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**‘Habitus, childrearing approach and early child
development in Scotland’.**

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PhD

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Declaration

I declare that this thesis is of my own composition, based on my own work, with acknowledgement of other sources, and has not been submitted for any other degree or professional qualification.

Tania Wood

August 2013

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I am sincerely grateful to my parents, without whose unstinting support this research would not have been possible. Finally, thank you to James and Rob:

Aug, mein Aug, was sinkst du nieder?

Goldne Träume, kommt ihr wieder?

Weg, du Traum, so gold du bist:

Hier auch Lieb' und Leben ist.

Abstract

This thesis is concerned with childrearing approach as one of the prime sites of the reproduction of social inequality. It adopts Bourdieu's concept of habitus as a way of explaining how social structures are reproduced through childrearing approach, and it draws on Annette Lareau's definition of the 'concerted cultivation' and 'accomplishment of natural growth' childrearing approaches (Lareau 2003).

During the latter half of the 2000s, UK and Scottish government policy placed increasing emphasis on the importance of parenting and the early years of a child's life as factors likely to have an impact on health, education and employment outcomes. Between 2005 and 2008 - the timeframe considered by this thesis - a number of policy initiatives emerged which were intended to support 'better parenting'. Critics of these policy initiatives argue that what was presented as a model of good parenting was in essence a model of middle class parenting which misunderstood and devalued other parenting approaches. Lareau's typology of childrearing approach is used as a means of situating the UK parenting policy discourse within a broader theoretical context and assessing critically the extent to which this policy discourse reflects childrearing approaches in Scotland.

During this period, the policy areas of parenting and neighbourhood began increasingly to overlap in the UK, both through area-based family interventions such as Sure Start and through the central role given to parents in the drive towards community empowerment, greater collective efficacy and reduced anti-social behaviour.

The analysis uses data from the 'Growing up in Scotland' (GUS) survey to ask whether 'concerted cultivation' and the 'accomplishment of natural growth' can be observed in the childrearing approaches of Scottish mothers; it assesses whether beliefs about collective efficacy and measures of neighbourhood deprivation are associated with childrearing approach; it explores whether mothers change their childrearing approach over time and considers what factors might influence changes

in childrearing approach. Finally, the thesis examines links between a mother's childrearing approach and her child's behavioural development at entry to primary school.

This thesis builds on previous research on childrearing approach by testing Lareau's concepts on a quantitative sample of mothers in a different geographical locale and by exploring changes in childrearing approach longitudinally. The analysis presented considers childrearing approach both at the individual and aggregate level. A narrative analysis technique is used to construct biographies for four mothers using the quantitative data in GUS. The constructed biographies inform a discussion of the ways in which childrearing may be experienced and made sense of by the individual. Latent Class Analysis is then used to explore whether patterns of childrearing practice can be discerned in the GUS sample.

A typology of four childrearing approaches is presented: two approaches correspond to Lareau's typology and two further groups are observed: working mothers and socially isolated mothers. The analysis finds that social class differences do not fully explain childrearing approach in the GUS sample. Neighbourhood measures are not found to be associated with childrearing approach when socio-economic factors are controlled for. Changes in socio-economic status are associated with changes in childrearing approach; mothers who experience fewer changes in socio-economic position tend to be those who adopt a childrearing approach similar to 'concerted cultivation'. The children of these mothers are more likely to display pro-social behaviours at entry to primary school than the children of other childrearing approaches; the children of mothers who adopt a childrearing approach akin to 'the accomplishment of natural growth' are more likely to display conduct problems at entry to primary school. The discussion concludes that family policy between 2005 and 2008 did not fully reflect the variety of childrearing approaches in Scotland, and that mothers whose circumstances and childrearing approach diverged from the policy model may not have been adequately supported.

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List of Abbreviations

CTC	Child Tax Credits
DCLG	Department for Communities and Local Government
DfES	Department for Education and Skills
EFA	Exploratory Factor Analysis
EYF	Early Years Framework
GUS	Growing up in Scotland
HMRC	Her Majesty's Revenue and Customs
LCA	Latent Class Analysis
LTA	Latent Transition Analysis
MCS	Millennium Cohort Study
ONS-SEC	Office of National Statistics Socio-economic Classification
SDQ	Strengths and Difficulties Questionnaire
SIMD	Scottish Index of Multiple Deprivation
WTC	Working Tax Credits

1 Introduction

This thesis is based on the premise that parenting attitudes and behaviours are socially patterned, and that a child's psychological, social and behavioural frames of reference are strongly influenced by the childrearing approach of their parents. These frames of reference can influence children's educational attainment and choices, occupation, residential location and leisure pursuits, as well as their income and health outcomes (Reay et al. 2009; Zimdars et al. 2009; Reay 2006 and 2004a; Sullivan 2003; Nash 2002; de Graaf et al. 2000; Bourdieu and Passeron 1977). Childrearing approach can consolidate and multiply the effects of material advantage: it is a prime site of the reproduction of social inequality.

This research adopts Bourdieu's concept of habitus as a way of explaining how social structures are reproduced through childrearing approach. Annette Lareau's (2003) typology of childrearing approaches is used as a means of situating the UK parenting policy discourse within a broader theoretical context and assessing critically the extent to which this policy discourse reflects childrearing approaches in Scotland.

In the following chapters, it is argued that the parenting and early years policies of both the Westminster and Edinburgh governments during 2005-2008 were based on a middle class model of parenting which failed to take account of other childrearing approaches, and failed therefore adequately to meet the needs of parents whose childrearing approach diverged from the norm on which policy was based. There is some evidence to suggest that society in the UK – and Scotland in particular – is more unequal than it was thirty years ago (Hills et al. 2010; Diamond and Giddens 2005). Scotland compares unfavourably with the rest of the UK and Europe in terms of health inequalities and mortality (Scottish Government 2008b). Towards the end of the four year period on which this study is based, the Scottish Government targeted resources more systematically towards children in the early years (Scottish

Government 2008) as a means of tackling the intergenerational cycle of disadvantage at its source (Scottish Government 2008d). During this period, the policy areas of parenting and neighbourhood began increasingly to overlap, both through area-based family interventions such as Sure Start and through the central role given to parents in the drive towards community empowerment, greater collective efficacy and reduced anti-social behaviour (Scottish Government 2008; 2008c and 2008d). The suite of parenting and early years policies was intended to tackle inequality through: tax credits; health care; pre-school and early education; parenting education and local area improvement. In this thesis, the argument is advanced that the UK policy emphasis on the labour market activation of mothers coupled with the high cost of childcare created a gap in provision which it was easier for middle class families to bridge. This policy model was better suited to middle class mothers who might be more likely to attract higher salaries to offset the cost of childcare. Working class mothers, on the other hand, might be more reluctant to give up the valued caregiving role in exchange for possibly low-status and low-paid work (Daly 2010).

A number of the parenting support services available in the UK during 2005-2008 were superficially universal, but in effect targeted towards socially excluded parents whose childrearing approach was seen as lax, uncaring and responsible for children's anti-social behaviour (Gillies 2007; Blair 2006; Rutter 2006). Parenting advice and support focussed on developing secure attachment; authoritative parenting; and creating a stimulating home learning environment (Scottish Government 2008; Gillies 2004), all characteristics of stereotypical 'middle class' parenting (Allatt 1993). It is argued that there were two key weaknesses to parenting and early years policies: firstly, parenting supports and services may not have fully taken into account the material needs of parents living in disadvantaged circumstances (it is easier to engage children in activities if parents can afford to do so), and if facilities are easily accessible. Secondly, parenting support services may have failed to take account of the social reality of parents which was manifested in their childrearing approach: children living in disadvantaged circumstances may need to develop a different set of survival skills and learn to negotiate completely different challenges than do middle class children (Gillies 2005; Lareau 2003). In summary, it is argued

that parenting, early years and neighbourhood policies failed to take account of the variety of childrearing approaches which parents in different circumstances adopt, and that this impacted particularly on those parents whose childrearing approach diverged from the norm assumed by the policy framework.

The analysis presented in this thesis uses data from the ‘Growing up in Scotland’ (GUS) survey to ask whether ‘concerted cultivation’ and the ‘accomplishment of natural growth’ (Lareau 2003) can be observed in the childrearing approaches of Scottish mothers; it assesses whether beliefs about collective efficacy and measures of neighbourhood deprivation are associated with childrearing approach; it explores whether mothers change their childrearing approach over time and considers what factors might influence changes in childrearing approach. Finally, the thesis examines links between a mother’s childrearing approach and her child’s behavioural development at entry to primary school.

The analytic approach adopted in this thesis is somewhat novel (although see Irwin and Elley 2011): GUS data have been analysed using both qualitative and quantitative methods in an attempt to better understand how the individual experience of childrearing may be reflected in broader social structures, and how the cultural processes that work through childrearing to reproduce social inequality may be seen to operate at the individual and aggregate level. Narrative analysis is carried out on the ‘text’ of four individual mothers’ survey responses and a biography is constructed for each. The biographies are used to triangulate the results of the quantitative analysis.

Although there has been increasing interest both in the US and the UK in childrearing approach as a possible explanatory factor in the reproduction of social inequality (Henderson 2013; Irwin and Elley 2011; Bodovski 2010; Vincent 2010; Irwin 2009; Ermisch 2008), no study of Lareau’s typology has to this author’s knowledge been carried out in Scotland. Scotland is an interesting field in which to study the reproduction of inequality partly because social inequality is particularly acute in Scotland (Hills et al. 2010; Scottish Government 2008b), and partly because

of the political divergence from the rest of the UK which occurred with devolution in 1999 and later with the change of government from Labour-Liberal Democrat coalition to Scottish National Party in 2007. With the change of government came a change in the policy discourse, and this thesis discusses how that change in discourse was reflected in policies to support parenting and the early years.

Finally, many of the quantitative studies of childrearing approach cited above (for example Bodovski 2010; Vincent 2010; Ermisch 2008), have used groups of variables to measure childrearing approach. Typically, these studies create a measure for 'parenting style' or 'childrearing approach' based on adding together individuals' scores on a number of questionnaire items, for example the more books in the household, or the more visits to libraries, museums or concerts, the higher the score on that individual's 'concerted cultivation' measure. Although these studies take account of measurement error in their models, this thesis treats measurement error slightly differently by conceptualising childrearing approach as a latent variable which cannot be measured directly because not every aspect of childrearing approach can be defined and recorded. Instead, a number of survey questions which record mothers' attitudes to authority figures, their personal networks and their children's structured enrichment activities are taken together and are assumed to be (some of) the social practices which constitute childrearing approach in the round¹. The analysis considers the association between a mother's *most likely* childrearing approach and her child's behaviour scores, therefore acknowledging the imperfect nature of the statistical measures.

The thesis is set out as follows: Chapter 2 presents a review of the literature on socially patterned childrearing approaches and neighbourhood effects research and

¹ Henderson (2013) uses Principal Components Analysis, which also assumes childrearing approach to be a latent variable; however Principal Components Analysis groups together variables, whereas the Latent Class Analysis approach adopted in this thesis groups together people. It is argued that the Latent Class Analysis approach is preferable in this case because it allows the researcher to test whether Lareau's (2003) typology of childrearing approaches can be observed among mothers in Scotland.

sets out the theoretical framework on which the analysis is based; Chapter 3 discusses parenting, early years and neighbourhood policies at the UK and Scottish levels; Chapter 4 presents the Growing up in Scotland dataset and explains how childrearing approach was measured; Chapter 5 discusses the results of the narrative analysis of four case studies from the Growing up in Scotland dataset; Chapter 6 presents a typology of childrearing approaches in Scotland; Chapter 7 considers the effect of neighbourhood on childrearing approach and Chapter 8 explores some of the factors associated with changes in childrearing approach over time and links between childrearing approach and children's behavioural development at entry to primary school.

2 The reproduction of inequality: parents, places and institutions

The links between parenting practices and social inequality have been the subject of a number of studies over the past two decades (Henderson 2013; Sullivan et al. 2013; Irwin and Elley 2011; Bodovski 2010; Vincent, Braun and Ball 2010; Irwin 2009; Ermisch 2008; Vincent and Ball 2007; Gillies 2007; Gillies 2005; Reay 2004a; Vincent, Ball and Kemp 2004; Lareau 2003; Sullivan 2001; Reay 2000; Allatt 1993). Common to many of these is the argument that parenting practices can serve to compound the value of existing economic advantage or reproduce disadvantage. Parenting practices are shaped by a complex set of factors including the economic, cultural and social resources available to the family. Although it is clear that access to economic capital facilitates the adoption of high status cultural practices, there is some evidence to suggest that the effects of parental income on children's educational and behavioural outcomes are not direct (Sullivan et al. 2013; Ermisch 2008; Reay 2004b; de Graaf et al. 2000), and that cultural and social resources (dispositions, modes of speech, lifestyle choices and tastes) operate to some extent independently of income or wealth to transfer advantage to the next generation. Many of the studies cited in this chapter seek to understand inequality in educational attainment or behavioural adaptation by examining differences in aspects of the childrearing approaches associated with different status groups, typically distinguishing between middle and working class parents². Many authors have commented critically on the ways in which both government policy and institutions such as schools and universities absorb and reflect dominant forms of discourse around appropriate and desirable parenting behaviours, discourses in which middle class norms tend to be valorised.

² At this stage, these class labels are accepted uncritically because they are the currency of the majority of studies which have dealt with the issue of socially patterned childrearing approach. The issue of 'class' is considered more critically in Section 2.4.3 below.

The childrearing approach of middle class mothers³ tends to be characterised in the research literature as one in which social, cultural and economic resources are employed to cultivate the child's skills, interests and networks. The child's individual abilities and talents are regarded as important and worthy of development. Parents tend to believe that individual application and effort will be rewarded with success in terms of educational and employment outcomes. Middle class mothers are likely to have sufficient social capital at their disposal to enable them to tap into a network of influential contacts to support their child, whereas working class mothers may have extensive and close networks, but with more limited influence, or whose influence is limited to particular fields.

In the policy discourse, working class childrearing approaches are 'othered': they are everything that middle class parenting is not. The role of economic circumstances and family social and cultural resources in childrearing is rarely taken into account explicitly in government policy; rather, lower status groups are pathologised as being an '*unknowing uncritical tasteless mass from which the middle classes draw their distinction*' (Reay 2006: 295). Qualitative research with working class mothers in particular has highlighted the overwhelming similarities between mothers regardless of background in terms of concern for their child's wellbeing and hopes for their future (Irwin and Elley 2011; Gillies 2007; Reay 2000). Differences in the economic, cultural and social resources of families, however, can lead to different discourses of entitlement and unequal outcomes for children.

The commonly adopted shorthand of 'middle class' and 'working class' is somewhat unhelpful, since these class labels obscure the considerable variety of income, education and occupation within classes. The concept of status groups may be a more useful one for explaining the relationship between economic and cultural

³ Mothers specifically - rather than parents - are the focus of this thesis because Bourdieu posits that women are 'the predominant markers of taste. It is women's role to convert economic capital into symbolic capital through the display of tastes' (Skeggs 2004: 142, quoted in Vincent and Ball 2007: 1069). In other words, the tastes, attitudes and behaviours which are markers of membership in a status group are - arguably - passed on primarily through the mother.

resources and childrearing. It is not the contention of this author that family economic and cultural resources lead inevitably to a specific set of childrearing behaviours. What does seem plausible however is that certain combinations of family economic and cultural capital render certain childrearing behaviours more effective.

Higher levels of income can buy a better-quality living environment; more nourishing food; more books and a quiet place to read; or activities for children such as swimming or ballet. Income is also likely to be a marker of parents' occupational prestige and educational qualifications. Better educated parents may have access to cultural and linguistic knowledge which can be passed on to their children. Parents of lower status and income may value education and structured enrichment activities just as much as higher status parents, and they may encourage and support their children accordingly. The childrearing approaches of higher and lower status parents are theorised as differing in the extent to which parents implicitly identify with and confidently reproduce the cultural norms which are valorised in policy and in the institutions of the state (Reay 2006 and 2000; Gillies 2005; Lareau 2003).

Material, cultural and social resources are not linearly related: like gambling chips individuals may possess more of one kind of resource and less of the other (Bourdieu 1993). While it would be a welcome start, more effective economic redistribution alone seems unlikely to remove social inequality: the cultural causes of inequality need to be acknowledged and understood if inequality is to be addressed more effectively.

The neighbourhoods where families live, as well as individual families, contribute to the material, cultural and social environment where children grow up. A substantial body of research (see Galster 2010 and Leventhal and Brooks–Gunn 2000 for comprehensive overviews) suggests that there is an association between neighbourhood and children's behavioural development, probably working through the effect of neighbourhood on parenting. In areas with a strong sense of social cohesion, parents are more likely to be supported in presenting norms of behaviour.

This thesis is concerned not just with socially patterned childrearing approaches, but with the ways in which different childrearing approaches might be experienced and made sense of by mothers. Chapter 5 uses a narrative analysis technique to construct biographies for four mothers in the Growing up in Scotland sample. It uses the ‘text’ of the mothers’ survey responses to explore whether a narrative voice can be discerned for each. The aim is to consider how different economic and social circumstances may shape new mothers’ sense of self and their social practices. In constructing these biographies, an attempt is made to understand how some of the social processes involved in the reproduction of inequality may operate at the individual and family level within the GUS sample.

Various forms of capital (discussed in the next section) need to be considered in order to come closer to an understanding of how parents’ material, social and cultural resources combine to bring about the transmission of differential advantages to their children. This chapter therefore presents a consideration of selected literature on cultural capital and children’s educational outcomes, socially patterned childrearing approaches, neighbourhood effects and finally narrative analysis. The theoretical framework on which the thesis is based is presented at the end of this chapter.

2.1 Childrearing and the forms of capital

This section seeks to situate the subsequent discussion of socially patterned childrearing approaches within the context of the considerable research literature on the impact of symbolic capitals - particularly cultural capital - on the reproduction of social inequality. Bourdieu (1986) argued that there are three forms of capital: economic capital, cultural capital and social capital. Capital, according to Bourdieu, takes time to accumulate, can be employed to produce profits and has the capacity to ‘*reproduce itself in identical or expanded form*’ (Bourdieu 1986: 241). Bourdieu argued that social, cultural and symbolic capital, like economic capital, are not equally distributed across members of society. In other words, it is not only differing levels of income and wealth which lead to social inequality: other factors must also

be taken into consideration. Bourdieu is fairly clear that the other forms of capital do not operate independently of economic capital: the various social strategies which individuals employ - he argues - will depend on the relative availability of economic and other forms of capital and the costs of transforming one form of capital into another. For example, within the policy discourse of 'school choice', parents with a lot of economic capital and less cultural capital may choose to send their child to a private school; parents with a lot of cultural capital and less economic capital may seek to gain entry to a non-fee-paying selective school for their child. Parents with limited cultural or economic capital are less likely to be able to exercise any 'choice' over their child's school (Reay 2004a).

Arguably the most fundamental underpinning of Bourdieu's system of thought is the suggestion that dominant status groups erect symbolic barriers to exclude social groups of lower status. Modes of behaviour, speech, lifestyle choices and tastes all act as markers that individuals are members of a dominant status group and serve to limit access to individuals from lower status groups. An important characteristic of these symbolic barriers is their arbitrariness and vagueness: abstraction is used as a means of distinction. Real comfort with the modes of being of a dominant status group is, Bourdieu argues, most easily acquired when an individual is immersed in this culture from birth⁴. There has been much focus in the research literature on the impact of parental cultural capital in particular on children's educational outcomes, possibly because of Bourdieu's assertion that the transmission of

'cultural capital is without doubt the best-hidden form of hereditary transmission of capital, and it therefore receives proportionately greater weight in the system of reproduction strategies, as the direct, visible forms of transmission tend to be more strongly censored and controlled' (Bourdieu 1986: 247).

This factor, twinned with the '*prevailing fallacy*' (Reay 2006: 291) that school education and qualifications are all that is needed to level the social playing field,

⁴ Although these dispositions or modes of speech or behaviour can be learned, it may be more stressful for individuals to maintain them (Reay et al. 2009; Bourdieu and Passeron 1977).

appears to be the driving questions behind many studies into cultural capital and educational inequality.

In broad summary, many of the influential empirical studies of cultural capital (for example, Barone 2006; Sullivan 2001; de Graaf et al. 2000) have sought to do four things: to determine whether cultural capital is indeed distributed unevenly across members of society; to explore the relative influence of economic capital and cultural capital on children's educational attainment; to unpick the mechanisms within cultural capital and to measure the impact of parental cultural capital on children's educational outcomes. Bourdieu's theory of habitus - that status groups display distinct cultural identities - has been criticised in the literature (possibly most influentially by DiMaggio 1982) on the grounds that boundaries between status groups are often weak and changing and, in any case, they cannot be easily identified with class divisions. These criticisms have been countered by authors who assert that class identities are less important than the micro-processes and affective dispositions which govern individuals' interactions with the dominant set of evaluative standards (Reay 2004a; Lareau and Weininger 2003). Much of the divergence in the reported strength of cultural capital as an empirical measure is linked to the divergent ways in which the concept has been operationalised.

Barone (2006) explored the impact of social origins on children's 'demonstrated academic ability' and found that across the 25 Programme for International Student Assessment (PISA⁵) countries, measures of cultural possessions and cultural communication were significantly positively associated with children's literacy and maths scores, controlling for occupational status and parental level of education. He also found that parents' occupation and education shaped their occupational ambitions for their children.

Barone argues that the moderate effects of his cultural capital measures on reading and maths scores support the theory that the concept has limited explanatory use, and

⁵ See <http://www.oecd.org/pisa/> (accessed 28/11/13)

that inequality in educational outcomes cannot be explained entirely by means of cultural capital; rather, economic factors and social ambition may have significant roles to play in determining attainment in school. In this respect he is in agreement with Bourdieu, who was clear that the use of cultural resources depended to some extent on the availability of economic resources. While Barone's study appears to downplay the influence of cultural capital, he does not explicitly consider the effects of using parental education as a measure of social background, when it is also a measure of parents' cultural capital. Had he done so, the influence of cultural capital might have been greater.

Sullivan (2001) and DeGraaf et al. (2000) seek to draw a distinction between cultural participation and cultural knowledge, for example participation in 'high-brow' or beaux arts culture such as visits to museums, galleries or concerts on the one hand and cultural awareness, cultivated through reading and conversation, on the other. DeGraaf et al. (2000) found that reading was associated with academic success, whereas beaux arts participation was not. He and his colleagues inferred from this that reading improved academic attainment through its development of analytical and cognitive skills, and that these were more important in determining academic success than the communication of high status associated with beaux arts participation. Sullivan (2001) found strong support for the theory that parents' cultural capital - in the form of cultural activities - is transmitted in the home to their children, and that a significant proportion of the variance in pupils' cultural knowledge could be accounted for by their reading and (uniquely to Sullivan) television viewing, rather than their participation in beaux arts activities. None of these three studies engage in any depth with the constructed nature of academic achievement itself, and the inability of the education system to reward ability rather than training (Zimdars et al 2009).

All three of the studies cited above concur that cultural capital explains only part of the class-based variation in children's educational outcomes, and that other factors, such as material circumstances and parental encouragement, must account for the remainder of the variation. Other authors, particularly Reay (2009; 2006; 2004a),

Lareau and Weininger (2003) and Skeggs (1997) argue for a broader, more qualitative operationalisation of cultural capital which takes into account the 'affective' aspects of inequality (Reay 2004a: 75), for example the extent to which individuals' interactions with dominant status groups are characterised by entitlement, aggression or timidity. That is also the stance of this author.

Bourdieu's concepts have been dismissed as '*catch-alls*' and as '*too flexible to tell us anything interesting*', (Zimdars et al. 2009: 652), but to try to operationalise complex social processes in entirely deductive ways may be to risk producing analysis which is '*mere artefact*' (Bourdieu 1984: 511). There appears to be a strong argument for a broader conceptualisation of cultural capital which takes account of the affective aspects of habitus. Cultural capital could more usefully be defined as a set of

'micro-interactional processes whereby individuals' strategic use of knowledge, skills and competence comes into contact with institutionalised standards of evaluation' (Lareau and Weininger 2003: 569).

Important to this definition is the notion of the 'evaluative criteria' imposed by dominant groups, and the abstract nature of these criteria which makes it difficult for outsiders to identify and comply with them. It is the belief of this author that Bourdieu intended his concept of cultural capital to be flexible precisely so that it could be applied to different countries at different times. To try to better understand the complexity of the constantly changing, evanescent abstract barriers which dominant status groups erect, this thesis uses a conceptualisation of childrearing approach which includes social capital, cultural capital and the affective aspects of habitus. The thesis focuses on children's behavioural adaptation, rather than their educational attainment, to seek to understand whether the affective aspects of habitus are passed on from mothers to their children.

2.2 'Concerted cultivation' and the 'accomplishment of natural growth'

Lareau (2003) conceptualises this difference as a typology of childrearing with two approaches: 'concerted cultivation' and 'the accomplishment of natural growth'. These childrearing approaches correspond to middle and working class parenting respectively, although Lareau acknowledges that there is considerable variation in childrearing approach within these categories, which she uses to summarise broad trends. 'Concerted cultivation' involves parents consciously encouraging their children to cultivate their talents in a concerted fashion. Structured enrichment activities such as clubs and classes, controlled and supported by parents, often dominate the lives of better-off children. From these experiences and opportunities, a robust sense of entitlement takes root in the children. This sense of entitlement is particularly important in institutional settings such as school and in dealing with authority figures (Lareau 2003: 1).

