big State' top-down approach had crowded out the basis of the sociality that Burke wrote about – civil society. To give an example, the welfare state, so the argument goes, crowds out community action (Alcock 2010). In contrast to a top-down statist approach, the Big Society focuses on developing intermediate institutions between the individual and the state (see Cabinet Office [2010] for an elaboration).

The Big Society agenda also explicitly committed itself to reducing any barriers that prevent people from becoming more resilient to shocks (Cabinet Office 2011, p.3). Resilience is defined by the government in a very similar way as was defined in Part 1 of the thesis: "The capacity of an individual, community or system to adapt in order to sustain an acceptable level of function, structure and identity" (Cabinet Office 2011, p.4). The dedicated 'Community Resilience Programme' aims to "increase individual, family and community resilience against all threats and hazards" (Cabinet Office 2011, p.13). On the list of threats is economic adversity. The programme acknowledges that when people are faced with a threat, they "use their skills, knowledge and resources to prepare for and deal with emergencies" (p.15). Finally, the programme also recognises that developing social capital is of great important for the task of developing resilience: "the benefits to the community of social capital are best demonstrated in the way in which a community copes during and after an emergency".

³ Other strands of thought that have also contributed to the project include the 'Conservative communitarianism' of 'Red Toryism' (Blond 2010). Another recent intellectual strand that has fed into the Big Society comes in the form of 'libertarian paternalism' (Corbett & Walker 2013). Paradoxically, this is a stand of thought that aims to manipulate individual decision-making and lacks a wider societal focus.

⁴ He fought reforms that he thought sought "to tear asunder the bonds of the subordinate community and to dissolve it into an unsocial, uncivil, unconnected chaos of elementary principles" (Burke quoted in Nisbet 1966).

However, it seems that few policies have emanated from the programme (this becomes obvious from looking at the programme's webpage⁵, which seems to be inactive, a relic of pre-austerity Conservative politics). This is for two reasons. Firstly, as the report says, "There is no dedicated funding for the Programme" (Cabinet Office 2011, p.17). Secondly, there is generalised aversion in the Conservative party to acknowledging the role that the state might play in such an endeavour. One reason for this is that the programme had been influenced by an earlier Demos report that had argued that resilience in society was possible without the institutions of the state intervening (Edwards 2009). Whilst this thesis argues that the focus on developing social resilience is a laudable goal, there are definite problems with the Big Society related to these two points.

Critics have argued that the 'Big Society' is nothing but a 'fig-leaf', a necessary cover for the Conservatives whilst they enact state retrenchment on a colossal scale (Corbett & Walker 2013). Indeed, in somewhat of an antithetical move, austerity has actually meant that important funding and financial support to encourage local community volunteering has been cut (or in some cases removed completely). As described by Corbett and Walker (2013), an audit of the Big Society highlighted that in all likelihood over £3 billion of public funding will be cut from the voluntary sector: "the Big Society policy literature neglects to explain how the intermediate institutions of community groups and families can practically fund, organise, run and maintain services when substantial public funding has been cut". So, it seems that local communities are stripped of their wealth and then expected to make up for the loss through increasing their own effort, volunteering and kindness (Sennett 2012, p.252).

Clearly, the Big Society neglects the contribution that the state, and state funding, can play in promoting cohesion, regeneration, volunteering and informal kindness (Sullivan 2012). Not only this, but the welfare changes described in Chapter 5 have also made it increasingly unlikely that people will volunteer or offer informal kindness to others (Clark & Heath 2014, New Economics Foundation 2013). The New Economics Foundation (2013) have described the situation as follows:

"As people have become less economically secure, they have tended to turn inwards, focusing on just getting by from day-to-day, with no time or energy to connect with others or take local action. This has led to a general weakening of the core economy—a term used to describe all unpaid time, caring, support, friendship, expertise, giving and learning that underpin society and the formal economy. The Big Society vision relied on a strong core economy. But people have found their time and capacity increasingly stretched by reduced local public services, changes to working and child tax credits, and insecure low paid employment."

So, it seems that the combination of the 'Big Society' with the austerity agenda reduces Conservative party politics to a mere rhetoric that lacks any real substance (see also volume edited by Ishkanian & Szreter [2012] for similar criticisms). It is perhaps for this reason that David Cameron no longer explicitly talks of the 'Big Society' (although, the concept did still appear in the Conservative Party 2015 General Election Manifesto).

Having said all of this, even critics do see some good in the underlying idea of the Big Society. Corbett and Walker (2013) argue that the concept has led to a "rediscovery of the social" in

⁵ Webpage: https://www.gov.uk/government/publications/community-resilience-resources-and-tools

politics and that going forward the progressive element of the Big Society could be developed (see also Glasman 2010). Indeed, how can anyone disagree with what seems to be a praiseworthy goal of strengthening communities, relationships, people's networks and social resilience? The policy goal is desirable, the means are left wanting. The Big Society is flawed not in its intent for civil renewal, but in its lacklustre and unrealistic means of execution.

11.2.2. One Nation Labour and 'family resilience' in hard times

The Big Society, argue Labour thinkers, has been left "like an abandoned child". It has become mired by the financial crisis and the austerity agenda (Glasman 2012, p.11). In offering a response to the Big Society and fiscal austerity agenda, Labour has latched onto another conservative thinker, Benjamin Disraeli, who once argued:

"There is no community in England; there is aggregation, but aggregation under circumstances which make it rather a dissociating than uniting principle. It is a community of purpose that constitutes society. Without that, men may be drawn into contiguity, but they continue virtually isolated." (Disraeli, quoted in Nisbet 1966)

For Ed Miliband this sentiment applies equally to our current times. His vision for 'One Nation Labour' is that it will unite British society as a community with common purpose⁶. To do so requires an economy "that works for everyone" to complement the renewed focus on civil society. This strand of thought in the Labour party has been influenced by the thought of academic (and Lord) Maurice Glasman.

Glasman (2012, 2010) shares the vision of civic renewal offered by the Big Society, and also shares the Conservatives' critique of New Labour's state building. However, he criticises Big Society thinking for lacking an adequate critique of the market and for lacking an appropriate economic vision (this seems to be the main point of divergence between One Nation Labour and the Big Society). The Big Society does not confront money, power, capitalism, and the potential for exploitation. The Big Society is in thrall to free-market economics, which leaves individuals and communities at the mercy of greedy forces which care only for profit (Glasman 2012). Glasman argues that whilst capitalism can work as a force for good, if left uncontrolled it is a menace. One way in which is it a menace is by creating an unequal distribution of wealth and opportunity.

Adding to this, tackling inequality and unequal distribution of opportunity would seem a necessity if government is to ensure that volunteering and 'informal kindness' is also equally distributed in society. As seen in Chapter 5, currently this is not the case: the poorest areas having the lowest rates of both (Clark & Heath 2014). Lone mothers, for example, who generally have higher rates of poverty and big family responsibilities, tend to be poor in spare time, money and social capital. How can they be included in such a vision of civic renewal? The Big Society fails to address this sort of question. Clearly the state has a role to play in enabling and facilitating

⁶ It is worth noting that at the time of writing that the terminology 'One Nation Labour' seems to have been all but dropped by the Labour party (as has terminology related to the Big Society by the Conservative party). However, whilst the slogan has been dropped, the ideas related to it have not.

the strengthening of civil association across the board, ensuring that the strengthening does not just happen in the richest areas. One way of doing this is through adequate economic policies.

One Nation Labour discourse has also adopted the terminology of resilience, linking it directly to the adverse socio-economic circumstances of our recent times. As Jon Cruddas (2014) has argued:

"In this period of austerity, we need to support families, and use the power of their relationships and the networks they create to help strengthen people's capacity for resilience, care and good neighbourliness"

Cruddas also talks of the need for "policy to use [the] power of relationships to help strengthen the resilience of men, women and children to withstand adversity and to facilitate their readiness to take up opportunities". At the time of writing, however, concrete policy proposals to strengthen relationships and build the resilience of families are yet to emerge⁷.

11.3. Policy recommendations

Given the policy goals proposed by the 'Big Society' and 'One Nation Labour' (i.e. to strengthen people's relationships, communities, and facilitate social resilience), what policy strategies might be used? Critics have argued that, in terms of policy, the concept of resilience shifts emphasis away from the government and public sphere when dealing with a crisis and onto families and individuals (Mohaupt 2009, Harrison 2013). For example, Mohaupt (2009) argues that "resilience research is accused of being too actor centred, ignoring any structural forces. This can de-politicise efforts such as poverty reduction and emphasise self-help in line with a neoconservative agenda instead of stimulating state responsibility". The fact that the Big Society claims to be concerned with building resilience, yet at the same time the government is set on state retrenchment and austerity, fans the flames of these critics.

Contrary to the practical applications of 'resilience' imagined by critics of the idea, the theoretical and empirical argument in this thesis suggests that the institutions of the state can potentially play an important role in facilitating and strengthening people's social support systems and thus their resilience against shocks. To establish this, the sections below are structured around the explanatory framework of this thesis (and associated theory and empirical findings). Firstly, related to 'situational mechanisms', section 11.3.1 asks how policy makers might lessen people's exposure to economic adversity in the first place. A number of suggestions regarding the labour market and welfare policy are put forward. Then, in section 11.3.2 and 11.3.3, related to 'action formation mechanisms' and 'transformational mechanisms', it is argued that certain types of institution and social structure might facilitate supportive relationships and resilience in hard times. Suggestions include the state providing adequate institutional support for decision-

⁷ Tellingly, however, Steve Reed MP (2013) highlights that in his constituency he is developing employment strategies that harness the power of people's networks when it comes to helping them find jobs (related to a programme called 'Backr' – more on this below). Also, Cruddas (2014) endorses the 'Home Start' programme (currently operating in a handful of cities in Northern UK) which seeks to match young single parents with more experienced parents from their local community. The idea is that building the networks of these lone parents will give them access to practical help and decision-making advice.

making in non-routine circumstances, and also constructing a congenial environment for relationships and networks to form and flourish.

11.3.1. Labour market regulation, poverty and inequality reduction, and welfare to provide safety from uncertainty

To begin with, linked with the ideas of 'exposure' and 'situational mechanisms' (i.e. Arrow 2 on Diagram 6.2), the state could play an active role in making sure that citizens are buffered from exposure to socio-economic shocks/adversities (see Seccombe 2002 for a similar argument). The evidence presented in Chapter 7 made clear that if people were protected from labour market uncertainty and poverty then they would be less likely to deviate from their aspired towards living standards. Moreover, other research has suggested that labour market uncertainty, material poverty and inequality are all associated with a loss of social cohesion. So, protecting people from such hardships would also remove potential barriers to people building and sustaining relationships. As Sennett (2012, p.9) has argued: "People are losing the skills to deal with intractable differences [between, for example, the wealthy and poor] as material inequality isolates them, short-term labour makes their social contacts more superficial... We are losing the skills of cooperation needed to make a complex society work." Given all of this, it is suggested that policy might aim to reduce uncertainty in the labour market, as well as reduce poverty and inequality and ensure adequate income protection.

Policies to increase labour market participation and increase work stability

The qualitative evidence in this research suggests that people's ability to maintain a desirable standard of living in hard economic times (i.e. to be resilient), as well as their ability to connect and reciprocate with others, relies heavily on being able to find and sustain employment. This argument is supported by quantitative evidence (e.g. Clark & Heath 2014). Keeping employment to a maximum and unemployment to a minimum is therefore important. At the same time, policy makers might also consider ensuring a minimum standard of employment stability, especially in hard economic times (see Room *forthcoming*).

• Some of the lone mothers in this research described having found their jobs through their informal networks. To facilitate this type of dynamic, policy might seek to build strategies that recognise the importance of informal networks in finding a job (see Perri 6, 1997, for more on this). To give an example, a service called 'Backr' helps their clients make informal connections to find opportunities in the world of work⁸. Such services could be given government support⁹. Furthermore, some of the interviewees in this research highlighted that whilst on JSA they had been asked to stop their volunteering

⁸ As Backr highlights, "80% of jobs are never formally advertised & most of us find work by word of mouth, so no matter how many CV's you send out or interviews you go to if you aren't using connections you're massively missing out."

⁹ Also, other services proved helpful for the interviewees in this research. Louise described that she had been using various similar online networking tools. She mentioned 'Skillset Online' and 'Sorted.com', both of which allow their users to list their skills, so that people that need those skills can seek you out more easily. She had found more work through these websites than through Job Centre Plus. Perhaps JCP could develop a similar service.

activities and focus on finding employment. Both Celina and Jody questioned whether this was a sensible strategy, as both were hoping of eventually finding employment through the contacts they made whilst volunteering. So, in contrast to current practice, people on JSA could perhaps be encouraged to volunteer as a way of building their informal job opportunities.

- Childcare policy: As seen in this research, childcare directly impacts on the ability of lone mothers to take up and sustain work. Most of the interviewees who were out of work (mostly in the vulnerable category) described lacking informal childcare support and not being able to afford to pay for formal childcare. Some particular strategies that might be used to build informal support will be discussed later in the chapter. However, in terms of formal childcare, developing childcare policy will be important to encourage lone parents into the labour market (see also Rabindrakumar 2014). In their interviews, both Sarah and Eve suggested that more could be done at school, for example, improving access to before and after school clubs. The IPPR (2014, p.80) has also highlighted that greater spending on childcare services in Scandinavian countries has helped sustain higher employment rate for lone mothers. One could imagine the UK adopting a Scandinavian model of formal childcare provision.
- Bolster work-place protection: Chapter 7 described how Rachel had been affected by a zero-hours contract (implemented by the NHS). Such contracts are likely to shunt people around, not giving them enough time to develop skills or relationships within a particular job. Given the statistics on the rise of zero-hour contracts (Clark & Heath 2014), this type of problem is likely to affect many other individuals. Rachel suggested that the government should be leading the way in tackling labour market uncertainty rather than transferring risk onto vulnerable individuals like herself. There is a need for policies that curtail the transfer of risk and uncertainty onto vulnerable individuals (see also Room forthcoming).
- Encourage labour market flexibility: Celina, Rachel and Imogen had all struggled to find
 flexible employment to combine working life with family life. It was suggested by Rachel
 and Celina that the government might try to make the labour market friendlier to
 mothers, and that employers should be prepared to accept genuinely flexible working
 (e.g. flexible working hours, working from home etc.).
- Other options might include strengthening the minimum wage or introducing a living wage to incentivise more people into employment (see Plunkett et al. [2014], Jordan [2010] respectively).

Confronting poverty and economic inequality

This research suggests that a minimum standard of living is important to ensure that people are content with their living standards (see also Wilkinson & Pickett 2009, pp.8-10). For instance, had the lone mothers in the vulnerable group been able to afford the basic necessities of family life – food, utilities – they would have been less likely to describe how anxious they felt about their situation and the future. On top of this, evidence presented in Chapter 9 also suggested that being able to construct, maintain and mobilise social support networks crucially relies on

having a base level of material resources available to reciprocate with¹⁰. Given all of this, policy mechanisms that reduce material poverty should be central to the enterprise of building resilience in society.

Related to this, other research has also shown that economic inequality translates in everyday experience as a driver of social distance and is associated with the erosion of trust (necessary for social capital) (Sennett 2012). The upper echelons of society become financially, physically (geographically), emotionally and psychologically remote from the mass and can no longer empathise with their situation (Music 2014, Sennett 2012)¹¹. This has also been recognised by the IPPR (2014, p.14), who state "Protecting the integrity of social cooperation necessitates that we maintain a 'line of sight' between everyone in society, but gross material inequalities makes this untenable." ¹² One of the interviewees in this research, Jody, recognised a similar problem and suggested that politicians themselves need a better empathetic understanding of the effects that their policies are likely to have on people. Politicians, Jody requested, should be made to live "a good three months" in the shoes of those affected by their policies.

There is widespread support for reducing inequality (Hills 2015). However, tackling inequality will require tackling unchecked market fundamentalism. This has been recognised by the Bank of England's Mark Carney (2014), who has recently exhorted markets to regain some of their lost sense of ethical responsibility: "Just as any revolution eats its children, unchecked market fundamentalism can devour the social capital essential for the long-term dynamism of capitalism itself. To counteract this tendency, individuals and their firms must have a sense of their responsibilities for the broader system." Tackling inequality might also involve progressive taxation, cash benefits, labour market regulation (e.g. strengthening of workers' rights) and state spending. Specifically in relation to female employment, evidence presented by Harkness (2013b, p.227) suggests that increasing female employment would reduce inequality (albeit, her primary focus is on inequalities across couples): "Aggregate data show a clear inverse relationship between female employment and earnings inequality ... women with higher earnings power are most likely to work in all countries". Also importantly, democratic institutions need to take power back from capital, to prevent what a recent report by Oxfam (2014) has called 'opportunity capture' - where the wealthy use their power to seek political favours and entrench their interests. Two of the interviewees, Jody and Celina, recognised this as a problem asked that the government stop 'catering for themselves and the higher levels' (Celina's words).

Furthermore, recent evidence presented by the OECD (2014) shows that inequality actually undermines growth. A greater level of income equality would mean more growth. For specific

¹⁰ Moreover, the connection between the resources available in a social network and the socioeconomic resources of those involved is well known (Lin 2001, Cochran et al. 1993). Cochran et al. (1993), for example, highlight that "network resources become richer as economic resources increase". So, people are more likely to be able to support one another if the economic resources available through a network are not diminished by economic crisis.

¹¹ It has even been shown that material inequality inhibits children's ability to connect with one another and cooperate, lessening their sociability (see Sennett 2012 & Music 2014).

¹² Furthermore, other research drawn upon in this thesis has shown that inequality worsens societal wide feelings of anxiety and that this is a driver of the recent so-called 'social recession' in which volunteering and 'informal kindness' have gone into decline (Clark & Heath 2014). As Clark and Heath (2014, p.221) argue, "Until we have an economy that delivers fairer shares and some measure of security across society, such anxiety will never be banished, and – in the face of the next financial storm, whenever that may come – neither 'general wellbeing' nor community life is going to be safe'.

and practically implementable policy suggests on inequality reduction, see Piketty (2014), Wilkinson and Pickett (2009) and Stiglitz (2013).

Welfare to provide "safe ground"

The lone mothers in the vulnerable group would have been better protected from financial adversity and vulnerability to economic shocks if state welfare provided them with certainty and a 'safe ground' adequate for the necessities of family life. As it was, this was not the case – most of the lone mothers in the vulnerable group described how they struggled to afford food and pay their bills. Kate described, for instance, how the combination of government policy changes and increasing prices (especially in the food market) had driven her to use a food bank. Indeed, a recent 'All-Party Parliamentary Inquiry' (2014) has highlighted that the uncertainty and instability of the social security provisions that are now on offer has driven food poverty and the increasing use of food-banks. Moreover, research described in Chapter 5 suggested that people had actually been sheltered from such adversities up until 2010, when the safety net started to be dismantled (Clark & Heath 2014).

The state has provided shelter, stability and certainty for entrepreneurs and bankers (as seen with the recent 1tm bank bailouts). (And, this is perhaps one reason that we have seen growing inequality during the economic crisis, see e.g. Hills 2015.) If the resilience of individuals, families and communities is a policy goal, then the state should also provide a realm of stability on which citizens can play out their everyday lives. As noted by Room (forthcoming) "Government can and should provide an environment of greater certainty and resilience for citizens, in which they can make longer-term decisions and investments, and make their creative contributions to society". Why should security be given to just those with wealth, those who take risks at the expense of the taxpayer, who have "no skin in the game" (Taleb 2012)? Research by Reeves et al. (2012) has shown that welfare spending and health spending have positive economic multipliers. So, even austerity is no excuse for retrenching and/or withdrawing spending in such areas.

However, at the same time, clearly welfare should not encourage overdependence on cash benefits to raise incomes. Wider reaching institutional reforms might be better placed to offer the stability that is required (for example, reforms to the labour market as described above, and also some of the proposed reforms to be described below).