Working class and poor parents, by contrast, tend to undertake the 'accomplishment of natural growth'. In the 'accomplishment of natural growth', *'children experience long stretches of leisure time, child-initiated play, clear boundaries between adults and children, and daily interactions with kin'* (Lareau 2003: 3). Lareau is clear that there are important advantages to the 'accomplishment of natural growth' approach. In many cases, the approach provides children with the skills they need to cope with the economic and social challenges they face each day. However, Lareau's argument is that 'concerted cultivation' provides children with the tools to engage actively with institutions such as schools, universities and the world of work, to understand implicitly and to meet the evaluative criteria of these institutions and to know how to use the rules of the institution to mould situations to their preferences. As children brought up with 'concerted cultivation' gain an increasing sense of entitlement, children brought up according to the 'accomplishment of natural growth' tend to develop an emerging sense of constraint. Lareau asserts that this leads to the *'transmission of differential advantages to children'* (2003: 5); in other words, to the reproduction of social inequality.

The following sections consider some important aspects of Lareau's childrearing typology: parental effort in cultivating the child's skills and talents; structured enrichment activities such as clubs and classes; personal networks; interventions in institutions and childcare.

Parental effort and structured enrichment activities

Middle class mothers are inclined to view day-to-day routines as learning opportunities: children take part in numerous structured activities from swimming to crafts and yoga. Leisure time should be directed towards self-development. The aim is to cultivate or develop the child so that they are equipped with the social and cultural skills they need to maintain their position in society. In her study of three middle class families, Allatt (1993) notes that middle class families strike a subtle balance between control and encouragement: parents act as facilitators and children are encouraged to reflect on, discuss and choose from a range of parentally-approved options. She contends that privilege is not automatically transmitted; it depends on purposeful activity directed towards the maintenance of class position. Middle class family processes encourage a self-image of individualism and personal responsibility: the freedom offered by access to material resources makes it easier for middle class children to maintain this self-image. Gillies (2005) argues that the UK's policy focus on personal responsibility validates this middle-class conception to the detriment of other parenting approaches:

'individualised understandings of class facilitate a middle class 'discourse of entitlement', which itself becomes a key resource for cementing family privilege' (Gillies 2005: 842).

The middle class approach to parenting is not entirely positive, but it is associated with higher status groups and tends to be valorised by government policy and institutions which embody the dominant discourse. Lareau notes how elements of family life cohere to form a '*cultural logic of childrearing*' (2003: 3): the preferences and behaviours associated with 'concerted cultivation' become the dominant set of cultural repertoires (ibid.: 4) which working class parents may find it difficult or

impossible to emulate. Faced with more immediate economic challenges, working class parents undertake to provide comfort, food, shelter, and other basic support: they are concerned with ensuring the child's physical wellbeing and safety, rather than teaching them to mould interactions to suit their preferences. Working class mothers on the whole do not see themselves as educators but they are proud of their children's achievements (Irwin and Elley 2011; Vincent, Ball and Braun 2010; Lareau 2003); they tend to understand their children's characteristics, skills and talents as being more fixed and static (Vincent and Ball 2007: 1068) than do middle class parents, who see their children's skills as under development (Allatt 1993). Working class mothers may draw protective boundaries between home and school to create a nurturing space where the injuries and injustices of class can be soothed (Gillies 2007).

Working class mothers, therefore, risk being marginalised and alienated by the dominant norm of good parenting. The cultural dominance of middle class parenting approaches can have an undermining effect on working class mothers: *'middle class selves are necessarily defined in relation to working class inferiority'* (Gillies 2007: 77). The UK policy discourse of the Blair government (see Blair 2006; DfES 2005) implied that working class parents must be taught to raise children who are capable of becoming middle class. Poor life outcomes and anti-social behaviour were implicitly blamed on ignorant, uncaring or lazy parenting (Gillies 2007; 2005).

Vincent and Ball (2007) contend that parents' engagement with structured enrichment activities mirrors their approach to consumption in other spheres⁶: an industry has grown up around a representation of the child as a project to be developed, educated and nurtured. Toys, activities and television programmes are presented as educational, intended to improve confidence as well as cognitive, social and motor skills. Much of the informational literature around children's activities stresses the value of the skills learned for later life. Parental tastes in toys and

⁶ Although both Irwin and Elley 2011 and Lareau 2003 note that working class children also take part in structured enrichment activities.

activities become a crucial marker of class and contribute to the transmission of cultural capital in the family. Vincent and Ball argue that

'inherited capital is supplemented by that bought in as activities. These activities contribute to the cultural capital held by and embodied in the family itself and are part of an accrual of class resources' (ibid.).

Personal networks

Parents' personal networks are central to the 'cultivation' of the child. Allatt found that middle class parents offer their own social networks for their children's advantage:

'parents possess social capital vested in the social networks they use on behalf of their children...parents also foster in the young the skills necessary for the creation of their own social capital' (1993: 143).

Allatt is clear that it is not simply having personal networks that counts: it is the quality of those networks and the ability to utilise them to achieve goals, such as work experience with a chosen firm. Children are directly involved in these transactions as part of learning how to create social capital. In contrast, the children of working class parents need to develop a different set of survival skills and learn to negotiate completely different challenges (Gillies 2005).

A number of empirical studies of social networks support the findings of Vincent and colleagues (2010), Gillies (2007 and 2005) and Allatt (1993) to the extent that they find evidence of class-based variation in the way individuals develop, maintain and use social networks. The social networks of higher-status individuals tend to be characterised by a large number of 'loose' or 'weak' ties through which information and other resources can be accessed. In general, all of the actors in the network have access to similar levels of economic and symbolic capital, and so are able to call on the resources of individuals in the network on the implicit understanding that they will be able to reciprocate (Burt 1992). In the context of finding a job, Burt (1992)

and Granovetter (1974) found that high status individuals within a network could act as links or gatekeepers to other, higher-status networks in turn. In contrast, the social networks of lower-status individuals are often characterised by many strong ties, such as those to friends and family. In these networks, there may be many 'redundant' ties, that is, many of the actors in the network may know each other, with the result that each link in the network does not bridge to a new network and the information or resources to which it might afford access (Burt 1992).

Hagan et al. (1996) and Stack (1974) found that families can compensate for a lack of social capital by emphasising family support and therefore still secure good outcomes for their children. Granovetter (1974), Lin et al. (1981) and Burt (1992) found that looser networks can benefit those in disadvantaged communities because they allow individuals to draw on new information and resources from other networks. Where community ties are too strong, this can inhibit social mobility. For mothers, relationships between personal networks and social capital are highly nuanced, with strong personal networks acting as a 'buffer' against the effects of mothers' stress on controlling discipline; whereas limited social support protects against the negative effects of a welfare-based peer group on maternal warmth (Fram 2003).

Personal networks, then, are a key aspect of class-based parenting approaches. Middle class parents cultivate networks through their own and their children's school, university, employment, clubs and activities. Through their networks they have early access to privileged information and resources, but they also have sufficient social capital to be able to utilise their contacts. Working class mothers may be able to access informal support through strong friendship and family networks, but their networks are typically less well adapted to accruing social capital.

Interventions in institutions

Lareau (2003) investigates parents' and children's interventions in institutions as a means of observing the affective aspect of habitus. As part of their lessons in creating and maintaining effective personal networks, middle class children are

encouraged to discourse, reason, articulate their thoughts and to challenge authority. They learn the importance of shaking hands and making eye contact and as such they learn from an early age how to interact comfortably with the institutions of society such as school, university, the law and the medical establishment.

'This sense of entitlement plays an especially important role in institutional settings, where middle-class children learn to question adults and address them as relative equals' (Lareau 2003: 1).

Behaviours which are part of middle class repertoires such as making eye contact may not be appropriate for working class children. In some neighbourhoods, it is not safe to look someone in the eye for too long. In her depth-interviews with working class mothers, Gillies found that working class mothers

'had little to gain and much to lose from emphasising their own or their children's exceptionality as more privileged middle class parents do. Instead, they tended to display a greater relational sense of self, de-centring personal interest and stressing the inter-dependency of a family that often included friends' (Gillies 2007: 144).

Childcare

Current media and policy conceptualisations of the 'good mother' combine nurturing childcare with productive paid employment, but this already difficult balance is almost impossible for working class mothers to achieve (Vincent, Ball and Braun 2010). Employment typically offers more limited autonomy and flexibility with fewer family-friendly policies, making it harder to combine work and family. Further, salaries tend to be lower so working class mothers have more limited resources to buy in reliable, high quality childcare. These mothers cannot win in the eyes of society: if they stay at home to nurture their children they must rely on state support and may be portrayed as 'benefit scroungers'; if they go out to work their wages are unlikely to meet the high cost of full time structured child care and their children run the risk of being perceived as 'latchkey kids' likely to be involved in anti-social behaviour (Nixon et al. 2010; Scottish Government 2009 and 2009b).

Childcare is of central importance and can straddle the divide between statutory and informal services. Vincent and colleagues (2010 and 2004) argue that the bewildering array of choice in education and childcare reinforces inequality. Their depth interviews with 70 families in two London locations found that middle class mothers are more likely to choose childminders to look after their children, whereas working class mothers are more likely to choose nurseries.

'[Middle class] mothers stressed the risk of emotional neglect in nurseries whereas for the working class mothers the primary concern was the possibility of physical neglect or harm from childminders' (Vincent, Braun and Ball 2010: 288).

Possibly because of the realities of their environment, working class mothers showed much lower levels of social trust, particularly of unknown others and of private spaces. Middle class mothers in contrast showed much higher levels of social trust, often engaging unqualified childminders whom they had recruited through online adverts. Mothers' choices about childcare and children's enrichment activities therefore become increasingly strong markers of class.

Summary

The suggested remedies to the reproduction of inequality through parenting approaches form a continuum rather than a dichotomy. Gillies (2007 and 2005) argues that more equal distribution of resources alone can address the '*transmission of differential advantages*' (Lareau's phrase, 2003: 5) between generations. Lareau (2003) and Vincent et al. (2010) however suggest that the structural location of families does not determine childrearing practices. These authors do not deny that having the money to pay for children's activities and membership of exclusive clubs in which to network is central: some working class and poor families in Lareau's US study were directly prevented from pursuing a 'concerted cultivation' approach by lack of resources. However, their contention is that middle class parents' approach to childrearing in the form of personal networks and use of services such as child care and structured enrichment activities compound their existing economic

advantages. Lareau argues that as class positions change, so do parenting practices (2003: 250).

Lareau advocates addressing the problematic nature of class-based childrearing methods themselves:

'[i]t is possible that policies could be developed to help professionals learn how to be more sensitive to differences in cultural practices and how to 'code switch'; they, in turn, might be able to teach children to 'code switch' as they move between home and encounters with institutions' (2003: 255).

Vincent and Ball (2007: 1068) find that Lareau's distinction between 'concerted cultivation' and the 'accomplishment of natural growth' holds good among the families they investigated. Their research was based in London. This thesis uses data from the GUS survey to assess whether this distinction stands in the Scottish context, and to explore further Lareau's suggestion that where class positions are dynamic, parenting approaches may adapt to align with the norms of the new social group.

2.3 Neighbourhood effects: the making of people and places.

Neighbourhood effects research is based on the concept that places influence people, and people influence places. A significant body of research (see Galster 2010 and Leventhal and Brooks–Gunn 2000 for comprehensive overviews) has sought to quantify the relationship between residential environment and individual outcomes, and to explain the causal mechanisms that are at work behind those relationships, such as role model effects, social contagion or social sorting. An understanding of the structural and psychological mechanisms which underpin neighbourhood effects – particularly in deprived neighbourhoods – can inform policies aimed at improving residential mobility and reducing social inequality.

Neighbourhood effects have been defined as '*social interactions that occur in close proximity to an individual's residence, and that affect social and economic wellbeing*' (Oreopoulos 2008: 238). This section reviews the literature examining two relationships of interest: the influence of neighbourhood on parenting; and the influence of neighbourhood on children's development. The section concludes that much of the influence of neighbourhood on young children's development is mediated through parents.

It is worth pausing at this point to touch on the empirical challenges facing neighbourhood effects research⁷. There are limitations to both qualitative and quantitative research designs which seek to describe and explain neighbourhood effects. At the heart of the problem is the question of whether and how neighbourhood level social processes can have an effect which is more than the sum of individual-level factors. A number of qualitative studies have used in-depth interviews and observation (for example Gillies 2007, 2005; Atkinson and Kintrea 2004; Vincent, Ball and Kemp 2004; Lareau 2003) to explore how a set of factors, including neighbourhood, influence childrearing approach. While these studies provide persuasive accounts of some of the mechanisms of neighbourhood effects, their findings cannot be generalised to a wider population. Neither can qualitative studies measure the relative contribution of a number of factors which are hypothesised to contribute to the 'neighbourhood effect'. On the other hand, Galster (2010) points out that many qualitative studies have been remarkably consistent in their findings, suggesting that certain causal pathways are more likely – this is certainly the case with the studies referred to above.

While the findings from quantitative studies may be applied to populations beyond the study population, there are considerable difficulties in reliably isolating and measuring group effects. In fact, Galster suggests that

⁷ The theoretical challenges are considered in the theoretical framework in section 2.4.7.

'most empirical conclusions regarding neighbourhood effect mechanisms should be treated as provisional at best' (2010: 6).

The main weakness of conclusions based on quantitative analysis is selection bias or omitted variable bias (Galster 2010; Oreopoulos 2008; Leventhal and Brooks-Gunn 2000). Models may not be able to account for individuals who choose to live in neighbourhoods where they do not share the characteristics of other residents, for example middle class students who choose to live in more deprived, inner city areas. Furthermore, an individual's ability to limit contact with people from his or her neighbourhood, or to choose a 'community of interest' not based on residential area is likely to be greater for the better off (Teasdale and Silver 2009; Laurence 2009), so that the magnitude of neighbourhood effects may be different for different social groups. To try to address this empirical challenge, Galster (2010) proposes a 'dosage-response' model for neighbourhood effects studies: research designs should seek to measure the frequency, duration, intensity and consistency of the 'dosage' of neighbourhood contact. Others have chosen to measure threshold or non-linear effects of neighbourhoods on children's development (Crane 1991), however this approach is vulnerable to the mis-specification of the threshold measures.

Whatever the research approach taken, omitted variable bias may indicate neighbourhood effects where none exist, or may underestimate effects which are present. Some argue that neighbourhood effect size diminishes dramatically once more variables are included in the model (Oreopoulos 2008). Conversely, Leventhal and Brooks-Gunn (2000) argue that neighbourhood effects may be under-reported in some cases because of the restricted range of neighbourhoods examined in most studies (these tend to be deprived neighbourhoods) and because of the weak theoretical link between the neighbourhood demographic composition measures often used (e.g. percentage ethnic minority, percentage in receipt of social support) and the mechanisms of interest.

The following review of – mainly quantitative – studies of the relationship between neighbourhood and a) childrearing approach and b) children's development should

be read with these caveats in mind: qualitative research suggests that a number of mechanisms bring about neighbourhood effects, but quantitative studies have not always been consistent in establishing the magnitude of the effects or relative contribution of various explanatory factors.

Neighbourhood and childrearing approach

Studies examining the relationship between neighbourhoods and childrearing approach tend to draw on theories of social capital (Portes 1998; Bourdieu 1986 and 1977) and social networks (Burt 1992; Lin 1981; Granovetter 1974; Stack 1974). Those living in deprived neighbourhoods may have more limited personal networks because they lack the financial resources and the confidence to travel to ‘territories’ beyond their immediate neighbourhood. Parents living in these areas may limit their networks and keep themselves to themselves to avoid exposing their children to anti-social behaviour (Atkinson and Kintrea 2004). Bradshaw et al. (2009), analysing data from the Growing up in Scotland survey, also found that more disadvantaged circumstances are associated with less satisfactory networks. Parents in lower-income households, those in socially-rented accommodation, and those living in areas of high deprivation were less likely to have satisfactory networks than were parents in higher income households, owner-occupied accommodation or living in less deprived areas. Bradshaw et al. (2009) found that individual characteristics were more strongly associated with personal networks than were neighbourhood characteristics; however their study does not use multilevel models⁸ but rather includes area characteristics as independent variables.

Neighbourhood resources, personal networks, and neighbourhood satisfaction appear to be closely linked, but different studies offer competing causal pathways to explain these links. In Scotland, Bradshaw et al. (2009) suggest that personal networks may be prior to service use. They found that parents who report more satisfactory

⁸ Multilevel models portion out the variance in a measure of interest, for example children’s reading ability, and estimate how much of the variation can be explained by factors at the individual level, such as ability in maths, and at the cluster level, such as the average reading ability of the peer group. See Hox (2002) for a full discussion.

networks engage in more activities with their child, and are more open to seeking help and support as well as being more likely to do so than parents with less satisfactory networks. This suggests that those who are better connected are more likely to find out about activities and resources and are more likely to use public services to their advantage. Weak personal networks are also associated with lower neighbourhood satisfaction. Baum, Arthurson and Rickson (2010) find that lower levels of neighbourhood satisfaction are associated with being younger, having poorer social contacts or social networks, living in public housing and being born in a non-English-speaking country. Conversely, living in a high-income household appears to have a positive impact on the likelihood of neighbourhood satisfaction.

On the other hand, there is evidence to suggest that the availability of neighbourhood resources is prior to personal networks. Resources such as libraries, childcare centres and safe public areas may offer opportunities for personal networks to develop by providing spaces where parents can become familiar with others in their community. In her research with residents of the HOPE VI programme in the US, Curley explains that

'neighbourhoods devoid of shared public spaces and institutions may leave residents with few opportunities to observe each other ..., and as a result, residents may be less likely to trust their neighbours' (Curley 2010: 94).

The availability of good public services and residents' degree of choice over the neighbourhood where they live are also associated with greater neighbourhood satisfaction (Permentier, van Ham and Bolt 2011).

Intergenerational closure (that is, close bonds between children, parents and grandparents) may contribute to a child's neighbourhood context: stronger links with grandparents can help to support parents in enforcing norms and expectations for their children. In Scotland, Bradshaw et al. (2009) found that older mothers tended to have more satisfactory *friendship* networks, while younger mothers tended to have more satisfactory *family* networks, possibly due to older mothers having less contact

with grandparents. Areas of greater residential stability are more likely to benefit from intergenerational closure, higher levels of exchange between generations and consequently greater levels of social control (Sampson, Morenoff and Earls 1999). Areas of concentrated affluence tend to facilitate social control, with residents being more likely to intervene on behalf of children either to protect or discipline.

Neighbourhood effects and children's behavioural outcomes

Much of the neighbourhood effects literature examining children's development focuses on the mediating effects of parenting on collective socialisation, social cohesion and control. The argument that community influences parenting which in turn influences children's outcomes is underpinned by the theories of collective socialisation (Shaw and McKay 1942) and collective efficacy (Sampson, Raudenbush and Earls 1997). These theories posit that where there are high levels of trust and shared values in a community, members of the community are more likely to monitor and enforce conforming behaviour. This combination of factors is likely to help parents to 'socialise' their children, that is, to provide consistent examples of accepted norms of behaviour.

More recent research argues that disadvantage erodes the social capital available to parents to promote self-control behaviours in their children and that policy needs to be directed not just at the individual, but also at the family and community levels. Pratt et al. (2004) find that adolescents' self control in the USA is predicted longitudinally by parental socialisation and adverse neighbourhood conditions. Teasdale and Silver (2009) find that US neighbourhoods influence adolescents' behaviour by creating environments in which the socialisation activities of parents may be more or less successful. Within the context of a study on urban violence, Morenoff, Sampson and Raudenbush (2001) also found that family and friendship networks promote the collective efficacy of local residents in achieving social control. Silk et al. (2004) contend that positive social features of a neighbourhood may serve a protective role for children, moderating the influence of hostility within the family environment. They suggest that children in socially cohesive

neighbourhoods are exposed to alternative models of how to behave, how to regulate emotions, and how to connect with other adults and children.

In summary, these studies suggest that neighbourhood does influence parents' personal networks and use of services, but not necessarily in a straightforward way. There does not appear to be any consensus in the literature on the mechanisms through which neighbourhood context influences these aspects of childrearing practice. It is likely that affluent individuals are attracted to move to more prestigious neighbourhoods: they are also more likely to have the financial resources to do so. Affluent neighbourhoods with access to good quality community resources and services may facilitate friendship networks with weak ties. On the other hand, affluent parents with substantial social capital at their disposal may already be adept at creating and maintaining resource rich personal networks and may be less reliant on services. Hastings' (2009) case studies of 12 UK neighbourhoods suggest that – particularly in disadvantaged neighbourhoods – failure to provide service levels proportionate with need can mean that environmental problems are perpetuated and the relationship between residents and service providers breaks down, with the result that disadvantage is intensified.

Parenting behaviours, then, seem to be the most likely mediating mechanism through which neighbourhoods exert influence on young children's development. School aged children and adolescents are more likely to be subject to peer group influences and role model effects than preschoolers. Studies into the effects of neighbourhood on child development suggest that living in deprived neighbourhoods is stressful for parents. Factors such as inadequate access to child care; fear of crime; a built environment which is of poor quality or dangerous; or a lack of space can increase parental stress and encourage parents to adopt stricter discipline and more restrictive parenting styles (Simmons et al. 1996; Earls, McGuire and Shay 1994; Furstenberg 1993). Community violence and maternal stress have been found to adversely affect children's behavioural development (Linares et al. 2001; Elder et al. 1995). While some parents living in deprived circumstances limit their children's freedom in order to protect them from the risks of their immediate locale, others seek resources

outside the immediate area to enhance their children's development (Jarrett 1997; Elder et al. 1995).

The number of studies based specifically on the relationship between neighbourhood and young children's – as opposed to adolescents' – behavioural development is relatively small. Odgers et al. (2009) find that neighbourhood level collective efficacy is a robust predictor of children's antisocial behaviour at school entry, but only in deprived neighbourhoods. Colder et al. (2006) demonstrate further evidence that poor neighbourhood quality is associated with children's behaviour problems at age six, however this is mediated by certain character traits displayed in infancy.

Among three year old children in the US Infant Health and Development Program, a low percentage of managerial and professional workers in the neighbourhood was associated with higher amounts of reported externalising and internalising behaviour problems (Brooks-Gunn et al. 1993). Among children ages five to six, the presence of low-income neighbours (as compared with middle-income neighbours) or neighbours with low socio-economic status was associated with increased amounts of reported externalizing behaviour problems, while evidence from the National Longitudinal Survey of Youth (Child Supplement) suggests that residing in a neighbourhood with more socioeconomic resources is positively associated with increased amounts of reported internalizing problems among young children (Chase-Lansdale et al., 1997).

2.4 Theoretical Framework

Three concepts central to this thesis are those of equality, social class and habitus. The thesis also considers how habitus - as an interplay of choice and necessity - may be experienced and made sense of by the individual. For this reason, the concepts of self and identity are also important theoretical underpinnings to the analysis. These concepts are now explored in turn.

2.4.1 Equality

The concept of equality is not unproblematic philosophically, empirically or politically. There appears to be a philosophical consensus – certainly in modern Western thought – that each human life has equal worth, but there is less certainty over how to use this principle of moral equality as the basis for a system of redistributive justice (Gosepath 2011). In modern democracies all citizens over the age of 18 have an equal voice in the form of their vote⁹. But beyond this, what role should the state have in establishing and maintaining equality? Should societies strive for absolute equality of resources such as money, land and power? Kurt Vonnegut's *Harrison Bergeron* is a satire of a society where absolute equality is enforced. Such 'extreme' equality may cause more suffering than it eradicates. More moderately, the purpose of pursuing equality may be to promote wellbeing and minimise suffering, but individuals are likely to have different subjective perceptions of wellbeing and suffering. A useful conceptualisation of equality for the purposes of this thesis, and one which synthesises resource-based and welfare-based approaches, is that of Equal Opportunity for Welfare (Arneson 1989). In this conception of equality, each individual is faced with an equal range of opportunities to achieve or satisfy his or her preferences, and equal ability to negotiate those choices successfully¹⁰. This is the ideal of equality which this study holds as its goal.

2.4.2 Habitus

Bourdieu's concept of habitus is a means of addressing the question of whether social structural forces or individual agency – or what mix of the two – have primacy

⁹ This point is arguable as requirements for voter registration in the UK disadvantage those without a stable address such as the homeless or refugees. Those serving time in prison may also have their right to vote withdrawn.

¹⁰ Arneson's conception of equality of opportunity for welfare takes account of differential symbolic capital as well as personal responsibility: the range of options for welfare (or wellbeing or fulfilment) must not be contingent on an individual's ability to negotiate them. However, an individual may make better or worse choices for fulfilling his welfare opportunities (Arneson 1989: 86).

in shaping social reproduction or social change. Reay (2004b) describes habitus as a set of matrices which demarcate the extent of choices available to any one individual:

'[c]hoices are bounded by the framework of opportunities and constraints the person finds himself/herself in, her external circumstances. However, within Bourdieu's theoretical framework he/she is also circumscribed by an internalized framework that makes some possibilities inconceivable, others improbable and a limited range acceptable' (2004:435).

It is beyond the scope of this thesis to engage in detail with ontological questions about the nature of habitus: whether individuals reproduce social structures unconsciously and to what extent social structures are constructed (see Nash 1999, Baert 1998 and King 2000 for a discussion). Bourdieu made it clear in his writing that the concept of habitus was fluid and that it was meant for empirical study.

Of central importance to the study of childrearing approach as a prime site of the reproduction of social inequality is the role of habitus in transferring cultural practices from parents to children. Bourdieu (1977) argued that young children learn a set of cultural repertoires from their parents (including language use, manners, preferences and orientations) which act as markers of status. Children learn to indicate their membership in particular status groups, which in turn helps them to make more rapid progress in institutions (Henderson 2013: 543). This thesis therefore considers children's behaviour as a way of investigating whether it is possible to observe the process of the reproduction of class dispositions by the time children start primary school.