11.3.2. Culture, institutions and decision-making

Reducing economic poverty, inequality, and offering adequate financial protection will, by itself, be unlikely to produce the results we are seeking. There is a need to go beyond distributional concerns (whether the distribution of wealth or risk/uncertainty) and look towards social and institutional reforms. The suggestions outlined in this subsection aim to do this and are related to the processes described by Arrow 3 on Diagram 6.2, i.e. people's mental models, skills, resources and access to information that helps with their decision-making. In particular, given the main argument of this thesis, we argue that government policy could seek to promote a greater understanding (through education) of the importance of people's interdependencies, and

also ensure that adequate information and institutional support is available to help people with decision-making in non-routine situations (such as economic recession).

Individualism and interdependency in society and economy

This research has described how people's social interdependencies are crucial in helping them construct resilience in the face of changing circumstances. One mother, Rita, highlighted how having an explicit knowledge of the importance of interdependency and cooperation actually made it easier for her to construct her social networks. In Rita's case, such knowledge brought awareness to potential courses of action. Rita suggested that policy might seek to promote an awareness of the benefits of cooperation, of having a strong sense of interdependency, duty and responsibility: "We have got to promote this [cooperation] and find ways of doing things together and being respectful of one another."

In modern societies, however, the overriding message from consumerism teaches us that we create our identities through our consumer choices, through constructing a life filled with external consumer goods rather than through developing intrinsic aspects of ourselves, of relationships and of communities (see e.g. Music 2014). This culture takes awareness away from the institutions and networks of relations on which people are dependent and places it on the person as an 'individual self', who is meant to be the perfect example of autonomy. As this thesis has also described, people might even become ashamed of interdependency and struggle to ask for support (section 7.4.2). Moreover, when what is valued by society is the individual, people seem to lose collective aims (Sennett 2012). Durkheim might call this a situation of low moral density. To counterbalance this cultural trend, the government could promote an understanding of the importance of social integration, of interdependency, reciprocity and relational responsibilities.

Sennett (2012) describes a Chinese tradition called *guanxi* in which people feel a strong duty to be there for each other. No one is ashamed of dependency. Even though China is now a consumerist society, *guanxi* emphasises the quality of social relationships and the power of duty and honour. Sennett (2012) highlights how the bonds of *guanxi* are a necessity for many Chinese citizens in a fast-changing world; they help people survive change and prosper. One way in which we might promote a similar dynamic in the UK is through educating children around the key skills of cooperation (Sennett 2012, see also Halpern 2010, p.257).

MacIntyre (1999) argues a similar point, that the state should promote an education in virtues valued by society, such as generosity and justice. He also highlights a specific virtue that seems relevant to Rita's request of promoting cooperation and Sennett's (2012) discussion of *guanxi*, what he calls 'the virtue of acknowledged dependency' (a virtue described initially by St. Thomas Aquinas). This means explicitly recognising that quite often throughout life people become dependent upon other people. MacIntyre (1999) argues that schooling in such 'civic virtues' might involve educating children about the realities of human biology that make us vulnerable to sickness and to disability. On top of this, as we have seen in this thesis, people are also vulnerable to the social and economic circumstances of society (e.g. recession, job insecurity etc.). The reality is that these circumstances quite often mean that people must be dependent upon others at points during their life. Perhaps the National Curriculum for 'Personal, Social,

Health and Economic' education could include material on the importance of interdependency for wellbeing and resilience in such circumstances. The social sciences and humanities could play more of a role in early education around this.

Enhanced institutional bases of decision-making for non-routine situations

This thesis has described how practical reasoning and decision-making is quite often undertaken within some determinate set of social relationships and/or social foci. For example, we saw in the empirical chapters that a number of the interviewees relied upon local social organisations for information and support necessary for them to make appropriate decisions during socio-economic change. At the same time, we also saw in the cases of Julie and Daniella that the information given out by government institutions might actually have inhibited appropriate decision-making on their part (for example, through sending out irrelevant information). Chapter 7 also described how some lone mothers struggle to make decisions because they do not have appropriate level of information about upcoming changes to their income. The welfare system, they felt, kept such information a closely guarded secret. As Kate described "there is a lot of stress in the unknown! Obviously, things are not clear! It just seems like every time you listen to the news, something else has been added, or more taken away! It's quite confusing and really really stressful."

Eve also suggested that adequate advice and lessons about budgeting and money management might help people cope better in hard socio-economic times. Indeed, we saw in Chapter 10 how Celina benefited tremendously from the money management support of her local priest. Such rules of thumb for appropriate decision-making could be carried within the social institutions that surround us. Government policy could play a role here by facilitating the institutional bases of decision-making on matters that are of importance to individuals, families and communities. This is likely to be especially important during non-routine situations such as economic recession and/or state retrenchment.

One way of doing this might be to make sure that relevant information and data about the potential impacts of government policy are widely available in easily accessible formats. (This, however, might be a hard sell to politicians who, when the consequences of policy are negative, seem to try and obfuscate potential outcomes as much as possible.) This information is quite often left dispersed in government reports and academic publishing, and is not generally available in a format that would be useful to those people whose lives are actually affected. The government might enhance transparency and access to key information by setting up webpages and information centres which make readily and easily available the key information necessary for fully informed decision-making in certain circumstances. Such a service might give information about upcoming changes ('this is going to happen') as well as potential rules of thumb for such situations ('these are some of the potential options that are available for precautionary measures'). Such guidance appears to be in place for natural disasters¹³. It could be also be encouraged for socio-economic emergencies.

¹³ See, for example, the Cabinet Office's 'Risk Register' and 'Community Resilience Programme'.

11.3.3. Fostering relationships, networks, communities and enabling support

This thesis has shown how people's relationships and social support systems are an important aspect of their capacity to adapt to changing socio-economic circumstances and construct resilient outcomes (Arrow 3 and 4 on Diagram 6.2). The empirical chapters suggested that lone mothers with different social networks and social resources coped differently with socio-economic change. So, there is also a need to do something in addition to the policy strategies already discussed above.

Clearly, however, the state itself cannot actually construct networks of giving and receiving. But, what it can do is provide the necessary environment for social support networks to flourish from the 'bottom-up'. A recent IPPR (2014, p.73) report makes a similar suggestion: "Government can create the conditions for families to thrive by making sure that support is available at times of stress, and by removing some of the barriers to forging and maintaining strong relationships". There are also good economic reasons for doing so, as evidence suggests that strong communities are beneficial for the economy (Halpern 2010, Clark & Heath 2014). This has also been made explicit by Mark Carney (2014) who has recently warned: "We simply cannot take the capitalist system, which produces such plenty and so many solutions, for granted. Prosperity requires not just investment in economic capital, but investment in social capital."

Audit current policy for 'network friendliness'

Given the potentially perverse effect that some policies (e.g. the 'Bedroom Tax') have on people's social networks, this thesis recommends that all areas of current social policy (whether social security or housing policy) should be scrutinised to ensure they are not damaging existing social networks (see also Perri 6, 1997 and Halpern 2010). Below are a few example:

- The under-occupancy charge ('Bedroom Tax'): As we have seen, this policy is potentially highly damaging to people's ability to form and sustain local support networks. During their interviews, both Jody and Sophie described how the policy offered them a choice between financial adversity through "staying put" or losing their local support networks of family and friends through relocating. Such a choice is affecting thousands of other families (Clark & Heath 2014). To ensure the stability and continuity of people's social support systems, this policy should be scrapped.
- As already discussed, a handful of interviewees described how their personal JSA advisor
 had stopped them from volunteering and/or attending educational training. This is despite
 evidence that most people who move from unemployment into the world of work are able
 to do so because of advice and help offered by their informal connections.
- At the broadest level, evidence also suggests that cash benefits seem to do little or nothing to encourage people to sustain and build their social networks (Perri 6, 1997). People on cash benefits could be asked to engage in network building activities (e.g. through programmes such as Backr, described earlier)

Creating stronger and deeper local networks

This thesis has argued and given evidence for the fact that the more options for support that are available in a network, the more capacity that network offers individuals to construct resilient outcomes when adversity strikes. As seen in the case of Celina (Chapter 9, sec. 9.6), lacking options for childcare support meant that her employment was unsustainable. Sarah, on the other hand, had plenty of support options which gave her backup and flexibility. The evidence presented in Chapter 8 and 9 also made clear that quite often such support came from local community networks unrelated to family. So, facilitating the development of such networks might make a difference. Policies that aim to create stronger and deeper local networks would be one potential way of increasing the support options that people have available.

- Evidence described in Chapter 8 suggested that social foci (e.g. social organisations, local meeting points) are one of the main ways in which relationships are constructed and maintained¹⁴. A large body of literature also supports this finding (Feld 1981, Small 2009, Kossinets & Watts 2009). Given this, the government could seek to promote the development and strengthening of local relationships by encouraging and facilitating the development of local community/neighbourhood social foci. Aldrich (2012) highlights that the Japanese government builds social capital (and thus, he argues, social resilience) by encouraging and funding local parades, fairs, and regular meetings of neighbourhood groups (see also Putnam 2000). A similar strategy might be beneficially adopted in the UK.
- Related to this, the wider research literature also suggests that there is an interplay between the physical and transport infrastructure of a city and the strength of its social networks/capital (Aldrich 2012, Perri 6, 1997, Takhteyev et al. 2012). Urban infrastructure and the proper design of residential environments could therefore play a role in building social capital (Perri 6, 1997). In designing new cities, for example, planners could allow for protected spaces where people can meet and spend time together and in which interactions can emerge from the bottom up.
- Chapter 8 described how some social support organisations act as a safety net, helping people cope with adversity. The term 'Neighbourhood Resilience Centre' was used to describe the function of these services. In the United States, there has been the growth of 'Neighbourhood Resilience Centres'. These centres provide a range of services, such as offering meeting points for local people, as well as offering them access to valuable information and resources. In San Francisco, for example, the 'Neigborhood Empowerment Network' attempts to build community resilience through encouraging collaboration between non-profits, faith based organizations, and academic institutions with the explicit goal of "empowering the neighborhoods of San Francisco with the

¹⁴ For example, services offered by 'Single Parent Action Network' in Bristol integrate mutual self-help within wider networks, offering people the opportunity to meet other people whilst taking part in personal development. Louise asked that the government respect the importance of these types of service: "these services should be maintained as they really help you make friends and gain skills and I think the government should recognise the importance of it and keep funding such services". (At the time of writing, Single Parent Action Network has just had much of its government funding withdrawn, so such services will be less available for some of the lone mothers interviewed for this research.)

- capacity to steward themselves to a resilient condition." Policy makers in the UK might learn from attempts in the US to construct resilient communities¹⁵.
- We saw in the empirical chapters how it seemed vital to have the emotional and decision-making support of people with experience. In the UK, the 'Home Start' programme matches young single parents with more experienced parents from their locality for practical help, advice and support. Services like this should be developed and offered government support.

Geographically open and diverse networks

As seen in Chapter 9, people seem to do the best when they have a variety of different types of social support available. Strong and deep support networks can only get people so far. Having a diversity of support available is also important. Chapter 8 also showed that different types of individual and relationship tend to give different types of social support. So, related to this, policy might attempt to facilitate ties between different types of people and geographical areas (as also suggested by Aldrich 2012, Elliott et al. 2010).

- As was evidenced by the cases of Kate, Jody and Elizabeth, people living in poverty struggle to pay for public transport. Jody described how even though she wanted to get the bus to see friends and family, she couldn't afford it most of the time. It is also likely that the most financially vulnerable live in areas where transport infrastructure is not adequate as there is less demand (Perri 6, 1997). This creates a vicious circle in which they cannot get out to meet people who might actively offer them a chance of moving out of poverty. Going back to Jody's case, we saw in Chapter 10 that she had to cut back on volunteering (which might have eventually been her way into employment) because she couldn't afford to pay for transport, largely because of the 'Bedroom Tax'. Kate also made the suggestion that the government might consider implementing free bus travel for certain people with children up to the age of 12.
- One of the differences between the vulnerable group and the resilient group was that most of the mothers in the resilient group had been able to get into work. One reason for this was that they had informal network that helped them find work. Chapter 8 and 9 described how the mothers in the vulnerable group tended to lack contacts who could offer them job related advice. Related to this, Louise suggested that the government might consider implementing a graded introduction to the labour market and also facilitating introductions to contacts who could help lone mothers find a job before they are required to actually look for work. For example, in the year before being required to move into work, the government could suggest that lone mothers build their work based connections through attending programmes such as 'Backr'.

¹⁵ In the UK services such as CAB arguably offer similar services. However, there are some differences. CAB generally offers individualised advice on specific problems and does not aim to build the general resilience of local communities/networks.

Digital solutions

Although it is no substitute for face-to-face interaction, digital technology could be a platform for people to connect with others, share ideas, solve problems and otherwise offer support to one another. Although this point was not developed upon in the empirical chapters, a number of the interviewees described how having access to online support forums was one essential way in which they accessed information they needed to make decisions and also sought out emotional support. The government could have a role to play in helping people create, customise, and improve their own digital support services.

- Problem solving at an individual and community level could be attempted in spirit of experimentation, through trying different adaptations and finding out what works (Room 2012). There is a craze on the internet at the moment called 'bio-hacking'. 'Bio-hackers' tinker with their lifestyle (i.e. experiment on n=1) and monitor health and performance outcomes of interest, record what works for them, what doesn't work, and then report back to the 'bio-hacking community' so other people can try the same 'hacks'. Why not promote something similar at a social level: 'socio-hacking'? The government might consider providing a platform from which people could report on their efforts and experiments to develop local community and neighbourhood networks, solve local social and individual problems.
- The government could foster user generated information services. These can adapt and spread information quicker than government bureaucracy. For example, OneSpace internet forums (based in Bristol) offer a forum for lone parents to report their experiences regarding the welfare system and other various problems. The hope is that these experiences will give other lone parents material to use when dealing with similar problems.
- Invest in technologies that allow individuals to have an overview of their local social foci and associated networks. As Enemark et al. (2014) describe "We find that a more complete view of the network leads to faster coordination ... These results suggest that changing what actors know about a network can improve outcomes". This finding, we argue, likely applies to information about local social foci as well. The website OneSpace offers a service that provides this type of information for lone mothers, which its service users find invaluable. These types of services, in Room's (forthcoming) words, could help bring attention to resources which might lie 'hidden, scattered or badly utilised'.

11.4. Conclusions

The types of policy initiatives outlined in this chapter will likely be much more successful if they have a solid evidence base of tried and tested methods for implementing them. For example, as Dickens et al. (2011) show, social network interventions are much more likely to work if they are designed with a theoretical foundation in mind. Their review suggests that 87% of interventions with a theoretical foundation had beneficial outcomes, compared with 59% of interventions with no theoretical foundation.

As it currently stands, the government supports and funds a narrow vision of the social sciences: behavioural economics (the science of 'nudges'). Behavioural economics largely treats human

motivation as financial. It is less concerned with relationships, networks and community empowerment. If the government is serious about using the power of people's relationships and networks, then it should also consider expanding its current vision of the 'behavioural sciences' to include other relevant fields of study¹⁶. Policymaking not only requires a strong evidence base, but also a range of distinctive standpoints from which to develop and evaluate that evidence base. The framework of this research could potentially provide a platform, a different standpoint, from which to develop and evaluate such an evidence base.

¹⁶ As a side note, research by Ormerod (2010) has shown that network effects can dwarf nudges: "Nudging provides a potentially valuable insight for the initial task of trying to steer a network in a particular direction, but then the network takes over".

Chapter 12: Contributions and conclusions

12.1. Introduction

Over the last 7-8 years a series of interconnected economic adversities have affected the lives of many British citizens: falling incomes, rising prices, and cuts to public spending. Of all groups in society, these changes have damaged the real incomes of lone mothers the most. The aim of this thesis was to investigate if social networks provide people, lone mothers in particular, with the capacity to adapt to such hardships. The introductory chapter also introduced three interrelated research challenges – all related to current gaps in knowledge – that such an investigation would also enable us to address.

Policy makers are challenged to learn from the recent hard economic times, such that they are in a position to improve the resilience of individuals, families, and communities against similar threats in the future (the 'social policy challenge'). One potential way in which policy makers might strengthen people's capacity for resilience is to use the 'power of their relationships and the networks they create' (Cruddas 2014). But, it is not clear how people's personal relationships and networks interrelate with, and help them adapt to, macro socio-economic conditions ('the theoretical challenge'). For this reason, the socio-economic context of this thesis offered an opportunity to develop and refine social theory in this direction. To take advantage of this opportunity, empirical research was required. Given that lone mothers have been particularly badly affected by the recent economic crisis, this thesis investigated their personal networks and resilience in times of adversity ('the empirical challenge').

Now at the end of the thesis, we can evaluate the preceding chapters and the proposed original contributions that have been made towards the challenges just outlined¹. In addition, the thesis has also contributed towards methodological debate surrounding 'analytical sociology', a branch of sociology which seeks to detail in clear and precise ways the 'social mechanisms' which bring social phenomena about.

The structure of this concluding chapter mirrors the structure of the thesis as a whole: the chapter starts by discussing the conceptual and theoretical contributions (12.2), followed by the methodological contribution (12.3), then the empirical contribution (12.4), and finally the policy contribution (12.5). The thesis concludes with some reflective comments (12.6).

¹ Given that the focus of the empirical chapters was on answering the research questions, the focus of this chapter will be on how the answers given to the research questions have contributed towards the research challenges.

12.2. Conceptual and theoretical contributions: A sociological conceptualisation of resilience and how social networks help people adapt to changing circumstances

The socio-economic context of this thesis was a catalyst for both conceptual and theoretical development². Policy makers and social policy scholars have turned towards concepts such as 'resilience' as economic hard times started to damage family finances and uproot people's lives (Cruddas 2014, Harrison 2013, Batty & Cole 2010). But neither policy makers nor scholars are clear about the meaning or definition of the concept of resilience. Given this, the primary conceptual contribution of this thesis is to have developed a sociological understanding of resilience. As for the theoretical contribution, the thesis has proposed a number of ways in which people go about achieving resilience in hard economic times. This section summarises both of these contributions.

In terms of the conceptual contribution, this thesis has shown that literature concerned with 'complex adaptive systems' and ecological systems (e.g. Holland 1992, Walker & Salt 2006) can help conceptualise resilience in sociological terms. When exposed to some shock in its environment, a complex adaptive system will have multiple possible 'adaptive outcomes', some 'desirable' for the system and some 'undesirable' (Walker et al. 2004, Adger 2006, Engles 2011, see Chapter 2). Resilience, more specifically, describes the persistence of desirable outcomes. As for what is 'desirable' in the social world, this thesis argued that sociological and economic perspectives on what people aspire towards (e.g. Simon 1996, Goldthorpe 2000, Millar 2007) can help clarify the concept of resilience (Chapter 4). For instance, if a particular family aspires towards some specific standard of living, and is able to ensure the persistence of that standard of living in the face of an economic shock, then they are resilient. But a social system is only said to be resilient if desirable outcomes persist without any radical changes to that system's identity (its 'structure and function'). Social systems which go through a more radical restructuring to achieve desirable outcomes are said to exhibit 'transformable outcomes'. For instance, when exposed to the economic crisis a social agent might seek to change the opportunities they have access to, or the ways in which they do things, to ensure they have desirable outcomes. On the other hand, social systems which move towards undesirable outcomes when exposed to some perturbation are said to exhibit 'vulnerable outcomes'. For instance, a family who is unable to ensure the persistence of some aspired towards living standard when exposed to recession, they might for example increasingly struggle financially, experiences 'vulnerable outcomes'.