2.4.3 Social class

As noted in the introduction to this chapter, the terms 'working class' and 'middle class' have been adopted in this thesis because these are the terms used in the vast majority of studies of socially patterned childrearing approach, and in Lareau's

(2003) study in particular. There are well-documented difficulties in translating definitions of working and middle class from the US to the UK (Crompton 2008), although the UK-based studies of childrearing approach have negotiated these difficulties effectively (see in particular Henderson 2013; Irwin and Elley 2011; Vincent et al. 2010, who make explicit reference to Lareau's work).

A key difficulty lies in effectively defining and measuring social class. In the UK, the distinction between working- and middle class has its roots in the historical distinction between serfs and landowners, and later between those working in manufacturing occupations and professional occupations. Social class has therefore traditionally been measured by occupation (Crompton 2008).

A number of commentators have noted that the commonly used statistical measure of occupational classification, the Office of National Statistics Socio-economic Classification scale (ONS-SEC) may not adequately reflect the variety of occupations which exist in 21st Century society, and the expansion of the middle class: there are far fewer manufacturing jobs and far more service industry jobs now than was the case in the 19th and 20th Centuries (Rose et al. 2005; Pevalin and David 2002). Neither does the ONS-SEC fully reflect the increased participation of women in the labour market since the Second World War, since women too are less likely to work in manufacturing jobs and are more likely to work in service jobs. Neither is the ONS-SEC sensitive to the part-time working patterns of women: those in routine and manual occupations are more likely to work part time than are women in professional and managerial occupations (Crompton and Lyonette 2010).

In addition, occupational measures of class cannot capture how individuals may self-define as belonging to one 'class' or another. The child of two professional parents who works on a farm may be classified as working class (semi-skilled) according to an occupational classification scheme, yet may consider himself to be middle class and may display many of the tastes, attitudes and behaviours of his middle class parents (Crompton 2008; Archer and Francis 2006). Definitions of class which are

based on occupation cannot take into account the inherited class dispositions - and the inherited income and wealth - which may be at an individual's disposal.

Lareau (2003) adopted a binary class approach of working and middle class precisely because she wanted to demonstrate that 'even' in the US, a country which was founded on the principle of equality and where the American Dream is still an important part of cultural identity (Lareau 2003), childrearing approaches and children's outcomes could be classified according to social status. This thesis follows Lareau's terminology, while accepting that a measure of social status defined according to occupational classification is limited. The constructed biographies discussed in Chapter 5 find that class labels based on occupational classification cannot capture the variation of experience within class; nor can they fully reflect the tastes, attitudes and lifestyles which Bourdieu argued are the most influential markers of class (Bourdieu 1984).

The analysis presented in Chapters 6, 7 and 8 finds that childrearing approach in the GUS sample does not coalesce along traditional class lines. Four childrearing approaches were observed which were not systematically associated with markers of class such as occupation, education and income. While 'class' may be a useful shorthand for describing mothers of higher or lower social status, occupational measures of class are limited when the aim is to better understand the tastes and lifestyles which act as the markers of habitus.

2.4.4 Self and Identity

The following sections discuss the theories of self and identity; memory; narrative and biography on which the constructed biographies presented in Chapter 5 are based. Literary and sociological thinkers have developed theories of narrative which consider the ways in which self, memory and identity both inform and are formed by narrative (Sartre 2003; Derrida 2001; Foucault 1998). Until the self knows itself, it cannot tell itself. The memory is not an objective camera, blankly recording the

process of a life; it is a lens trained on events which are salient to the self, focussing and refocusing them to be recognisable to the self's self-image. Smith refers to

'Greenwald's (1980) notion of the self as a personal historian which as well as selecting self-relevant and self-enhancing information, also revises autobiographical memory to conform with the current self-concept'. (Smith 1994: 373)

This process of refocusing the interpretation of reality to better align with the self-image can be seen in the psychological phenomenon of cognitive dissonance reduction (Festinger 1962).



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The frame of meaning and the interpretation of cause and effect which an individual calls into service in a narrative may not be the only valid interpretation of those events or of that life. Even as a person's self-image changes over time, so the narrative of past events can be re-written, a process explored by the pioneers of narrative therapy such as – arguably - Freud and much more recently White and Epston (1990). In a similar vein, Uprichard and Byrne point out that assertions about the validity of knowledge elicited through interviews dismiss the strong (later) version of Bourdieu's notion of habitus as *'a collection of systems of structuring structures'* which are always inaccessible to human perception. They argue instead for a weak version of habitus in which much of social action is unconscious, not reflected upon, but can ultimately be accessed through a systematic process of research and investigation (Uprichard and Byrne 2006: 669).

Feminist theories of identity and the self explore the challenge for women of finding a ‘real’ self – not simply a persona which conforms to gender stereotypes – and of dealing with a fragmented or changing self (Griffiths 1995). Women define themselves not just in relation to their material conditions and the expectations of their social group, but they must also seek, within their self-image, to embody the virtues of modern Western culture (reason, independence) alongside the expected ‘feminine’ characteristics (feeling, self-sacrifice).

‘It is precisely this dilemma – the conflict between compassion and autonomy, between virtue and power – which the feminine voice struggles to resolve in its effort to reclaim the self...’ (Gilligan 1993: 71).

It is through the prism of these theories of self and identity that the biographies presented in Chapter 5 are constructed. Indeed, many of the GUS mothers’ responses bespeak the dilemma of accommodating the self to the expectations of different groups.

The desire to attach oneself to and to be accepted by attractive social groups is an important influence on the formation of identity. For GUS mothers, these groups may be mother and baby groups, networks of friends, family or employers. Episodes of belonging or rejection can be crucial to the ongoing construction of identity (Griffiths 1995), which can in turn influence mothers’ adoption of concerted cultivation or natural growth strategies. As parenting strategies are met with acceptance or success within powerful social groups or institutions, confidence and feelings of entitlement are reinforced; as parenting strategies fail or are met with resistance, feelings of alienation and powerlessness are reinforced (Lareau 2003). When a person is rejected, they construct a new identity which accommodates this rejection and leads to identification with other social groups. This process is particularly important for the GUS mothers who need to incorporate their new role as carer into their previous self-image. Motherhood may bring women into contact

with institutions with which they had only limited – and not always positive - previous experience.

Social constructionist and postmodern theories of identity (Derrida 2001, Foucault 1998) tend to present the self as a purely relative entity, denying the existence of a sovereign self altogether. Rationalist thinkers present the self as a unified whole which is the source of autonomy and control (Descartes 2008, Kant 2007). The biographies constructed here aim to steer a middle course between these schools of thought, drawing out the ways in which the individual deploys psychological and social strategies within the constraints of structure to mould situations to her preferences.

2.4.5 Memory and (re)constructing the self

The activities of memory and narrative are closely aligned. For the GUS mothers spotlighted in Chapter 5, narrative construction takes place at the point of remembered feelings, attitudes and beliefs (*'When you found out you were pregnant with [the survey child], how did you feel?'*). The survey interviews are carried out once a year and therefore inevitably rely on memory. Memory creates a sense of distance and perspective from which to understand and interpret the events of our lives:

'...[t]he process of self-understanding is itself fundamentally recollective, taken here in the sense of gathering together again those dimensions of selfhood that had heretofore gone unarticulated or been scattered, dispersed or lost' (Freeman 1993: 29).

The narrative activity of memory can produce poetic interpretations of life events which not only convey the meaning which an experience held for the individual but also imprint the events with a more psychologically acceptable or coherent chain of cause and effect (Kendall and Murray 2005). The pursuit of social goals requires that the individual holds in mind not only her self, but also how she is perceived by

others (Trower et al. 1978). The GUS dataset provides some limited insight into the way mothers believe that they are perceived by friends.

2.4.6 Narrative and biography

‘The strength of the narrative is that it substitutes meaning for the straightforward copy of the events recounted. It follows that the absence of a narrative is an absence of meaning itself’ (Guhathakurta 2002: 909 quoted in Uprichard and Byrne 2006: 666).

The way that an individual ‘performs’ narrative reveals much about the way he constructs himself. If there is no self, there can be no narrative: the self makes and remakes itself through narrative, and biography is a form of third party narrative. This section explores ideas about knowing the self, constructing the self and constructing others – through the process of writing a biography. The self and self-image or identity are intrinsically linked both to material structural constraints and to social position. The self defines itself in relation to others. It follows that individual identities are at least partially informed by access to capital - both symbolic and economic - since this access defines status and power in relation to dominant groups. Therefore, examining the ways in which a self may be constructed – through the interpretive process of constructing a biography – can enhance our understanding of how structure, society and self interact to influence the formation and activation of symbolic capital in the form of GUS mothers’ personal networks, attitudes to authority and use of child-related services.

Within the GUS dataset, first person narratives are not available: the ‘text’ is neither an oral account, nor a written story, but rather a series of pieces of chronologically ordered information about material circumstances, behaviours, attitudes and feelings which reflect a section of the mothers’ life histories from the birth of their child until that child starts pre-school. From this text, third person narratives are interpreted–biographies. Denzin defines biography as the

'studied use and collection of personal-life documents, stories, accounts and narratives which describe turning-point moments in people's lives' (1989: 13).

The biographical method seeks to join and record lived experience and conscious existence – the outer and inner life.

There are two central dilemmas within the theory of interpretive biography: firstly, if the selfhood of the subject is relative and constantly changing, how can it be known to others? Secondly, how can the interpretive account of a third person researcher or narrator be anything other than an account coloured by the narrator's experience and cultural references? This section briefly explores some of the assumptions and arguments surrounding the biographical method, and posits that the narrative analysis carried out in Chapter 5 on the texts of the four GUS mothers' lives produces valid interpretive biographies. This is because the accounts are open about the fact that the interpretation presented is merely the most feasible of a number of possible interpretations. It is legitimate to imagine and interpret the texts of others' lives because – although we can never directly access lived experience as felt by others – as human beings living in the same society we share the same perceptive faculties and a similar understanding of how the social world works.

A central challenge of biographical writing is how to locate and interpret the subject. For some thinkers (Derrida 2001, Foucault 1998), biographies are mere literary constructions which can at best hope to stumble across traces of the 'real' person being written about. Denzin (1989) argues that the act of writing a biography creates and constructs the subject in much the same way as the subject creates and constructs herself in storytelling practices. Any narrative or biography relies on the implied presence of an audience, an audience with a shared framework of cultural and social understanding.

'There are only interpretations, and all that people tell are self-stories. The sociologist's task cannot be one of determining the difference between true and false stories...The sociologist's task... involves studying how persons and their groups

culturally produce warrantable self- and personal experience stories which accord with that group's standards of truth' (Denzin 1989: 77).

In other words, the self and the construction of the self are inseparable: all that narrative interpretation can do, be it self-narrative or biography, is to present a self which makes sense to those who understand the social and cultural context being written about.

The self may not be infinitely relative; the fact that we can misunderstand the physical world and misinterpret social reality suggests that there are at least some objective anchor points to which interpretation of the self can be bound. The self synthesises sensory information about material conditions and social expectations embodied in the world, but the self can also fail to understand or misinterpret what is there (Freeman 1993). The 'facts' of the GUS participants' life histories may be interpreted in a number of different ways, but the text remains a series of events, decisions and expressed attitudes and beliefs. The biographies constructed and presented in Chapter 5 are not merely fictions, because they are based on real life courses. Although the biographies interpret – rather than present authoritatively - conceptions of selfhood and identity,

'we interpret and explain in ways that are more or less consonant with the particular reality we inhabit' (Freeman 1993: 139).

All human lives, and the biographies constructed around them, belong in some sense to the social context that produced them. As well as being studies in personal identity, belief, action and power, biographies are also mirrors for the political, social and cultural institutions of the time (Denzin 1989). Freeman describes the process of biographical interpretation as one where the researcher starts reading for general meaning, then as he reads on he assesses whether the interpretation he has formed can be borne out by what he reads next. Gadamer (1979) argues that

'it is precisely our own anticipatory understanding of things that is needed [rather than empirical detachment and objectivity], our own belongingness to a world, a tradition we already know about'' (quoted in Freeman 1993: 140).

The stories we tell – including biographies – may indeed partly be a function of who is doing the telling, but biography is an intersection between narrative and history. The interpretation of the subjects' motivation and identity can reveal not only things about the subjects but can also highlight current discourses and norms in society. Although interpretation of the GUS mothers' life-histories presented in Chapter 5 will be informed by theory and academic literature, it will also reflect the researcher's own experience of the same social world, at the same time, in the same place.

2.4.7 Neighbourhood effects

The neighbourhood effects literature cited in Section 2.4 suggests that residential locale does have some influence on children's life outcomes, probably mediated through its effects on childrearing approach. This section considers theoretically plausible explanations for exactly how people are influenced by their physical and social environments: how can an individual's neighbourhood influence their beliefs and practices in relation to childrearing: *'how can one demonstrate that social values and norms exert external constraints upon the acting and thinking of individuals if they only exist in the minds of individuals?'* (Blau 1960: 179 quoted in Burbank 1995: 166).

Burbank (1995) suggests that individuals are influenced by their social environments in two ways: firstly by learning from others, and secondly by learning from one's own observations. The social structure of a neighbourhood may influence the people available for social interaction: interactions with people in the neighbourhood may create and maintain personal networks directly, but those interactions may also affect an individual's cognition of the networking preferences of others.

2.5 Research questions and hypotheses.

Research Questions

1. Do mothers in Scotland adopt socially patterned childrearing approaches akin to Lareau's 'concerted cultivation' and the 'accomplishment of natural growth'?
2. What is the relationship between neighbourhood context and childrearing approach for mothers in Scotland?
3. Can childrearing approach change over time? What are the reasons for a change?
4. To what extent can a mother's childrearing approach explain variation in her child's behaviour at entry to primary school?

Hypotheses

- a) Lareau's typology of 'concerted cultivation' and 'accomplishment of natural growth' childrearing approaches can be observed in a sample of Scottish mothers.
- b) In the GUS sample, mothers with higher income, more education, and higher occupational status tend to adopt the 'concerted cultivation' approach.
- c) GUS mothers' childrearing approach is associated with their subjective assessment of the level of collective efficacy in their neighbourhood and with objective measures of neighbourhood deprivation. Mothers living in areas with low collective efficacy and high deprivation are more likely to adopt a childrearing approach akin to the 'accomplishment of natural growth'.
- d) When a range of socio-economic factors are controlled for, subjective assessment of neighbourhood collective efficacy and objectively measured neighbourhood deprivation are not significantly associated with childrearing approach.

e) GUS mothers whose social status improves between Sweep 2 and Sweep 4 are more likely than other mothers to adopt a childrearing approach akin to ‘concerted cultivation’.

f) Children whose mothers adopt a childrearing approach akin to the ‘accomplishment of natural growth’ are more likely to display conduct problems at entry to primary school. The children of mothers whose childrearing approach approximates ‘concerted cultivation’ are less likely to display conduct problems and are more likely to display pro-social behaviours.

3 Policy and the policy gap: parenting, neighbourhoods and the early years

So far this thesis has considered academic research into childrearing approach and neighbourhood and their role in the reproduction of social inequality. This chapter explores how childrearing approach was framed within the policy discourse of the Scottish and UK governments between 2005 and 2008. The following sections consider some of the central policy initiatives covering parenting, the early years and neighbourhoods. Neighbourhood and parenting are frequently linked both in neighbourhood effects research (Atkinson and Kintrea 2004; Sampson, Raudenbush and Earls 1997; Simmons et al. 1996; Earls, McGuire and Shay 1994; Brooks-Gunn et al. 1993; Furstenberg 1993) and in research into childrearing approach (Vincent 2010; Vincent, Braun and Ball 2010; Gillies 2007; Lareau 2003): in both areas of investigation there is some evidence to suggest that neighbourhood has an impact on parenting styles, which can in turn have an impact on children's outcomes. In policy terms, the neighbourhood element to parenting gained increasing focus in the period 2005-2008, as did the policy discourse of parents as pivotal actors within communities. Parenting support was often targeted in certain neighbourhoods, as was the case with SureStart centres and the Family Nurse Partnership (Nixon et al. 2010; Rutter 2006). 'Poor parenting' was presented as a cause of the anti-social behaviour which was described as a 'blight' on communities (Blair 2006). Government increasingly emphasised the responsibilities of parents as contributing to 'strong, resilient communities'¹¹: the role of parents was to raise a new generation of active citizens (Scottish Government 2008).

¹¹ 'Strong, resilient communities' were one of the Scottish Government's National Outcomes post-2007: <http://www.scotland.gov.uk/About/Performance/scotPerforms/outcomes/communities> (accessed 01/06/13)

Two key contrasts are explored in this chapter: differences between the policy discourse in Scotland and England, and differences in the policy discourse in Scotland before and after the election of the SNP government in 2007.

Different narratives of policy are evident in government policy documents and academic analysis of policy. In this chapter, policy is understood as socially constructed. In the traditional account, however, policy is the coherent problem-solving framework which governments develop and then implement in order to fulfil their contract with the people - often as set out in election manifestos (Colebatch 2006). However, 'government' is not one body politic of unified understanding and purpose; several groups of people may be involved in creating policy, including people with expertise in the problem to be solved, civil servants who advise elected members of government and the elected politicians themselves. Different groups of people involved in making policy have different understandings of the problem to be solved and different interests in achieving a solution. In this narrative, policy becomes an exercise in social construction (Rose and Miller 1992) which is concerned with the generation of meaning. Policy identifies situations as problematic or as needing to be addressed and in doing so suggests a way of understanding the reasons for the problem and how the problem should be solved. In practice, policy can be a means of finding plausible reasons for action (Majone 1992).

Following Rose and Miller (1992), this chapter considers policy to be socially constructed: both elected politicians and those who advise them are likely to share implicit knowledge of the dominant set of norms and values and bring these to bear in their framing of policy problems and solutions. This is discussed further in the next section.

3.1 Overview: policy, habitus and power

Policy is an important bridge between social context and material circumstances: it affects us materially through taxation, benefits, provision of services and

management of the built environment, but policy also reflects and projects the attitudes, beliefs and behaviours of those who hold political power, acting in a way which will be viewed as appropriate and acceptable by voters and public opinion as presented in or moulded by the media. There is a reciprocal relationship between policy and material circumstances: policy shapes our material circumstances, but its priorities are also (on the whole) predicated by the material circumstances that exist within its jurisdiction. However, policy is also a product of the cultural norms and social practices - the habitus - of the people who make policy: it is the embodiment of the world view of the powerful (Churchill and Clarke 2009; Winter 2009). Policy is not 'blind', not judgement-neutral; policies proposed by one administration will be designed to solve a problem which has been framed in a certain way, based on that administration's assessment of material need and priorities, and on normative assumptions about the desirability of certain outcomes over others. Whatever the political administration, Bourdieu would argue that policies have the effect of maintaining and strengthening the power base of dominant groups (Bourdieu 1984; Bourdieu and Passeron 1977).

There is rarely a perfect relationship between policy intention, policy implementation and social outcomes. This rather opaque area is fertile ground for the investigation of social reproduction: instances where policy uptake fails to meet expectation or where policies have unintended consequences may be instances where the social dispositions of those who made the policy diverge from the dispositions of those for whom the policy was made. This is the 'policy gap' to which the title of this chapter refers. The analysis presented in chapters 5 to 8 of this thesis offers evidence to support a discussion of the gap between policy intention and policy impact in the areas of parenting, early years and neighbourhood policies in Scotland.

In the UK between 2005 and 2008, benefits and services designed to tackle early years inequalities included cash benefits such as Income Support and Child Benefit and benefits awarded through the tax system such as Child Tax Credits (Bradshaw 2007). Early years policy sought to support children's cognitive development via an enhanced entitlement to free pre-school education. Support and advice were also

made available to parents. There are challenges in harmonising the policy interventions administered by health, education or social work professionals and the informal support offered by family, friends and community. Although these policy interventions are designed to address disadvantage at all levels of the individual's ecology, they do not always work together effectively. This chapter advances the argument that the disconnect between formal services and informal support arises because policy struggles to link psychological and structural explanations of inequality. In other words, because it is difficult to design policies that can account for the social reproduction brought about through habitus, policy may be missing an important - though complex - set of levers for reducing social inequality.

In the UK, a number of areas of policy are reserved to the Westminster Parliament while others are devolved to the Scottish Parliament. In the time frame considered by this thesis, 2005-2008, taxation, social security and employment law were reserved areas, while education, health, local government and social work were devolved. This chapter examines differences in policy discourse between the UK and Scottish governments, and between the Scottish Government pre- and post-2007. Comparing Scottish policy with UK policy over the 2005-2008 period is a useful exercise in spotlighting how changing political currents influence policy discourse: in 2007, the Labour-Liberal Democrat coalition was replaced in Scotland by the Scottish National Party, whereas in the rest of the UK a Labour administration was in power throughout the four years.

This chapter first compares the UK and Scottish governments' approach to parenting policy; it then considers early years policy and finally neighbourhood policy.

3.2 UK and Scottish Government policy on parenting and the early years

In 2006, the Council of Europe made a recommendation¹² to its member states on policy to support positive parenting which emphasised the responsibilities of parents but also urged states to guarantee access to social rights such as adequate income to fulfil the parenting role. The recommendation highlighted the need to consider children living in situations of social exclusion within their social context. The recommendation takes account of children and parents in a holistic context of material, social and cultural circumstances, yet family policy in the UK between 2005 and 2008 remained remarkably fragmented: there were changes to cash payments, tax allowances, services for families and employment leaves, but these failed to result in a policy package which supported families in a seamless way (Lloyd 2008). Daly (2010) argues that this is because New Labour ideology saw the family as an economic agent, but also as serving important functions in relation to social cohesion and social order. Although sometimes quite far-reaching family policy reforms were made at the UK level, the philosophical orientation of family policy had many points of reference with the preceding Conservative administration (Daly 2010), particularly in relation to parenting and childcare, as will be discussed more fully in the following sections.

Tables 3.1 and 3.2 are not exhaustive; they summarise the most relevant parenting and early years policy developments in the UK and Scotland between 2005 and 2008. One of the most important policy developments at the UK level was the reform of childcare and early learning services with the introduction of free childcare places. Child Tax Credit and Working Tax Credit had been introduced in 2003; payments were made to the main carer, which by 2005 was estimated to have increased mothers' incomes by about 10% (Campbell 2008: 462). Labour market activation was another plank of family policy under New Labour: the government

¹² See

<https://wcd.coe.int/ViewDoc.jsp?id=1073507&BackColorInternet=9999CC&BackColorIntranet=FFB55&BackColorLogged=FFAC75> (accessed 01/06/13).

Table 3.1 Policy grid for UK and English Parenting and Early Years policies, 2005-2008

Year	Parenting	Early Years	Employment	Redistributive
2006 (Labour administration)	<ul style="list-style-type: none"> -Parent Support Advisors piloted in 20 LAs -Family Intervention Projects (50 projects) -Parenting Early Intervention Projects pilots (18 LAs) -Education and Inspections Act and Police and Justice Act extend scope of parenting orders and parenting contracts 	<p>Childcare Act: free integrated care and education for the most disadvantaged 2 year olds in 32 LAs. Act also introduced the Early Years Foundation Stage, a statutory framework of welfare requirements and learning and development requirements for children aged 18 months to 5 years.</p>		
2007 (Labour administration)	<ul style="list-style-type: none"> -Family Nurse Partnership pilots (10 LAs) -Respect Parenting Practitioners (77 LAs) -All LAs must have a parenting commissioner and parenting support strategy as part of Children and Young People's Plan. 		Extension of paid maternity leave to 9 months	Welfare Reform Act: from 2008, lone parents required to seek work when youngest child aged 12+
2008 (Labour administration)	<ul style="list-style-type: none"> -National Academy for Parenting Practitioners established -DCSF <i>Parent Know How</i> launched -Two parenting experts to be appointed in all LAs -Parent Support Advisers in all LAs 			

Table 3.1 reproduced and adapted from Churchill and Clarke 2009: 40-42. LA = Local Authority. Policies or legislation which apply to the whole of the UK, including Scotland, are shaded.

Table 3.2 suggests that there were few policy developments in Scotland during the four years considered by this thesis compared with the rest of the UK, but this would be to oversimplify the case. The period 2005-2008 in Scotland marks a move away from the UK Labour government's Respect¹³ agenda - a carrot and stick approach - towards an arguably more traditionally Scottish discourse of 'welfare paternalism' (Nixon et al. 2010: 319) promoting support and advice for parents without the threat of sanctions and with ever-decreasing emphasis on parents' 'responsibilities'. Over the next four years, the Scottish Government launched its Play Talk Read campaign (2009), national guidance on Pre-Birth to Three (2010) and the National Parenting Strategy was introduced in 2012.

Table 3.2 Policy grid for Scottish Parenting and Early Years policies, 2005-2008

Year	Parenting	Early Years
2005 (Scottish Labour-Liberal Democrat coalition)	Parenting Orders introduced in Scotland for the first time (a provision of the Antisocial Behaviour (Scotland) Act 2004)	
2006 (Scottish Labour-Liberal Democrat coalition)		Getting it Right for Every Child
2008 (Scottish National Party)	These Are Our Bairns: A guide for community planning partnerships on being a good corporate parent (responsibilities of statutory services to Looked After children)	-Equally Well: report of the ministerial task force on health inequalities -Achieving Our Potential -Early Years and Early Intervention Framework -The Early Years Framework

In this table, the 'Employment' and 'Redistributive' columns from Table 2.1 have been excluded as these areas of policy are reserved to Westminster.

¹³ Respect Action Plan, Home Office 2006

had set a target of 70% of lone parents in employment (Daly 2010: 436) and in 2008 a compulsory element was introduced to the policy, with lone parents being required to seek employment once their child reached the age of 12 (or 7 from 2010). In tandem with an extension of paid maternity leave, from 2003 parents of children aged 6 or under had the right to request flexible working and have their request considered seriously. A large number of parenting programmes were also introduced, often targeted towards parents who were considered most deviant, but also seeking to preserve a universal element in order to legitimise state intervention in this area.