Fundamental to the ability that a given social system has to achieve desirable adaptive outcomes in a turbulent environment is the 'adaptive capacity' of that system (Engles 2011, see Chapter 2). The particular elements and connections within a given system influences that system's adaptive capacity (Scheffer et al. 2012, Walker & Salt 2012, Carpenter et al. 2012). As social networks are composed of elements (people) and connections (relationships), this argument acted as a bridge between the complex adaptive systems literature and the social network analysis literature (Chapter 3). The adaptive capacity of a given social agent is a property of their personal

² By concepts it is meant definitions of what is to be observed, and by theory it is meant interrelationships between concepts (Merton 1967, see Appendix 1).

network, their complex adaptive 'ego-system', which they create and mobilise when needed. When exposed to some perturbation in their environment, they might act towards their egosystem in agile and creative ways to ensure the persistence of their aspired towards standard of living (Chapter 4). If they lack resources in their personal network, they are more likely to experience undesirable vulnerable outcomes. The conceptualisation of resilience used in this thesis, and its connection with the concept of adaptive capacity, allowed us to account for outcomes beyond the psychological ability of the individual to cope. The conceptualisation also allowed for the generation of a theoretical argument which highlighted the interplay between individuals, their aspirations, their wider socio-economic circumstances and the relationships and networks they have access to. It is this argument to which we now turn in more depth.

The empirical chapters highlighted that concepts and theory related to what people aspire towards can help researchers connect evidence about individual motivations with evidence about wider socio-economic conditions and social networks. To use Simon's (1996) terminology, for many of the lone mothers interviewed for this research adapting to their wider socio-economic environment was essential for the wellbeing of themselves and their family and was one of the main goals towards which they oriented their actions and interactions with others. As per Simon's (1996) argument, the interviewees described aspiration levels above which they would experience some form of satisfaction and below which they experienced varying degrees of dissatisfaction. The interviewees seemed to try to maintain their living standards over time, especially trying to protect against moving into undesirable circumstances such as poverty (as also described by Millar 2007). Furthermore, in hard economic times it seemed that it was stability rather than advancement that the interviewees aimed for. Yet many of the interviewees described how their capacity to ensure the stability and persistence of a living standard with which they felt satisfied had been affected by the wider socio-economic crisis.

Some interviewees had been able to work through problems which had arisen because of the economic crisis through re-orienting their actions and interactions with others. Elster (2007) might say that the interviewees displayed certain 'action tendencies' in response to unease about their situation, tendencies which aimed at restoring some balance (i.e. returning to an aspired way of life). Some mothers, however, had not been able to work through their problems and achieve what they aspired towards. For these mothers, negative emotions and potential mental health problems seemed to boil to the surface (see Chapter 7). In this sense, this research corroborates other research which highlights that being impoverished relative to one's aspirations has the potential to cause widespread hurt in a sharp recession (e.g. Clark & Heath 2014). As Brown and Harris (1978) note, when an individual faces the loss of some valued object or set of circumstances (perhaps because of socio-economic conditions beyond their control), the mental state of that individual does not just reflect their loss, it also reflects their ability or inability to find satisfactory alternatives to their ways of doing things to work around and overcome the loss.

For those actors who described being affected by the socio-economic crisis, who found they were no longer meeting their aspirations (either in the present or in the past), they reoriented their actions in a number of ways. Some of the interviewees, especially those who had access to appropriate information (and used this information to monitor their environment - one of Buckley's [1967] key features of a complex adaptive social system), reoriented their actions in

For those interviewees who felt they were meeting their aspirations, they described acting in the habitual ways they had done in the past, getting on with life as they had done before. To use the language of Gigerenzer and Selten (2001), their 'adaptive toolbox' of tried and tested responses to situations seemed adequate to help them maintain a satisfactory standard of living in the environment they found themselves in. That is to say, habitual modes of action and interaction seemed capable of seeing some of the interviewees through the tough times.

On the other hand, mothers who felt the economic crisis had knocked them off course (or anticipated that it would knock them off course in the future) reoriented their actions in what Room (2011) might call agile ways. The evidence supports Room's argument that when an anomalous pattern is detected, actors are alerted to the need for an agile and creative response. For these mothers, their adaptive toolbox of habitual responses did not always seem sufficient given their circumstances. They described that for this reason they might distance themselves from their previous ways of acting and interacting and display more creative forms of action and interaction (a similar argument is also presented by Emibayer & Miche 1998). For example, they described re-working the patterns of social support amidst which their lives played out, with regard to the ways in which they expected the world to unfold and the ways in which they anticipated any new arrangements might help them achieve their aspirations. For some mothers, this reweaving of their local support systems achieved the desired results – they managed to construct resilience for themselves in hard economic times. Others, however, lacked resources to draw upon from their support networks and consequently seemed to struggle to get by.

These findings also support the theoretical work of Potts (2000), who describes how the ways in which agents decompose social structures in some areas and increase interconnectedness in other areas can be a potential source of novelty to help adapt to change. The lone mothers interviewed for this research described probing potential 'adjacent possibilities' (see Chapter 2, section 2.4.4) in their relationships and networks, possibilities which stemmed from their current arrangements, looking for what was achievable with the resources embedded in their relationships and networks. They tinkered with the potential combinations of elements available to them in their social networks, aiming to find new ways to satisfice their aspirations. As might be described by Earl (2013), they generated new arrangements, new connections, that seemed good enough for the context in question. This is, it has been argued, one way in which individuals can generate the adaptive capacity necessary to adapt to changing circumstances whilst ensuring they are meeting their aspirations (i.e. to be in a state of resilience).

Two types of social network theory helped us explore the empirical evidence and develop the argument further. Firstly, this thesis has extended theory about the benefits of people's relationships and networks (e.g. Lin 2001, Granovetter 1973, Wellman & Wortley 1990, Small 2009) to explain how people are able to adapt to maintain a certain standard of living in changing socio-economic circumstances. We saw that what is usually termed social capital, i.e. the potential resources embedded in a social network (Lin & Erickson 2008), can be activated (or mobilised) through the giving and receiving of social support to help people adapt. Furthermore, it was clear that the types of resources available to the interviewees in their social networks influenced their capacity to adapt. We saw that the particular resources that the interviewees had in their networks was linked to the individuals in those networks (i.e. the occupational class of alters), the specific types of relationships in those networks (i.e. role-types, the strength of ties) and the network structure itself (i.e. the 'depth' of the network). This corroborates the research of scholars such as Wellman and Frank (2001) who describe the multilevel nature of 'network capital'. Moreover, as also highlighted by Feld (1981) and Small (2009), it was clear that 'social foci' (e.g. local social organisations or meeting points) shaped interactions and also seemed to enhance access to social capital.

On top of this, the findings also relate to theory regarding the formation of people's personal relationships. The findings suggest that to understand the adaptive capacity of social systems such as families it is important to understand the ways in which they might build new connections, but also the reasons why connections might decay over time. For example, the interviewees described how reciprocity was fundamental to maintaining their relationships, especially relationships with friends (similar findings are reported by Plickert et al. 2007 and Gaudeul & Gianneti 2013). Some mothers described how without an adequate set of resources to reciprocate with, they had seen their relationships decay over time. Because they lacked resources to reciprocate with, they also struggled to construct new relationships and they found it difficult to draw upon existing resources in their networks in times of need (similar arguments are also discussed by scholars such as Offer 2012 and Gouldner 1960). Their capacity to adapt and retain a desirable standard of living was affected by their problems with reciprocity. Furthermore, adverse economic conditions had clearly damaged the ability of some of the interviewees to reciprocate, leading to a reduction in the intensity of their social life (as also argued Paugam 1995 and Clark & Heath 2014) This, it was suggested, leads to a number of important implications about the role that public policy might play in creating stability and resilience for individuals, i.e. by ensuring they have an adequate resource base on which to construct reciprocal relationships and resilience (see e.g. Chapter 11).

We also saw how a number of concepts from literature concerned with complex adaptive ecosystems can be used to analyse social networks and shed some light on the bases of adaptive capacity. Ecologists have shown that the more diverse the resources in an ecosystem, the more likely that ecosystem is to achieve a desirable state following a perturbation (e.g. Page 2011, Carpenter et al. 2012). The evidence presented in this thesis has suggested that this argument extends to the social world. The more diverse the social resources that individuals have access to through their network when disaster strikes - what we called network diversity - the more likely they will be able to realise desired outcomes even given that adversity. Moreover, we have seen that a greater number of elements in a network that perform the same function – what we called network depth – the more flexibility that a lone mother family has if one of those elements The empirically evidenced theoretical arguments outlined above build on the work of scholars across sociology, anthropology, and the environmental sciences, who show that the ways in which people adapt to changing circumstances are often linked to the social networks they have access to (Minnis 1985, Aldrich & Meyer 2014, Beggs et al. 1996, Adger 2003).

For the reasons outlined above, this thesis has provided evidence to support the statement that families, including the lone mother families that were interviewed for this research, can be seen as complex adaptive social systems, as adapting to things outside of their control in their wider socio-economic environment by changing things over which they do have some control, things within their spheres of influence (Chapter 4). The thesis introduced a new concept to denote the immediate personal network as being within the spheres of influence of individuals and families to help them adapt – ego-system. To draw upon Bateson's (1972) terminology, a given individual's ego-system is part of the 'regulatory circuitry' that they have access to for 'selfcorrective' purposes when they are knocked of target, a circuitry which we have seen can be shaped and reshaped in response to change. As argued by Buckley (1967), individual social agents might use their 'dyadic interdependencies' as a source of adaptive potential, as a source of plasticity and variability which allows for new forms of action and reaction in response to change. The evidence suggests, as also argued by Buckley (1967), that people do indeed reciprocally adjust their behaviour towards one another in response to their environment. Such arguments also build on the work of Potts (2000) and Room (2011) who both describe families as complex adaptive systems. It extends their work by describing the processes through which such social systems can remain flexible and achieve the capacity to adapt to their environment (e.g. through reciprocal resource exchange, through network diversity and depth).

It is worth linking the arguments presented above back to sociological literature which seeks to transcend the structure and agency divide. Archer (1995) argues that social structures are able to have their causal effects on human action through the ways in which individuals receive and interpret these structures in light of their particular 'projects' (i.e., their aspirations). The empirical evidence presented earlier in this thesis supports such arguments. We have seen that lone mothers do indeed react to the ways in which they perceive wider socio-economic trends are affecting, or are going to affect them. Moreover, we have seen that actions and interactions that individuals take can lead to either the reproduction of a given relational structure (if the social agent perceives it to be functional in relation to their aspirations, or at least not maladaptive) or the transformation of a given relational structure (if an individual perceives that a new arrangement might better suited to achieving their aspirations). This corroborates the theoretical work of Archer (1995) and Scott (2011) who argue that social agents reflect on their social context, assess the resources available to them within the relational structure in relation to the demands of the immediate situation, and then choose to either reproduce or transform the structures which they have access to.

The elaborated relational structure that results from the interactions of various social agents, acting and reacting to the ways in which they perceive macro social structures are impinging on their particular projects/aspirations, becomes the basis of a new set of conditions under which they can construct further actions. It does indeed seem possible, as would be argued by Archer

(1995) and Pawson (1996), that social scientists can isolate and describe the objective structural circumstances which provide the context for action (e.g. economic crisis) and investigate empirically, with the help of social agents, how these circumstances shape the actions and interactions that result at the level of the individual, and how the actions and interactions that result lead to the reproduction or transformation of social structures.

As is clear from the above, this thesis has brought together a number of different, but complementary conceptualisations concerned with: system dynamics, social networks and people's aspirations and actions. Each particular conceptualisation has been used to enhance the others in certain ways. Systems concepts, for example, helped theorise the ways in which people's personal networks interrelate with and help them adapt to changing socio-economic circumstances. Whereas, the literature on people's aspirations and actions helped theorise the micro-mechanisms behind social system dynamics. The different conceptualisations were drawn together within the framework of 'analytical sociology', which helped give enhanced clarity to the proposed relationships between the different literatures and concepts.

Analytical sociologists attempt to explain 'social regularities' with reference to a number of different types of abstract 'social mechanisms' which bridge macro, micro and meso levels of analysis (Hedström & Swedberg 1998). 'Situational mechanisms' describe processes which connect the social agent to their wider socio-economic environment. 'Action formation mechanisms' describe processes which influence how a given social agent acts in response to the situation they find themselves within (for example, the opportunities that their personal network gives them access to). Finally, 'transformational mechanisms' describe how the particular actions taken by social agents shape the outcome of interest (the social regularity). This thesis associated each particular mechanism just described with specific aspects of the conceptual framework, as well as with a specific empirical research question³. The theoretical argument, framed in terms of social mechanisms, is illustrated below with reference to the answers given to each of the research questions (see Diagram 6.2 in Chapter 6 sec. 6.2 for a supporting visual representation of these mechanisms).

The regularity to be explained – adaptive outcomes (answering Q1): The regularity of interest in this thesis is people's differential capacity to cope with wider economic crisis. The empirical chapters categorised the lone mothers interviewed for this research as having either vulnerable outcomes, resilient outcomes, or transformable outcomes. Those with vulnerable outcomes felt that the economic crisis had made it increasingly difficult for them to achieve a desirable standard of living. Those with resilient outcomes were happy with their living standards, even given the economic crisis. Those with transformable outcomes had decided that because of the economic crisis they needed to make wider reaching changes to ensure desirable outcomes. Categorisation of this sort is an important starting point for theoretical work. However, the categorisation left us with a puzzle. Such a mapping does not tell us why lone mother families vary as they do with their adaptive outcomes when exposed to economic adversity. So, the task then became to explain how the socio-economic context of the research was linked to the adaptive outcomes experienced by the respondents.

³ The exact research questions can be found in Chapter 6, sec 6.2.

Situational mechanisms (answering Q2): People are motivated to ensure the persistence of some desirable lifestyle or way of life, and they act in ways to meet such aspirations (micro). But, what people value is quite often situated beyond their direct control. For example, at the mercy of the to-and-fro of the economic cycle and government policy (macro). Thus, wider socio-economic forces are likely to affect people's goals and motivations for action (macro to micro). To illustrate, the lone mothers interviewed in this research who had experienced a tightening of financial resources (because of economic crisis) also exhibited changes to their personal goals and motivations for action. In particular, they sought to offset and correct any deviations from their desired standard of living (perhaps, for instance, by trying to get into work).

Action formation mechanisms (answering Q3): People, having been motivated to act by the situational mechanisms just described, act in accordance with their skills and knowledge, as well as any opportunities for social action supplied by their social networks. Social networks give access to latent resources that people can mobilise when needed. Social networks gave some of the lone mothers interviewed in this research opportunities for buffering themselves against financial uncertainty when it strikes. The empirical chapters showed that those who experience different outcomes do so in part because they have access to quite different social networks and resources. For instance, situational mechanisms tended to motivate those with vulnerable outcomes to get into work, but quite often they did not had the options available for activating childcare support to make this a reality (i.e. they had low adaptive capacity). Whereas, those with resilient outcomes tended to have been motivated to get into work, and had the childcare support options available in their network to do so (i.e. they had high adaptive capacity).

Transformational mechanisms (answering Q4): While action formation mechanisms describe the opportunities available, it is the actual actions that people take and the outcomes of these actions that help people ensure the persistence of some aspired towards standard of living. The empirical chapters adduced evidence to show that the activation of social support enables the lone mother to achieve desirable outcomes when exposed to adversity. For instance, the mobilisation of financial resources can help offset the negative financial effects of recession and austerity. Yet, the main difference between those with resilient and those with vulnerable outcomes is that those with resilient outcomes tended to have access to and activate a greater 'depth' (i.e. more support) and 'diversity' (i.e. greater range) of social support when trying to correct a deviation to their living standards.

The argument of this thesis (outlined above) has been framed in such a manner so it has potential interest for a broader audience of scholars and practitioners concerned with the ways in which people deal and cope with other types of hardship (perhaps, for example, hardships related to natural disasters, or personal difficulties). Indeed, research of the sort conducted in this thesis (case-study, qualitative) is essential for generating and probing theoretical arguments and excavating causal processes (Perri 6 & Bellamy 2012, Pawson 2013, Moses & Knutsen 2012). That is to say, the abstract mechanisms described and illustrated above are likely to produce similar outcomes even with different groups and across different contexts. The argument might, for example, be applied fruitfully to other groups of key interest to social policy

(e.g. sick people, fail elderly people, the poor and unemployed, homeless youth) to understand how they differentially cope with hardships and how policy makers might support them.

Having said this, the notion of generalisability in research such as this, with a small number of cases, is much contested. Critics suggest that such research produces particularistic rather than general insights. This is potentially one limitation of this thesis. But, it is argued that this criticism only applies to the statistical generality of the argument, not the theoretical generality. This thesis cannot generalise the core argument or findings in a statistical manner to the population of lone mothers as a whole (or indeed, to any other groups). Nor can it give any weighting to the explanatory factors outlined in the research. However, even though research of the sort conducted in this thesis is not well suited for testing theory, or highlighting the prevalence of certain categories of phenomena (e.g. vulnerable, resilient, transformable), it is good for generating theoretical arguments and excavating causal pathways (Perri 6 & Bellamy 2012, Pawson 2013). Indeed, the type of research conducted in this thesis can claim to use what are called 'theoretical generalisations' (see in particular Lewis et al. 2014, p.352, but also Yin 2009, Perri 6 & Bellamy 2012, Bengtsson & Hertting 2014). That is to say, it has generated theoretical arguments which are hypothesised to have wider generality in certain circumstances. However, although the research has been able to generate theoretical arguments, and probe their plausibility (Moses & Knutsen 2012), it has not been able to rigorously test these arguments. Further research, designed for the purposes of theoretical evaluation, must establish whether the theoretical generality of the research holds.

For this reason, it is important that comparable research is conducted with a larger sample, and also with other groups, to test the relevance of the thesis' argument to the broader population. This would require that the argument be operationalised in such a manner so to allow for quantification. Then, there are two avenues forward to test the argument. One would involve a longitudinal evaluation research design, the other would involve experimental intervention (as in the social network intervention research described by Cochran et al. 1993 and Dickens et al. 2011).

12.3. Methodological contributions: Qualitative methods and analytical sociology

As outlined in the previous section, this thesis used the explanatory framework of analytical sociology. In doing so, the thesis has made a contribution to methodological debate. The methodological literature concerned with analytical sociology does not address the potential use of qualitative methods within its explanatory framework. That is to say, the potential linkages between well-established qualitative methods and analytical sociology have yet to be drawn out (see Chapter 6). This research has addressed this gap in the literature by demonstrating that researchers can use qualitative methods as an empirical tool for investigating social mechanisms. There are two primary ways in which this convergence has been demonstrated.

Firstly, the analytical sociology framework attempts to bridge micro, meso and macro levels of analysis. The empirical chapters of this thesis have shown that qualitative methods can bridge micro, meso and macro levels of analysis with ease. More specifically, the thesis has shown that qualitative methods can draw upon the knowledge that social agents have of how their own

motivations, decision-making and actions are connected with wider socio-economic trends (Chapter 7) and also with their own personal social networks (Chapter 9).

Secondly, the thesis has demonstrated that researchers can use well-established qualitative methods for generating 'causal stories' (e.g. the interpretative method of Schutz [1972], and thematic coding as described by Fereday & Muir-Cochrane [2008]) to qualitatively narrate social mechanisms. Like the abstract social mechanisms that analytical sociologists seek to describe, these qualitative narratives claim to have some wider level of generality (see Chapter 6). They might, for example, be generalised to other groups at risk of vulnerable outcomes in changing circumstances, other groups of interest to social policy.

12.4. Empirical contributions: The social support networks of lone mothers

Previous research has highlighted the potential impact that social networks potentially have in shaping policy relevant outcomes that lone mothers experience. For instance, research has shown that social support helps lone mothers get into work and maintain work-life balance (Ciabattari 2007, Millar & Ridge 2009). Having said this, the literature that demonstrates this does not examine in any detail the actual personal networks that lone mothers have, nor does it highlight which aspects of their personal networks are associated with positive support outcomes. Moreover, it does not examine how social networks might help lone mothers adapt to and achieve resilience against wider socio-economic hardships.

The empirical contributions made by this thesis are related to these gaps in the literature. This thesis has conducted an in-depth empirical examination of the social networks of lone mothers. It has explored which aspects of their networks are import for certain support outcomes, how their networks are likely to have formed through time, how and why lone mothers mobilise social support, and the role that support networks play in adverse socio-economic circumstances.

This research has shown that different types of social support originate from different parts of the personal networks that lone mothers have. To give an example, friends are a greater source of emotional support and work related help (i.e. help with finding work, help with solving problems at work). But, family are most likely to give financial assistance. It seems that for those mothers who are still in contact with their ex-partners (about half of the sample in this research), they provide a great source of childcare. It was thus suggested that having a network with diverse types of people in it, not just family, not just friends, is likely to be beneficial in helping lone mothers deal with different types of problem.

This thesis has also highlighted how lone mothers who are vulnerable to economic adversity tend to have problems constructing reciprocal relationships, they tend to have smaller personal networks, fewer networked resources (i.e. less social capital), and they access less social support than more advantaged, resilient, lone mothers. It was also seen that, compared to those with vulnerable outcomes, those with resilient outcomes tended to have family and friends in a higher occupational class. The empirical chapters also indicated that amongst other things this meant they are likely to have access to a greater level of financial support. For example, some of the

resilient mothers described how their family had given them financial support to buy a house. Such support seemed beneficial for helping them cope with the effects of wider socio-economic adversity. Given this, it was suggested that relational processes (such as giving and receiving financial support) could lead to previous socio-economic inequalities being reinforced and/or exacerbated during an economic crisis. Those with valuable class based resources seem more able to ensure the persistence of a desirable standard of living, and those without struggle more and are more likely to move towards vulnerable outcomes.

It was also shown how advantaged (resilient) and disadvantaged (vulnerable) lone mothers form their social networks in quite different settings. More advantaged mothers tend to form their networks through higher education (e.g. University), employment and also with other mothers at the school gate (because they find it easier to construct reciprocal relationships). Disadvantaged lone mothers, on the other hand, tend to form their supportive relationships predominantly through local social foci, such as local support organisations (e.g. childcare support centres, charities), and thus with people in a similar situation to themselves⁴.

This thesis also offered a qualitative understanding of how lone mothers have experienced the economic crisis and government austerity, how they have acted in response, and how their personal networks have helped them adapt. It was seen how wider socio-economic trends influence the types of social support that lone mothers mobilise and how this social support can potentially help them offset hardships. This particular contribution builds directly upon the empirical contribution offered by Millar and Ridge (2009), who also examine the relationships that lone mothers have in relation to the wider public policy context. They show, for instance, that 'relationships of care' can be used to explain why some lone mothers are able to take up opportunities offered by government policy (they might, for example, offer childcare support necessary to sustain employment), whilst others are not. Similarly, this research, looking at a later context of austerity and recession, has shown that supportive relationships can be used to help explain why some lone mothers cope with economic adversity to a degree that they are happy with, whilst others do not. These conclusions are consistent with and reinforce the research of Millar and Ridge (2009).

The findings described above also contribute to the wider social support network literature. Many studies of social support offer a decontextualized description of personal networks. That is to say, patterns of support are generally not described in relation to the wider socio-economic context which gives meaning to people's interactions and which creates the motives, desires and needs which people satisfy through their relationships. This thesis has done exactly this.

12.5. Policy contributions: Facilitating social networks to build social resilience

This thesis has practical implications for social policy. It implies that people are not just pockets or purses into which policy makers pour money (as some social policy tends to assume). They are active agents in their own local ecosystem of connections. These connections, this thesis has

⁴ Although, these findings could be an artefact of the sampling strategy, so would need to be corroborated with further research.

shown, are important for helping people cope in adverse times. Policy makers are starting to recognise this. Both the Conservative's 'Big Society' and Labour's 'One Nation' policy umbrellas focus on strengthening people's relationships, networks and resilience (Norman 2010, Glasman 2012, Cabinet Office 2011, Cruddas 2014). Yet, although the political rhetoric is clear about the fact that policy should seek to strengthen people's relationships and their capacity for resilience, it is not clear about how policy makers might reasonable achieve this.

The policy contribution of this thesis is thus to have used theory and evidence to suggest ways in which social policy might facilitate the development of stronger, deeper and more diverse networks. Doing so, it has been suggested, will develop people's capacity to achieve resilience in hard times. Whereas previous academic interpretations of 'resilience' have suggested that it leads to a neglect of the role that government policy can play (Mohaupt 2009), the theory and evidence presented in this thesis suggest that there is a significant role and place for government policy. Each different type of mechanism discussed in section 12.2 above gives policy makers room for intervention in different ways (Chapter 11). At the stage of 'situational mechanisms', public policy could emphasise the protection of groups likely to be vulnerable to the effects of wider socio-economic crisis. Such policies might seek to create a buffer for citizens to ensure that their level exposure to adversity is not as damaging as it might be. At the stage of 'action formation mechanisms' and 'transformational mechanisms', government might attempt to facilitate conditions that are conducive for strong and diverse relationships to thrive. They might, for example, audit current policy to remove potential barriers to people forming and sustaining relationships (e.g. the 'Bedroom Tax'). They might also enhance structural conditions which are conducive to people forming and sustaining relationships, for instance, by funding local parades, fairs, and regular meetings of neighbourhood groups (see Chapter 11 for more detailed suggestions).

12.6. Concluding thoughts

This thesis was catalysed by a puzzle: do social networks help people, lone mothers in particular, cope with and adapt to adversities brought on by socio-economic change? Some resolution has now been brought to this puzzle. The overarching original contribution of this thesis is to have shown, through a theoretically grounded empirical investigation into the social networks of lone mothers, that how people cope with adversity is linked to their capacity to create, sustain and mobilise networks of support. Those with appropriate support are better able to obtain the resources needed for daily life and are more resilient in the face of the uncertainties associated with new socio-economic environments.

It is quite often forgotten how an understanding of wider socio-economic conditions is important for an adequate understanding of people's social relationships. It is also forgotten that an understanding of people's social relationships can help us understand how they cope with socio-economic transformations. The recent economic crisis has brought these realities back to our attention. This thesis has shown that sociological concepts and research can help us understand what happens to individuals and families when disaster strikes. Also, investigating what happens when disaster strikes can help to extend sociological concepts and theories. In doing so, this thesis has set the stage for new avenues of inquiry for future research and public policy.

Appendix

Appendix 1: The difference between 'concepts' and 'theory' in this thesis

The chapters in Part 1 of this thesis set out a conceptual and theoretical framework that allows us to examine how social networks interrelate with and supply resilience against socio-economic hardships. However, a few words are necessary about the meaning given to the words 'concept' and 'theory' in this thesis.

Concepts are definitions of what is to be observed (Merton 1967, p.143). Concepts precede but are necessary for theory. The choice of concepts is crucial for guiding the collection and analysis of data, directing the researcher towards what they will look for, how they will categorise what they find and also what they will ignore. As Alfred Schutz (1964, p.17) has noted "[the] theoretical task begins with building up a conceptual scheme under which his information about the social world may be grouped". Furthermore, what might often be considered as rival approaches to conceptualising the social world can often be used in a complementary fashion (Scott 2011a). Doing so can help overcome the limitations of the different approaches and enhance explanatory power. The particular concepts used in this research are drawn from a number of different but, we argue, complementary literatures:

- Firstly, concepts concerned with the resilience of complex adaptive systems (Ch. 2)
- Secondly, concepts concerned with social support networks (Ch. 3)
- Finally, concepts concerned with social agents, their decision-making and actions (Ch. 4)

However, concepts themselves do not constitute theory. It is only once concepts are proposed to be interrelated that theory emerges (and the researcher might then search out empirical relationships between the concepts that have been proposed to be interrelated) (Merton 1967). Although the concepts from each of the literatures described above are linked throughout the chapters of Part 1, the linkages become most explicit in Chapter 6 when the explanatory framework of the thesis, derived from analytical sociology, is explained.

Appendix 2: Additional material for Chapter 8

2.1. Additional tables drawn upon in sections 8.2, 8.3 & 8.4

This section of the appendix gives a select output from analysis that was conducted on the ego-network data. For parsimony, only tables that are relevant to the argument and that have been drawn upon in Chapter 8 are presented.

						Adaptive	outcomes					
			Vulner	rable (N=1	3)				Resil	ient (N=17	')	
						Support						Support
	Colleague	Ex	Family	Friend	Neighbour	worker	Colleague	Ex	Family	Friend	Neighbour	worker
Student	0%	0%	5%	0%	0%	0%	0%	0%	5%	6%	0%	0%
Unemployed	0%	0%	20%	40%	50%	0%	0%	33%	6%	17%	14%	0%
Labour	100%	25%	15%	34%	0%	79%	0%	33%	23%	17%	0%	100%
Service	0%	50%	15%	16%	50%	21%	100%	33%	42%	59%	86%	0%
Retired	0%	25%	45%	11%	0%	0%	0%	0%	25%	2%	0%	0%

Appendix table 2.1: Role-type vs. class, by adaptive outcomes (Column %)

Γ	otal	dy	yads

	Female	Male
Colleague	55%	46%
Ex	7%	93%
Family	57%	43%
Friend	86%	14%
Neighbour	56%	44%
Support worker	80%	20%

Appendix table 2.2. Gender vs. role-type (Row %)

	Total					Adaptive	outcome	S			Ε	Educationa	l attainme	ent	
				Vuln	erable (1	N=13)	Res	ilient (N	[=17]	\mathbf{L}	ow (N=	13)	Н	igh (N=	:17)
	Same			Same	•	,	Same	,	ŕ	Same	·	ŕ	Same		,
	city	UK	Abroad	city	UK	Abroad	city	UK	Abroad	city	UK	Abroad	city	UK	Abroad
Colleague	94%	6%	0%	100%	0%	0%	93%	7%	0%	100%	0%	0%	92%	8%	0%
Ex	53%	33%	13%	50%	25%	25%	55%	36%	9%	67%	33%	0%	50%	33%	17%
Family	35%	48%	17%	47%	24%	29%	31%	58%	12%	59%	22%	20%	23%	62%	15%
Friend	71%	22%	7%	88%	7%	5%	66%	27%	7%	90%	6%	4%	63%	29%	8%
Neighbour	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Support															
worker	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%

Appendix table 2.3: Role-type vs. geographical proximity (Row %)

			Job	
	Emotional	Childcare	related	Financial
Emotional Childcare	1.00 0.00	0.00 1.00	0.14 -0.07	-0.02 0.17
Job related	0.14	-0.07	1.00	-0.02
Financial	-0.02	0.17	-0.02	1.00

Appendix table 2.4: Correlations between different types of support

	Frequency	Percent
No support	113	29%
1.00	153	40%
2.00	100	26%
3.00	17	4%
4.00	4	1%
Total	387	100%

Appendix table 2.5: Total support given by dyads

		Total	dyads		
	Same city	UK	4	Abroad	
Mean length of time known	7.16	,	17.21		17

Appendix table 2.6: Geography vs. time known, mean

2.2. Regression models, additional information

Data: The total number of egos in the sample is 30 and the total number of alters is 387. Around 30% of this alter data was excluded (listwise) because of missing data¹ (and this resulted in the exclusion of three egos). The modelling process was informed by Luken and Tranmer (2010), Scott et al. (2013) and course materials from a Centre for Multilevel Modelling (University of Bristol) training course. Guidance on the specific steps taken during this process was taken from Rasbash et al. (2009) and Browne (2012). MLwiN software was used to construct the models.

Variables & assumptions: Most of the independent variables are categorical, so dummy variables were created for each category. The reference categorises were chosen because of assumed interest of comparison. The same variables and reference categories were used across all models (i.e. each different type of dependent support variable) to ensure each model was comparable to the other models. It is interesting to see, for example, that some predictors have an impact on one type of support but absolutely no impact on another.

Initially, other variables were included in the models. However, tests indicated multicollinearity between certain variables (for example, between role-type and network formation). Some variables were thus excluded from the models. There were no problems with multicollinearity for any of the predictor variables included in the final models. A correlation matrix of the predictors showed they all had a low correlation. All predictors had a tolerance of greater than 0.1 (average .7) and none had a VIF statistics greater than 10 (average 1.6) (tests suggested by Field 2009). Moreover, the linearity assumption is not a problem as most of our variables are dummies.

Multilevel models: Multilevel models are used in situations in which the data is hierarchical, or nested. Many of the extensions of the basic multilevel linear regression model – for example, random intercepts, random slopes and contextual effects – can be applied also to binary response variables, such as support received. The particular models that have been used in this thesis are termed two-level random intercept models with contextual effects (Rasbash et al. 2009). These models allow researchers to control for the hierarchical nature of the data (for clustering), and one benefit is that they allow the researcher to estimate the effects of group-level (Level 2) variables while simultaneously allowing for the possibility that the dependent variable might be influenced by unmeasured group factors. Such models allow us to investigate to what extent the likelihood of receiving support varies across egos (rather than just alters) (through what is called the VPC statistic – discussed below). Scott et al. (2013) and Luken and Tranmer (2010) use a similar model used to estimate the likelihood of tie existing or not (1, 0).

Using a similar strategy to that of Luken & Tranmer (2010), the following models were constructed²:

- Model 0.1: Single level null model
- Model 0.2: Multilevel null model
- Model 1: Multilevel model with Level 1 explanatory variables included

¹ Reasons for missing data are described in Chapter 8 footnote 6.

² However, whereas Luken and Tranmer (2010) add Level 2 characteristics first (ego characteristics), this modelling approach follows Rashbash et al. (2009) by adding Level 1 characteristics first (in the case of this research, alter characteristics).

Model 2: Multilevel model with Level 1 and Level 2 explanatory variables included

Comparing the fit of the single level null model with the multilevel null model (Model 0.1 vs. Model 0.2) allows us to examine if multilevel modelling is warranted by looking for a reduction in a model fit statistic (the Deviance Information Criterion, DIC) (Luken & Tranmer 2010). The results (see bullet points below) indicated that multilevel modelling was warranted for all types of support except financial assistance. The reduction across the first three areas of support suggests that the chances of receiving support vary from ego to ego. The statistic for the financial assistance null models on the other hand suggests that receiving financial support does not differ from ego to ego. This suggests that financial assistance varies predominantly by the characteristics of the alter and relationship (rather than characteristics of the ego and their personal network). For this reason, a single level logistic regression model was constructed for financial assistance.

- Emotional support: Model 0.1 DIC = 531.33, Model 0.2 DIC = 514.52
- Childcare support: Model 0.1 DIC = 491.79, Model 0.2 DIC = 485.12
- Job related assistance: Model 0.1 DIC = 311.09, Model 0.2 DIC = 299.42
- Financial assistance: Model 0.1 DIC = 376.76, Model 0.2 DIC = 377.06

Structure and estimation of the models: Below is an example of the structure of one of the models, the emotional support model (constructed following guidelines given by Rasbash et al. [2009]) (output from MLwiN). Different aspects of the model are discussed below

```
\begin{aligned} & \text{Moral\_emotional}_{ij} \sim \text{Binomial}(\text{cons}_{ij}, \ \pi_{ij}) \\ & \text{logit}(\pi_{ij}) = \beta_{0j} \text{cons} + \beta_1 \text{Female}_{ij} + \beta_2 \text{Student}_{ij} + \beta_3 \text{Labour}_{ij} + \beta_4 \text{Service}_{ij} + \beta_5 \text{Retired}_{ij} + \beta_6 \text{Second}_{ij} + \beta_7 \text{Third}_{ij} + \\ & \beta_8 \text{Main\_type:Friend}_{ij} + \beta_9 \text{Main\_type:Colleague}_{ij} + \beta_{10} \text{Main\_type:Ex}_{ij} + \beta_{11} \text{Main\_type:Support worker}_{ij} + \\ & \beta_{12} \text{Main\_type:Neighbour}_{ij} + \beta_{13} \text{UK}_{ij} + \beta_{14} \text{Abroad}_{ij} + \beta_{15} \text{High}_{j} + \beta_{16} \text{Emp}_{j} + \beta_{17} \text{O37}_{j} + \beta_{18} \text{P\&S}_{j} + \\ & \beta_{19} (\text{N\_children-gm})_{j} + \beta_{20} (\text{Degree-gm})_{j} \\ & \beta_{0j} = \beta_0 + u_{0j} \end{aligned}
\begin{bmatrix} u_{0j} \end{bmatrix} \sim \text{N}(0, \ \Omega_u) : \ \Omega_u = \begin{bmatrix} \sigma_{u0}^2 \end{bmatrix}
\text{var}(\text{Moral\_emotional}_{ij} | \pi_{ij}) = \pi_{ij} (1 - \pi_{ij}) / \text{cons}_{ij} \end{aligned}
```

Dependent variable: In the equation above, i represents Level 1 (dyads, alters) and j represents Level 2 (ego). In the equation, the dependent variable, emotional support (y_{ij}) , is equal to 1 if alter i in ego-network j is supportive and 0 if not. Similarly, $\pi_{ij} = \Pr(y_{ij} = 1)$ (Rasbash et al. 2009, p.128). π_{ij} thus expresses the probability that a given alter i in a given ego-network j gives support to ego. This is equal to the sum of a linear function containing intercept and explanatory variables.

Random intercept: The model above is a random intercept model. This means that the intercept consists of fixed component (B_0) shared by all respondents and an ego (Level 2) specific

component random effect u_{0j} which allows the intercept to vary across each ego j (the random effect is assumed to follow a normal distribution, with mean zero). For this reason, these models are also called mixed-effects models (as they contain fixed and random effects).

In a multilevel model, B_{0j} itself can be thought of as an outcome (Wellman & Frank 2001), allowing us to examine if the extent to which an ego is supported is a function of that ego's characteristics. It is an outcome representing the extent to which one of the ego's interviewed is likely to receive support and the effect of ego's characteristics (X_j) in the model. Characteristics of ego (X_j) change the intercept for that ego. (But, the effect of X_j is the same across all egos who share the same characteristic). Thus B_{0j} represents the baseline extent to which an ego with characteristics X_j receives support.

Coefficient estimation procedure: Following guidance given by Rasbash et al. (2009, pp.128-129) and Browne (2012) the restricted iterative generalised least squares (RIGLS) algorithm was used, which then fed into the Monte Carlo Markov Chain (MCMC) method which allowed us to estimate regression coefficients and also estimate if each successive model was a better fit than the last (a strategy also used by Luken and Tranmer [2010], Scott et al. [2013]).

Fixed and Contextual Effects: Covariates with notation *ij* are fixed effects at lower level of the hierarchical data structure. This means they vary at the level of the alter/dyad (Level 1). They include the theorised correlates of social support, such as the gender of an alter.

Covariates with notation *j* are what Rasbash et al. (2009) refer to as contextual effects. These vary at the level of ego and their personal network (Level 2). These allows us to estimate the extent to which a given ego is supported is a function of the characteristics of that ego, such as their employment status.

Variance Partition Coefficient: One benefit of the model outlined above is that it allows us to calculate the intra-unit correlation, i.e. the correlation between Level 1 units in the same Level 2 unit (Rasbash et al. 2009). This allows us to specify to what extent social support is likely to be a function of the alter/dyad or the ego and their personal network.

2.3. Select output from bivariate analysis of support outcomes and predictor variables

Before fitting models between the dependent support variables y and explanatory variables x, we first examined for any potential bivariate relationship between y and the predictors x1, x2, x3 etc. The analysis took place at the level of the dyad. The output of this analysis is presented below.

Table 2.7 below gives an overview of which role-types the different types of support are coming from. Friendship is clearly the most important type of relationship in terms of the amount of emotional support, childcare and job related advice given. Family follows a close second for these types of support. However, one area where friendship does not seem as important is financial assistance. Family are clearly important in offering financial assistance, roughly 2/3rds of financial assistance comes from family members.