Parenting became an increasingly central theme of government policy in the New Labour government of the late 1990s, and in the newly devolved Scotland after 1999 (Wasoff and Hill 2002). In Scotland, the policy discourse saw the state as the facilitator of socially responsible citizens who would in due course contribute to the Scottish economy¹⁴. Children were increasingly seen as individuals rather than merely components of a family¹⁵. As children moved out of the shadow of the family to become the subjects of policy themselves, this gave policy makers greater scope to draw the previously private realm of parenting into their area of influence.

At the UK level, services to support parenting typically targeted ‘families at risk’ and ‘families who pose a risk to others’ (Churchill and Clarke 2009; Winter 2009). In the first case, policy interventions such as the Family Nurse Partnership focussed on encouraging health-promoting behaviours, secure attachment and maternal labour-market participation. In the second case, interventions such as parenting orders or compulsory parenting classes were designed to reduce youth anti-social behaviour by encouraging parents to develop more authoritative parenting styles.

¹⁴ Sam Galbraith, Scottish Parliament Official Report 17th November 1999.

¹⁵ A discussion of the UK and Scottish government’s definition of ‘the family’ is beyond the scope of this chapter but Kay et al. (2010), Gillies (2005) and Wasoff and Hill (2002) provide detailed commentary.

The policy analysis which follows was based on a systematic review of Scottish government policy documents relating to parenting, the early years and neighbourhoods between 2005 and 2008, and on a review of academic literature on these policy fields in Scotland and the UK.

3.2.1 Parenting policy - a top-down approach?

During 2005-2008, the UK Labour government presented parenting as one of the routes through which the problem of inherited inequality could be addressed at its source (DfES¹⁶ 2005: 4), mainly through raising educational attainment among the disadvantaged. Parenting was presented in conflicting ways: on the one hand the role of parents was respected and families were regarded as the ‘bedrock of society’ (DfES 2005: 3), but on the other hand policy attributed social inequality and social breakdown at least in part to ‘poor parenting’ (ibid. and Blair 2006). Parenting policy across the UK was characterised by a ‘support and sanctions’ model. Families would be offered support and advice, but those who were seen as ‘problem families’ (Blair 2006) would be subject to sanctions if they failed to cooperate with the intervention programme or failed to modify their behaviour. The Antisocial Behaviour Act 2003 and the Respect agenda were two important drivers of parenting interventions, introducing punitive legislation on anti-social behaviour twinned with measures to address the underlying causes of ‘bad’ behaviour.

A number of commentators (Nixon et al. 2010; Vincent, Ball and Braun 2010; Churchill and Clarke 2009; Winter 2009; Walters and Woodward 2007; Gillies 2005b) have noted that the discourse underlying the ‘support and sanctions’ policy model is cast specifically from the point of view of the powerful. According to Bourdieu, the social practices of individuals in society are moulded by their material and social circumstances, practices which can change as these circumstances change; but the Westminster and pre-2007 Edinburgh governments’ policy discourse on parenting implied a moral judgement of the ‘poor’ as being marginalised or excluded

¹⁶ Department for Education and Skills

from mainstream values and aspirations (Gillies 2005b). The policy interventions designed to support parenting appeared to be based on a politically and socially constructed category applied to any childrearing approaches which diverged from the middle class model of ‘concerted cultivation’. The support offered was not designed to meet the parenting needs of service users, but rather to encourage conformation to mainstream ideals of ‘good parenting’.

In this way, parenting policy focussed on individual personal attributes and behaviours rather than structural inequalities. Parents were seen as somehow *‘responsible for passing on inequality to their children’* (Winter 2009: 1240). The label of ‘poor parenting’ was arguably implicitly reserved for certain - more disadvantaged - social groups only: professional parents who worked long hours and were frequently absent from their children or who were alcohol dependent were not brought into the ambit of the definition. Parenting orders and the sanctions available to enforce them (family curfews, withdrawal of secure social housing) were clearly not designed to tackle the anti-social behaviour of advantaged children. Policy referred to the ‘intergenerational cycle of disadvantage’ (Scottish Government 2008d) but did not refer explicitly to the advantages of inherited wealth or the intergenerational cycle of advantage.

In practice, the ‘support and sanctions’ policy model was implemented in part through Family Intervention Projects (FIPs), intense programmes of ‘support’ for whole families across employment, health, housing and parenting. Families would be allocated a key worker whose role was to:

‘manage or ‘grip’ the family’s problems, co-ordinate the delivery of services and use a combination of support and sanction to motivate the family to change their behaviour.’¹⁷.

¹⁷ Home Office 2010

<http://webarchive.nationalarchives.gov.uk/20100405140447/asb.homeoffice.gov.uk/members/article.aspx?id=8678> (accessed 04/04/13)

Nixon et al. (2010) point out that these FIPs were modelled on the Dundee Families Project, also an intense family support project. The policy was ‘borrowed’ from Scotland to England, but the underlying discourse was lost in translation. The English FIPs were explicit about sanctions from an early stage, insisting that families sign a contract (termed a ‘behaviour support agreement’) with their key worker which set out the behaviour which was expected of them. In practice, key workers only mentioned sanctions where they felt it would not undermine the relationship of trust they had established with families (ibid.).

Ministerial rhetoric in Scotland was also strong in its support of sanctions (Nixon et al. 2010), but both the design of family intervention policy and the practice on the ground was more strongly social welfarist than the FIPs in England: although the Anti-Social Behaviour (Scotland) Act 2004 made provision for Parenting Orders, none has ever been issued in Scotland¹⁸. The design of the Scottish project did include sanctions, but these were hardly ever referred to with participants and never used in practice (Nixon et al. 2010: 319). The parenting policy discourse north and south of the border appears to have been influenced by both administrations’ desire to be presented as taking a firm stance against anti-social behaviour in the media and public opinion, but to varying degrees. The fact that practitioner behaviour in implementing the policy diverged from policy intention suggests that this may be an instance where the assumptions and beliefs of policy makers are at odds with the material and social circumstances of those whom the policy was intended to ‘grip’.

This section has focussed on the parenting policy discourse designed to tackle ‘families who pose a risk of harm’; in England, ‘softer’ policy interventions were also used for ‘families at risk’, such as the ‘Triple P Positive Parenting Program’ and the Family Nurse Partnership, but these programmes were not piloted in Scotland until 2010.

¹⁸ Scottish Parliament written answer number S3W-36579.

3.2.2 Early Years policy - from school-readiness to wellbeing

Two important developments in UK family policy between 2005 and 2008 were the expansion of childcare provision and early years education. This section explores some of the discourses underlying childcare policy and early years education in Scotland and the rest of the UK.

Childcare

The Lisbon Strategy had set a target of 60% for female labour market participation (Lewis 2006) and the UK government followed the EU lead by setting a target of 80%. As a necessary adjunct to this, the UK government substantially increased the number of childcare places available, and offered 12 ½ hours of free childcare per week to all three and four year olds. This limited provision addressed only one aspect of an integrated family policy package and left a considerable policy gap: paid maternity leave ended after nine months so mothers who chose to return to work after that time either had to buy formal childcare or rely on informal support. Childcare policy was implicitly based on a traditional male breadwinner model: the part-time nature of guaranteed provision reflects the *'liberal view of the appropriate (limited) role of public provision in the lives of young children and of families generally'* (Daly 2010: 440).

The mixed economy of childcare provision which sprung up as a result of the expansion of childcare places is arguably a further example of how the dominant model is adopted in policy. Middle class mothers working full time or with highly-paid husbands might be more likely to make use of private childcare providers while working class mothers might be more reluctant to give up the caregiving role in exchange for low-paid and low status work (Vincent, Braun and Ball 2010).

Early Years Education

In England and Wales, the approach to early years education could be regarded as an attempt to level the playing field in terms of children's cognitive development. The Early Years Foundation Stage was directed mainly towards monitoring and

supporting children's personal, social and cognitive development in childcare settings outside the home. Parents appear in the policy landscape as carers to children and partners to childcare professionals, but their childrearing approach is not explicitly included as one of a range of factors which influence 'The Unique Child'¹⁹. Indeed, children from birth to five are represented as blank slates: the Early Years Foundation Stage:

*'is intended to play a key role in improving the life chances of all children, regardless of their family circumstances by setting a clear expectation of the care, learning and development they will receive, whatever the setting they attend'*²⁰.

The discourse underlying this policy appears to be one which emphasises the importance of cognitive development, school readiness and educational attainment for reducing social inequality. One of the aims of the Early Years Foundation Stage (EYFS) is to reduce inequalities in children's home learning environments through early care and education programmes provided and quality-assured by the state. The EYFS incorporated a 'progress check' at age two to identify any problems or developmental delays which could then be addressed before the child started school.

In Scotland, early years education was not addressed in as structured a way as was the case in England and Wales until the introduction of the Curriculum for Excellence in 2010, although the framework document was published in 2004 (Scottish Executive 2004b). Scottish policy discourse was more explicit about the holistic benefits of quality childcare: improved health and educational achievement, a sense of social responsibility and (later) the ability to contribute to Scotland's economy. There is therefore a rather nuanced difference in the discourse of early years education in Scotland and England pre-2007: in England, early years education

¹⁹ 'The Unique Child' is a phrase taken from the EYFS to refer to each child participating in the programme.

²⁰ Department for Education and Skills 2006, <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/SESCO6-18> (accessed 04/04/13)

was seen as a means of reducing inequalities in home learning environment and therefore of reducing inequality in educational attainment and - implicitly - in choice of job and contribution to the economy. In Scotland, the end goal of policy was the same, but the discourse was more explicit in taking account of factors outside of education in reducing social inequality.

The Scottish government's welfare paternalistic approach (Nixon et al. 2010) is particularly evident in the 'Getting it Right for Every Child' initiative. Getting it Right for Every Child (GIRFEC) shared many similarities with the 'Every Child Matters' agenda in England: it emphasised the importance of prevention and early intervention and the approach encouraged service providers to work together to assess and meet the needs of children, based on a range of risk and resilience factors. There is little difference between the letter of GIRFEC and 'Every Child Matters', but the Scottish Executive, and later the Scottish Government, appeared to adopt the policy with greater zeal and used GIRFEC as a central idea around which other strands of education and children's policy were woven.

The GIRFEC approach underpinned the SNP government's Early Years Framework, published in 2008. The Early Years Framework (EYF) was an aspirational document which set out the case for support at an early stage in children's lives to '*maximise positive opportunities for children*' (Scottish Government 2008: 1). The EYF still retained echoes of the rights and responsibilities approach adopted by the Westminster government and pre-2007 Scottish Executive: the document still spoke of '*helping children, families and communities to secure outcomes for themselves*' (ibid.: 4), and support for parenting skills and intensive family programmes were still key features of early years services. In spite of these similarities, there was a change of emphasis in the EYF such that some of the elements of 'childrearing approach' measured in this thesis were given greater prominence. The EYF acknowledged the contribution of health, housing, parents' informal support networks and children's home environment in shaping later outcomes. The EYF bore witness to an attempt to take account of some of the less tangible causes of social inequality: it discussed improving parents' confidence and children's resilience (ibid.: 11). In this way the

EYF took a more holistic approach than early years policies which had gone before, with greater emphasis on inputs as well as outcomes.

The Scandinavian countries with which the Scottish government wished to align itself²¹ reflected many of the EU's policies associated with the 'social investment state'. As part of its 'Europe 2020 Strategy' to reduce poverty, the European Commission provided guidance to member states on ways to modernise their welfare systems away from redistributive financial transfers towards investment in services such as education, training and child care (Cantillon 2011). In its policy discourse, Scottish early years policy arguably took the social investment model to an extreme and placed children at the centre to the exclusion of parents. Children's rights are emphasised but the rights of parents are largely ignored: the EYF makes no mention of parental leave or policies to support income security during the early years of parenthood. Much Scottish policy discourse focuses on children as future parents, future earners and future voters: early intervention in the lives of children is seen as having both social and economic advantages (Scottish Government 2008).

Scotland's orientation towards the social investment state is arguably one of the political drivers for the commissioning and funding of Growing up in Scotland. The Millennium Cohort Study has the same design and many of the same survey questions: analysis of the MCS Scottish sub-sample would, in theory, yield the same results. Yet investment in a longitudinal cohort study for Scotland signalled the Scottish government's commitment to long term strategies and investment in the future.

The responsibility for realising the vision set out in the EYF fell to Local Authorities. The implications of this, and the turn to community empowerment, are considered in the next section.

²¹ Alex Salmond, Scottish Parliament Official Report 23rd May 2007

<http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=4725> (accessed 04/06/13)

3.3 Neighbourhood policy and the double-edged sword of community empowerment.

During 2005-2008, neighbourhood policy and parenting policy in Scotland and the rest of the UK became increasingly linked through a discourse of personal and community responsibility. Fostering stronger, more cohesive communities was seen as a way of rebuilding social capital in areas where *'the old civic and family bonds ha[d] been loosened'* (Blair 2006). The argument ran (DCLG 2008 and Scottish Government 2008) that stronger communities which cooperated to plan and deliver their own local services would have better collective efficacy and informal social control, such that local residents would reinforce - rather than undermine - the childrearing efforts of parents. The Scottish Government saw *'meeting the needs of children and families as also involving a strong community dimension where there is a sense of collective responsibility for the welfare of young children'* (Scottish Government 2008b: 39). In this way, communities would support parents, who would in turn nurture the active citizens of the future.

An unstable compromise is evident between individual and structural explanations for inequality in the Scottish Government's *Purpose*²², *Strategic Objectives*²³ and *National Outcomes*²⁴. Although policy acknowledged the importance of the economic causes of inequality, much of the language used suggested an individualist approach, where education and personal resilience were prized. Few policies addressed the more complex mechanisms through which social inequality is reproduced. The Scottish Government's overarching *Purpose* is to 'promote sustainable economic growth'. In each policy area, the social welfare arguments for promoting equality and wellbeing compete with the economic arguments for increased effectiveness and productivity. In Scotland, the SNP government structured its approach under five *Strategic Objectives*. The 'Smarter' *Strategic*

²² <http://www.scotland.gov.uk/About>

²³ <http://www.scotland.gov.uk/About/Performance/Strategic-Objectives>

²⁴ <http://www.scotland.gov.uk/About/Performance/scotPerforms/outcome>

Objective highlights tension in the discourse between promoting social cohesion and promoting a middle class norm of education:

*'a smarter Scotland will also underpin greater social and economic cohesion, by ensuring that education plays a key role in building stronger and more resilient families and communities'*²⁵.

Colebatch and Degeling (1986) describe how policy makers develop different ways of thinking about and discussing policy in different contexts: there are 'sacred' accounts which are presented for voter and media consumption and 'profane' accounts reserved for policy makers and advisors. The move to greater community involvement was arguably an example of this: the 'sacred' account was presented as the state 'empowering' citizens to take control, exercise choice and shape their own communities in a way which was more flexible and responsive than central government could be. In the 'profane' account, central government could shift responsibility for public service delivery onto local government, communities and voluntary organisations (Ellison 2011).

Scotland: double devolution

The move to community empowerment was more pronounced in Scotland, where a form of 'double devolution' took place. After devolution in 1999, the SNP government further devolved the delivery of public services to Local Authorities in 2007. The minority SNP government sought to avoid legislation - and the potential for proposed Bills being defeated in the Scottish Parliament - and focussed instead on policy initiatives which were likely to gain cross-party support. The SNP adopted a campaign of intensive consultation with stakeholders, and the Scottish Cabinet began holding meetings in venues across Scotland as a means of fostering greater engagement in the political process. The rhetoric of community empowerment served two ends in Scotland: it provided Scottish Ministers with 'evidence' about the views of local communities on a range of issues which constituency MSPs from

²⁵ Scottish Government website, accessed 29/01/10

opposing parties would be ill-placed to contradict, and - as in England - it also shifted the focus of responsibility for public service delivery away from central government.

The Scottish Government signed a concordat with all 32 Scottish Local Authorities in 2007. The concordat essentially devolved all responsibility for spending on public services to Local Authorities. Ring fencing was removed from Local Authority funding and Single Outcome Agreements (SOAs) were created between each council and the Scottish Government in which Local Authorities set out their priorities and showed how they would contribute to the 15 *National Outcomes*²⁶. In practice, this meant that there was a gulf between central government policy intention and the will or ability of local government to deliver it. Services to support parenting and the early years were often funded and delivered differently in different Scottish Local Authorities (Geddes et al. 2011; Jung et al. 2010; Sinclair 2008).

A further example of the tension between central government policy and local implementation was the Scottish government's pledge to reduce class sizes in Primary 1. As part of its 2007 election manifesto, the SNP had promised to reduce class sizes in the first three years of primary school to 18 but the legal maximum remained at 30. Therefore local authorities were unable to reduce class sizes in popular schools where parents used placing request legislation to gain entry for their children. Indeed, opposition to the SNP's class size policy from a number of local authorities, most notably Glasgow City Council, led the then Cabinet Secretary for Education Fiona Hyslop to raise the prospect of taking state schools from local government's responsibility altogether (Arnott 2012: 8).

Both north and south of the border community engagement policies were based on a perceived failure of 'welfare liberalism' (Wallace 2009) to respond quickly and flexibly to the emerging needs of different communities. Policy advocated local solutions for local problems, often delivered through grass-roots voluntary

²⁶ See <http://www.scotland.gov.uk/About/Performance/scotPerforms/outcomes> (accessed 16/04/13).

organisations. While in England this mixed economy of service provision was couched in the language of 'choice' (DCLG 2008), in Scotland Local Authorities were still seen as the main providers of local services (Danson and Whittam 2011). However, there are (at least) two important weaknesses in neighbourhood policy that seeks to devolve greater responsibility to individuals and communities: firstly, *'the rewards of greater community empowerment may not be equally available to all citizens'* (Ellison 2011: 56) and secondly, local residents may not agree with each other, local government or national government about priorities for action or the form which local services should take. There is a danger that greater community empowerment creates a situation where the powerful groups in a neighbourhood mould services to suit their preferences in a participatory microcosm of the democratic state. The most vulnerable people or those living with many stressors may not have the capacity (either in terms of time, money or emotional reserves) to contribute to community-wide initiatives, policy planning or implementation. The very people whose views are least well represented among elected politicians and government officials may be further marginalised. Although the 2008 DCLG policy document *'Communities in Control: Real People, Real Power'* made passing reference to the need to offer extra support to enable people living in disadvantaged communities to take up volunteering opportunities (DCLG 2008: 3), this concern did not form a central part of the policy and vulnerable groups were termed the 'hard to reach' (ibid.: 80), possibly implying that these individuals were somehow beyond the usual sphere of understanding of policy makers.

A number of commentators (Danson and Whittam 2011; Ellison 2011; Williams 2011; Wallace 2009) have observed that neighbourhood policy failed to address adequately the fact that 'communities' may not always be united or unanimous. 'Community empowerment' rests on a conceptualisation of communities as homogeneous groups with similar aims and expectations, yet the policy discourse places moral expectations on individuals themselves (Danson and Whittam 2011). Neighbourhood policy therefore appears to be another case - like parenting policy - where those in power make policy based on their own habitus, on their own

normatively defined model of what ‘*strong, resilient and supportive communities*’²⁷ should be.

3.4 Summary: discrepancies between policy intention and implementation

The inference from Scottish Government discourse on parenting, early years and neighbourhood policies is that policy alone cannot solve the problem of inequality; informal structures such as social networks also have a role to play. Scotland is an interesting context in which to explore social reproduction, because Scotland has operationalised the UK-wide rhetoric on local decision-making in a fairly systematic and far-reaching way. Scottish society is among the most unequal in the UK, with some of the lowest and highest life expectancies (Scottish Government 2008). The OECD concluded in 2007 that educational inequality in Scotland was among the worst in Europe (OECD 2007). And yet, Scotland’s national identity has arguably been more strongly social welfarist than the rest of the UK: the ‘contracting in’ of private education and health services tends to take place on a smaller scale than in the rest of the UK (Independent Schools Council 2008; Robson 2007). Political administrations at the UK and devolved levels struggled to reconcile policies based on different world views: the sociological view which sought to address the structural causes of inequality and the psychological or individual view, which emphasised the primacy of choice and responsibility. Scotland is an example of an instance where a strong historical commitment to social justice has been harnessed to an apparently ‘laissez-faire’ agenda on the part of government: it may therefore be a useful case study in how habitus and policy interact to reproduce or change social structures. By examining the links between childrearing approach, neighbourhood and children’s behaviour, this thesis offers further empirical evidence to contribute to an understanding of how informal structures work alongside policy to reduce or perpetuate social inequality.

²⁷ Scottish Government National Outcome 11.

4 Measuring aspects of ‘concerted cultivation’ and ‘accomplishment of natural growth’ approaches to childrearing

Chapter 2 explored theories of childrearing approach as a prime site of social reproduction and discussed empirical studies which were based on those theories; Chapter 3 discussed UK and Scottish policy discourse around childrearing. This chapter considers how habitus and childrearing approach can be measured. It introduces the Growing up in Scotland dataset and describes the analysis methods and the survey questions which are used in the investigation presented in Chapters 5, 6, 7 and 8.

4.1 Recap: the centrality of childrearing approach to inequality

Chapter 2 argued that it is not only different levels of education, occupation and income which are at the root of social inequality in the UK; powerful groups in a society create other barriers to equality of opportunity in order to maintain their status. People of high status tend to have lifestyles, attitudes and beliefs which align them with dominant discourses in a society. People of lower status may feel excluded from these discourses. The type and extent of an individual’s social network, cultural tastes and lifestyle choices may all be markers of status or class (Vincent and Ball 2007; Burt 1995; Bourdieu 1984). This thesis argues that these attitudes are transmitted from parents to children through childrearing approach.

As discussed in the previous chapter, childrearing approach and parenting assumed an increasingly central role in UK and Scottish policy in the period 2005-2008. However, the relationship between redistributive social policies and social inequality is not always straightforward: policy can struggle to take account of the social, rather than structural, barriers to equality which individuals may face. A better understanding of how social structures are reflected and reiterated through

childrearing may offer some guidance on other types of policy intervention to reduce social inequality.

4.2 The challenges of measuring habitus and childrearing approach

This thesis uses Bourdieu's concept of habitus as its theoretical underpinning and as the framework through which the analysis is constructed and interpreted. The concept of habitus provides a framework for explaining how inequality persists from one generation to the next. Habitus also provides an explanation of the process of social change. Bourdieu described habitus as akin to the performance of a musical score, while the social structure is the musical score itself (1977:78). Individual material circumstances and family life may be different, but the social structures which inform that individual's dispositions are likely to be similar. This is the basis on which this thesis groups mothers together to analyse their childrearing approach: the social structure of higher or lower status is arguably the most basic continuum along which habitus - and childrearing approach - is organised.

The problem with habitus is that Bourdieu himself resisted strict definitions of the concept and as a result commentators have interpreted habitus in a range of ways, from structuralist and deterministic (King 2000) to constructivist and phenomenological (Reay 2004b; Nash 1999). If a concept is ill-defined, surely it is more difficult to operationalise it, observe it and measure its effects in social life? According to Bourdieu (1990), not necessarily. Bourdieu intended (1990) the concept of habitus to be used as a method: *'first and foremost habitus is a conceptual tool to be used in empirical research rather than an idea to be debated in texts'* (Reay 2004b: 439).

This will be taken as licence to adopt one of Bourdieu's earlier conceptualisations of habitus²⁸ in which habitus aims to circumvent the agent-structure debate (Bourdieu 1977). In this model, objective reality - an individual's material circumstances -

²⁸ See King 2000 for an explanation of how Bourdieu's definitions of habitus changed in his writing.

constrains agents' choices and activities, but there is also a social reality which makes some choices seem more or less realistic, some actions seem more appropriate than others. This is a form of internalised and embodied social structure. But the social structure is not embodied and reproduced in a deterministic way; individuals can consciously adapt their practices to new social circumstances, bringing about change. This thesis aims to observe instances where individuals change their social practice - in the form of childrearing approach - and to consider some of the factors which may be associated with change. If childrearing approach is one manifestation of habitus generated as a response to material, cultural and social circumstances, then it may be helpful to understand what factors are associated with, for example, a transition from the 'accomplishment of natural growth' childrearing approach to 'concerted cultivation'.

Each individual's habitus is manifested in their social practice. The individual's habitus is also a distillation of the underlying social structures of his or her family and cultural group. In this case, habitus is used as a way of explaining why a mother adopts her specific childrearing approach. Childrearing approach is one aspect of social practice, a manifestation of one aspect of habitus. However, this thesis is not an ethnography as many of Bourdieu's studies were; its aim is to look at childrearing approaches in aggregate; to explore changes in childrearing approach over time; and to consider the effect of childrearing approach on children's behavioural development at entry to primary school.

This presents an epistemological problem. Habitus as a concept can be applied to the individual as well as the collective. This provides flexibility but also challenge: how can habitus - which is formed from individual material and family circumstances as well as through the influences of the social group - be explored effectively in the aggregate, as must be the case with statistical analysis? Nash has criticised the 'statistical mode' of class reproduction, in which a whole social class adopts a habitus based on the average or aggregated material circumstances of that class. In the 'statistical mode', individual trajectories within a class are seen as a matter of chance (Nash 1999: 178). Although this thesis uses statistical analytical methods,

the analysis is not underpinned by Nash's 'statistical mode' of understanding social reproduction. Instead, this thesis is based on the 'specific' habitus model (ibid.), which proposes that social practices are generated by each individual's habitus: there will be as many different forms of habitus and life trajectories within a group of people as there are individuals within that group. Each of the nearly 4,000 mothers whose survey data are used in the analysis will have slightly different material and social circumstances and a slightly different childrearing approach. However, this thesis works on the assumption that individuals' childrearing approaches - and their habitus - may be similar in theoretically salient ways and that it is legitimate to group mothers who adopt similar childrearing approaches together.