			То	tal dyads			
				•	Support		
	Friend	Colleague	Family	Ex	worker		Neighbour
Emotional	64%	1%	25%	2%		6%	2%
Childcare	51%	2%	28%	7%		2%	9%
Job related	43%	28%	19%	0%		9%	0%
Finance	22%	3%	64%	10%		1%	0%

Appendix table 2.7: Support vs. role-type (Row %)

When we look at it the other way around and ask what proportion of these types of relationships supply the particular types of support we get a bit more insight into the relationships. Table 2.8 below gives a summary of this data. The table makes clear that the type of support that dominates work based relationships is job related advice. Family on the other hand supply moral support, childcare and financial assistance with similar rates. Friends on the other hand are very useful for emotional support, unsurprisingly. A few of the interviewees mentioned they would much rather talk to friends so as to avoid judgement from their parents. Friends also supply childcare, with a slightly higher rate than family. This could be because friends are more likely to be geographically proximate. Although not a high proportion of relationships are to neighbours, a large proportion of these relationships supply childcare. Qualitative data suggests this is primarily because of proximity.

		Total dyads					
	Friend	Colleague	Family	Ex	Support worker	Neighbour	
Emotional	56%	11%	32%	27%	63%	18%	
Childcare	34%	11%	28%	60%	19%	71%	
Job related	12%	83%	8%	0%	31%	0%	
Finance	8%	11%	36%	47%	6%	0%	
Multiplexy	1.11	1.17	1.03	1.33	1.19	0.88	

Appendix table 2.8: Support vs. role type (Column %)

Table 2.9 below gives a summary of which type of strength relationship particular types of support come from. So we can see, for example, that all types of support are more likely to come from strong ties. This is especially the case with financial support.

		Total dyads	
	First	Second	Third
Emotional	65%	31%	4%
Childcare	54%	35%	10%
Job related	53%	38%	9%
Finance	73%	18%	10%

Appendix table 2.9: Support vs. circle (Row %)

When we look at it the other way around (Table 2.10) we get a bit more insight into the relationships placed into each circle. Clearly, the relationships in the first circle are the most valuable in terms of the total amount of support and different types of support given, as the multiplexy score shows, on average each relationship in the first circle gives 1.5 different types of support. Whereas only 83% of relationships in the second and 62% in the third give any type of support at all.

			Total dyads		
	First		Second	Third	
Emotional		61%	33%	ı	14%
Childcare		39%	29%	ı	25%
Job related		16%	13%	1	10%
Finance		30%	8%		14%
Multiplexy		1.45	0.83		0.62

Appendix table 2.10: Support vs. circle (Column %)

In terms of the gender split of support supplied, Table 2.11 below shows that females provide the greatest share of emotional, childcare and job related support. On the other hand, men provide a greater share of the financial assistance.

	Total dyads				
	Female	Male			
Emotional	78%	22%			
Childcare	73%	27%			
Job related	70%	30%			
Finance	46%	54%			

Appendix table 2.11: Support vs. Gender (Row %)

When looked at the other way (Table 2.12), each type of gender relationship supplies, on average, roughly 1 different type of support. Females are much more likely to supply moral/emotional support and men are much more likely to supply financial assistance.

	Tota	Total dyads		
	Female	Male		
Emotional	49%	32%		
Childcare	35%	30%		
Job related	12%	12%		
Finance	13%	35%		
Multiplexy	107%	109%		

Appendix table 2.12: Support vs. Gender (Column %)

All types of support are associated with proximity (Table 2.13). This is unsurprisingly highest for childcare, which by definition requires somebody to be close proximity. However, even with other forms of support which do not necessarily demand proximity, over 50% of support supplied is by someone in the same city.

	Total dyads			
	Same city	UK		Abroad
Emotional	58%		28%	14%
Childcare	84%		16%	0%
Job related	73%		24%	4%
Finance	57%		31%	11%

Appendix table 2.13: Support vs. geographical proximity (Row %)

To summarise, there seem to be strong relationships between social support and the predictors considered. We consider the effects of these and other variables jointly in the regression analysis presented in Chapter 8.

References

- Aassve, A., Betti, G., Mazzuco, S., Mencarini, L., 2007. Marital disruption and economic well-being: a comparative analysis. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 170, pp.781–799.
- Abbott, A., 1997. Of time and space: The contemporary relevance of the Chicago School. *Social Forces*, 75, pp.1149–1182.
- Abbott, A., 2001. Time matters: on theory and method. Chicago: University of Chicago Press.
- Abell, P., 2009. A Case for Cases Comparative Narratives in Sociological Explanation. *Sociological Methods & Research*, 38, pp.38–70.
- Åberg, 2009. The Contagiousness of Divorce. In Hedström, P. & Bearman, Peter, 2009. *The Oxford Handbook of Analytical Sociology*, Oxford: OUP.
- Adger, W.N., 2003. Social Capital, Collective Action, and Adaptation to Climate Change. *Economic Geography*, 79(4), pp.387–404.
- Adger, W.N., 2006. Vulnerability. Global Environmental Change, 16, pp.268–281.
- Ajrouch, K.J., Antonucci, T.C., Janevic, M.R., 2001. Social Networks Among Blacks and Whites The Interaction Between Race and Age. *The Journals of Gerontology: Series B*, 56, S112–S118.
- Albert, R., Jeong, H., Barabási, A.-L., 2000. Error and attack tolerance of complex networks. *Nature*, 406, pp.378–382.
- Alcock, P., 2010. Building the Big Society: a new policy environment for the third sector in England. *Voluntary Sector Review*, 1, pp.379–389.
- Aldrich, D.P., 2012. Building resilience: Social capital in post-disaster recovery. Chicago: University of Chicago Press.
- Aldrich, D.P., Meyer, M.A., 2014. Social Capital and Community Resilience. *American Behavioral Scientist*. Pre-Print, doi:10.1177f/0002764214550299
- Allan, G., 1998. Friendship, sociology and social structure. *Journal of Social and Personal Relationships*, 15, pp.685–702.
- Allan, G., 2001. Personal relationships in late modernity. Personal Relationships, 8, pp.325–339.
- Allan, G., 2008. Flexibility, friendship, and family. *Personal Relationships*, 15, pp.1–16.
- All-Party Parliamentary Inquiry., 2014. Feeding Britain: A strategy for zero hunger in England, Wales, Scotland and Northern Ireland. Available from: http://bristol-cathedral.co.uk/images/uploads/Food_Poverty_Feeding_Britain_FINAL_PDF.pdf [Accessed 2.2.15].
- Amato, P.R., 2005. The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *The Future of Children*, 15, pp.75–96.
- Anderson, P.W., 1972. More is different. Science, 177, pp.393–396.
- Anderson., 1999. In Carter, B. & McGoldrick, M., 1998. *The Expanded Family Life Cycle: Individual, Family and Social Perspectives* 3rd ed., Pearson.
- Annesley and Weit. 2010. The Impact on Women of the Coalition Spending Review 2010. Women's Budget Group. Available from:
- Antonucci, T.C., 1986. Hierarchical mapping technique. *Generations: Journal of the American Society on Aging.* 10(4), pp.10-12.

http://oro.open.ac.uk/26423/1/RRB_Reports_4_1653541019.pdf [Accessed 12.3.12].

- Archer, M., 1995. Realist Social Theory: The Morphogenetic Approach. Cambridge: Cambridge University Press
- Archer, M., 2003. Structure, Agency and the Internal Conversation. Cambridge: Cambridge University Press
- Archer, M., 2007. Making our Way through the World: Human Reflexivity and Social Mobility. Cambridge: Cambridge University Press
- Arthur, W.B., 2013. Complexity economics: a different framework for economic thought. Sante-Fe Institute Working Paper. Available from: http://tuvalu.santafe.edu/~wbarthur/Papers/Comp.Econ.SFI.pdf. [Accessed 2 April 2015]
- Atkinson, W., Roberts, S., Savage, M., 2012. Class Inequality in Austerity Britain: Power, Difference and Suffering. Basingstoke: Palgrave Macmillan.
- Augier, M., March, J.G., 2004. Models of a man: Essays in memory of Herbert A. Simon. MIT Press.
- Ayres, L., Kavanaugh, K., Knafl, K.A., 2003. Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research*, 13, pp.871–883.
- Bailey, K.D., 1994. *Typologies and Taxonomies: An Introduction to Classification Techniques.* London: SAGE.
- Baker, W., Faulkner, R.R., 2009. Social capital, double embeddedness, and mechanisms of stability and change. *American Behavioral Scientist*, 52, pp.1531–1555.
- Bak, P., 1997. How Nature Works: The Science of Self-Organized Criticality, New York: Copernicus.
- Bascompte, J., 2007. Networks in ecology. Basic and Applied Ecology, 8, pp.485–490.
- Bateson, G., 1963. The role of somatic change in evolution. Evolution, 17(4), pp.529–539.
- Bateson, G., 1972. Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology, Chicago: University of Chicago Press.
- Batty, E., Cole, I., 2010. Resilience and the recession in six deprived communities: Preparing for worse to come. Joseph Rowntree Foundation York.
- Bearman, P., 1997. Generalized Exchange. American Journal of Sociology, 102, pp.1383–1415.
- Beaujouan, É., Ní Bhrolcháin, M., 2011. *Cohabitation and marriage in Britain since the 1970s.*Population Trends. Available from: http://eprints.soton.ac.uk/198915/ [Accessed 10.5.12].
- Beck, U., Beck-Gernsheim, E., 1995. *The Normal Chaos of Love. Polity Press*, Cambridge: Polity Press.
- Beggs, J.J., Haines, V.A., Hurlbert, J.S., 1996. Situational Contingencies Surrounding the Receipt of Informal Support. *Social Forces*, 75, pp.201–222.
- Belfield, C., Cribb, J., Hood, A., Joyce, R., 2014. *Living standards, poverty and inequality in the UK:* 2014. Institute for Fiscal Studies. Available from: http://www.ifs.org.uk/publications/7274 [Accessed 3.6.15].
- Bell, D.N., Blanchflower, D.G., 2011. Underemployment in the UK in the Great Recession. *National Institute Economic Review*, 215, R23–R33.
- Bengtsson, B., Hertting, N., 2014. Generalization by Mechanism Thin Rationality and Ideal-Type Analysis in Case Study Research. *Philosophy of the Social Sciences*, 44, 707–732.
- Bertalanffy, L.V., 1968. *General System Theory: Foundations, Development, Applications*, New York: George Braziller Inc,.

- Blanchard, O., Leigh, D., 2013. *Growth Forecast Errors and Fiscal Multipliers*. IMF Working Paper. Available from: https://www.imf.org/external/pubs/ft/wp/2013/wp1301.pdf [Accessed 3.4.15]
- Blau, P.M., 1964. Exchange & Power in Social Life. Transaction Publishers.
- Blau, P.M., Schwartz, J.E., 1984. Crosscutting Social Circles: Testing a Macrostructural Theory of Intergroup Relations. Transaction Publishers.
- Blond, P., 2010. Red Tory: how left and right have broken Britain and how we can fix it. Faber & Faber.
- Bochel, H.M. (Ed.), 2011. The Conservative Party and Social Policy, Policy Press.
- Borgatti, S.P., Foster, P.C., 2003. The network paradigm in organizational research: A review and typology. *Journal of Management*, 29, p.991.
- Borgatti, S.P., Halgin, D.S., 2011. On network theory. Organization Science, 22, pp.1168-1181.
- Borgatti, S.P., Halgin, D.S., 2012. An introduction to personal network analysis and Tie Churn statistics using E-NET. *Connections*, 32, pp.37–48.
- Borgatti, S.P., Mehra, A., Brass, D.J., Labianca, G., 2009. Network Analysis in the Social Sciences. *Science*, 323, pp.41-58.
- Borgatti, S.P., Lopez-Kidwell, V. 2011. Network Theory. In: Scott, J., Carrington, P.J. eds., 2011. The SAGE Handbook of Social Network Analysis. London: Sage, pp.116-128
- Bornstein, M.H. (Ed.), 2002. Handbook of Parenting: Volume 4 Social Conditions and Applied Parenting, 2nd ed. Psychology Press.
- Bossel, H., 2007. Systems and models: complexity, dynamics, evolution, sustainability. Books on Demand.
- Bott, E., 1957. Family and social network: Roles, norms and external relationships in ordinary urban families. Psychology Press 1971.
- Boudon, R., 2012. "Analytical sociology" and the explanation of beliefs. Revue européenne des sciences sociales, 50, pp.7–34.
- Bourdieu, P. 1986. The Forms of Capital by Pierre Bourdieu. Available from: http://www.marxists.org/reference/subject/philosophy/works/fr/bourdieu-forms-capital.htm [Accessed 10.24.12].
- Boyatzis, R.E., 1998. Transforming qualitative information: Thematic analysis and code development. London: Sage.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, pp.77–101.
- Brenner, M.H., Mooney, A., 1983. Unemployment and health in the context of economic change. *Social Science & Medicine*, 17, pp.1125–1138.
- Brewer, M., Browne J., Joyce, R., 2011, *Child and Working-Age Poverty from 2010 to 2020,* Institute for Fiscal Studies. Available from: http://www.ifs.org.uk/comms/comm121.pdf [Accessed 3.4.15]
- Brewer, M., Browne, J., Hood, H., Joyce, J., Sibieta, L., 2013a. Better-off hit hardest by recession initially; poor feeling the squeeze now. Institute for Fiscal Studies. Available from: http://www.ifs.org.uk/publications/6728 [Accessed 4 April 2015].
- Brewer, M., Browne, J., Hood, A., Joyce, R., Sibieta, L., 2013b. The Short- and Medium-Term Impacts of the Recession on the UK Income Distribution. *Fiscal Studies*, 34(2), pp. 179–201

- Brewer, M., 2012. *Child poverty and financial support for children*. Child Poverty Action Group. Available from: http://www.cpag.org.uk/sites/default/files/CPAG-Ending-child-poverty-by-2020-progress-made-lessons-learned-0612.pdf [Accessed 4.11.12]
- British Sociological Association., 2002. *Statement of Ethical Practice for the British Sociological Association*. Available from: http://www.britsoc.co.uk/about/equality/statement-of-ethical-practice.aspx [Accessed 4.1.15].
- Brown, G., Harris, T., 1978. The Social Origins of Depression: A study of psychiatric disorder in women. Tavistock Publications
- Browne, W.J. 2012. *MCMC Estimation in MLwiN, v2.31*. Centre for Multilevel Modelling, University of Bristol. Available from: http://www.bristol.ac.uk/cmm/software/mlwin/download/manuals.html [Accessed 7.7.14].
- Bryman, A., 2004. *Social Research Methods*. Second Edition. Oxford: Oxford University Press Buckley, W., 1967. *Sociology and Modern Systems Theory*. Prentice Hall
- Bullmore, E., Sporns, O., 2009. Complex brain networks: graph theoretical analysis of structural and functional systems. *Nature Neuroscience*, 10, pp.186–198.
- Burger, M.J., Buskens, V., 2009. Social context and network formation: An experimental study. *Social Networks*, 31, pp.63–75.
- Burt, R.S., 1992. *Structural Holes: Social Structure of Competition*, Boston: Harvard University Press. Burt, R.S., 2000. Decay functions. *Social Networks*, 22, pp.1–28.
- Burt, R.S., 2004. Structural holes and good ideas. *The American Journal of Sociology*, 110, pp.349–399.
- Burt, R.S., 2005. Brokerage and closure: An introduction to social capital. Oxford: Oxford University Press.
- Burt, R.S., Cook, K., Lin, N. (Eds.), 2001. Social Capital: Theory and Research. Aldine Transaction.
- Byrne, D.S., 1998. Complexity Theory and the Social Sciences: An Introduction. Routledge.
- Byrne, D., Ragin, C.C., 2009. The SAGE Handbook of Case-Based Methods. London: Sage
- Cabinet Office., 2010. *Building the Big Society*. Available from: https://www.gov.uk/government/publications/building-the-big-society [Accessed 4.2.15].
- Cabinet Office., 2011. *Strategic National Framework on Community Resilience*. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60922/Strategic-National-Framework-on-Community-Resilience_0.pdf [Accessed 4.4.15].
- Cabinet Office., 2013. *National Risk Register for Civil Emergencies 2013 edition*. Available from: https://www.gov.uk/government/publications/national-risk-register-for-civil-emergencies-2013-edition [Accessed 4.2.15].
- Cameron, D., 2009. *The Big Society: Speech*, Available from:

 http://www.conservatives.com/News/Speeches/2009/11/David_Cameron_The_Big_S
 ociety.aspx [Accessed 4.11.12]
- Cameron, D., 2010, *Leaders Speech*, Available from: http://www.britishpoliticalspeech.org/speech-archive.htm?speech=214_[Accessed 4.11.12]
- Camic, C., 1986. The matter of habit. American Journal of Sociology, 91(5), pp.1039–1087.
- Canvin, K., Marttila, A., Burstrom, B., Whitehead, M., 2009. Tales of the unexpected? Hidden resilience in poor households in Britain. *Social Science & Medicine*, 69, pp.238–245.

- Capra, F., Luisi, P.L., 2014. The Systems View of Life: A Unifying Vision. Cambridge: Cambridge University Press.
- Carney, M., 2014. *Inclusive capitalism: creating a sense of the systemic.* Bank of England. Available from: http://www.bankofengland.co.uk/publications/Pages/speeches/2014/731.aspx [Accessed 4.2.15].
- Carpenter, S., Walker, B., Anderies, J.M., Abel, N., 2001. From metaphor to measurement: resilience of what to what?, *Ecosystems*, 4, pp.765–781.
- Carpenter, S.R., Arrow, K.J., Barrett, S., Biggs, R., Brock, W.A., Crépin, A.-S., Engström, G., Folke, C., Hughes, T.P., Kautsky, N. 2012. General resilience to cope with extreme events. *Sustainability*, 4(12), pp.3248–3259.
- Carter, B., McGoldrick, M., 1999. The Expanded Family Life Cycle: Individual, Family and Social Perspectives, 3rd ed. Pearson.
- Cartwright, D., Harary, F., 1956. Structural balance: a generalization of Heider's theory. *Psychological Review*, 63, p.277.
- Castellani, M., 2013. Alfred Schutz and Herbert Simon: Can their Action Theories Work Together? *Journal for the Theory of Social Behaviour*, 43, pp.383–404.
- Christakis Nicholas A., Fowler James H., 2010. Social Network Sensors for Early Detection of Contagious Outbreaks. *PLOS ONE*.
- Ciabattari, T., 2007. Single mothers, social capital, and work–family conflict. *Journal of Family Issues*, 28, pp.34–60.
- Cilliers, P., 2001. Boundaries, hierarchies and networks in complex systems. *International Journal of Innovation Management*, 5(2), pp.135–147.
- Clark, T., Heath, A., 2014. *Hard Times: The Divisive Toll of the Economic Slump*. Yale University Press.
- Cochran, M., Larner, M., Riley, D., Gunnarsson, L., Jr, C.R.H., 1993. Extending Families: The Social Networks of Parents and their Children. Cambridge: Cambridge University Press.
- Cochran, M., Niego, S., 2002. Parenting and social networks. In, *Handbook of Parenting Volume* 4: Social Conditions and Applied Parenting, pp.123-148.
- Coleman, N., Lanceley, L., 2011. Lone Parent Obligations: supporting the journey into work,
 Department for Work and Pensions. Available from:
 http://research.dwp.gov.uk/asd/asd5/rports2011-2012/rrep736.pdf [Accessed 19.12.12].
- Coleman, J.S., 1988. Social capital in the creation of human capital. *The American Journal of Sociology*, 94, pp.95–120.
- Coleman, J.S., 1990. Foundations of Social Theory, Boston: Harvard University Press.
- Collins, R., 1981. On the Microfoundations of Macrosociology. *American Journal of Sociology*, 86(5), pp.984–1014.
- Collins, D., Gray, M., Purdon, S., McGee, A., 2006. *Lone parents and work: developing new survey measures of the choices and constraints.* Department for Work and Pensions. Available from: http://research.dwp.gov.uk/asd/asd5/WP34.pdf [Accessed 11.30.12].
- Corbett, S., Walker, A., 2013. The big society: Rediscovery of "the social" or rhetorical fig-leaf for neo-liberalism? *Critical Social Policy*, 33, pp.451–472.
- Corden, A., Millar, J., 2007. Time and change: A review of the qualitative longitudinal research literature for social policy. *Social Policy and Society*, 6, pp.583–592.
- Crabtree, Miller, 1999. Doing Qualitative Research, 2 edition. London: Sage Publications.

- Cribb, J., Joyce, R., Phillip, D., 2012, *Living standards, poverty and inequality in the UK: 2012*, Institute for Fiscal Studies
- Crossley, N., 2012. Towards Relational Sociology. Routledge.
- Crow, G., 2004. Social Networks and Social Exclusion: An Overview of the Debate. In, Phillipson, C., Allan, G., eds. 2004. *Social Networks and Social Exclusion: Sociological and Policy Perspectives.* Aldershot: Ashgate Publishing Limited. pp.7-19.
- Crow, G., Hatton, P., Lyon, D., Strangleman, T., 2009. New Divisions of Labour?: Comparative Thoughts on the Current Recession. *Sociological Research Online*, 14. doi:10.5153/sro.1929
- Cruddas, J., 2014. How Labour will strengthen family life and relationships. *New Statesman*. Available from: http://www.newstatesman.com/politics/2014/03/how-labour-will-strengthen-family-life-and-relationships [Accessed 31 March 2015].
- Davidson, R., 2009. More than "Just Coping": The Antecedents and Dynamics of Resilience in a Qualitative Longitudinal Study. *Social Policy and Society*, 8, pp.115–125.
- Deacon, B., 2011. In Bochel, H.M. (Ed.), 2011. *The Conservative Party and Social Policy*, Policy Press.
- De Witte, H., 1999. Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8, pp.155–177.
- Department for Work and Pensions, 2014. *Households below average income (HBAI): 1994/95 to 2012/13*. Available from: https://www.gov.uk/government/statistics/households-below-average-income-hbai-199495-to-201213. [Accessed 6.3.15].
- Dickens, A.P., Richards, S.H., Greaves, C.J., Campbell, J.L., 2011. Interventions targeting social isolation in older people: a systematic review. *BMC public health*, 11, p.647.
- DiMaggio, P., 1997. Culture and Cognition. Annual Review of Sociology, 23, pp.263–287.
- Dunbar, R.I.M., 2008. Cognitive constraints on the structure and dynamics of social networks. *Group Dynamics: Theory, Research, and Practice*, 12, p.7.
- Duncan, S., Edwards, R., 1997a. Single Mothers in International Context: Mothers Or Workers? Routledge.
- Duncan, S., Edwards, R., 1997b. Lone mothers and paid work-Rational economic man or gendered moral rationalities? *Feminist Economics*, 3, pp.29–61.
- Duncan, S., Edwards, R., 1999. Lone Mothers, Paid Workers, and Gendered Moral Rationalities. St. Martin's Press.
- Durkheim, E., 1895. The Rules of Sociological Methods. The Free Press, 1958 version.
- Durkheim, E., 1987. Suicide: A Study in Sociology. London: Routledge, 2002 edition
- Durkheim, E., 1955. Pragmatism and Sociology. CUP Archive.
- Durkheim, E., 1960. Essays on Sociology and Philosophy. Harper & Row.
- Earl, P.E., 2013. Satisficing and Cognition, in: Frantz, R., Leeson, R. (Eds.), *Hayek and Behavioral Economics*. Palgrave Macmillan, Basingstoke.
- Economic and Social Research Council, 2010. Framework for research ethics. Available from: http://www.esrc.ac.uk/about-esrc/information/framework-for-research-ethics/ [Accessed 4.1.15].
- Edin, K., Lein, L., 1997. Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work. Russell Sage Foundation.

- Edwards, C., 2009. Resilient Nation: Next generation resilience relies on citizens and communities, not the institutions of the state... Demos
- Edwards, J. (Ed.), 2012. Retrieving the Big Society. Chichester: Wiley-Blackwell.
- Ekeh, P.P., 1974. Social exchange theory: the two traditions. Boston: Harvard University Press.
- Elliott, J.R., Haney, T.J., Sams-Abiodun, P., 2010. Limits to social capital: Comparing network assistance in two New Orleans neighborhoods devastated by Hurricane Katrina. *The Sociological Quarterly*, 51, pp.624–648.
- Elmqvist, T., Folke, C., Nyström, M., Peterson, G., Bengtsson, J., Walker, B., Norberg, J., 2003. Response diversity, ecosystem change, and resilience. *Frontiers in Ecology and the Environment*, 1, pp.488–494.
- Elster, J., 2007. Explaining Social Behavior: More nuts and bolts for the social sciences. Cambridge: Cambridge University Press.
- Elster, J., 2009. Emotions. In Hedström, P. & Bearman, Peter, 2009. *The Oxford Handbook of Analytical Sociology*, Oxford: OUP.
- Emirbayer, M., Goodwin, J., 1994. Network Analysis, Culture, and the Problem of Agency. *American Journal of Sociology*, 99, pp.1411–1454.
- Emirbayer, M., Mische, A., 1998. What Is Agency? *The American Journal of Sociology*, 103, pp.962–1023.
- Enemark, D., McCubbins, M.D., Weller, N., 2014. Knowledge and networks: An experimental test of how network knowledge affects coordination. *Social Networks*, 36, pp.122–133.
- Engle, N.L., 2011. Adaptive capacity and its assessment. *Global Environmental Change*, 21(2), pp.647–656.
- Esser, H., 1993. The Rationality of Everyday Behavior A Rational Choice Reconstruction of the Theory of Action by Alfred Schütz. *Rationality and Society*, 5, pp.7–31.
- Evans, M., Harkness, S., Ortiz, R.A., 2004, Lone Parents Cycling Between Work and Benefits, Department for Work and Pensions Research Report No 217
- Farmer, J.D., 1990. A Rosetta stone for connectionism. *Physica D: Nonlinear Phenomena*, 42(1-3), pp.153–187.
- Farnsworth, K., Irving, Z.M. (Eds.), 2011. Social Policy in Challenging Times: Economic Crisis and Welfare Systems. Policy Press.
- Feld, S.L., 1981. The focused organization of social ties. *American Journal of Sociology*, 86(5), pp.1015–1035.
- Fereday, J., Muir-Cochrane, E., 2008. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5, pp.80–92.
- Festinger, L., 1957. A theory of cognitive dissonance. Stanford University Press.
- Festinger, L., Schachter, S., Back, K., 1950. Social Pressures in Informal Groups: A Study of Human Factors in Housing. Stanford Univ Pr.
- Field, A., 2009. *Discovering Statistics Using SPSS*, Third Edition. London: Sage Publications Ltd. Finch, N., 2003, *Demographic Trends in the UK*, Available from:
 - http://www.york.ac.uk/inst/spru/research/nordic/ukdemo.PDF. [Accessed 5.11.12]
- Finch, J., 1989. Family Obligations and Social Change, Cambridge: Polity Press.
- Fischer, C.S., 1982. To Dwell among Friends: Personal Networks in Town and City. Chicago: University of Chicago Press.

- Fletcher, D., Sarkar, M., 2013. Psychological Resilience: A review and critique of definitions, concepts and theory. *European Psychologist*, 18(1), pp.12–23.
- Folke, C., 2006. Resilience: the emergence of a perspective for social–ecological systems analyses. *Global Environmental Change*, 16, pp.253–267.
- Folke, C., Carpenter, S., Walker, B., Scheffer, M., Elmqvist, T., Gunderson, L., Holling, C.S., 2004. Regime shifts, resilience, and biodiversity in ecosystem management. Annual Review of Ecology, *Evolution, and Systematics*, 35, pp.557–581.
- Folke, C., Carpenter, S.R., Walker, B., Scheffer, M., Chapin, T., Rockstrom, J. 2010. Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and Society*, 15(4).
- Freeman, L.C., 2004. The Development of Social Network Analysis. Booksurge.
- Freeman, L.C., 1992. Filling in the blanks: A theory of cognitive categories and the structure of social affiliation. *Social Psychology Quarterly*, 55(2), pp.118–127.
- Fuhse, J., Mützel, S., 2011. Tackling connections, structure, and meaning in networks: quantitative and qualitative methods in sociological network research. Qual *Quant*, 45, 1067–1089. doi:10.1007/s11135-011-9492-3
- Gai, P., Haldane, A., Kapadia, S., 2011. Complexity, concentration and contagion. *Journal of Monetary Economics*, 58, pp.453–470.
- Gallopín, G.C., 2006. Linkages between vulnerability, resilience, and adaptive capacity. *Global Environmental Change*, 16, pp.293–303.
- Gaudeul, A., Giannetti, C., 2013. The role of reciprocation in social network formation, with an application to LiveJournal. *Social Networks*, 35, pp.317–330.
- Giddens, A., 1984. *The Constitution of Society: Outline of the Theory of Structuration*, Cambridge: Polity Press.
- Giddens, A., 1992. The Transformation of Intimacy: Love, Sexuality and Eroticism in Modern Societies, Cambridge: Polity Press.
- Giddens, A., 1998. The Third Way: The Renewal of Social Democracy. Polity Press.
- Gigerenzer, G., 2008. Rationality for Mortals: How People Cope with Uncertainty. Oxford: Oxford University Press.
- Gigerenzer, G., Selten, R., eds., 2001. Bounded rationality: The adaptive toolbox. MIT Press.
- Gingerbread., 2011. Analysis of the impact of tax credit changes on working single parents. Available from: www.gingerbread.org.uk/file_download.aspx?id=7414 [Accessed 4.11.12]
- Gingerbread., 2012. *It's off to work we go?*. Available from: http://www.gingerbread.org.uk/news/155/its-off-to-work-we-go [Accessed 3.4.15]
- Gingerbread. 2013. Paying the Price: Single parents in the age of austerity. Available from: http://www.trustforlondon.org.uk/wp-content/uploads/2013/12/full.pdf [Accessed 3.4.15]
- Glaser, B.G., Strauss, A.L., 1967. The Discovery of Grounded Theory. Aldine Publishing Co.
- Glasman, M., 2010. Society not state: the challenge of the Big Society. *Public Policy Research*, 17, pp.59–63.
- Glasman, M., 2012. The Big Society in Question. In, Edwards, J. (Ed.), 2012. Retrieving the Big Society. Chichester: Wiley-Blackwell.
- Godelier, M., 2012. The Metamorphoses of Kinship. Verso.
- Goldstein, J., 1999. Emergence as a construct: History and issues. *Emergence*, 1(1), pp.49–72.
- Goldthorpe, J.H., 2000. On Sociology: Numbers, Narratives, and the Integration of Research and Theory. Oxford: Oxford University Press.

- Goldthorpe, J.H., 2007a. On Sociology: Critique and Program v. 1, 2nd Revised edition. Stanford: Stanford University Press.
- Goldthorpe, J.H., 2007b. *On Sociology: Illustration and Retrospect v. 2*, 2nd Revised edition. Stanford: Stanford University Press.
- Gore, S., 1978. The effect of social support in moderating the health consequences of unemployment. *Journal of Health and Social Behavior*, 19, pp157–165.
- Gornick, J., Jäntti, M., 2013. *Income Inequality: Economic Disparities and the Middle Class in Affluent Countries*. Stanford University Press.
- Gottfried, G., 2010. *In-work poverty in the recession*. Institute for Public Policy Research. Available from: http://www.ippr.org/publication/55/1796/in-work-poverty-in-the-recession [Accessed 4.11.12]
- Gough, I., 2011., In Farnsworth, K., Irving, Z.M. (Eds.), 2011. Social Policy in Challenging Times: Economic Crisis and Welfare Systems. Policy Press.
- Gouldner, A.W., 1960. The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), pp.161–178.
- Graham, H., McQuaid, R., 2014. Exploring the impacts of the UK government's welfare reforms on lone parents moving into work, Literature Review. University of Stirling. Available from: http://dspace.stir.ac.uk/bitstream/1893/20454/1/GCPH_lone_parents_Literature_Review_FINAL%200514.pdf. [Accessed: 3.4.2015]
- Granovetter, M.S., 1973. The Strength of Weak Ties. *The American Journal of Sociology*, 78, pp.1360–1380.
- Granovetter, M., 1979. The idea of "advancement" in theories of social evolution and development. *American Journal of Sociology*, 85(3), pp.489–515.
- Granovetter, M., 1983. The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, 1, pp.201–233.
- Granovetter, 1985. Economic Action and Social Structure: The Problem of Embeddedness. *The American Journal of Sociology*, 91, pp.481–510.
- Granovetter, M., 2005. The impact of social structure on economic outcomes. *Journal of Economic Perspectives*, 19(1), pp.33–50.
- Gregg, P., Harkness, S., Smith, S., 2009. Welfare Reform and Lone Parents in the UK. *The Economic Journal*. 119 (535), F38–F65.
- Gregg, P., Wadsworth, J. (Eds.), 2011. The Labour Market in Winter: The State of Working Britain. Oxford: OUP.
- Gregg, P., Macmillan, L., Nasim, B., 2012. The Impact of Fathers' Job Loss during the Recession of the 1980s on their Children's Educational Attainment and Labour Market Outcomes. *Fiscal Studies*, 33, pp.237–264.
- Gregg, P., Machin, S., Fernández-Salgado, M., 2014. Real Wages and Unemployment in the Big Squeeze. *The Economic Journal*, 124 (576), pp.408–432.
- Haddad, M., 2012. The Perfect Storm: Economic stagnation, the rising cost of living, public spending cuts, and the impact on UK poverty. Oxfam. Available at: http://policy-practice.oxfam.org.uk/publications/the-perfect-storm-economic-stagnation-the-rising-cost-of-living-public-spending-228591 [Accessed December 2, 2012].
- Haines, V.A., Hurlbert, J.S., Beggs, J.J., 1996. Exploring the determinants of support provision: Provider characteristics, personal networks, community contexts, and support following life events. *Journal of Health and Social Behavior*, 37(3), pp.252–264.

- Haldane, A.G., May, R.M., 2011. Systemic risk in banking ecosystems. *Nature*, 469, pp.351–355.
- Hall, J.A., 2010. Parents' networks: Egocentric networks and unique and shared sources of social support. *Connections*, 30, pp.41–49.
- Hall, R., 1993. Europe's changing population. *Geography*, 78(1), pp.3–15.
- Halpern, D., 2010. The Hidden Wealth of Nations. Bristol: Polity Press.
- Halsey, A.H., Heath, A.F., Ridge, J.M., 1980. Origins and destinations: family, class, and education in modern Britain. Clarendon Press.
- Hanneman, R., Riddle, M., 2005. *Introduction to Social Network Methods*. Available from: http://www.faculty.ucr.edu/~hanneman/nettext/ [Accessed 4.30.11].
- Hantrais, L., 2008. *International Comparative Research: Theory, Methods and Practice*. Palgrave Macmillan.
- Harary, F., Batell, M.F., 1981. What is a System? Social Networks, 3, pp.29-40.
- Harkness, S., 2013a. Women, families and the "great recession" in the UK, in: Ramia, G., Irving, Z. (Eds.), *Social Policy Review 25*. Bristol: Policy Press.
- Harkness, S., 2013b. Women's Employment and Household Income Inequality. In, Gornick, J., Jäntti, M., 2013. *Income Inequality: Economic Disparities and the Middle Class in Affluent Countries.* Stanford University Press.
- Harkness, S., Gregg, P., MacMillan, L., 2012. Poverty: the role of institutions, behaviours and culture. Joseph Rowntree Foundation. Available from: http://www.jrf.org.uk/publications/poverty-role-institutions-behaviours. [Accessed 2 April 2015]
- Harkness, S., Skipp, A., 2013. *Lone mothers, work and depression*. Nuffield Foundation. Available from:
 - http://www.nuffieldfoundation.org/sites/default/files/files/Lone%20mothers,%20work %20and%20depression.pdf [Accessed 3.4.15]
- Harknett, K., 2006. The relationship between private safety nets and economic outcomes among single mothers. *Journal of Marriage and Family*, 68, pp.172–191.
- Harknett, K.S., Hartnett, C.S., 2011. Who lacks support and why? An examination of mothers' personal safety nets. *Journal of Marriage and Family*, 73, pp.861–875.
- Harré, R., 1971. The philosophies of science. Oxford: Oxford University Press.
- Harrison, E., 2013. Bouncing back? Recession, resilience and everyday lives. *Critical Social Policy*, 33(1), pp.97–113.
- Haux, 2009. Lone parents and welfare-to-work reform: A policy appraisal. PhD Thesis. Available from: http://opus.bath.ac.uk/22662/1/UnivBath_PhD_2009_T_Haux.pdf [Accessed 10.19.12].
- Haux, T., 2011. Lone parents and the Conservatives: anything new? In. *Social Policy Review 23*., 2011. Policy Press
- Haux, T., 2012. Activating Lone Parents: An Evidence-Based Policy Appraisal of Welfare-To-Work Reform in Britain. *Social Policy and Society*, 11, pp.1–14.
- Haux, T., 2013. Understanding Employment Barriers for Lone Parents in Great Britain: Research Gaps and Missed Opportunities. *Social Policy & Administration*, 47(4), pp.468–482.
- Hedström, P., 2005. Dissecting the Social. Cambridge: Cambridge Univ. Press.

- Hedström, P., Swedberg, R., 1998. Social Mechanisms: An Analytical Approach to Social Theory. Cambridge: Cambridge University Press.
- Hedström, P., Bearman, P., 2009. The Oxford Handbook of Analytical Sociology. Oxford: OUP.
- Hedström, P., Ylikoski, P., 2010. Causal mechanisms in the social sciences. *Annual Review of Sociology*, 36, pp.49–67.
- Heider, F., 1946. Attitudes and cognitive organization. *Journal of Psychology*, 21, pp.107–112.
- Hickman, P., Batty, E., Dayson, C., Muir, J., 2014. *Getting-by, Coping and Resilience in Difficult Times: Initial Findings.* Sheffield Hallam University: Centre for Regional Economic and Social Research
- Hills, J., 2015. Good Times, Bad Times: The welfare myth of them and us. Policy Press.
- HM Treasury. 2012, *Budget 2012*, Available from: http://cdn.hm-treasury.gov.uk/budget2012_complete.pdf [Accessed 4.11.12]
- Hodgson, G.M., 2006. Economics in the Shadows of Darwin and Marx. Edward Elgar Publishing.
- Hogan, B., Carrasco, J.A., Wellman, B., 2007. Visualizing personal networks: Working with participant-aided sociograms. *Field Methods*, 19, pp.116–144.
- Holland, J.H., 1992. Complex Adaptive Systems. Daedalus, 121(2), pp.17-30
- Holland, J.H., 2012. Signals and boundaries: Building blocks for complex adaptive systems. Cambridge, Mass: MIT Press.
- Holland, P.W., Leinhardt, S., 1971. Transitivity in structural models of small groups. *Small Group Research*, 2(2), pp.107-124.
- Holling, C.S., 1973. Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4, pp.1–23.
- Hollstein, B., 2011. Qualitative Approaches. In, Scott, J., Carrington, P.J. (Eds.), 2011. *The SAGE Handbook of Social Network Analysis*. London: SAGE Publications Ltd. pp.404-416.
- Holme, P., Kim, B.J., Yoon, C.N., Han, S.K., 2002. Attack vulnerability of complex networks. *Physical Review E*, 65.
- Hurlbert, J.S., Haines, V.A., Beggs, J.J., 2000. Core networks and tie activation: what kinds of routine networks allocate resources in nonroutine situations? *American Sociological Review*, 65(4), pp.598–618.
- Hurrell. J., 2012. *Counting the costs of childcare*. Resolution Foundation. Available at: http://www.resolutionfoundation.org/media/media/downloads/Counting_the_costs_of _childcare_2.pdf [Accessed December 2, 2012].
- Ibarra, H., 1992. Homophily and differential returns: Sex differences in network structure and access in an advertising firm. *Administrative Science Quarterly*, 37(3), pp.422–447.
- Institute for Fiscal Studies, 2014. *Autumn statement briefing 2014*. Available from: http://www.ifs.org.uk/uploads/publications/budgets/as2014/as2014_johnson.pdf [Accessed 4 April 2014]
- Institute for Public Policy Research, 2014. *The Condition of Britain: Strategies for social renewal.*Institute for Public Policy Research. Available from:
 http://www.ippr.org/publications/the-condition-of-britain-strategies-for-social-renewal
 [Accessed 4.4.15]
- Ishkanian, A., Szreter, S., 2012. *The Big Society Debate: A New Agenda for Social Policy?* Cheltenham: Edward Elgar Publishing Ltd.