4.3 How childrearing approach has been measured in previous research

The operationalisation of childrearing approach adopted in this thesis is closely based on Annette Lareau's (2003) typology of 'concerted cultivation' and the 'accomplishment of natural growth' as described in Chapter 2.

Lareau used close ethnographic observation of 88 children and their families over a period of months. The other qualitative studies on which this thesis draws (Irwin and Elley 2011; Vincent 2010, Vincent and Ball 2007, Gillies 2007 and 2005, Allatt 1993) used depth interviews with small samples of families (ranging from three families in the case of Allatt to 70 families in the case of Vincent).

The quantitative studies which have explored aspects of childrearing approach, habitus and early child development (for example Henderson 2013; Sullivan et al. 2013; Kiernan and Mensah 2011; Bodovski 2010; Ermisch 2008; Sullivan 2003 and 2001; Nash 2002) have used large probability samples which are representative of the population on which they are based. These studies have tended to use statistical regression on individual variables or groups of variables, for example measures of parenting style.

Although this thesis also uses quantitative data, the analytical approach adopted is somewhat different to that adopted in the quantitative studies cited above. These studies have tended to examine whether variation in children's cognitive ability or behavioural test scores is associated with variation in parental characteristics (such as age, income, education) and behaviours (such as authoritative parenting or concerted cultivation). Typically, these studies create a measure for 'parenting style' or 'childrearing approach' based on adding together individuals' scores on a number of questionnaire items, for example the more books in the household, or the more visits to libraries, museums or concerts, the higher the score on that individual's 'concerted cultivation' measure. Although the studies cited above take account of measurement error in their models, this thesis treats measurement error slightly differently by conceptualising childrearing approach as a latent variable which cannot be measured directly because not every aspect of childrearing approach can be defined and recorded. Instead, a number of survey questions which record mothers' attitudes to authority figures, their personal networks and their children's structured enrichment activities are taken together and are assumed to be (some of) the social practices which constitute childrearing approach in the round. The analysis considers the association between a mother's *most likely* childrearing approach and her child's behaviour scores, therefore acknowledging the imperfect nature of the statistical measures.

This thesis uses both inductive and deductive analysis methods to explore whether the 'concerted cultivation' and 'accomplishment of natural growth' childrearing approaches can be identified in a sample of mothers in Scotland, or whether the different social structures in Scotland manifest themselves in different forms of habitus and different childrearing approaches. Chapter 5 presents constructed biographies for individual mothers in the Growing up in Scotland survey and uses inductive reasoning as its basis. Chapter 6 also works inductively, exploring the childrearing approaches of mothers in the survey, looking for similarities between them and describing the types of childrearing approach. Chapters 7 and 8 take a deductive approach, testing theories and findings from qualitative studies.

Bourdieu was clear about the limitations of secondary data analysis (1984). For 'Distinction', he used a mixture of secondary data analysis and ethnographic observation. He argued that survey questions may be misinterpreted or interpreted differently by each respondent., and that the most disadvantaged people in society are likely to be so far outside the dominant discourse that a survey instrument designed from within that discourse will be as good as useless. Survey questions may record the frequency of gallery visits but not the type of exhibition or the comportment of the individual during that visit. Bourdieu warned that statistical surveys, by denying the importance of our 'sense of the game'²⁹, (Bourdieu 1990: 66), colluded in the perpetuation of the dominant discourse and hierarchies of social power: they perpetuated our 'misrecognition of arbitrariness' (Bourdieu 1977: 167). He argued that statistical surveys could result in analysis that was mere artefact.

This is indeed a serious case to answer. The findings of this thesis are in some ways only one side of a coin. To avoid 'genteel abstraction' (Bourdieu 1984: 511) Bourdieu might argue that this study should be teamed with an ethnographic study, or at least depth interviews. However, in its defence, even Bourdieu acknowledges that what social surveys lack in precision and detail, they make up for in 'systematicity' (1984: 508). In many ways, this thesis borrows and builds on the precision and detail gained from the qualitative studies that have gone before and asks whether the findings can be observed in a large probability sample of mothers. It also asks whether the social structures which gave rise to the findings of the qualitative studies carried out in England (Irwin and Elley 2011; Vincent 2010, Vincent and Ball 2007, Gillies 2007 and 2005, Allatt 1993) are similar - and result in similar patterns of childrearing approach - in Scotland.

²⁹ Our 'sense of the game', according to Bourdieu in the 'Logic of Practice' (1990), is our in-built sense of the 'rules' of life. Everything in the game seems to make sense and to be directed to a judicious outcome. Our attitude to the social game, as opposed to a game of sport, is like learning our mother tongue compared to learning a foreign language: it is instinctive and we accept its sense unquestioningly.

Finally, in defence of the analytical approach taken in this thesis, Bourdieu also recognised the value of our ‘sense of the game’ (Bourdieu 1990: 110), what we might dismiss as anecdote or opinion. The personal experience of the researcher as a social subject is a valuable resource. This is significant and it is worth quoting Bourdieu in full:

‘[t]he unwritten rule that only data collected in socially defined scientific conditions, i.e., by prepared questioning and observation, may enter into scientific construction....had to be transgressed in order to bring up all the information which the sociologist, as a social subject, inevitably possesses, and which, when verified by comparing it with the measurable data of observation, has a place in scientific discourse’ (Bourdieu 1984: 510).

Although the social insight which survey questions can provide is partial, the researcher is a product of similar social structures as the mothers in the survey and can bring a ‘sense of the game’ to bear in interpreting the survey responses.

The next section introduces the Growing up in Scotland dataset and sets out the survey questions which were used to summarise and measure childrearing approach.

4.4 The Growing up in Scotland dataset

The Growing up in Scotland (GUS) survey was commissioned in 2003 by the then Scottish Executive³⁰ and is carried out by the Scottish Centre for Social Research³¹. The study was established to provide an evidence base for policy-making and service provision in Scotland. GUS has followed a sample of Scottish children every year from birth. The survey questionnaire is carried out by face-to-face interview with the

³⁰ When the SNP came to power in Scotland in 2007, the administration changed its name from the Scottish Executive to the Scottish Government.

³¹ ScotCen is an integral part of NatCen Social Research, an independent social research institute. ScotCen runs most of the Scottish Government’s large scale surveys such as the Scottish Social Attitudes Survey and the Scottish Health Survey.

child's main carer (usually the mother): participants' answers are recorded on laptops using CAPI³² software and the interview takes about an hour. There is a self-completion section where the respondent enters answers directly onto the laptop. The interviewer may also carry out cognitive tests with children or measure their height and weight.

Table 4.1 Year of interview and age of children at each sweep of GUS birth cohort

Sweep	Year of interviews	Age of children
Sweep 1	2005/06	Age 0-1
Sweep 2	2006/07	Age 1-2
Sweep 3	2007/08	Age 2-3
Sweep 4	2008/09	Age 3-4
Sweep 5	2009/10	Age 4-5

The GUS birth cohort study followed around 5,000 children, starting at Sweep 1 in 2005 when babies were around 10 months old and returning to the same children each year³³. Table 4.1 sets out the year in which each sweep of data collection was carried out and the age of the survey children.

This thesis uses the first five sweeps of birth cohort data: Sweep 5 data were collected in 2009 when children were aged between four and five. The only cases selected for analysis are those where the respondent is the child's mother and where the mother responded at the first four sweeps, creating datasets with 3,706 cases for analysis at Sweeps 2, 3 and 4. Sweep 1 data are not analysed in this thesis because the full set of variables used to measure childrearing approach is not available at this sweep. For the final model which includes a distal outcome measured at Sweep 5, the number of cases is 3,491. Over 97% percent of respondents are the child's mother, so very few cases are excluded on this basis. Table 4.2 presents the percentage of cases excluded at each sweep as a result of the approach adopted. This approach results in the exclusion of a large percentage of cases at Sweep 2 (18%):

³² Computer Assisted Personal Interviewing

³³ A child cohort was also launched at the same time following around 3,000 children from aged 2-3, but this was discontinued after four sweeps.

this reflects the nature of attrition in longitudinal surveys and its effects are countered to some extent by the use of weights, as discussed below. A sensitivity analysis was carried out, estimating a Latent Class Model with the full Sweep 2 dataset. Although some predicted probabilities were slightly different, no systematic bias was evident and the number and interpretation of the latent classes was the same.

Table 4.2 Percentage of cases excluded at each sweep of GUS

	TOTAL N	% of cases excluded
Sweep 1	5,217	29.0%
Sweep 2	4,512	18.0%
Sweep 3	4,139	10.5%
Sweep 4	3,994	7.2%
Sweep 5	3,833	8.9%

4.5 Sampling, attrition and weighting in GUS

One of the key strengths of using probability sampling is that it is possible to use inferential statistics to make generalisations about the population on the basis of the characteristics of people in the sample. In order for these generalisations to be valid, though, the sample needs to be fully representative of the population from which it is drawn. The most reliable way to achieve a representative sample is to select individuals from the population completely at random (a simple random sample). In practice however there are barriers to achieving a perfectly representative sample:

- certain individuals or groups may be missed out of our definition of the population, so that the sample we draw does not represent people in those groups (sampling error³⁴);
- certain individuals or groups may be more likely to refuse to take part in the survey, so their views are not represented (non-response error);

³⁴ Sampling error may also occur due to chance: it is possible that an unrepresentative sample may be drawn from the ‘tails’ of a normal distribution.

- particularly in Scotland, a nation-wide sample drawn completely at random would be difficult for interviewers to access because of the wide dispersion of the rural population.

The first two barriers may cause bias in the sample but this bias can be corrected using weights. A statistical weight is a value applied to each case based on the probability of a person with a certain set of characteristics responding³⁵. For example, if lone parents are under-represented in the sample and have a lower probability of responding compared to couple families, then their predicted response probability is inverted and this value is applied to each case, increasing their representation in the sample and making the sample match the population more closely. The weights used in GUS correct for sampling error and non-response bias at each sweep. Table 4.3 shows the respondent characteristics associated with being likely to respond to the survey.

Table 4.3 Characteristics positively associated with response behaviour at Sweep 5

Characteristics associated with response	Characteristics associated with non-response
At least one parent/carer in full-time employment	No parent/carer working; at least one parent/carer in part-time employment
Owner occupiers	Rents from a private landlord; rents from a Housing Association
Mother aged 25 or over	Younger mother aged under 20
Does not live in the 20% most deprived Data Zones in Scotland	Lives in the 20% most deprived Data Zones in Scotland
Interviewer made contact on the first call	Interviewer needed more than one call to make contact with the household

Reproduced from GUS Sweep 5 User Guide: 11.

A further cause of bias in the sample is the attrition of respondents over time. Individuals with certain characteristics are more likely to drop out of surveys between sweeps, meaning that they are under-represented and with the result that inferences made about the population based on the sample may be wrong (Plewis

³⁵ The key variables used in the weighting were: area level deprivation indicator (measured using the Scottish Index of Multiple Deprivation), respondent employment status, respondent age at interview, household income and whether the respondent was a lone parent. (GUS Sweep 5 User Guide: 11).

2007). Table 4.4 shows that by Sweep 5 only about three-quarters of the original group from Sweep 1 are still participating in the survey. This is nevertheless a high response rate for a longitudinal survey (see Groves 2006 for a discussion).

Table 4.4 GUS Sweep 1 to Sweep 5: number of issued and achieved cases and response rates

Achieved interviews at sweep 1	5217
Achieved interviews at sweep 2	4512
Achieved interviews at sweep 3	4193
Achieved interviews at sweep 4	3994
Cases to field at sweep 5:	
All issued to field*	4196
Eligible i.e. achievable or 'in-scope'**	4177
Cases achieved at sweep 5	3833
Response rate	
As % of all eligible cases at sweep 5	92%
As % of all sweep 1 cases	73%

* The number of cases issued to the field at sweep 5 is higher than the number of Interviews achieved at sweep 4 because some of the sweeps 1 to 3 respondents missed at sweep 4 came back at sweep 5. ** Cases which were considered out-of-scope or unachievable were mostly ineligible addresses – usually due to the family having moved away from Scotland. Reproduced from GUS Sweep 5 User Guide: 8.

To try to correct for the effects of attrition, longitudinal weights are applied which take account of the sampling error and non-response bias at each sweep. Although using statistical weights can correct sources of bias to some extent, their use comes at a price. Using weights reduces the efficiency of the sample³⁶. In addition, only individuals who responded at all sweeps will have a longitudinal weight, which further reduces the number of cases available for analysis over time. A smaller sample means that we can be less confident that the findings of our analysis hold true for the rest of the population.

Cross-sectional weights are applied when only one sweep of data is being analysed at a time (as in Chapters 6 and 7); longitudinal weights are applied when more than one sweep of data is analysed (as in Chapter 8).

³⁶ Because the use of weights means that each case may count for only a fraction of one 'person', the number of cases is effectively reduced. Reducing the effective sample size means that estimates made based on the sample are likely to have wider confidence intervals: in other words, survey estimates carry a greater degree of uncertainty.

The third barrier to achieving a perfectly representative simple random sample as mentioned above is the logistical difficulty of interviewing people scattered over a wide geographical area. In order to make the process more efficient for interviewers visiting homes sometimes on multiple occasions, children were selected from 130 sample points in Scotland. The sample points consist of aggregations of Data Zones (a geographic unit consisting of an aggregation of post codes, designed to have a population of between 500 and 1,000)³⁷. These Data Zones were randomly selected within a stratification scheme based on region and deprivation. Therefore, not every child in Scotland had the same chance of being selected to participate and these unequal selection probabilities are taken account of by cluster and strata weights.

Missing data in GUS

The previous section discussed data which are missing as a result of attrition (or ‘unit non-response’) and argued that the effects of attrition can be counteracted using weights generated from information gathered about respondents at previous sweeps of the survey. However, within each survey sweep respondents may miss out or refuse to answer certain survey questions (‘item non-response’). Item non-response can lead to biased survey estimates and incorrect conclusions if the non-response is not random, for example if wealthier individuals are more likely to refuse to answer questions about their level of income. It is important to establish whether data are ‘missing completely at random’ (MCAR), ‘missing at random’ (MAR) or ‘missing not at random’ (MNAR). Where missing data are MCAR, missingness is not related to any observed or unobserved measurements and cases with missing values can be ignored or deleted from the dataset (termed listwise deletion). Valid inferences can still be made from analyses of the cases with complete data, since these are assumed to constitute a simple random sample subset of the full sample³⁸.

³⁷ Further information on the sample design and the weighting process at sweeps 1, 2, 3, 4 and 5 can be found in the User Guides for those sweeps which are available from the ‘using GUS data’ section of the Growing Up in Scotland website www.growingupinScotland.org.uk.

³⁸ Although such an approach typically reduces the efficiency of the sample as it reduces the sample size.

In most cases, however, it is not realistic to assume that data are MCAR (Muthen et al. 1987). Where missing data do not meet the assumptions of MCAR, the more general assumption of MAR is made. The MAR assumption holds if the probability of non-response is conditionally independent of the unobserved measurements, given the observed measurements (Kenward et al. 1994: 946). For example, in a hypothetical survey, respondents with higher levels of depression may be more likely to miss items in a mental health questionnaire, but the relationship between non-response and depression score may be explained when controlling for level of deprivation (Acock 2005). In such a case the missing responses would be assumed to be missing at random.

There are very few instances of item non-response in the variables used for the analyses carried out in this thesis; on the whole, all the survey participants included in the analyses have answered all the questions used to estimate the models. No variable has more than 5% missing cases; most have far fewer. All of the models presented in this thesis were analysed using the statistical software package Mplus 7 (Muthén & Muthén 2012). Mplus offers a Chi-Square test of MCAR for Latent Class Models. In all the models presented in the subsequent chapters, the Chi-Square test returned a p value of 1, suggesting that MCAR does hold, however caution should be exercised as these values may not be trustworthy due to the number of empty cells in the models. A test of MAR was carried out using STATA to examine whether the probability of having a missing value on one of the fifteen indicators of childrearing approach was associated with the response variable - each respondent's most likely latent class group (the logic being that missing values only influence the results if the probability of missingness is associated with the dependent variable) (Allison 2002). There was no statistically significant relationship (at the 1% level) between the missing data patterns on the indicator variables and the respondent's most likely class membership in the models at Sweep 2 or Sweep 4. It was therefore assumed that any missing data were missing at random.

Traditionally, item non-response has been dealt with using listwise or pairwise deletion of cases. Both approaches have limitations: listwise deletion reduces the number of cases available for analysis and reduces the power of the sample. Pairwise deletion can mean that each correlation is based on a different set of cases, which can lead to problems estimating the regression equation because the covariance matrix cannot be inverted (Acock 2005). Mplus avoids these problems by implementing the Expectation Maximisation (EM) algorithm, an iterative estimation scheme that can obtain maximum likelihood estimates for incomplete data (Nylund 2007:16). Mplus uses Full Information Maximum Likelihood (FIML) estimation and treats the latent variable as missing data which is then imputed for all mothers in the sample using the observed measures. As a result, in both the cross-sectional and longitudinal models used in this thesis, mothers were only eliminated from the analysis if they were missing on all 15 of the observed indicators of childrearing approach or if they were missing on the covariates.

A weakness of maximum likelihood estimation is that the solutions presented are dependent on the sets of starting values used in the estimation. A solution may be presented which represents an apparently good model fit but which is in fact only a 'local maximum'; if different starting values were used, a better-fitting model might be found. This problem can be circumvented by instructing Mplus to use different sets of starting values which are generated by a random number generator in the programme.

Each LCA model in this thesis is based on 2000 sets of starting values, each of which was subjected to ten iterations of the estimation procedure. Estimation then continued on the 200 sets of starting values which provided the lowest log-likelihood values after the initial ten stages of estimation until the algorithm converged on a solution. All of the models presented in Chapters 6, 7 and 8 represent global maxima which were arrived at from multiple sets of starting values.

4.6 Limitations of the GUS dataset

The advantage of using GUS is that it provides access to well-piloted questionnaires and a much larger sample than could be achieved by a lone researcher. The disadvantage is that the need to measure service uptake and children's outcomes in a number of policy domains can compete with the need to maintain continuity in questionnaire content over time. Although this thesis considers change in childrearing approach over time, not all of the variables of interest are measured at all sweeps, so the analysis of change is limited to a comparison of Sweep 2 - measured in 2006 when children were around two years old - with Sweep 4 - measured in 2008 when children were around four years old. The fifteen variables considered to be the best indicators of childrearing approach are measured at these sweeps, but not at Sweep 1 or Sweep 3. Children's behavioural development is measured as a 'distal outcome' at Sweep 5. Distal outcomes are outcomes measured after the period considered by the longitudinal model. In this case, change in childrearing approach is observed between Sweeps 2 and 4 of GUS; the distal outcome is measured at Sweep 5.

A further important limitation to the GUS data in relation to the research questions posed here is that the distribution of responses to many of the survey questions is highly skewed. A number of the survey questions offer a group of response options such as 'strongly agree'; 'agree'; 'neither agree nor disagree'; 'disagree' and 'strongly disagree'. In some cases over 80% of mothers agree or strongly agree with the statement. There is therefore very little variation in the mothers' responses and statistical analysis is based on understanding variation. For this reason a number of possible indicators of childrearing approach - particularly in relation to aspects of social capital - were excluded from the analysis.

4.7 Operationalisation of childrearing approach

Childrearing approach is a central concept in this thesis and the operationalisation adopted is based primarily on Annette Lareau's definition as set out in Table 4.5, but with a more explicit emphasis on the mother's social capital.

The key elements of childrearing approach as set out in Tale 4.5 are parental effort in actively fostering the child's talents and abilities; organised enrichment activities in which the child participates; and interventions in institutions. Bodovski (2010) and Ermisch (2008) included in their definition of childrearing approach measures of parental perceptions of their responsibilities towards their child, for example frequency of singing songs, reading to the child and helping with homework. This approach has also been adopted in this thesis.

Table 4.5 Annette Lareau's typology of childrearing approaches

	Childrearing Approach	
	Concerted Cultivation	Accomplishment of Natural growth
Key Elements	Parent actively fosters and assesses child's talents, opinions and skills.	Parent cares for child and allows child to grow.
Organisation of Daily Life	Multiple child leisure activities orchestrated by adults.	"Hanging out", particularly with kin, by child.
Language use	Reasoning/directives. Child contestation of adult statements. Extended negotiations between parents and child.	Directives. Rare questioning or challenging of adults by child. General acceptance by child of directives.
Interventions in Institutions	Criticisms and interventions on behalf of child. Training of child to take on this role.	Dependence on institutions. Sense of powerlessness and frustration. Conflict between child-rearing practices at home and at school.
Consequences	Emerging sense of entitlement on the part of the child.	Emerging sense of constraint on the part of the child.

(Lareau 2003: 31)

Lareau's 2003 research centred on children of school age; the children in GUS are between ten months and five years old, so some of Lareau's measures of childrearing approach need to be adapted for younger children. Vincent and Ball's (2007) research into families in England confirmed the importance of structured enrichment

activities for under fives as an element of socially patterned childrearing approach. These ‘structured enrichment activities’ refer to classes for pre-schoolers which are designed to develop talent and confidence and build ‘skills for life’, such as infant/toddler massage, Tumble Tots, Water Babies, Sing and Sign and French for under fives. The GUS dataset does not record participation in this type of activity specifically so visits to libraries, museums, galleries and live performances are used as proxies for parental effort in supporting children’s cultural participation.

Vincent, Ball and Braun (2010) found that choice of childcare provider among London families with children under five may also be a marker of class disposition. For this reason, this thesis includes choice of childcare provider in its operationalisation of childrearing approach.

Because GUS data are based on caregiver responses to a questionnaire rather than observation, these key elements of childrearing approach must be inferred from question responses rather than being observed directly. For the same reason it was not possible to assess the caregiver’s use of language with the child as Lareau had done.

The survey questions used to measure these aspects of childrearing approach are summarised below. Full question wording and descriptive statistics for these measures are provided in Technical Appendix 4.1.

Parental effort

- frequency with which the mother recited nursery rhymes with her child in the last week
- frequency with which the mother played with her child at recognising letters, shapes, colours in last week

Structured enrichment activities

- frequency with which child is taken to the library, concerts or live performances and galleries

Intervention in institutions

- whether the mother feels that professionals try to interfere if you ask for help or advice

Childcare

- main childcare provider, e.g. child's grandparents, other family member or nursery

A further element of childrearing approach considered in this thesis is the social capital available to mothers through their personal networks. Lareau gave the example of middle class parents who used their networks to have their children's IQ independently verified if the child did not initially qualify for the school's programme for gifted children and then insisted that the child be enrolled (Lareau 2003: 23). Networks with weak, non-redundant ties are characteristic of - typically middle class - individuals with access to large amounts of social capital (Burt 1992; Granovetter 1974; Stack 1974). The following survey questions were used to measure the mother's personal networks. Once again, full question wording and descriptive statistics for these measures are provided in Technical Appendix 4.1.

Personal networks

- how many people the mother feels close to
- whether the mother feels she gets enough help with looking after the child
- frequency with which mother visits friends with children
- frequency with which mother is visited by friends with children
- whether mother regularly attended a mother and baby/toddler group in the last year
- mother's confidence in being able to access childcare at short notice
- person mother would turn to for childcare at short notice
- whether the mother works full time, part time or does not work

4.8 Children's behavioural development

A number of studies which explore the association between childrearing approach and children's outcomes focus on cognitive development or educational attainment (for example Sullivan et al 2013; Bodovski 2010; DeGraaf 2000). This thesis considers instead the links between childrearing approach and children's behavioural development at entry to primary school. As discussed in Chapter 2, children's behaviour in school is an important indicator of future wellbeing because it can act as a mechanism of social reproduction: behaviour influences teacher and peer attitudes to children which can in turn influence teacher expectations of pupils' behaviour and attainment (Plewis 1997; Bennet et al. 1993; Blatchford et al. 1989). Teachers may make assumptions about pupils and treat them differently because of their class (Bourdieu and Passeron 1977: 73). Cognitive development is an indicator of embodied cultural capital, but behavioural development is more relevant to the central questions of this thesis because it is an embodiment of habitus: behaviour can conform to or deviate from expected norms, and opposition to dominant forms of discourse can manifest itself in oppositional behaviour.

Lareau's work found that the consequence of a 'concerted cultivation' childrearing approach was an emerging sense of entitlement in the child, while children whose parents adopted the 'accomplishment of natural growth' childrearing approach developed an emerging sense of constraint. This thesis explores whether social structures are being transferred through habitus from mothers' childrearing approach to children's behaviour. The measure of behavioural development available in GUS is the Strengths and Difficulties Questionnaire (Goodman 2001 and 1997). The Strengths and Difficulties Questionnaire (SDQ) is based on parent report and comprises 25 question items which can reliably indicate cause for concern across five subdomains of behavioural development in children aged 3 to 15. The domains are: conduct problems, hyperactivity and inattention, peer problems, pro-social behaviour and emotional symptoms. Each question has three possible answers, each with a value of 0, 1 or 2. The child's scores on the five questions are added together giving a score ranging from 0-10. The SDQ scale has been designed such that scores

on the five subscales are added together to give the total difficulties score (Goodman 2001). Appendix 4.2 sets out the question wording for all 25 items.

The children in Lareau's study were older than the GUS children and she and her team had the opportunity to observe the children's emerging sense of entitlement or constraint, particularly in dealing with authority figures. By Sweep 5, the GUS children would be in contact with the institution of school and the authority figures of teachers. This thesis adopts the pro-social subscale as a proxy for an emerging sense of entitlement. The conduct problems subscale is adopted as a proxy measure of an emerging sense of constraint.