- Jamieson, M., 2006. Friends, Neighbours and Distant Partners: Extending or Decentring Family Relationships? *Sociological Research Online*. Available from: http://www.socresonline.org.uk/11/3/jamieson.html. [Accessed 11.27.12].
- Janssen, M.A., Schoon, M.L., Ke, W., Börner, K., 2006. Scholarly networks on resilience, vulnerability and adaptation within the human dimensions of global environmental change. *Global Environmental Change*, 16, pp.240–252.
- Jervis, R., 1997. System Effects: Complexity in Political and Social Life, Princeton University Press.
- Johnson, S., 2010. Where Good Ideas Come From: The Seven Patterns of Innovation. London: Penguin.
- Jordan, B., 2010. Why the Third Way Failed: Economics, Morality and the Origins of the "Big Society." Bristol: Policy Press.
- Kadushin, C., 2005. Who benefits from network analysis: ethics of social network research. *Social Networks*, 27, pp.139–153.
- Kadushin, C., 2012. *Understanding Social Networks: Theories, Concepts, and Findings*. Oxford: Oxford University Press.
- Kahneman, D., Tversky, A., 2000. *Choices, Values, and Frames*. Cambridge: Cambridge University Press.
- Kalmijn, M., 1998. Intermarriage and homogamy: Causes, patterns, trends. *Annual Review of Sociology*, 24(1), pp.395–421.
- Kanazawa, S., 2001. De Gustibus Est Disputandum. Social Forces, 79, pp.1131–1162.
- Kauffman, S.A., 1993. The Origins of Order: Self-Organization and Selection in Evolution, New York: OUP.
- Kauffman, S.A., 2000. Investigations. Oxford: Oxford University Press
- Keynes, J.M., 1937. The General Theory of Employment. *The Quarterly Journal of Economics*, 51, pp.209–223.
- King, G., Keohane, R.O., Verba, S., 1994. Designing social inquiry: Scientific inference in qualitative research. Princeton University Press.
- Klett-Davies, M., 1997. In, Duncan & Edwards, eds., 1997. Single Mothers In International Context: Mothers Or Workers?, Routledge.
- Klett-Davies, M., 2007. Going it alone?: lone motherhood in late modernity. Ashgate Publishing Company.
- Koestler, A., Janus: A summing up. London: Random House
- Kossinets, G., Watts, D.J., 2009. Origins of Homophily in an Evolving Social Network. *American Journal of Sociology*, 115, pp.405–450.
- Krackhardt, D., Stern, R.N., 1988. Informal networks and organizational crises: An experimental simulation. *Social Psychology Quarterly*, 52(2),123–140.
- Labour Force Survey., 2011. Proportion of lone parents aged 16 to retirement in the stated work statuses. Data available from: http://www.poverty.org.uk/46/index.shtml [Accessed 31.08.2015]
- Lampard, R., 2012. Parental Characteristics, Family Structure and Occupational Attainment in Britain. *Sociology*, 46(6), pp.1020-1038
- Laumann, E.O., Marsden, P.V., Prensky, D., 1989. The boundary specification problem in network analysis. Retrieved from: https://bdpems.wiwi.huberlin.de/portal/sites/default/files/Session%201_Laumann%20et%20al.pdf. [Accessed 2 April 2015]
- Lazarsfeld, P.F., Merton, R.K., 1954. Friendship as a social process: A substantive and methodological analysis. In, *Freedom and Control in Modern Society*, ed. M Berger, pp. 18–66.

- Leana, C.R., Feldman, D.C., 1991. Gender differences in responses to unemployment. *Journal of Vocational Behavior*, 38, pp.65–77.
- Levin, S.A., 1999. Fragile dominion: Complexity and the Commons. Princeton: Princeton University Press
- Levin, S., Xepapadeas, T., Crépin, A.-S., Norberg, J., de Zeeuw, A., Folke, C., Hughes, T., Arrow, K., Barrett, S., Daily, G., Ehrlich, P., Kautsky, N., Mäler, K.-G., Polasky, S., Troell, M., Vincent, J.R., Walker, B., 2013. Social-ecological systems as complex adaptive systems: modeling and policy implications. *Environment and Development Economics*, 18, pp.111–132.
- Lévi-Strauss, C., 1969. The Elementary Structures of Kinship: (Les Structures Élémentaires de la Parenté). Taylor & Francis.
- Lewis, J., 2007. Analysing qualitative longitudinal research in evaluations. *Social Policy and Society*, 6, pp.545–556.
- Lewis, J., Ritchie, J., Ormston, R., Morrel, G., 2014. Generalising from Qualitative Research. In, Ritchie, J., Lewis, J., Nicholls, C.M., Ormston, R. (Eds.), 2014. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*, Second Edition edition. London: SAGE Publications Ltd.
- Lieberson, 1987. Making it Count: The Improvement of Social Research and Theory. University of California Press.
- Lim, C., Laurence, J., Forthcoming "Doing Good When Times Are Bad: Volunteering Behavior in Economic Hard Times." British Journal of Sociology
- Lin, N., 1999. Social networks and status attainment. Annual Review of Sociology, 25, 467–487.
- Lin, N., 2000. Inequality in Social Capital. *Contemporary Sociology*, 29, pp.785–795.
- Lin, N., 2001. Social Capital: A Theory of Social Structure and Action. Cambridge: Cambridge University Press.
- Lin, N., Ensel, W.M., Vaughn, J.C., 1981. Social resources and strength of ties: Structural factors in occupational status attainment. *American Sociological Review*, 46(4), pp.393–405.
- Lin, N., Dumin, M., 1986. Access to occupations through social ties. *Social Networks*, 8, pp.365–385.
- Lin, N., Burt, R.S., Cook, K. (Eds.), 2001. Social Capital: Theory and Research. Aldine, New York.
- Lin, N., Erickson, B.H. (Eds.), 2008. Social Capital: An International Research Program. Oxford:
- Lin, N., Erickson, B.H. 2008. Theory, Measurement, and the Research Enterprise on Social Capital. In Lin, N., Erickson, B.H. (Eds.), 2008. *Social Capital: An International Research Program*. Oxford: OUP. pp.1-26
- Lister, R., & Bennet, F., 2010. The new "champion of progressive ideals"? *Renewal*, 18(1/2). Available from: http://renewal.org.uk/articles/the-new-champion-of-progressive-ideals/P0/
- Loasby, B.J., 1999. Knowledge, Institutions and Evolution in Economics. Routledge.
- Loasby, B.J., 2001. Time, knowledge and evolutionary dynamics: why connections matter. *Journal of Evolutionary Economics*, 11, pp.393–412.
- López, J.L., Scott, J., 2000. Social Structure. Buckingham: Open University Press.
- Lorrain, F., White, H.C., 1971. Structural equivalence of individuals in social networks. *The Journal of Mathematical Sociology*, 1, pp.49–80.

- Lubben, J., Gironda, M., 2004. Measuring Social Networks and Assessing their Benefits. In, Phillipson, C., Allan, G., eds. 2004. *Social Networks and Social Exclusion: Sociological and Policy Perspectives*. Aldershot: Ashgate Publishing Limited. pp.20-34.
- Luhmann, N., 2012. Introduction to Systems Theory, Cambridge: Polity Press.
- Luken, V., Tranmer, M., 2010. Personal support networks of immigrants to Spain: A multilevel analysis. *Social Networks*, 32, pp.253–262.
- Lukes, S., 1973. *Emile Durkheim: His Life and Work An Historical and Critical Study.* Stanford: Stanford University Press.
- MacIntyre, A., 1999. Dependent Rational Animals: Why Human Beings Need the Virtues. London: Bloomsbury Academic.
- Mahoney, J., 2001. Review essay: Beyond correlational analysis: recent innovations in theory and method. *Sociological Forum.* 16(3), pp.575–593.
- Malinowski, B., 1922. Argonauts of the Western Pacific. Routledge
- Manzo, G., 2010. Analytical Sociology and Its Critics. *European Journal of Sociology*, 51(1), pp.129–170.
- Marsden, P.V., 1987. Core discussion networks of Americans. *American Sociological Review*, 52, pp.122–131.
- Marsden, P.V., 1988. Homogeneity in confiding relations. *Social Networks*, 10, pp.57–76.
- Marsden, P.V., 1990. Network data and measurement. *Annual Review of Sociology*, 16, pp.435–463.
- Marsden, P.V., 2011. Survey Methods for Network Data. In, Scott, J., Carrington, P.J. (Eds.), 2011. *The SAGE Handbook of Social Network Analysis*. London: SAGE Publications Ltd. pp.371-388.
- Marsh & Vegeris, 2004, *The British Lone Parent Cohort and their Children 1991 to 2001*, The Department of Work and Pensions. Available from: http://statistics.dwp.gov.uk/asd/asd5/rports2003-2004/rrep209.pdf [Accessed 5.11.12]
- Martingnon, L., 2001., Comparing Fast and Frugal Heuristics and Optimal Models. In, Gigerenzer, G., Selten, R., eds., 2001. *Bounded rationality: The adaptive toolbox*. Mit Press. pp.147-172.
- Mauss, M., 1925. The Gift: Forms and Functions of Exchange in Archaic Societies. 1966 version.
- McCarty, C., Govindaramanujam, S., 2005. A modified elicitation of personal networks using dynamic visualization. *Connections*, 26, pp.61–69.
- McCarty, C., Molina, J.L., Aguilar, C., Rota, L., 2007. A comparison of social network mapping and personal network visualization. *Field Methods*, 19, pp.145–162.
- McKenzie, L., 2015. Getting By: Estates, Class and Culture in Austerity Britain. Bristol: Policy Press
- McPherson, J.M., Smith-Lovin, L., 1987. Homophily in voluntary organizations: Status distance and the composition of face-to-face groups. *American Sociological Review*, 52(3), pp.370–379.
- McPherson, M., Smith-Lovin, L., Cook, J.M., 2001. Birds of a Feather: Homophily in Social Networks. *Annual Review of Sociology*. 27, pp.415–444.
- Merton, R.K., 1968. The Matthew Effect in Science. Science, 159, p.56.
- Merton, R.K., 1967. On Theoretical Sociology, Simon and Schuster, New York.
- Millar, J., 2007. The dynamics of poverty and employment: the contribution of qualitative longitudinal research to understanding transitions, adaptations and trajectories. *Social Policy and Society* 6(4), pp.533–544.

- Millar, J., 2008. Work is good for you: lone mothers, children, work and well-being. *In: Third Annual KELA lecture*, 2008-01-01, Helsinki. Available from: http://opus.bath.ac.uk/1078/[Accessed 3.4.15]
- Millar, J., 2011. Desperately seeking security: UK family policy, lone mothers and paid work. *Family Matters*, 87, pp. 27-36.
- Millar, J., Ridge, T., 2009. Relationships of Care: Working Lone Mothers, their Children and Employment Sustainability. *The Journal of Social Policy*. 38(1), pp103-121.
- Millar, J., Ridge, T., 2013. Lone mothers and paid work: the "family-work project." *International Review of Sociology*, 23, pp.564–577.
- Miller, F., Osbahr, H., Boyd, E., Thomalla, F., Bharwani, S., Ziervogel, G., Walker, B., Birkmann, J., van der Leeuw, S., Rockstroem, J. 2010. Resilience and Vulnerability: Complementary or Conflicting Concepts?. *Ecology and Society*, 15.
- Miller, J.H., Page, S.E., 2007. Complex adaptive systems: an introduction to computational models of social life: an introduction to computational models of social life. Princeton: Princeton University Press.
- Minnis, P.E., 1985. Social adaptation to food stress: A prehistoric Southwestern example. Chicago: University of Chicago Press.
- Mohaupt, S., 2009. Review Article: Resilience and Social Exclusion. *Social Policy and Society*, 8(1), pp.63–71.
- Mollenhorst, G., Volker, B., Flap, H., 2014. Changes in personal relationships: How social contexts affect the emergence and discontinuation of relationships. *Social Networks*, 37, pp.65–80.
- Molm, L.D., 2010. The structure of reciprocity. Social Psychology Quarterly, 73, pp.119–131.
- Molm, L.D., Peterson, G., Takahashi, N., 1999. Power in negotiated and reciprocal exchange. *American Sociological Review*, 64(5), pp.876–890.
- Molm, L.D., Collett, J.L., Schaefer, D.R., 2007. Building Solidarity through Generalized Exchange: A Theory of Reciprocity. *American Journal of Sociology*, 113, pp.205–242.
- Molm, L.D., Schaefer, D.R., Collett, J.L., 2009. Fragile and Resilient Trust: Risk and Uncertainty in Negotiated and Reciprocal Exchange*. Sociological Theory 27, 1–32.
- Mooney, A., Oliver, C., Smith, M., 2009, *Impact of Family Breakdown on Children's Well-Being*. Department for Children, Schools and Families. Available from: https://www.education.gov.uk/publications/eOrderingDownload/DCSF-RR113.pdf [Accessed 10.19.12].
- Moore, G., 1990. Structural determinants of men's and women's personal networks. *American Sociological Review*, 55(5), pp.726–735.
- Moran, E.F., 2007. Human Adaptability: An Introduction to Ecological Anthropology, Third edition. Boulder: Westview Press.
- Moses, P.J., Knutsen, P.T., 2012. Ways of Knowing: Competing Methodologies in Social and Political Research, 2nd edition. New York: Palgrave Macmillan.
- Müller, C., Wellman, B., Marin, A., 1999. How to use SPSS to study ego-centered networks. Bulletin de Méthodologie Sociologique, 64, pp.83–100.
- Munch, A., McPherson, J.M., Smith-Lovin, L., 1997. Gender, Children, and Social Contact: The Effects of Childrening for Men and Women. *American Sociological Review*, 62, pp.509–520.
- Music, G., 2014. The Good Life: Wellbeing and the new science of altruism, selfishness and immorality. Routledge.

- New Economics Foundation., 2013. *Surviving austerity*. New Economics Foundation. Available from: http://www.neweconomics.org/publications/entry/surviving-austerity [Accessed 4.2.15].
- Nelson, M.K., 2000. Single mothers and social support: The commitment to, and retreat from, reciprocity. *Qualitative Sociology*, 23, pp.291–317.
- Newman, M.E., 2010. Networks: An Introduction. Oxford: Oxford Univ Pr.
- Nisbet, R., 1966. The Sociological Tradition. Transaction Publishers.
- Norman, J., 2010. *The Big Society: the anatomy of the new politics*. University of Buckingham Press Buckingham.
- Norris, F.H., Stevens, S.P., Pfefferbaum, B., Wyche, K.F., Pfefferbaum, R.L., 2008. Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41, pp.127–150.
- Nussbaum, M.C., 2009. The Therapy of Desire: Theory and Practice in Hellenistic Ethics. Princeton University Press.
- Offer, S., 2012. Barriers to social support among low-income mothers. *International Journal of Sociology and Social Policy*, 32, pp.120–133.
- Offer, S., Sambol, S., Benjamin, O., 2010. Learning to negotiate network relations: social support among working mothers living in poverty. *Community, Work & Family*, 13, pp.467–482.
- O'Hara, M., 2014. Austerity bites: A Journey to the Sharp End of Cuts in the UK. Policy Press.
- Okech, D., Howard, W.J., Mauldin, T., Mimura, Y., Kim, J., 2012. The effects of economic pressure on the resilience and strengths of individuals living in extreme poverty. *Journal of Poverty*, 16, pp.429–446.
- Office for National Statistics., 2010a. Family Spending 2009 Edition, Available from: http://www.ons.gov.uk/ons/rel/family-spending/family-spending/2009-edition/index.html. [Accessed 3 March 2015]
- Office for National Statistics, 2010b. Changes in family structure in early childhood in the Millennium Cohort Study. Available from:
 - http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCI QFjAA&url=http%3A%2F%2Fwww.ons.gov.uk%2Fons%2Frel%2Fpopulation-trends-rd%2Fpopulation-trends%2Fno--142--winter-2010%2Fchanges-in-family-structure-in-early-childhood-in-the-millennium-cohort-
 - study.pdf&ei=faweVdmmHaWE7gb1_YDgDw&usg=AFQjCNGs2CzFFv7QKWztbuw zuGNFr5Q_cw&sig2=c8Z5_5gXYl8l7V5tiGN14w&bvm=bv.89947451,d.ZGU&cad=rj a [Accessed 3.4.215]
- Office for National Statistics., 2010c. *The National Statistics Socio-economic classification*. Available from: http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html [Accessed 3.4.2015]
- Office for National Statistics., 2011. Chapter 3 Households, familes and people (General Lifestyle Survey Overview a report on the 2011 General Lifestyle Survey). Available from: http://www.ons.gov.uk/ons/rel/ghs/general-lifestyle-survey/2011/rpt-chapter-3.html [Accessed 31.08.2015]
- Office for National Statistics., 2012a. Lone parent families with dependent children in UK near two million. Available from: http://www.ons.gov.uk/ons/rel/mro/news-release/lone-parent-

- families-with-dependent-children-in-uk-near-two-million/famandhousenr0112.html [Accessed 3 March 2015].
- Office for National Statistics., 2012b. *Measuring National Well-being*. Available from: http://www.ons.gov.uk/ons/dcp171766_284260.pdf [Accessed 4.12.15]
- Office for National Statistics., 2013. General Lifestyle Survey 2011, Available from: http://www.ons.gov.uk/ons/rel/ghs/general-lifestyle-survey/2011/index.html. [Accessed 3 March 2015]
- Office for National Statistics., 2014a. Working and workless households 4th Quarter 2004 to 2013. Available from: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-354520 see Table P. [Accessed 3 March 2015]
- Office for National Statistics., 2014b. *Key Economic Time Series Data, GDP*. Available from: http://www.ons.gov.uk/ons/site-information/using-the-website/time-series/index.html#1 [Accessed 3.6.15].
- Office for National Statistics., 2014c. *Time Series Dataset: Labour Market Statistics*. Available from: http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/october-2014/dataset-labour-market-statistics.html [Accessed 3.6.15].
- Organization for Economic Cooperation and Development., 2014. Focus on Inequality and Growth. Available from: http://www.oecd.org/els/soc/Focus-Inequality-and-Growth-2014.pdf [Accessed 4.4.15]
- Ormerod, P., 2010. N Squared: Public policy and the power of networks. RSA. Available from: https://www.thersa.org/globalassets/pdfs/blogs/rsa_pamphlet-publicpolicy.pdf [Accessed 4.4.15].
- Ormerod, P., 2012. Positive linking: how networks can revolutionise the world. London: Faber & Faber.
- Orton, M., 2015. *Something's Not Right: Insecurity and an Anxious Nation.* Compass. Available from: http://www.compassonline.org.uk/publications/somethings-not-right-insecurity-and-an-anxious-nation/ [Accessed 4.3.15].
- Oxfam., 2014. Working for the Few. Oxfam International Available from: https://www.oxfam.org/en/research/working-few [Accessed 4.2.15].
- Page, S.E., 2011. Diversity and complexity. Princeton: Princeton University Press.
- Parsons, T., 1951. The Social System. Tavistock Publications Ltd.
- Parsons, T., 1964. Evolutionary Universal in Society. *American Sociological Review*, 29(3), pp.339-357
- Paugam, S., 1995. The spiral of precariousness: a multidimensional approach to the process of social disqualification in France. In, Room, G. (Ed.), 1995. *Beyond the Threshold:*Measurement and Analysis of Social Exclusion. Policy Press.
- Paul, K.I., Moser, K., 2009. Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74, pp.264–282.
- Pawson, R., 1996. Theorizing the Interview. The British Journal of Sociology, 47, pp.295–314.
- Pawson, R., 2013. The Science of Evaluation: A Realist Manifesto. London: Sage
- Payne, S., 2000. *Poverty, Social Exclusion and Mental Health*. Available from: www.bris.ac.uk/poverty/pse/99PSE-WP15.doc [Accessed 5.11.12].
- Pelling, M., High, C., 2005. Understanding adaptation: what can social capital offer assessments of adaptive capacity?. *Global Environmental Change*, 15, pp.308–319.
- Perri 6. 1997. Escaping Poverty: From Safety Nets to Networks of Opportunity. London: Demos.