These proxies are not unproblematic, nor are they intended to place any value judgement on children's behaviour as 'good' or 'bad'. Lareau describes how children whose parents adopted the 'concerted cultivation' approach shake hands, look people in the eye, and learn to speak the language of power. They feel comfortable challenging authority. Lareau was also clear that working class and poor children (Lareau's terms) were generally good at sharing and were considerate of their siblings and friends. It could therefore be argued that they are more likely to be pro-social than the children of middle class parents who spend less time in peer-directed play. The theoretical basis for adopting the pro-social subscale as a proxy for an emerging sense of entitlement is that empathetic or helping behaviours are usually only observed when a strong sense of self and the place of that self in a social group has first been established (Penner et al. 2005).

The conduct problems subscale is used as a proxy to measure an emerging sense of constraint. Behaviour such as disobeying authority figures, fighting or lying may be labelled 'externalising problem behaviour' by a survey instrument designed by academics working within the dominant discourse, but these behaviours may be appropriate survival mechanisms for some children who feel alienated from society's institutions (Gillies 2007 and 2005). Lareau (2003: 243) gives the example of one working class boy whose parents told him to 'beat up' another boy if he continued bothering him.

Although the SDQ scale has been found to be reliable in predicting future problem behaviour and psychopathology (DiRiso et al. 2010; Marzocchi et al. 2004; Mathai et al. 2004; Goodman et al. 2000), it could also be speculated that factors such as parental mental health and social class may have some influence on the parental report of child behaviour. For example, a middle class mother who has – consciously or unconsciously – assimilated her social group’s expectations of ‘good’ behaviour may be more likely to highlight those aspects, such as ‘child is helpful when someone is hurt’. This is precisely the utility of the SDQ since it can be used in an analysis to illustrate how certain childrearing approaches may be associated with children’s behaviours which conform to or deviate from the expectations of dominant groups in society.

4.9 Reliability of descriptive statistics

This section assesses the reliability of the GUS sample by comparing it with available census data for Scotland and with the Scottish sub-sample from the Millennium Cohort Study (MCS) described in the next section. Weights correct for bias in the sample to some extent, but only on certain measures. The GUS weights correct for area level deprivation (measured using the Scottish Index of Multiple Deprivation), respondent employment status, respondent age at interview, household income and whether the respondent was a lone parent. Table 4.6 suggests that the GUS sample over-represents managerial and professional occupations when compared with census-based data and under-represents those in routine and semi-routine occupations. The census data were collected in 2001, five years before Sweep 1 of GUS, however it is assumed for this project that the underlying distribution of occupational classification in the population would not have changed substantially in this period.

Table 4.6 Mothers' ONS-SEC occupational classification

Occupational group	Census-based statistics for Scotland, females aged 16-44 - % N=28,022	% in GUS Sw1, obs.=5,210, weighted (95% confidence intervals)	% in MCS Sw1 Scottish sub-sample, N= 2,336, weighted (95% confidence interval)
Managerial and professional occupations	32.3	34.8 (32.6 - 37.0)	35.8 (31.0 - 40.6)
Intermediate occupations	20.5	19.1 (18.0 - 20.1)	20.5 (17.8 - 23.3)
Small employers and own account workers	3.3	3.9 (3.3 - 4.4)	3.2 (2.1 - 4.4)
Lower supervisory and technical occupations	5.2	6.2 (5.4 - 6.9)	6.8 (4.8 - 8.8)
Semi-routine and routine occupations	33.0	30.8 (29.1 - 32.6)	30.2 (25.0 - 35.3)
Never worked	5.8	5.2 (4.3 - 6.1)	3.4 (1.4 - 5.5)

Source: author's calculations and Office for National Statistics (2006) 2001 United Kingdom Sample of Anonymised Records, Household Special Licensed File [computer file] distributed by the UK Data Archive, University of Essex. Full time students and cases where occupational classification is unknown have been excluded from the analysis. The analysis was restricted to individuals between 16 and 44 years of age, since this range most closely resembles the age range of GUS respondents.

GUS data also show that there are important differences between occupational groups in the average age at which mothers have their first child, as can be seen from Table 4.7.

Table 4.7 Mothers' age at primiparity by occupational classification (N=5,217)

Occupational classification	Mean age at birth of first child - weighted	Standard deviation
Managerial and professional occupations	29.4	5.0
Intermediate occupations	26.5	5.4
Small employers and own account workers	27.7	5.8
Lower supervisory and technical occupations	23.8	5.2
Semi-routine and routine occupations	22.7	5.2
Never worked	19.8	4.2

Source: GUS data, author's calculations.

GUS and the Millennium Cohort Study

The Millennium Cohort Study (MCS) is a longitudinal birth cohort study carried out every two years across the UK. The MCS sample was selected from a random sample of electoral wards, disproportionately stratified to ensure adequate representation of all four UK countries, deprived areas and areas with high concentrations of Black and Asian families³⁹. In Scotland the sample was boosted by 1000, to be divided equally between advantaged and disadvantaged wards. The MCS therefore has a similar survey design to GUS, and includes many of the same questionnaire items. If the surveys are reliable, survey estimates between the two samples should be similar. Table 4.8 compares the mean SDQ scores for children at Sweep 5 of the GUS sample - when children were around 5 years old - with mean SDQ scores for children in the Scottish sub-sample from wave 3 of MCS - when children were also around 5 years old. The MCS Age 5 survey went into the field at the beginning of 2006, and was completed in 2007. Higher scores on the total difficulties scale and the conduct problems scale indicate more concerning behaviour; higher scores on the pro-social scale are more positive.

Table 4.8 Comparison of survey estimates in GUS and MCS: children's behavioural development

	GUS Sweep 5 2008 - children aged 5		MCS Sweep 3 2007 - children aged 5	
	Mean (standard error)	Observations	Mean (standard error)	Observations
SDQ total difficulties score	7.8 (0.10)	3,446	6.4 (0.10)	1,519
SDQ pro-social score	8.2 (0.03)	3,460	8.4 (0.00)	1,765
SDQ conduct problems score	1.8 (0.03)	3,461	1.5 (0.00)	1,988

Source for MCS data: Hansen and Joshi 2008

Table 4.8 suggests that there are some differences between the weighted survey estimates for the SDQ total difficulties score and the conduct problems subscale. GUS estimates show a substantially higher average for concerning behaviour overall and a slightly higher average score for the conduct problems subscale. The average pro-social scores are very similar in both samples.

³⁹ <http://www.cls.ioe.ac.uk/studies.asp?section=000100020001> accessed 23/11/10

It is more difficult to test the reliability of the measures of childrearing approach: not all of the survey questions are included in MCS and MCS surveys were carried out when children were aged nine months, three and five. In this thesis, childrearing approach is measured when children were around two and four. Even where similar questions are asked, the response categories are not always comparable, making it difficult to establish the reliability of the GUS sample. The available measures are presented for comparison in Appendix 4.3. While Tables 4.6 and 4.7 might suggest that the GUS sample over-represents middle class respondents, this does not appear to have given rise to better scores on the SDQ scale. It seems reasonable to conclude - based on the available evidence - that although there is some inconsistency in the available measures of childrearing approach and the estimates of SDQ between GUS and MCS, there is also no obvious systematic bias in these measures in the GUS sample.

4.10 Summary of analytical methods

The main quantitative analysis methods used in this thesis are Latent Class Analysis, Latent Transition Analysis, Exploratory Factor Analysis and regression. Latent Transition Analysis (LTA) is a subset of Latent Class Analysis (LCA): LTA is essentially LCA applied over time. The first three methods are data summary techniques: their strength is that they take a large number of survey questionnaire items and summarise them without sacrificing the complexity of the information contained in each item. LCA and LTA group together cases or people; EFA groups together variables. LCA and LTA have been chosen as the most appropriate methods for investigating childrearing approach because these techniques allow us to make inferences about the behaviour of groups of people. Exploratory Factor Analysis was chosen to analyse neighbourhood characteristics because EFA can summarise a number of indicators of a concept into one measure which can then be used in subsequent analysis.

These methods, and their associated tests of model fit, are briefly explained in the following sections.

The analysis carried out in Chapter 5 uses a qualitative method, narrative analysis, to explore the GUS data. This method and the approach taken in this thesis are discussed in Section 4.12.

4.10.1 Latent Class Analysis and Latent Transition Analysis

Latent Class Analysis (LCA) groups together individuals based on a set of observed characteristics. It can be a means of simplifying or summarising large quantities of information recorded about individuals in a dataset. The central assumption of LCA is that variation in each of the observed indicators is caused by a latent variable. The latent variable explains the relationship between the observed variables (McCutcheon 1987). For example, we may posit that childrearing approach is an unmeasured - and unmeasurable - latent concept; however, we make the assumption that childrearing approach will be manifested through a mother's use of personal networks and certain parenting behaviours, such as the mother's use of childcare or structured enrichment activities. The selected observed measures may not perfectly reflect the nature of the latent variable; other observed measures could also be used, but if the indicators are well-chosen, then the LCA model will be an acceptable approximation of the latent variable. A theoretically attractive aspect of LCA is that the technique acknowledges the impossibility of measuring the latent concept precisely and instead offers solutions based on probability. LCA allows us to make assumptions about the nature of the latent variable: a continuous latent variable - for example social anxiety - could be hypothesised as running on a linear scale from low to high. In this thesis, the latent variable childrearing approach is hypothesised to be categorical: we assume that there are a number of latent types or groups within the variable.

The formal Latent Class model is set out in equation 4.1 below (after McCutcheon 1987: 18).

$$\pi_{ijkl}^{ABCX} = \pi_{it}^{\bar{A}X} \times \pi_{jt}^{\bar{B}X} \times \pi_{kt}^{\bar{C}X} \times \pi_t^X \quad (4.1)$$

In the above example, three observed variables are used to estimate the latent variable. The terms on the left hand side of the equals sign refer to the probability that a randomly selected individual will be located in the i, j, k cell. Each term on the right hand side of the equals sign refers to the conditional probability that an individual in class t of the latent variable X will be located at level i of variable A, at level j of variable B and so on. Covariation among the observed variables in a LCA model should be zero, conditional on the latent variable.

In LCA, each case is assigned to one of the latent types or classes in a probabilistic way: cases may partially belong to more than one class. In other words, a mother may have a 70% chance of belonging to the ‘concerted cultivation’ group, but may also have 30% chance of belonging to the ‘accomplishment of natural growth’ group. The LCA model also estimates conditional item probabilities. These are the class-averaged probabilities of an individual in latent class t choosing certain response categories of the observed variables. For example, mothers in the ‘accomplishment of natural growth’ group may have an 80% probability of not working; whereas mothers in the ‘concerted cultivation’ group may have a 15% probability of not working.

LCA is an appropriate analysis technique to use because this thesis is concerned with exploring whether the typologies of childrearing approach identified in qualitative research can be seen to operate within a larger sample in a different geographical locale. LCA will allow for the identification of sub-populations within the GUS sample, based on observed indicators of childrearing approach.

Latent Transition Analysis is a form of longitudinal model for latent variables. Latent Class Analysis is carried out on the latent variable measured at two or more time points. In a Latent Transition Analysis model with complete measurement invariance, the latent variable would have the same number of classes of similar size and with the same substantive interpretation at each measurement occasion. Other

types of LTA model relax these assumptions. The LTA model estimates the probability of individuals moving from one group to another over time, for example the probability of optimists remaining optimists or becoming pessimists. In this thesis, the LTA model is used to investigate whether mothers in the GUS sample change their childrearing approach between their child's second and fourth birthday. Covariates can be added to the model which influence the latent transition probabilities. In Chapter 8 covariates are added to the LTA model to seek to understand some of the factors which might be associated with changes in childrearing approach.

4.10.2 Latent Class Analysis: model selection criteria and tests of model fit

In LCA, the best-fitting model is the one which most effectively balances the complexity present in the data with a parsimonious summary of that data. The tests of model fit are therefore mainly employed to help select a model with the most appropriate number of classes. The final model should be selected based on substantive understanding of the nature and meaning of the data; statistical tests should be used as a guide only. There are three main types of test: log-likelihood-based tests, entropy and likelihood ratio tests which compare data distributions between two models.

Log-Likelihood-based Information Criteria

There are three commonly-used log-likelihood-based tests in LCA: Akaike's Information Criterion (AIC), Bayes' Information Criterion (BIC) and the sample-size-adjusted Bayes' Information Criterion (ABIC). The log-likelihood is the natural log of the probability of observing the data that has been observed, given the model. In other words, the log-likelihood is a measure of how well the model fits the observed data.

The AIC has been shown to overestimate the correct number of components in Latent Class models (Celeux & Soromenho 1996; Soromenho 1993), whereas the

BIC has been reported to perform well generally (Magidson and Vermunt 2004; Hagenaars and McCutcheon 2002; Collins et al., 1993), and particularly for LCA models (Roeder and Wasserman 1997; Jedidi, Jagpal, and DeSarbo 1997). While some simulation studies found the adjusted BIC to perform well in LCA models, the balance of evidence is that BIC is the most reliable guide for choosing the correct number of classes in LCA models with large sample sizes (greater than 500) and with categorical observed indicators (Nylund et al. 2007; Li and Nyholt 2001). Therefore, although all three information criteria are reported, greater weight is given to the BIC values in helping to decide on the correct number of classes in the latent variable.

The BIC (Schwartz 1978) is defined as:

$$BIC = -2\log L + p\log(n) \quad (4.2)$$

Entropy

The dictionary definition⁴⁰ of entropy is a ‘gradual decline into disorder’. The statistical entropy criterion is a threshold beyond which meaningful patterns in the data can no longer be observed. Celeux & Soromenho devised the entropy criterion as a means of choosing clustering models with the most appropriate number of classes based on the criteria that classes in the model should be ‘*well separated, nonoverlapping, and clearly associated with the mixture components*’ (Celeux & Soromenho 1996: 197).

The entropy criterion is defined as:

$$NEC(K) = \frac{E(K)}{L(K) - L(1)} \quad (4.3)$$

⁴⁰ Oxford English Dictionary online, accessed 21/02/13.

Where $E(K)$ is an entropy term measuring the overlap in the mixture components and which can be regarded as a measurement of the ability of the k -class model to provide a relevant partition of the data. $L(K)$ is the log-likelihood of the k -class model (Celeux and Soromenho 1996: 201). Entropy values approaching 1 indicate clear delineation of classes and suggest that the model is well-specified.

Likelihood-ratio tests of model fit

These tests are based on comparing one Latent Class model with another, for example a model of childrearing approach with three classes ('concerted cultivation', 'natural growth' and 'hot-housing' for example) and a model with two classes ('concerted cultivation' and the 'accomplishment of natural growth' for example). The terminology used for describing these models is the k -class model compared with the $k-1$ class model. The standard likelihood ratio test cannot be performed because this test assumes a normal chi-square distribution⁴¹. There are two alternative tests of model fit which can be used instead, both of which provide a figure for the probability that the k -class model is an improvement on the $k-1$ model. These are the Lo-Mendell-Rubin Chi Square test (Lo, Mendell, Rubin 2001; Vuong 1989) and the Bootstrap Likelihood Ratio Test (McLachlan and Peel 2000). Although simulation studies (Nylund et al. 2007) have found the Bootstrap Likelihood Ratio Test to perform better, this test cannot work with weighted data. Because of the complex survey design of GUS and the question marks over the representativeness of the GUS sample, this test was not used. The Lo-Mendell-Rubin Chi Square test (LMR test) compares the improvement in fit between nested latent class models (i.e., comparing the k -class model with the $k-1$ class model) using an approximation of the chi-square distribution and provides a test statistic (a p value) that can be used to determine if there is a statistically significant improvement in fit to justify the inclusion of one more class. The test will reject the null

⁴¹ In nested models, the more restricted model is obtained from the less restricted model by a parameter assuming a value on the border of the admissible parameter space: a latent class probability of zero (Kaplan 2004:356). The standard likelihood ratio tests assume that the two distributions being compared are the same. When this is not the case, as in nested models, the non-central chi-square distribution is used instead as the reference distribution.

hypothesis that the data arise from a k-1 class model (rather than a k-class model) if the test statistic is greater than or equal to a constant determined by the size of the test (Lo et al. 1999: 771).

Lo et al. state that the asymptotic distribution of the test statistic 2LR is a weighted sum of $p + q$ independent χ^2 random variables under the null hypothesis; that is, as $n \rightarrow \infty$

$$pr(2LR \leq y) \rightarrow M_{p+q}(y; \lambda) \quad (y \geq 0) \quad (4.4)$$

Where $M_{p+q}(\cdot)$ is the weighted sum of the distribution function of χ^2 variables and λ is the vector of $p + q$ eigenvalues (see Lo et al. 1999: 772). In this thesis, the LMR test is used along with BIC and entropy to choose the latent class model with the most appropriate number of classes.

4.10.3 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) works on similar principles to LCA. It is a data summary technique which assumes that a set of observed variables are measuring an underlying latent variable. The task of EFA is to define the underlying structure among the variables in the analysis (Hair et al. 2006: 104). In this thesis, a set of eight survey questions are taken together as observed indicators of a mother's subjective perception of the level of collective efficacy in her area. No single survey question would be an adequate measure of collective efficacy but the eight measures used overlap and are highly interrelated. EFA groups the large number of variables into distinct sets or factors (sometimes only one factor). EFA can help identify a set of underlying concepts useful for understanding collective efficacy more broadly, while providing insight into the contribution of each individual measure to the overall factor. In this thesis, EFA is also used to define a composite measure of neighbourhood deprivation.

First, a factor matrix is computed which contains the factor loadings for each variable on each factor. Factor loadings describe the extent to which each of the observed variables correlates with the latent variable - the factor. The researcher then selects one of the rotation methods⁴² to achieve factor solutions which are more intuitive and which make more substantive sense. Rotating the factor loadings essentially maximises a variable's loading on a single factor and reduces the number of variables that load highly on more than one factor. Orthogonal and oblique rotation methods exist but this thesis uses oblique methods (Geomin rotation) because oblique methods allow for correlation between factors and are therefore better suited to obtaining a theoretically meaningful construct, since few constructs in the real world are uncorrelated (Hair et al. 2006: 127).

4.10.4 Exploratory Factor Analysis: model selection criteria and tests of model fit

Once the rotated factor matrix has been obtained then a decision must be reached on the most appropriate number of factors to extract. There are a number of criteria for determining the correct number of factors. The most commonly referred to are the Kaiser-Guttman rule (Guttman 1954) and the scree plot (Cattell 1966). The Kaiser-Guttman rule sets the criterion that only those factors with an Eigenvalue greater than 1 should be retained. The Eigenvalue is the amount of variance in the observed variables which is accounted for by the factor. When the number of variables is less than 20, this rule tends to extract too few factors (Hair et al. 2006). The scree plot charts the Eigenvalues against the number of factors. According to the scree plot approach, trivial common variance or 'rubble factors' (Hoyle and Duvall 2004: 304) begin after the 'elbow', or the point on the graph where the line flattens out. Factors coming at or after the elbow should be disregarded.

⁴² Factor rotation in essence takes a graph where all the factor loadings are plotted and rotates the axes of the graph about the origin. The correlations between factor loadings (the position of the points on the graph) do not change, but the interpretation of the axes does change, which can aid interpretation of the factors (Hair et al 2006: 123).

Two other fit indices used in this thesis are Bentler's (1990) Comparative Fit Index (CFI) and Steiger's (1990) Root Mean Square Error of Approximation (RMSEA). CFI gives the proportionate improvement in fit of the specified model over the null model (a model where the postulated indicators of the latent variable are not interrelated at all). For CFI, the reference distribution for the test statistic T is the non-central chi-square distribution with parameter λ_k . The size of λ_k can be taken as a population indicator of model misspecification, with larger values reflecting greater misspecification (Bentler 1990: 240).. Bentler sets out the Comparative Fit Index as follows:

$$\hat{\Delta} = CFI = 1 - \hat{\lambda}_k / \hat{\lambda}_i \quad (4.5)$$

Where $\hat{\lambda}_k$ is an estimation of the misspecification of the model to be tested and $\hat{\lambda}_i$ is an estimation of the corresponding misspecification of the null model. The smaller the ratio $\hat{\lambda}_k / \hat{\lambda}_i$, the greater the information provided by the model to be tested as compared with the null model. A cut point of .95 or greater has been recommended as justification for the adoption of a particular model (Mulaik and Millsap 2000).

RMSEA computes the discrepancy between the observed covariance matrix and the covariance matrix implied by the model, taking into account the degrees of freedom. A value of zero indicates no discrepancy and therefore a perfect fit of the model to the data. Steiger's (1990) RMSEA is a measure of the discrepancy per degree of freedom for the model and is given as:

$$\varepsilon_a = \sqrt{\frac{F_0}{d}} \quad (4.6)$$

Where F_0 is the error due to approximation (the discrepancy between the population covariance matrix and the fitted matrix) and d are the degrees of freedom in the model. If the discrepancy function is correctly specified for the distribution of the

data, then the RMSEA test statistic approximates a non-central chi-square distribution (Browne and Cudeck 1992: 235).

RMSEA is now commonly reported with a 90% confidence interval⁴³. .08 is typically accepted as a maximum upper limit for the confidence interval, however .05 has been suggested as a more robust maximum, suggesting a close fit of the model to the data (Browne and Cudeck 1992).

4.10.5 Multinomial Logistic Regression

The final statistical technique applied in this thesis is multinomial logistic regression. Once the latent variables have been defined using Latent Class Analysis and Exploratory Factor Analysis, they are used as explanatory and response variables in subsequent analyses. The aim of regression is to explore whether variation in the response variable (the main variable to be explained) is associated with variation in a set of explanatory variables. This thesis is concerned with explaining differences in childrearing approach, and childrearing approach is hypothesised to be an unordered categorical variable, so the regressions performed are multinomial logistic regressions.

In multinomial logistic regression, one category of the dependent variable is taken as the reference category (this is usually the category with the most observations) and the parameter estimates reported are the estimated effect of a one unit change in this variable on the logit (or log odds) of being in each class compared with the reference class. The formula for a multinomial logistic regression is given below:

$$\Pr(y_i = j) = \frac{\exp(x_i\beta_j)}{\sum_j \exp(x_i\beta_j)} \quad (4.7)$$

⁴³ See Browne and Cudeck 1992: 240 for details on how the confidence intervals are calculated.

Where $pr(y_i=j)$ is the probability of belonging to group j , x_i is a vector of explanatory variables and B_j are the coefficients, estimated using maximum likelihood estimation (Hosmer et al. 2013).

In multinomial logistic regression, each independent variable is tested to establish whether a statistically significant association remains when all the other independent variables are controlled for.

4.10.6 Multinomial logistic regression: model selection criteria and tests of model fit

A number of tests of model fit are available for multinomial logistic regressions in general, but in this thesis, the multinomial logistic regressions are carried out concurrently with the estimation of latent classes, so the tests of model fit are the same as for Latent Class Analysis. In their paper on the inclusion of covariates in a Latent Class model, Clark and Muthen (2009) highlight the undesirability of simply saving each case's most likely latent group membership and using this as the dependent variable in a multinomial logistic regression. Each case may be partly assigned to some or all groups. By treating the latent variable as an observed variable with a fixed rather than probabilistic value, the measurement error within the assignment of cases to classes is ignored. This is likely to lead to artificially reduced standard errors. Instead Clark and Muthen argue for a one-step analysis procedure where the covariates are included while the latent classes are formed.

4.11 Narrative analysis

The narrative analysis carried out in Chapter 5 of this thesis uses some of the 2,000 GUS variables available at each survey sweep to construct biographies for four mothers. A distinction is drawn here between 'narrative' and 'biography': in this thesis a personal narrative - more usually the focus of qualitative research - is defined as an attempt by the individual to impose meaning on the otherwise apparently

random events of his or her life. By selecting, retrospectively, events which we interpret as important turning points in our lives, we marshal the key elements of a narrative which may tell the story of our personal growth, overcoming adversity, victimhood or stability in the face of change (Smith 1994). A necessary condition of the narrative is that it is the individual herself who 'reads back' over the story of her life and provides the frame of meaning, the significant events and the evaluation of that story. Biography, on the other hand, constructs a narrative for a third party: it is the author of the biography who selects the frame of meaning and who provides an interpretation of the identity strategies and the constructions of the self which the subject's life story suggests. GUS participants are able within the scope of the survey neither to dictate the shape of their narrative nor to offer an evaluation of it. The resulting 'texts' cannot therefore be said to represent the participants' narratives in the true sense and are – properly understood - the researcher's. It is for this reason that the interpretive accounts in Chapter 5 are presented as constructed biographies.

In presenting a rationale for this analytic approach, the following sections explore assumptions about the ways in which meaning is drawn from different kinds of data or 'text'. The argument is advanced that the story told by survey information can be constructed and understood in more than one way. The constructed biographies depart from the way in which quantitative data are often explored or understood and highlight the ways in which meaning, memory and identity can be constructed by both the survey participant and researcher.

4.11.1 Applying narrative analysis to quantitative data

There are relatively few examples in the literature of narrative analysis being performed on quantitative survey data. A selection of empirical papers is referred to here which illustrates how the method has been used. The papers draw on three main themes: they highlight the shared elements of the narrative analysis approach as applied to qualitative and quantitative data; they illustrate the benefits of narrative analysis for triangulation with statistical modelling; and they explore the potential of

case histories and biography for enhancing our understanding of the interplay of social structure and individual agency.

Jane Elliott's (2008) work draws parallels between the process of quantitative and qualitative research. In quantitative analysis the researcher frames a time period or a set of themes and then selects *explanatory* variables which she believes are relevant to bringing about the outcome: assumptions are made about cause and effect. The dependent (or *outcome*) variable is analogous to the resolution of a story. The quantitative researcher uses theory to hypothesise a logical chain of events which explain how the explanatory variables bring about the outcome variable.

In qualitative interviews the research participant may be asked to reflect on his experiences, responses and attitudes. In most cases, the interview is recorded, but it is not always transcribed verbatim. Qualitative accounts of individual narratives are not, and do not in the main claim to be, simple accounts of the interview content (Kendall and Murray 2005). In qualitative narrative research, the researcher also influences the choice of topic and is instrumental in choosing the approach to analysis. Three layers of narrative can therefore be identified: the participant's own narrative – he imposes meaning on the events of his life; the researcher's interpretation of the respondent's evaluation of his narrative; and the researcher's own life narrative and ontological approach, which influence the subject-matter and conduct of interviews and the meaning to be constructed from them.

A very similar three-tiered structure can be identified for narrative research using quantitative data: firstly, the survey participant answers questions about her current situation, health, feelings and attitudes – the participant does not have the opportunity explicitly to link the pieces of information offered, as she might in a qualitative interview; secondly, the researcher constructs a biography from continuity and change in the participant's material situation and attitudes over time; and thirdly, the researcher imposes a narrative on her aggregate analysis, often influenced by her own life story, but usually drawing on theory to provide the authoritative impetus which in turn is part of the required discourse of quantitative research.

The potential for exploring reflexivity and interpretative analysis at the research design, data collection and data analysis stages of research is therefore similarly strong in both qualitative and quantitative approaches.

Elliott (2010) analyses participants' written reflective narratives from the British Birth Cohort study to discover the

'identity strategies used by cohort members and how these intersect with, and are shaped by, individual biographies' (Elliott 2008: 419).

Elliott explores stories which participants wrote at age 11 about their imagined future lives, looking at how key themes in the stories are gendered and how they differ by social class. Elliott considers the ways the children used gender as a resource to establish and maintain their own narrated identities. Although Chapter 5 uses similar techniques to those used by Elliott, she has access to authored texts, which are not available in the GUS data. In constructing biographies for individual participants, the meaning attributed to specific experiences will be informed by the context of the rest of the cohort.

Uprichard and Byrne (2006), Smith (1994) and Singer et al. (1998) argue that narrative analysis can act as a useful form of triangulation with statistical models, either suggesting variables to be included in models, patterns of stability and change worthy of further exploration, or simply in supporting or refuting the conclusions reached through statistical analysis of the data in aggregate. Constructing biographies for individual cases enables the researcher to consider the multiple nonlinear interactions of a lifecourse in context. This can provide a basis for drawing conclusions about cause and effect in tandem with longitudinal data.

Bynner et al. (1997) provide descriptions of trajectories followed by a number of typical individuals from the 1958 and 1970 British Birth Cohort studies to complement their statistical descriptions of the longitudinal data, but these

descriptions tend to be factual chronicles rather than biographies which present interpretations of participants' identity strategies.

In a seminal paper, Singer et al. (1998) use data from the Wisconsin Longitudinal Study to construct biographical accounts for individuals with a history of depression who nevertheless report high levels of wellbeing in mid-life. They then seek to identify the common factors associated with these 'resilient trajectories' and compare them with the lifecourses of other mental health groups. Singer et al. portray their analysis in terms of the compilation of life histories rather than the construction of narratives, and they acknowledge the importance of 'decision-points' (1998: 3) and informed judgements in their selection of a manageable number of theoretically-relevant variables for inclusion in the accounts. As in this thesis, Singer et al. use ideographic, person-centred research to help identify complex pathways which can then be extrapolated to survey data.

Smith (1994) analyses real-time and retrospective narratives to discover and describe self-reconstruction strategies in the accounts of women's pregnancies and early motherhood. He uses data from quantitative 'repertory grids' and qualitative interviews to construct narrative accounts for each woman. The GUS study also captures a mixture of present-time and retrospective data, offering scope for limited exploration of self-reconstruction. Smith argues that cognition and motivation are inseparably intertwined (1994: 389): our culture values both change and stability, so it is understandable that women going through the substantial changes of motherhood would seek to preserve a positive self-image by constructing themselves as stable yet developing in the face of change.

These examples illustrate the value of narrative analysis for understanding complex systems of agency within social structures.

4.11.2 Narrative analysis of individual cases: analytic approach

A specific caveat to quantitative narrative analysis highlighted by Elliott (2005) and Stanley (2008) is the difficulty in presenting the researcher's process of interpretation, rather than just the conclusions drawn from the analysis. In research accounts of qualitative interviews the researcher often describes in some detail the steps of assimilating, interpreting and analysing the data; whereas in quantitative research methodological accounts are often restricted to a technical description of the statistical techniques used. It is not conventional for the researcher to provide an account of the reflexive and subjective steps taken in choosing the approach to analysis. This section therefore aims to present these processes.

In this study, the researcher began by framing a starting point (the birth of the child) and a resolution (the child starting pre-school four years later) for the biographies. The lens through which the life histories were to be examined and interpreted was the narrative of socially patterned parenting approaches – ‘concerted cultivation’ and the ‘accomplishment of natural growth’ – as expressed through mothers’ personal networks and use of child-related services. The set of variables measuring the mother’s use of child-related services includes and extends the set of measures used in the quantitative analysis to operationalise parental effort, engagement with structured enrichment activities and attitude to authority figures as described earlier in this chapter. A number of variables were chosen which reflected theoretically salient information in the mothers’ life histories over the four sweeps of available data: socio-demographic information, the extent and type of the personal network, feelings about the network, use of statutory and non-statutory services and neighbourhood characteristics. The variables used are summarised below; a full list of the variables used in this analysis is provided in Appendix 4.4⁴⁴.

⁴⁴Space restrictions preclude the inclusion of full question wording and coding. These can be found in the GUS data documentation, available to download from <http://www.cfr.ac.uk/gus/using%20data.html>

General characteristics

- Mother's and partner's highest level of qualifications
- Mother's and partner's occupational group
- Annual household income
- Mother's and partner's employment status
- Housing tenure
- Marital status
- Mother's mental health
- Child's behavioural development

Neighbourhood

- Scottish Urban-Rural classification
- Scottish Index of Multiple Deprivation sub-domains
- Subjective measures of satisfaction with the local area
- Personal assessment of the quality and availability of services in the local area

Personal networks

- Whether mother feels close to most of her family
- Whether child's grandparents live within a 20-30 minute drive
- Frequency with which mother visits and is visited by friends with children
- Mother's feelings of acceptance by friends
- Whether mother feels she gets enough support from friends and family
- Whether mother attends parent and toddler group

Use of child-related services

- Whether mother attended ante-natal classes
- Which local services mother uses and with what degree of frequency
- Type of childcare, number of hours per week and cost per week
- Type of pre-school, number of hours per week and uptake of free pre-school place
- Benefits accessed by mother (e.g. Child Benefit, Child Tax Credit)

- Attitude to seeking help from authority figures such as health professionals

The first step was to convert the numerically coded data back into prose form. An account was written for each case study; a list was then made of the aspects of continuity and change in the mothers' home and family life, personal networks, service use and neighbourhood context over the four sweeps of the survey. A similar exercise was undertaken to note consistencies and discrepancies in the mother's reported attitudes, beliefs and feelings between sweeps: this stage of analysis was aimed at reading the mother's 'I' from the text. This familiarity with the text of the mother's account enabled the researcher to posit theoretically valid explanations of how identity strategies could be seen to operate within the context of her material, cultural and social circumstances. Finally, a process of interpretive engagement with the texts led to the construction and writing up of biographies for each of the four cases.

Van Maanen (1988) posits that there are three approaches to writing about ethnographic research: the Realist Tale, the Confessional Tale and the Impressionist Tale. Although the analytic approach adopted draws on Van Maanen's description, the process of constructing the biographies for GUS mothers cannot be said to be ethnographic research. Nevertheless, the GUS biographies seek to present an Impressionist account as far as possible, following the chronology of the research and including concrete details. In the context of anthropological research, the Impressionist Tale seeks to expose both the culture and the researcher's way of knowing it, so that both can be examined. The account invites participation in the interpretive process and allows the reader to make new interpretations. Because the longitudinal quantitative data used here are very different from the observational data or oral accounts collected by anthropologists, an adapted form of Impressionist approach has been taken. The discussion of the accounts set out in Chapter 5 considers the historical and geographical context which frames the data and comments on the rationale for selecting the start and end points of the narrative (Elliott 2005).

Constructing biographies for the GUS mothers raises two main ethical concerns: would a GUS participant be identifiable from the biography, and would a participant be surprised or uncomfortable to find that the information she had provided was being analysed not only for its content but also for its narrative form and the identity strategies it suggests?

Neither the GUS dataset nor the biographies presented here use real names; geographical locations are not known; and exact income and occupations are not reported. For the two atypical cases, certain personal details have been changed to make identification impossible. The accounts do include sensitive information such as the mother's mental health and her child's behavioural development, but participants would not know their scores on these measures and so could not identify themselves from these. In short, there is not enough person-specific information in the biographies with which to identify individuals. Even if one of the GUS participants were to read her own biography, it is unlikely that she would be able to identify it without question as pertaining to her own life, although she might identify strongly with the account. The biographies cannot and are not intended to be psychological profiles of the mothers. They aim to present general interpretations which are credible in the contemporary social, cultural and political context in Scotland.

Finally, constructing biographies from a perspective one step removed from the individual life can highlight patterns of which the subject herself is unaware.

'It is incumbent on the narrative researcher, as a social scientist, to relate the meanings of an individual's story to the larger, theoretically significant categories that they exemplify, an objective quite foreign to that of the individual telling a purely personal narrative' (Smythe and Murray 2000: 325, quoted in Elliott 2005: 149).

4.11.3 Narrative analysis: rationale for case selection

Two typical and two atypical cases were chosen from the GUS dataset for narrative analysis. The designation of ‘typical’ or ‘atypical’ was based on the two characteristics of the mother’s age at the birth of her first child and her occupational group.

Age at primiparity and occupational group are indicators of socio-economic status (Anderson et al. 2007). Better-educated women with higher-status jobs tend to have their children later in life. Patterns of social support and service use are also linked to these two criteria (Maybelis and Marryat 2011; Bradshaw et al. 2008). Finally, children’s behavioural development at pre-school is linked to socio-economic status (Bradshaw and Tipping 2010). In other words, the criteria used to select typical and atypical cases are some of the possible indicators of ‘class’ in order to explore the assumption that middle class mothers adopt the ‘concerted cultivation’ childrearing approach, while working class mothers adopt the ‘accomplishment of natural growth’ approach.

Initial exploration of the data had confirmed that women in the professional/managerial occupational group were on average 30 when their first child was born. Women in the routine and semi-routine occupational group were on average 23 at primiparity. In order to choose the two ‘typical’ cases, all the cases were identified a) where the mother was 30 at the birth of her first child and had a professional/managerial job, and b) where the mother was 23 at the birth of her first child and worked in a routine occupation. One case was selected at random⁴⁵ for each of the two age/occupational groups. The expectation was that the older, professional mother would adopt the ‘concerted cultivation’ childrearing approach, while the younger mother with a routine occupation would adopt the ‘accomplishment of natural growth’ approach. The atypical cases were selected on the basis of the same two criteria, but this time using purposive sampling to choose

⁴⁵ Using the software STATA.

cases where the mother's age at primiparity lay towards the extreme of the range for her occupational group. The four cases chosen for analysis are as follows:

- 'Rebecca' works in a managerial/professional occupation, and was 30 years old at the birth of her first child.
- 'Emma' works in a routine/semi-routine occupation and was 23 years old at the birth of her first child.
- 'Rita' has never worked and was 35 years old when her first child was born.
- 'Suzanne' works in a managerial/professional occupation, and was 19 years old at the birth of her first child.

Typical and atypical cases can be compared statistically to explore the impact of socio-economic differences in patterns of personal network and child-related service use on children's development. The intention in constructing biographies for these women is to use the power of a narrative framework to impose a beginning (the birth of a child), a chain of events which are understood in the context of the ultimate resolution of the story, and an ending, or evaluation (the child starting pre-school). The biographies are intended to enhance our understanding of how identity, opportunities and structural constraints overlap in individual lives.

4.12 Conclusion

This chapter has sought to explain how the analysis carried out in subsequent chapters is designed to answer the research questions set out in Chapter 2. Chapters 6, 7 and 8 present the results of statistical analysis; Chapter 5 considers habitus and childrearing approach at the individual level by using GUS data to construct biographies for four mothers. Chapter 5 uses a traditionally qualitative methodology to complement the quantitative analysis presented in other chapters: here, narrative analysis is carried out on the case studies of selected GUS mothers a) to examine concrete instances of the interplay of psychosocial factors and structural constraints and b) to explore how theories of social and neighbourhood differences in childrearing approach are played out in individual lives. The resulting - more

nuanced - understanding of individual trajectories will be used to shape model specification and selection in the subsequent quantitative analysis.

4.13 Appendix 4.1 Descriptive statistics for Childrearing Approach

This appendix sets out the descriptive statistics for the survey measures used as proxy indicators for childrearing approach at Sweep 2 and Sweep 4 of GUS.

Table 4.9 Parental effort - reciting nursery rhymes

“On how many days in the last week has the child recited nursery rhymes or sung songs either on his own or with someone else?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Every day	2,158	58.2% (57.8%)	2,264	65.2% (65.6%)
Less often	1,549	41.8% (42.2%)	1,206	34.8% (34.4%)
TOTAL	3,707 (3,650)	100%	3,470 (3,438)	100%

Weighted values are given in brackets

Table 4.10 Parental effort - letter and word play

“On how many days in the last week has the child played at recognising letters, words, numbers or shapes either on his own or with someone else?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Every day	1,088	29.4% (29.5%)	1,329	38.4% (37.8%)
Less often	2,612	70.6% (70.5%)	2,130	61.6% (62.2%)
TOTAL	3,700 (3,643)	100%	3,459 (3,425)	100%

Weighted values are given in brackets

Table 4.11 Structured enrichment activities - visits to libraries

“In the past year, how often has the child gone to the library?”

In the past year visited library ...	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
more than once a week	260	7.0% (7.0%)	481	13.9% (14.0%)
at least once a month	747	20.2% (19.5%)	1,084	31.2% (29.8%)
every few months	768	20.7% (20.0%)	849	24.5% (23.9%)
did not visit	1,932	52.1% (53.5%)	1,058	30.5% (32.3%)
TOTAL	3,707 (3,650)	100%	3,472 (3,439)	100%

Weighted values are given in brackets

Table 4.12 Structured enrichment activities - visits to live performances

“In the past year, how often has the child gone to a live performance for children such as a musical concert, play or pantomime?”

In the past year attended a live performance ...	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
at least every few months	247	6.7% (6.3%)	837	24.1% (22.6%)
at least once	733	19.8% (19.2%)	1,443	41.6% (40.1%)
did not attend	2,727	73.6% (74.6%)	1,192	34.3% (37.3%)
TOTAL	3,707 (3,650)	100%	3,472 (3,439)	100%

Weighted values are given in brackets

Table 4.13 Structured enrichment activities - visits to museums or galleries

“In the past year, how often has the child gone to an art gallery, museum or historical site?”

In the past year visited museum/gallery ...	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
once a month or more	243	6.6% (6.2%)	352	10.1% (9.5%)
every few months	470	12.7% (12.0%)	784	22.6% (21.3%)
at least once	526	14.2% (14.0%)	674	19.4% (18.9%)
did not visit	2,468	66.6% (67.8%)	1,662	47.9% (50.4%)
TOTAL	3,707 (3,650)	100%	3,472 (3,439)	100%

Weighted values are given in brackets

Table 4.14 Intervention in institutions

“If you ask for help or advice on parenting from professionals like doctors or social workers, they start interfering or trying to take over.”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Agree	258	7.2% (8.2%)	248	7.4% (9.1%)
Neither agree or disagree	882	24.5% (24.4%)	999	29.6% (29.8%)
Disagree	2,457	68.3% (67.5%)	2,128	63.1% (61.1%)
TOTAL	3,597 (3,541)	100%	3,375 (3,340)	100%

Weighted values are given in brackets

Table 4.15 Main childcare provider

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Not using childcare	1,108	30.2% (31.0%)	44	1.3% (1.5%)
Other family member, friend or neighbour	168	4.6% (4.7%)	209	6.1% (6.4%)
Private playgroup, nursery or preschool	829	22.6% (21.9%)	728	21.1% (19.9%)
Local Authority playgroup, nursery or preschool	316	8.6% (8.3%)	1,138	33.0% (35.0%)
Childminder, nanny or babysitter	70	1.9% (2.0%)	287	8.3% (7.6%)
Child's grandparents	1,174	32.0% (32.1%)	1,043	30.2% (29.7%)
TOTAL	3,665 (3,608)	100%	3,449 (3,414)	100%

Weighted values are given in brackets

Table 4.16 Personal networks - number of people respondent feels close to

“Not counting people who live with you, which of the following statements best describes how many people you have a close relationship with?”

Respondent feels close:	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
To lots of people	1,139	30.9% (31.6%)	1,123	32.4% (33.3%)
To some people	1,775	48.1% (47.3%)	1,601	46.2% (45.4%)
To few or no people	773	21.0% (21.1%)	741	21.4% (21.2%)
TOTAL	3,687 (3,628)	100%	3,465 (3,430)	100%

Weighted values are given in brackets

Table 4.17 Personal networks - support from family and friends

“Overall, how do you feel about the amount of support or help you get from family or friends living elsewhere?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
I don't need any help	148	4.0% (4.3%)	128	3.7% (3.8%)
I don't get any help	209	5.7% (5.7%)	184	5.3% (5.3%)
I don't get enough help	574	15.6% (15.7%)	520	15.0% (14.9%)
I get enough help	2,756	74.8% (74.4%)	2,633	76.0% (76.0%)
TOTAL	3,687 (3,628)	100%	3,465 (3,430)	100%

Weighted values are given in brackets

Table 4.18 Personal networks - frequency with which respondent visits friends with children

“How often do you (or your partner) take the child to visit other people who have young children?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Once or twice a week	2,432	65.6% (65.7%)	2,210	63.7% (63.8%)
Less often	1,275	34.4% (34.3%)	2,162	36.4% (36.2%)
TOTAL	3,687 (3,650)	100%	3,472 (3,439)	100%

Weighted values are given in brackets

Table 4.19 Personal networks - frequency with which respondent is visited by friends with children

“And how often are you and the child visited by other people who have young children?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Once or twice a week	1857	50.1% (50.2%)	1,876	54.0% (54.3%)
Less often	1849	49.9% (49.8%)	1,596	46.0% (45.7%)
TOTAL	3,706 (3,649)	100%	3,472 (3,439)	100%

Weighted values are given in brackets

Table 4.20 Personal networks - attendance at mother and toddler group

“In the last year, have you regularly attended any parent and toddler groups with the child?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Yes	2,005	54.1% (52.1%)	691	19.9% (18.6%)
No	1,702	45.9% (47.9%)	2,781	80.1% (81.5%)
TOTAL	3,707 (3,650)	100%	3,472 (3,439)	100%

Weighted values are given in brackets

Table 4.21 Personal networks - ease of finding childcare at short notice for a whole day

“If you (or your partner) needed to leave the child with someone for a whole day, how easy or difficult would it be to find someone to help you out at short notice - for example, in an emergency of some kind?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Difficult	1,482	40.0% (40.0%)	1,190	34.3% (34.6%)
Easy	2,225	60.0% (60.0%)	2,282	65.7% (65.4%)
TOTAL	3,707 (3,650)	100%	3,472 (3,439)	100%

Weighted values are given in brackets

Table 4.22 Personal networks - person respondent would be most likely to turn to for childcare at short notice

“Thinking about family, friends or anyone else, who would you be most likely to call on for help with looking after the child in the first instance?”

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Childminder	71	1.9% (1.8%)	65	1.9% (1.8%)
Friend, colleague or neighbour	377	10.3% (10.0%)	351	10.3% (9.6%)
Other family member	517	14.2% (14.7%)	504	14.7% (15.5%)
Child's grandparents	2,686	73.6% (73.5%)	2,499	73.1% (73.2%)
TOTAL	3,651 (3,592)	100%	3,419 (3,382)	100%

Weighted values are given in brackets

Table 4.23 Mother's working pattern

Whether the mother works full time (35 hours or more per week), part time or does not work.

	Sweep 2		Sweep 4	
	Frequency	Percent	Frequency	Percent
Full time >=35 hours	564	15.2% (14.8%)	569	16.4% (15.5%)
Part time	1,849	49.9% (47.8%)	1,831	52.8% (50.1%)
Does not work	1,294	34.9% (37.5%)	1,066	30.8% (34.4%)
TOTAL	3,707 (3,650)	100%	3,466 (3,434)	100%

Weighted values are given in brackets

4.14 Appendix 4.2 Strengths and Difficulties Questionnaire measures

Table 4.24 Strengths and Difficulties Questionnaire items

SDQ Questionnaire item	Behavioural sub-scale
Child has tantrums	Conduct problems
Child is obedient	
Child fights or bullies	
Child lies or cheats	
Child steals	
Child complains of headaches	Emotional symptoms
Child seems worried	
Child is unhappy	
Child loses confidence	
Child has many fears	Hyperactivity/inattention
Child is restless, overactive	
Child fidgets or squirms	
Child is easily distracted	
Child thinks before acting	
Child has a good attention span	Peer problems
Child is solitary	
Child has at least one good friend	
Child is liked by children	
Child is bullied	
Child gets on better with adults	Pro-social
Child considers others' feelings	
Child shares with other children	
Child is helpful if someone hurt	
Child is kind to younger children	
Child volunteers to help	

Each question is coded 2 - 'Often', 1 - 'Sometimes', or 0 - 'Never'. The coding of some items is reversed to create the subscales, for example 'Child is obedient' is reverse coded to create an item measuring disobedience for the conduct problems subscale. The Total Difficulties Score is calculated by combining the child's score on the five subscales.

4.15 Appendix 4.3 Comparison of available measures of childrearing approach in the Millennium Cohort Study and Growing up in Scotland

Table 4.25 Parental effort - reciting songs, poems and nursery rhymes in GUS and MCS

	GUS Sweep 2		MCS Wave 2 Scottish subsample (weighted)	
	Frequency	Percent	Frequency	Percent of valid responses
Every day	2,158	57.8%	845	60.5%
Less often	1,549	42.2%	595	39.5%
TOTAL	3,707 (3,650)	100%	1,440	100%

For GUS, unweighted frequencies are reported: weighted totals are given in brackets

Table 4.26 Parental effort - frequency with which child played ay recognising letters, words, numbers or shapes (MCS - alphabet only)

	GUS Sweep 2		MCS Wave 2 Scottish subsample (weighted)	
	Frequency	Percent	Frequency	Percent of valid responses
Every day	1,088	29.4%	245	23.2%
Less often	2,612	70.6%	1195	76.8%
TOTAL	3,700 (3,643)	100%	1,440	100%

For GUS, unweighted frequencies are reported: weighted totals are given in brackets

Table 4.27 Structured enrichment activities - library visits in GUS and MCS

In the past year visited library ...	GUS Sweep 2		How often child taken to library	MCS Wave 2 Scottish subsample (weighted)	
	Frequency	Percent		Frequency	Percent of valid responses
more than once a week	260	7.0% (7.0%)	Once a week	119	18.0%
at least once a month	747	20.2% (19.5%)	Once a fortnight	131	19.8%
every few months	768	20.7% (20.0%)	Once a month	259	39.2%
did not visit	1,932	52.1% (53.5%)	On special occasions	151	22.9%
			Not Applicable	779	-
TOTAL	3,707 (3,650)	100%	TOTAL	1,440	100%

For GUS, unweighted frequencies are reported: weighted totals are given in brackets

Table 4.28 Mother's working pattern in GUS and MCS

Whether the mother works full time (35 hours or more per week), part time or does not work.