- Perri 6. 2004. Can Government Influence Friendships? The Range and Limits of Tools for Trying to Shape Solidarities. In, Phillipson, C., Allan, G., eds. 2004. *Social Networks and Social Exclusion: Sociological and Policy Perspectives*. Aldershot: Ashgate Publishing Limited. pp.180-204.
- Perri 6., Bellamy, C., 2012. Principles of Methodology: Research Design in Social Science. London: SAGE Publications Ltd.
- Phillipson, C., Allan, G., 2004. *Social Networks and Social Exclusion: Sociological and Policy Perspectives.* Ashgate Publishing Limited.
- Piketty, T., 2014. *Capital in the Twenty-First Century*. Harvard University Press, Cambridge Massachusetts.
- Plickert, G., Côté, R.R., Wellman, B., 2007. It's not who you know, it's how you know them: Who exchanges what with whom? *Social Networks*, 29, pp.405–429.
- Plunkett, J., Hurrell, A., D'Arcy, C., 2014. *More than a minimum: The review of the minimum wage.* Resolution Foundation. Available from: http://www.resolutionfoundation.org/publications/minimum-review-minimum-wage-final-report/ [Accessed 4.2.15].
- Portes, A., 1998. Social Capital: Its Origins and Applications in Modern Society. *Annual Reviews of Sociology*, 24, pp.1–24.
- Potts, J., 2000. The New Evolutionary Microeconomics: Complexity, Competence and Adaptive Behaviour. Cheltenham: Edward Elgar.
- Potts, J., Earl, P.E., 2004. Bounded Rationality and Decomposability: The basis for Integrating Cognitive and Evolutionary Economics. In, Augier, M., March, J.G., 2004. *Models of a man: Essays in memory of Herbert A. Simon.* MIT Press. pp.317-334
- Prell, C., 2012. Social Network Analysis: History, theory and methodology. London: Sage.
- Putnam, R.D., 2000. Bowling Alone. Simon and Schuster.
- Rabindrakumar, S., 2014. *Paying the Price: The long road to recovery.* Gingerbread. Available from: http://www.gingerbread.org.uk/content/1813/Paying-the-price. [Accessed 2 April 2015]
- Radcliffe-Brown, A.R., 1937. A Natural Science of Society. Free Press, 1957 version.
- Rainie, L., Wellman, B., 2012. Networked: The New Social Operating System. MIT Press.
- Rappaport, R.A., 1968. Pigs for the ancestors: ritual in the ecology of a New Guinea people. Waveland Press.
- Rappaport, R.A., 1977. *Maladaptation in social systems*. Available from: http://habitat.aq.upm.es/boletin/n37/arrap.en.html. [Accessed 2 April 2015]
- Rasbash, J., Steele, F., Browne, W., Goldstein, H., 2009. *A user's guide to MLwiN, version 2.10*. Centre for multilevel modelling, University of Bristol. Available from: http://www.bristol.ac.uk/media-library/sites/cmm/migrated/documents/mlwin-userman-09.pdf [Accessed 7.7.14].
- Raub, W., Buskens, V., Van Assen, M.A., 2011. Micro-macro links and microfoundations in sociology. *The Journal of Mathematical Sociology*, 35, pp.1–25.
- Reed, S., 2013. In, Smith, O., Reeves, R. (Eds.), 2013. One Nation: power, hope, community. One Nation Register.
- Reeves, A., Basu, S., McKee, M., Meissner, C., Stuckler, D., 2013. Does investment in the health sector promote or inhibit economic growth? *Globalization and Health*, 9, p.43.
- Ritchie, J., Lewis, J., Elam, G., Tennant, R., Rahim, N., 2014. Designing and Selecting Samples. In, Ritchie, J., Lewis, J., Nicholls, C.M., Ormston, R. (Eds.), 2014. *Qualitative Research*

- Practice: A Guide for Social Science Students and Researchers, Second Edition edition. London: SAGE Publications Ltd. pp.111-146
- Ritchie, J., Lewis, J., Nicholls, C.M., Ormston, R. (Eds.), 2014. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*, Second Edition edition. London: SAGE Publications Ltd.
- Robertson, D., 2012. Build Your Resilience: Teach Yourself How to Survive and Thrive in Any Situation. London: Teach Yourself.
- Roberts, S.G.B., Dunbar, R.I.M., 2011. The costs of family and friends: An 18-month longitudinal study of relationship maintenance and decay. *Evolution and Human Behavior*, 32, pp.186–197.
- Room, G., (Ed.), 1995. Beyond the Threshold: Measurement and Analysis of Social Exclusion. Policy Press.
- Room, G., 1999. Social exclusion, solidarity and the challenge of globalization. *International Journal of Social Welfare*, 8, pp.166–174.
- Room, G., 2011. Complexity, Institutions and Public Policy: Agile Decision-Making in a Turbulent World. Edward Elgar Publishing.
- Room, G., 2012. Evolution and the arts of civilisation. *Policy & Politics*, 40(4), pp.453–471.
- Room, G., forthcoming. Nudge or Nuzzle? Improving Decisions about Active Citizenship.
- Rowlingson, K., McKay, S., 2002. Lone Parent Families: Gender, Class and State: Women, Children and the State, New York: Routledge.
- Russell, H., 1999. Friends in Low Places: Gender, Unemployment and Sociability. *Work Employment Society*, 13, pp.205–224.
- Sandelowski, M., Voils, C.I., Knafl, G., 2009. On Quantitizing. *Journal of Mixed Methods Research*, 3, pp.208–222.
- Schaefer, D.R., Light, J.M., Fabes, R.A., Hanish, L.D., Martin, C.L., 2010. Fundamental principles of network formation among preschool children. *Social Networks*, 32, pp.61–71.
- Scheffer, M., 2009. *Critical Transitions in Nature and Society*. Princeton: Princeton University Press.
- Scheffer, M., Carpenter, S.R., Lenton, T.M., Bascompte, J., Brock, W., Dakos, V., Van De Koppel, J., Van De Leemput, I.A., Levin, S.A., Van Nes, E.H. 2012. Anticipating critical transitions. *Science*, 338, pp.344–348.
- Schelling, T.C., 1978. Micromotives and Macrobehavior. W. W. Norton & Company.
- Schutz, A., 1944. The stranger: An essay in social psychology. American Journal of Sociology, 49(6), pp.499–507.
- Schutz, A., 1964. Collected Papers II: Studies in Social Theory. Springer Science & Business Media.
- Schutz, A., 1972. The Phenomenology of the Social World. London: Heinemann Educational.
- Scott, J., 2002. Social class and stratification in late modernity. Acta Sociologica, 45, pp.23–35.
- Scott, J., 2011a. Conceptualising the Social World: Principles of Sociological Analysis. Cambridge: Cambridge University Press
- Scott, J., 2011b. Social Physics and Social Networks. In: Scott, J., Carrington, P.J. eds., 2011. The SAGE Handbook of Social Network Analysis. London: Sage, pp.55-66
- Scott, J., 2012a. Social Network Analysis. Third Edition, London: Sage.
- Scott, J., 2012b. *Sociological Theory: Contemporary Debates*, 2nd Revised edition. Cheltenham: Edward Elgar Publishing Ltd.

- Scott, J., Sun, W., Zong, G., Liu, S., 2013. Rural-urban migration decision-making processes: a whole and personal support network analysis. *International Journal of Information and Decision Sciences*, 5, pp.312–330.
- Scott, J., Carrington, P.J. (Eds.), 2011. *The SAGE Handbook of Social Network Analysis*. London: SAGE Publications Ltd.
- Seccombe, K., 2002. "Beating the Odds" Versus "Changing the Odds": Poverty, Resilience, and Family Policy. *Journal of Marriage and Family*, 64, pp.384–394.
- Seery, E., Caistor-Arendar, A., 2014. Even it Up: Time to end extreme inequality. Oxfam GB. Available from: http://policy-practice.oxfam.org.uk/publications/even-it-up-time-to-end-extreme-inequality-333012 [Accessed 3.6.15].
- Seidel, M.D.., Polzer, J.T., Stewart, K.J., 2000. Friends in high places: The effects of social networks on discrimination in salary negotiations. *Administrative Science Quarterly*, pp.1–24.
- Sennett, R., 2012. Together: The rituals, pleasures and politics of cooperation. Yale University Press.
- Simmel, G., 1950. The Sociology of Georg Simmel. Free Press.
- Simmel, G., 1910. How is society possible? *American Journal of Sociology*, 16, pp.372–391.
- Simon, H.A., 1955. A behavioral model of rational choice. *The Quarterly Journal of Economics*, 68(1), pp.99–118.
- Simon, H.A., 1956. Rational choice and the structure of the environment. *Psychological Review*, 63, p.129.
- Simon, H.A., 1957. Models of man: social and rational; mathematical essays on rational human behavior in society setting. Wiley.
- Simon, H.A., 1962. The Architecture of Complexity. *Proceedings of the American Philosophical Society*, 106, pp.467–482.
- Simon, H.A., 1992. What is an "explanation" of behavior? Psychological Science, 3, pp.150–161.
- Simon, H.A, 1996. Sciences of the Artificial, 3rd Edition. Cambridge, Mass: MIT Press.
- Sinfield, A., 2011., In Farnsworth, K., Irving, Z.M. (Eds.), 2011. Social Policy in Challenging Times: Economic Crisis and Welfare Systems. Policy Press.
- Skew, A.J., 2009. Leaving lone parenthood: analysis of the repartnering patterns of lone mothers in the U.K. PhD Thesis. Available from: http://eprints.soton.ac.uk/72373/ [Accessed 12.3.12].
- Skocpol, T., 1979. States and Social Revolutions: A Comparative Analysis of France, Russia and China. Cambridge: Cambridge University Press.
- Small, M.L., 2009. *Unanticipated Gains: Origins of Network Inequality in Everyday Life*. Oxford: Oxford University Press.
- Small, M.L., 2011. How to conduct a mixed methods study: Recent trends in a rapidly growing literature. *Annual Review of Sociology*, 37, pp.57-86.
- Smit, B., Wandel, J., 2006. Adaptation, adaptive capacity and vulnerability. *Global Environmental Change*, 16, 282–292.
- Smith, O., Reeves, R. (Eds.), 2013. One Nation: power, hope, community. One Nation Register.
- Smith, V.L., 2008. Rationality in economics: constructivist and ecological forms. Cambridge: Cambridge University Press.
- Snijders, T.A.B., Doreian, P., 2012. Introduction to the special issue on Network Dynamics (Part 2). *Social Networks* 34(2), pp.289–290.
- Song, L., Son, J., Lin, N. 2011. Social Support. In: Scott, J., Carrington, P.J. eds., 2011. *The SAGE Handbook of Social Network Analysis*. London: Sage, pp.116-128

- Spenser, L., Ritchie, J., O'Connor, W., Morrell, G., Ormston, R., 2014. Analysis in Practice. In, Ritchie, J., Lewis, J., Nicholls, C.M., Ormston, R. (Eds.), 2014. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*, Second Edition edition. London: SAGE Publications Ltd. pp.295-346.
- Stewart, K., 2012. *Child poverty: what have we really achieved?*, Child Poverty Action Group. Available from: http://www.cpag.org.uk/sites/default/files/CPAG-Ending-child-poverty-by-2020-progress-made-lessons-learned-0612.pdf [Accessed 4.11.12]
- Stiglitz, J.E., 2013. The Price of Inequality. London: Penguin.
- Stiglitz, J.E., Greenwald, B.C., 2014. Creating a Learning Society: A New Approach to Growth, Development, and Social Progress. Columbia University Press.
- Strogatz, S.H., 2004. Sync: How order emerges from chaos in the universe, nature, and daily life. Hyperion.
- Stuckler, D., Basu, S., 2013. The Body Economic: Eight experiments in economic recovery, from Iceland to Greece. Allen Lane.
- Sullivan, H., 2012. A Big Society needs an active state. *Policy & Politics*, 40, pp.145–8.
- Takhteyev, Y., Gruzd, A., Wellman, B., 2012. Geography of Twitter networks. *Social Networks*, 34, pp.73–81.
- Taleb, N.N., 2012. Antifragile: Things That Gain from Disorder. New York: Random House.
- Taylor-Gooby, P., 2011. In, Yeates, N., Haux, T., Jawad, R., Kilkey, M., Timmins, N., eds., 2011. In Defence of Welfare: The Impacts of the Spending Review. Available from: http://www.social-policy.org.uk/ [Accessed 3.6.15].
- Taylor-Gooby, P., 2012. Root and branch restructuring to achieve major cuts: The social policy programme of the 2010 UK coalition government. *Social Policy & Administration*, 46, pp.61–82.
- Taylor-Robinson, D., Rougeaux, E., Harrison, D., Whitehead, M., Barr, B., Pearce, A., 2013. The rise of food poverty in the UK. *BMJ*, 347.
- Thane, P., Evans, T.D., 2012. Sinners? Scroungers? Saints?: Unmarried Motherhood in Twentieth-Century England. Oxford: OUP.
- Thomas, W.I., Znaniecki, F., 1918. The Polish Peasant in Europe and America: A Classic Work in Immigration History. University of Illinois Press, 1996 version.
- Thomson, R., 2007. The qualitative longitudinal case history: practical, methodological and ethical reflections. *Social Policy and Society*, 6, pp.571–582.
- Tindal, D.B., Cormier, J.J. 2008. Gender, Network Capital, Social Capital, and Political Change. In, Lin, N., Erickson, B.H. (Eds.), 2008. Social Capital: An International Research Program. Oxford: OUP. pp.282-307
- Timmins, N., 2011. In, Yeates, N., Haux, T., Jawad, R., Kilkey, M., Timmins, N., eds., 2011. *In Defence of Welfare: The Impacts of the Spending Review*. Available from: http://www.social-policy.org.uk/downloads/idow.pdf [Accessed 3.6.15].
- Tinsley, M., 2014. Parenting Alone: Work and welfare in single parent households. Policy Exchange. Available from:
 - http://www.policyexchange.org.uk/images/publications/parenting%20alone.pdf. [Accessed 2 April 2015]
- Titmuss, R.M., 1971. Gift Relationship: From Human Blood to Social Policy. Allen & Unwin.
- Tooby, J., Cosmides, L., Barkow, J.H., 1992. The Adapted Mind: Evolutionary Psychology and the Generation of Culture, USA: OUP.

- Travers, J., Milgram, S., 1969. An Experimental Study of the Small World Problem. *Sociometry*. 32, p.425.
- O'Connor, L., 2013. Ask and you shall receive: Social network contacts' provision of help during the job search. *Social Networks*, 35, pp.593–603.
- Trivers, R., 2002. Natural Selection and Social Theory: Selected Papers of Robert Trivers. Oxford: OUP.
- Udehn, L., 2001. Methodological Individualism: Background, History and Meaning. London: Routledge.
- Vaitilingam.,2009., Recession Britain. Economic and Social Research Council. Available from: http://www.esrc.ac.uk/_images/Recession_Britain_tcm8-4598.pdf [Accessed 4.11.12]
- Walker, B., Holling, C.S., Carpenter, S.R., Kinzig, A., 2004. Resilience, adaptability and transformability in social–ecological systems. *Ecology and Society*, 9(5).
- Walker, B., Gunderson, L., Kinzig, A., Folke, C., Carpenter, S., Schultz, L., 2006. A Handful of Heuristics and Some Propositions for Understanding Resilience in Social-Ecological Systems. *Ecology and Society*, 11(13).
- Walker, B., Salt, D., 2012. Resilience practice: building capacity to absorb disturbance and maintain function. Island Press.
- Walker, B., Salt, D., 2006. Resilience thinking: sustaining ecosystems and people in a changing world. Island Press.
- Walker, H.A., Thye, S.R., Simpson, B., Lovaglia, M.J., Willer, D., Markovsky, B., 2000. Network exchange theory: Recent developments and new directions. *Social Psychology Quarterly*, 63(4), pp.324–337.
- Wasserman, S., Faust, K., 1994. *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.
- Waters, J., 2013. The Role of Ecosystem Services and Adaptive Capacity in the Resilience of Poor Urban Areas. PhD Thesis. Available from:

 https://www.academia.edu/8688383/The_Role_of_Ecosystem_Services_and_Adaptive_Capacity_in_the_Resilience_of_Poor_Urban_Areas [Accessed 4.1.15].
- Weber, M., 1922. Economy and Society: An Outline of Interpretive Sociology. University of California Press, 1978 edition.
- Weber, M., 1949. The Methodology of the Social Sciences. Transaction Publishers, 2011 edition.
- Wellman, B., 1992. Men in networks: Private communities, domestic friendships, in: *Men's Friendships, Research on Men and Masculinities*. Sage Publications, Inc, Thousand Oaks, CA, US, pp. 74–114.
- Wellman, B., 1997. Structural analysis: From method and metaphor to theory and substance. *Contemporary Studies in Sociology*, 15, pp.19–61.
- Wellman, B., 2007. Challenges in collecting personal network data: The nature of personal network analysis. *Field Methods*, 19(2), pp.111-115.
- Wellman, B., Wortley, S., 1990. Different Strokes from Different Folks: Community Ties and Social Support. *American Journal of Sociology* 96(3), pp.558–588.
- Wellman, B., Frank, K., 2001. Network Capital in a Multi-Level World: Getting Support from Personal Communities. In, Burt, R.S., Cook, K., Lin, N. Eds., 2001. *Social Capital: Theory and Research*. Aldine Transaction.
- Wheelock, J., Jones, K., 2002. "Grandparents Are The Next Best Thing": Informal Childcare for Working Parents in Urban Britain. *Journal of Social Policy*, 31, pp.441–463.
- Wiener, N., Rosenblueth, A., Bigelow, J., 1943. Behavior, purpose and teleology. *Philosophy of Science*, 10, pp18–24.

- Wiener, N., 1948. Cybernetics. Paris: Hermann.
- Wilkinson, R., Pickett, K., 2009. *The Spirit Level: Why Equality is Better for Everyone*. London: Penguin.
- Wilson, 1987. The truly disadvantaged: The inner city, the underclass, and public policy. Chicago: The University of Chicago.
- Wolf, J., Adger, W.N., Lorenzoni, I., Abrahamson, V., Raine, R., 2010. Social capital, individual responses to heat waves and climate change adaptation: An empirical study of two UK cities. *Global Environmental Change*, 20, pp.44–52.
- Women's Budget Group., 2012. *The Impact on Women of the Budget 2012*. Available from: http://wbg.org.uk/pdfs/The-Impact-on-Women-of-the-Budget-2012-FINAL.pdf [Accessed 12.3.12].
- Women's Budget Group, 2013. *To ensure economic recovery for women, we need Plan F.* Available from: http://wbg.org.uk/wp-content/uploads/2013/10/Plan-F_WBG-Parties-briefing_Sept-2013_final.pdf [Accessed 4 April 2015]
- Wong, L.H., Pattison, P., Robins, G., 2006. A spatial model for social networks. *Physica A: Statistical Mechanics and its Applications*, 360, pp.99–120.
- Yeates, N., Haux, T., Jawad, R., Kilkey, M., Timmins, N., eds., 2011. In Defence of Welfare: The Impacts of the Spending Review. Available from: http://www.social-policy.org.uk/[Accessed 3.6.15].
- Yin, R.K., 2009. Case Study Research: Design and Methods, Fourth Edition. London: Sage Publications, Inc.
- Zerubavel, E., 1997. *Social Mindscapes: Invitation to Cognitive Sociology*, Harvard University Press, Cambridge, Mass.