	GUS Sweep 2		MCS Wave 2 Scottish subsample (weighted)	
	Frequency	Percent	Frequency	Percent
Full time >=35 hours	564	15.2% (14.8%)	181	12.7%
Part time	1,849	49.9% (47.8%)	656	45.8%
Does not work	1,294	34.9% (37.5%)	595	41.5%
TOTAL	3,707 (3,650)	100%	1,440	100%

For GUS, unweighted frequencies are reported: weighted totals are given in brackets

4.16 Appendix 4.4

Table 4.29 Variables used for the construction of GUS mothers' biographies

Variable name	Subject area/question wording
DaHGbord	Study child's birth order
MaHGsx1	Study child's sex
DaChAgMth	Age of study child (months)
MaHlsi01	'Does [study child] have any health problems or disabilities that have lasted or are expected to last for more than a year?'
DaAgBMum	Age of mother at birth of sample child
MaMage01	'How old were you when your first child was born?'
MaPGpr01	'When you first knew you were pregnant with child , how did you feel about the prospect of having this baby?'
MaHcig02	'Do you currently smoke cigarettes?'
MaHcig03	'How many cigarettes do you usually smoke in one day?'
DaEthGpM	Ethnicity of respondent
DdHGrsp04	Family Type
DaMedu02	Mother's highest level of education
DbYedu01	Partner's highest level of education
DaMsec01	Mother's occupational group
DaYsec01	Partner's occupational group
MaWsts01	Mother's employment status
MbWsam03	Whether respondent's employment details have changed
MbWtim01	Number of hours respondent works in a week
DbYsta01	Partner's employment status
MaCwlf01-04	Mother's attitudes to working vs being a stay-at-home-mum
DaSf12mn	Mother's mental health score
ZDbHdas01	Mother's stress score
ZDbHdas02	Mother's depression score
DbHdas03	Mother's standardised composite stress and depression score
MaWinc09	Annual household income from all sources
MaZhou05	Housing tenure
DaHGrsp01	Whether respondent is the survey child's biological mother
DaHGnp03	Whether the survey child's biological father lives in the household
DaGraPar	Whether any of the survey child's grandparents live in the household
MaCdom01	Survey child's main carer
MaZhou14	'How long have you lived at this address?'
MbZhou15	Whether respondent was living at the same address a year ago
MbZhou21-94	Reason for moving, if applicable
DdHGiw10	Number of other places child has lived in past year
MdOve01-95	Measures of household/family stability and change: 'I'd like to get an overview of what has happened in [survey child's] life since [month of interview] last year. Can I check, has [survey child] experienced any of the things listed on this card since the last interview?'
MdPatt01	'Nobody can teach you how to be a good parent – you just have to learn for yourself.' [response is likert scale: strongly agree - strongly disagree]
MaPatt02	'It's more important to go with what the child wants than to stick to a firm routine for feeding or sleeping.' [response is likert scale: strongly agree - strongly disagree]
MdPatt03	'It's better for children to have two parents than one.' [response is likert scale: strongly agree - strongly disagree]
MaPatt04	'If you ask for help or advice on parenting from professionals like doctors or social workers, they start interfering or trying to take over.' [response is likert scale: strongly agree - strongly disagree]

MaPatt05	'It's difficult to ask people for help or advice about parenting unless you know them really well.' [response is likert scale: strongly agree - strongly disagree]
MaPatt06	'It's hard to know who to ask for help or advice about being a parent.' [response is likert scale: strongly agree - strongly disagree]
MaPatt07	'It may not be a good thing to smack, but sometimes it is the only thing that will work.' [response is likert scale: strongly agree - strongly disagree]
MaCany01	'Do you currently get help with childcare for [survey child] on a regular basis from any of the providers or people listed on the card?'
MaPGan01	Whether mother attended ante-natal classes
MaPGan02	Whether ante-natal classes were NHS-run
MaPGin01-10	Sources of information and advice during pregnancy
MaPGin11	Most useful source of advice during pregnancy
Malgva01/2 to Malgvg0/2	Whether mother has heard of, and her level of knowledge about, various services such as Parentline and NHS 24.
MaDbab01-11	Child's early communication and motor skills
MbCSBS01-30	Communication and Symbolic Behaviour Scales - child
MdSDQ01 to MdSDQ25	Strengths and Difficulties Questionnaire (SDQ) – measures of child's behavioural difficulties
DdDsdem1	SDQ emotional symptoms sub-domain
DdDsdco1	SDQ conduct problems sub-domain
DdDsdhy1	SDQ inattention and hyperactivity sub-domain
DdDsdpr1	SDQ peer problems sub-domain
DdDsdps1	SDQ pro-social sub-domain
DdDsdto1	SDQ total score
DaCman01	Main childcare provider
DaCman02	Main childcare provider number of hours
DaCtyp01-19	Type of childcare provider
MaCpay03-09	Cost of childcare
MaCtot01	Number of childcare providers used
MaCnom01	Main reason for using childcare
MaAlit02	Frequency with which child is taken to library
MaWben01-94	Benefits received
MaObtg01	Whether mother attends mother and baby group
MaOpar01	Whether mother attends parenting classes
MaGcon01	Number of child's grandparents with whom mother is in regular contact
MaGclo01	Number of grandparents with whom child has a close relationship
MaGliv01	Number of grandparents who live within a 20-30 minute drive
MaGcon02	Frequency with which child sees grandparents
MaGspt01-04	Frequency and type of babysitting which grandparents undertake
MaZspt01	'How easy would it be to find someone to look after [survey child] at the last-minute or in an emergency for a few hours during the day?' [response is likert scale: very easy - very difficult]
MaZspt02	'...for a whole day?' [response is likert scale: very easy - very difficult]
MaZspt03	'...overnight?' [response is likert scale: very easy - very difficult]
MaZspt04	Person mother would turn to first for help with looking after child
MbAvst01	Frequency with which mother takes child to visit friends with children
MbAvst02	Frequency with which mother is visited by friends with young children
MbSNpf10	Number of people respondent has a close relationship with
MbSNpf11	Whether respondent feels close to most of her family
MbSNpf12	Whether respondent feels that friends take notice of her opinions

MbSNsp01	Whether respondent feels she gets enough support from friends and family
MbMact10	Whether respondent is a member of a local group for children
MbMact11	Type of local group
MbMact12	Whether respondent is a member of any other local group
MbMact13	Type of local group
MbNHsv01-12	Facilities available in the local area and frequency with which respondent uses them
McNHsa01	'How satisfied or dissatisfied are you with the area you live in?' [response is likert scale: very satisfied - very dissatisfied]
McNHsa02	Whether respondent feels her neighbourhood has a good community spirit
McNHsa03	Whether respondent feels her neighbourhood has a good reputation
McNHsa04	Whether respondent feels her area is going downhill
McNHsa05	'If I was able to, I would like to live in another neighbourhood' [response is likert scale: strongly agree - strongly disagree]
McNHfr01	'I feel safe when I am out alone in this neighbourhood during the day' [response is likert scale: strongly agree - strongly disagree]
McNHfr02	'I feel safe when I am out alone in this neighbourhood after dark' [response is likert scale: strongly agree - strongly disagree]
McNHkd02	Whether respondent feels that people around in her area look out for each other's children
McNHkd03	Whether respondent feels that most people in her area can be trusted with children
McNHkd04	'People around here hold shop doors open for parents with pushchairs' [response is likert scale: strongly agree - strongly disagree]
McNHkd06	'This is a good area to bring children up in' [response is likert scale: strongly agree - strongly disagree]
McNHim01	'If you had to choose two items from this list that are in most need of improvement around here which would your first choice be?'
McNHim02	'And which would your second choice be?'
McNHls01	'Thinking generally about local services, how would you rate the following? Social and leisure facilities for people like yourself?' [response is likert scale: very good - very poor]
McNHls02	'Facilities for young children up to the age of 12' [response is likert scale: very good - very poor]
McNHls03	'Facilities for teenagers' [response is likert scale: very good - very poor]
McNHls04	'Local childcare services' [response is likert scale: very good - very poor]
McNHls05	'Local health services (e.g. your GP or the local hospital)' [response is likert scale: very good - very poor]
McNHls06	'Local schools, colleges and adult education' [response is likert scale: very good - very poor]
McNHtr01	'From what you know or have heard, would you say this area has good local transport?' [response is likert scale: strongly agree - strongly disagree]
McNHkd01	Are there public places in your area where children can play safely?
McNHkd05	'Bringing up children well is a priority for people in this area' [response is likert scale: strongly agree - strongly disagree]
McNHgd01	'I'd like to ask you what you think makes somewhere a good place to bring up children. If you had to choose two items from this list, which would your first choice be?'
McNHgd02	'And which would your second choice be?'
MdPsup01-06	Six items from the Parent Supervision Attributes Profile (PSAPQ) questionnaire
ALaSNimd	Scottish Index of Multiple Deprivation score
Sw1qsnacc_04	SIMD access sub-domain quintile
Sw1qsnedu_04	SIMD education sub-domain quintile

5 Constructing biographies for selected GUS mothers

The previous chapter set out how childrearing approach - as one manifestation of habitus - is to be operationalised in the quantitative analysis carried out in this thesis. This chapter adopts a different analytic approach and a broader operationalisation of childrearing approach for two reasons. The first is to test the validity of the proposed operationalisation to be adopted for the quantitative analysis. The second is to address another issue raised in the previous chapter: habitus links agent and structure, yet quantitative analysis can only consider individuals in aggregate. This chapter focuses on four mothers in the Growing up in Scotland survey and explores how habitus and childrearing approach are manifested and experienced at the individual level. The results of this chapter are triangulated with the results of the quantitative analysis presented in Chapters 6, 7 and 8.

5.1 Why construct biographies with longitudinal data?

The analysis presented in this chapter applies a relatively little-used methodological technique in a new context. The chapter explores a broad range of survey questions at the individual level, and it uncovers cases where the theoretically anticipated patterns of childrearing approach hold, and cases where they do not, then considers why some instances conform to while others deviate from theoretical expectation. This process offers an opportunity to consider the validity of the variables selected to operationalise childrearing approach in subsequent chapters. Finally, the analysis presented here is triangulated with the final results of the statistical analysis.

Not unlike a school laboratory microscope, the analytic approach adopted for this chapter uses three different lenses to examine the GUS mothers' life histories: the lenses move from the theoretical to the empirical. The first lens considers mechanisms of social reproduction: how material structural constraint, social reality

and individual agency inform each other. The first lens examines whether, in the four GUS case studies, it appears that – in Bourdieu’s terms – the structure is absorbed by the individual who then reproduces the structure. The second lens focuses on the ways in which this interplay of choice and necessity may be experienced and made sense of by the individual: are the limits of structure unconsciously accepted in individual schemes of thought? How does this affect self-image and identity construction? The third lens looks at empirical manifestations of these mechanisms of social reproduction in the form of aspects of GUS mothers’ childrearing approach. The third lens illuminates the way that the four GUS mothers make, maintain and use their personal networks, the extent and density of those networks and the way that they use services to obtain their preferences with greater or lesser degrees of success.

The prime theoretical impetus for choosing this methodological approach is to explore mechanisms of social reproduction in Scotland. This chapter assesses whether elements of Lareau’s (2003) typology of childrearing approach are evident among mothers in Scotland. Qualitative research into childrearing approach (Gillies 2005; Lareau 2003; Allatt 1993) suggests that individuals vary in the way they consciously employ personal networks and services to achieve ‘concerted cultivation’ or ‘the accomplishment of natural growth’. In constructing biographies for the GUS mothers, this chapter offers the reader a number of possible interpretations of the more-or-less conscious application of ‘concerted cultivation’ and ‘natural growth’ strategies which the mothers adopt, within the context of the economic, cultural and social resources at their disposal.

Before statistical analysis of the GUS data is undertaken to examine the associations between mothers’ socio-economic and neighbourhood characteristics and childrearing approach it is important to consider how these networks of material and social necessity might be experienced and constructed at the individual level. Applying interpretive understanding to data which sets out the life histories of GUS mothers during an important life stage and using this understanding to construct

biographies for the four mothers offers insight into the individual experience of social reproduction which cannot be gained from quantitative analysis alone.

The GUS data are very rich: they represent four face-to-face interviews, each over an hour long, covering aspects of behaviour, attitudes and belief, as well as recording information on income, work and health. The biographies presented are intended to illustrate typical and atypical cases, not a generalised account of the attitudes and behaviours of selected 'social types'. The biographical form offers an insight into how far the psychological and social processes which influence personal networks and service use (identified in qualitative research, see Böhnke 2009 and 2007; Gillies 2007 and 2005; Lareau 2003) can be seen to operate in the context of GUS.

In sum: why construct biographies with GUS data? To search for meaning: the meanings which GUS mothers could be said to make of their life trajectories. In other words, to move beyond a statistical description of material conditions, or an analysis of the norms and expectations of social groups to provide an interpretation of how individual mothers construct and reconstruct themselves and their identities within the material and social constraints with which they are confronted.

5.2 The constructed biographies

This section presents a biographical account for each case study. The stories look in particular at the mothers' personal networks and use of services; their subjective views about their neighbourhood and objective measures of neighbourhood quality; and their children's behavioural development at age four. The accounts highlight instances where a personal narrative appears to emerge: where retrospective changes may suggest a re-writing of the self, or where discrepancies between measures of behaviour and belief may suggest cognitive dissonance reduction or the adoption of identity strategies. All names used in the analysis are fictitious.

Rebecca – a typical ‘concerted cultivation’ mother?

Rebecca was 30 when her first child, Rosie, was born. Rosie is the GUS survey child: she was eleven months old at the time of the Sweep 1 interview. Rebecca is white, and has degree-level qualifications. Both Rebecca and her husband are Rosie’s biological parents and both live in the household throughout the period of the survey. They own their property with a mortgage, which they pay off over the course of the survey and they do not move house during the four years up to 2008.

Rebecca and her husband both work in the same full-time managerial or professional occupations from 2005-2008. At Sweep 1, the household income was between £44,000 and £49,999 per year, but this increases year-on-year to over £56,000 per year by Sweep 4.

Rosie has no chronic health conditions and her early development is normal. By Sweep 4, her total difficulties score on the Strengths and Difficulties Questionnaire is zero, putting her in the top percentile. Rebecca herself scores slightly below the average for mental health at Sweep 1, but this improves over the subsequent years so that her mental health score at Sweep 3 is above average. Rebecca’s stress and depression scores are among the lowest in the whole sample at Sweeps 2 and 4.

Rebecca’s neighbourhood

Rebecca lives in one of the most affluent areas of a town⁴⁶. Her neighbourhood is in the least deprived quintile on nearly all of the Scottish Index of Multiple Deprivation (SIMD) sub-domains (income, employment, education, housing), but is in the most deprived quintile for geographic access and in the second most deprived quintile for health and crime⁴⁷. In spite of the lack of access to services, Rebecca is very satisfied with where she lives and she is not looking to move. The area has a good reputation; she feels safe when out on her own during the day and at night; there is good community spirit; people can be trusted; they look out for kids; and they hold

⁴⁶ From GUS, we know only that this town had a population of between 10,000 and 125,000 people.

⁴⁷ For a full explanation of SIMD sub-domains, see

<http://www.scotland.gov.uk/Publications/2006/10/13142913/4> .

doors open for pushchairs. In short, Rebecca says that hers is a good area in which to bring up kids.

The area's low score on access to services appears justified when Rebecca reports that there is no family doctor or community health service, no library, no public swimming pool or leisure centre, and poor facilities for children or teenagers. Local public transport is also poor. There is a play park in the area but Rebecca does not use it. In fact, local education services are the only facility which Rebecca rates as good.

At Sweep 2, Rebecca's number one priority for improving the area was the amount of good shopping facilities nearby. Her second priority was better facilities for young children. By Sweep 4, these priorities have changed: she would now like to see more facilities for younger and older children.

Rebecca is not a member of any local group: although we know she attends a mother and baby group, we must assume that this is out-of-area, since she says that there are no parent/toddler groups, no registered childminders, no playgroups and no nurseries in her local area. These facts may explain Rebecca's reliance on Rosie's grandparents for childcare (they are Rosie's main childcare provider). Her non-participation in local groups may have more to do with the absence of these groups than a lack of civic engagement on her part.

Rebecca's personal networks

Rebecca's personal networks appear to be based primarily around work and Rosie's grandparents, although she does attend a mother and baby/toddler group throughout the four years. Rebecca's responses give the impression of a small but close group of friends: she says that she has close relationships with a few people, but that her friends always take notice of her opinions. At Sweep 1 in 2005, Rebecca reported visiting and being visited by friends with children once a fortnight. By Sweep 4, this has reduced to once every one or two months, possibly because of increased work

pressures. Rebecca is very close to her family and feels that she gets enough support from family and friends.

Indeed, grandparents play a huge role in Rebecca and Rosie's life: all three grandparents live within 20 to 30 minutes of her home, and Rosie sees at least one of her grandparents every day. Rebecca's childcare arrangements are made on a purely informal basis: grandparents are the only childcare provider Rebecca uses for the first three years of her daughter's life, providing 28, 30, and then 32 hours per week of childcare before Rosie starts pre-school at the age of three years and six months. Through Rebecca's use of personal networks (in this case family networks), Rosie's childcare is free of charge throughout the four years of the survey.

Because of her particularly strong grandparental networks, Rebecca says that she would find it very easy to find childcare at the last minute or in an emergency either for a few hours during the day, for a whole day or overnight: her parents-in-law would be the first port of call for childcare in an emergency.

Rebecca's use of services

The main formal services which Rebecca uses are Child Benefit, Child Tax Credit and a pre-school attached to a Local Authority primary school in Sweep 4. The mother and baby/toddler group which she attends for all four years is NHS-run.

Rebecca has not only heard of, but knows quite a lot about services such as Working Families Tax Credit, Child Trust Funds, SureStart and Parentline. It appears, then, that Rebecca is accessing all of the statutory benefits and services to which she is entitled.

Discussion - Rebecca's constructed biography

The following section offers an interpretation of the 'facts' of Rebecca's chronicle, taking in turn her neighbourhood, her personal networks and her use of child-related services. A degree of cognitive dissonance reduction may be evident in Rebecca's narrative of place. She appears to have assimilated her area's actual and perceived

advantages into her own views about what makes an area a good place to bring up children, discounting or shifting out of focus the area's disadvantages. In other words, Rebecca may be adjusting her perceptions of her neighbourhood to fit with her need to believe that the area where Rosie will grow up is a good area in which to bring up children.

Rebecca's area scores poorly on the health sub-domain: this could suggest that there is a high proportion of elderly and retired people living in the area, which may impact on the provision of services for very young children. It is possible that the level of wealth in Rebecca's area is such that many services are accessed through the private sector. In addition, wealthier people are more likely to have cars, making longer drive times to services less prohibitive.

Rebecca's neighbourhood does not offer easy access to services and facilities, but she is highly satisfied with her area and its reputation. The area could be characterised as one with strong collective efficacy and a good school. For Rebecca, the most important factors which make a neighbourhood a good place to bring up children are the availability of good schools and a strong sense of community spirit. Because Rebecca's neighbourhood has a good reputation, and because her self-image may be one of a successful working mother living in a desirable neighbourhood, it is as if she constructs her beliefs about an 'ideal area' around the advantages of her current area. Being dissatisfied with her area would not fit with her self-image nor with her understanding of others' perceptions of the area as a desirable place to live.

Another example of a possible change in Rebecca's personal narrative is her change in priorities for her area between 2005 and 2008: she moves from prioritising shopping facilities to prioritising facilities for young children. This could simply reflect the practical logistics of childrearing and changing needs as children develop, but it could also bespeak a change in priorities from personal to child-centred as Rebecca gains more experience of living with a young child in her area. After the first year, Rosie would become more active and more able to take advantage of facilities for young children. It is also possible, though, that by Sweep 4 the role of

parent is more embedded in Rebecca's self-image, leading to a change in priorities to a more explicitly child-centred focus.

Rebecca's feelings about place may be an example of how the world gets into the mind and how individuals modify their perceptions to conform with their self-image. Group norms, expectations and attributions may influence individual views. Blau 1960: 179 (quoted in Burbank 1995: 166) asks:

“how can one demonstrate that social values and norms exert external constraints upon the acting and thinking of individuals if they only exist in the minds of individuals?”

Burbank (1995) suggests that individuals are influenced by their social environments in two ways: firstly by learning from others, and secondly by learning from their own observations. The social structure of a neighbourhood may influence the people available for social interaction. In other words, Rebecca's interactions with people in her neighbourhood may directly create and maintain her impression of the neighbourhood, but those interactions may also affect Rebecca's cognition of the perceptions and preferences of others, leading her own beliefs to converge not only with her objective observations, but also with her perception of the views of others.

Turning to Rebecca's personal networks, there are important tensions in the narrative that can be constructed from Rebecca's survey responses. On the one hand, she is already working full time by the time Rosie is eleven months old, in a professional or managerial role. Rebecca and her husband's household income is in the top quintile throughout the four years of the survey. By the time Rosie is three years and ten months old, Rebecca and her husband have paid off their mortgage. The neighbourhood where they live is one of the least deprived. At Sweep 4 in 2008, Rebecca reports that she and her husband are living very comfortably on their income. And yet, at Sweep 1 Rebecca says that if she could afford to, she would prefer to work fewer hours and spend more time bringing up Rosie. These dual voices which can be heard in Rebecca's narrative may reflect some of the difficulties

and ambiguities which are faced by new mothers as they seek to re-cast their identities to encompass the role of mother into their previous selves. On the one hand the 'old self' may be based around a self-image defined by professional competence, reputation, friendships formed in childhood and family roles such as daughter or wife. This self-image may locate an individual consciously within a certain social group. The preservation of self-image depends in part on the affirmation of that image by others, which in turn requires the display of certain attitudes and behaviours (Smith 1994; Trower et al. 1978). At this early stage of motherhood, it is possible that Rebecca is still struggling to preserve the continuity of her previous self while internalising the story of growth into motherhood, and the attitudes and behaviours which fit with that identity. The duality of Rebecca on the one hand working to maintain a high standard of living and on the other her desire to spend more time at home being a mother arguably reflects the duality of social expectations of mothers to be both carers and earners.

The pattern of personal network use which emerges from Rebecca's responses bespeaks a small, efficient network which is easy to maintain in the face of considerable time pressures. Rebecca's network appears limited to work colleagues, Rosie's grandparents, and friends and contacts made through a mother and toddler group. A pattern of frequent informal visits with a wide network of friends and extended family is not evident. Indeed, as might be expected from a well-educated, affluent mother, Rebecca's personal network is one of loose ties with very few redundant ties (Lareau 2003; Burt 1992; Granovetter 1974).

Perhaps missing from the standard pattern of concerted cultivation is a number of structured enrichment activities for Rosie, designed to expose her to a variety of new skills, including interacting with adults to learn the language of institutions. We know that Rosie's grandparents take her on visits every day, so it is legitimate to hypothesise that the grandparents are performing this role while Rebecca is at work and that Rosie is being exposed to a certain cultural repertoire through library, museum and gallery visits even at this young age. These activities may already be imbuing Rosie with a sense of belonging to a dominant culture and a sense of

entitlement to and consumption of that culture. Rebecca lives in an area that is poorly served by transport, leisure and children's facilities. It is not clear, therefore, whether Rebecca's current use of local services such as a library or playground would be greater if more services were available in her area, or whether Rebecca relies on Rosie's grandparents to access local services or facilities with Rosie while Rebecca is at work.

According to theories of class-based approaches to parenting (Irwin and Elley 2011; Vincent 2010; Boehnke 2009; Vincent and Ball 2007; Gilles 2007 and 2005; Lareau 2003; Allatt 1993), Rebecca is more likely than less affluent parents to feel comfortable encouraging professionals and institutions to meet her needs. Indeed, she is more likely to feel a sense of entitlement to access these professional services. This is the picture which her narrative reflects for the most part. Rebecca says that health professionals were the most useful source of advice during her pregnancy. However, at Sweep 1, Rebecca was undecided about whether professionals were likely to take over if asked for advice or help. By Sweep 4, though, Rebecca was confident about asking for help and did not feel that professionals were likely to interfere. While this change may simply reflect greater trust in professionals after greater exposure, Rebecca's change of attitude may also be an example of post-hoc rationalisation. Bearing in mind Rosie's normal developmental trajectory, lack of serious illness, general low risk status, and use of informal childcare only, it is unlikely that Rebecca would have had systematic or significant involvement with professionals beyond Sweep 1 health visitor contact and GP contact for initial inoculations. There is no evidence in the survey to suggest that there was further contact up until Sweep 4 which would have changed Rebecca's mind. Smith (1994) suggests that mothers may reconstruct or re-tell the stories of their pregnancies or motherhood, focussing on the positive in their retrospective accounts. Rebecca's re-casting of her attitude to professionals may reflect a desire to portray herself as a confident, well-educated woman at ease with her entitlement to statutory services and the equal of health professionals. This re-casting may help to consolidate Rebecca's self-image as aligning with the expectations of her social group.

Emma – a typical ‘accomplishment of natural growth’ mother?

Emma was 23 when Euan, her first child, was born. Euan is the GUS study child: he was 11 months old at the time of the Sweep 1 interview. Emma and her partner are both Euan’s biological parents. Euan had no chronic health problems during the study and his early development was normal: his Communication and Symbolic Behaviour scores at Sweep 2 were average for the cohort.

Emma is white and has Standard Grade level qualifications. At Sweeps 1 and 2, she and her partner both work full-time in semi-routine or routine jobs, but at Sweeps 3 and 4 Emma is not working. As a result of these changes in employment, the annual household income (including benefits) fluctuates year-on-year, from between £15,000 and £17,999 at Sweep 1, rising to between £26,000 and £28,999 at Sweep 2, then falling again to between £18,000 to £19,999 in 2007 before increasing slightly to between £20,000 and £22,999 at Sweep 4, at which time Emma says that the household is coping on their income. It is not possible to establish from the GUS data what proportion of the household’s total income is derived from salary, and what proportion from benefits.

Emma and her partner rent their flat from the council: at Sweep 1, they had been living there less than a year, but both continue to live in the household between 2005 and 2008. Euan lived away from the household with his grandparents at some point between 2007 and 2008. It is possible that he moved in with his paternal grandparents, who moved to the area at that time.

Emma’s neighbourhood

Emma lives in a small, accessible town. Her neighbourhood is in the most deprived SIMD quintile for education, employment, health and income; it is in the second most deprived quintile for crime and in the middle quintile for housing and access to services.

Emma is very dissatisfied with her area: she feels that the neighbourhood has a bad reputation and that it is going downhill. If she could, she would move to another

neighbourhood. There is no sense of community spirit in the area; parents look out for each other's children, but most people in the neighbourhood can't be trusted around them. Emma doesn't think that her neighbourhood is a good place to bring up children at all.

At Sweep 2, Emma's first priority for improving her area was the availability of good shopping facilities nearby; her second priority was enhancing facilities for young children. At Sweep 3, her priorities have moved from facilities for young children to better public transport. This may be because Emma is aware of facilities elsewhere, but is not able to access them easily from where she lives. There is a playground and a parent and toddler group in Emma's area but she doesn't use them. There is a GP practice and community health services which she sometimes uses. There is no library or public swimming pool. Emma rates local transport, leisure facilities, local childcare and facilities for children and young people as very poor.

Emma does not feel particularly safe going out alone in her area during the day or at night. There is nowhere safe for children to play: bringing up children well is simply not a priority for people in her area. For Emma, a good neighbourhood in which to bring up children would be one where there is a low level of crime and where there is good, affordable family housing.

Emma's personal networks

Emma relies mainly on informal friendship groups: she visits and is visited by friends with children every day – in spite of working full time at Sweeps 1 and 2. Emma feels that she has close relationships with some people (lots of people by Sweep 4); she feels very close to most of her family and her friends take notice of her opinions. However, Emma consistently feels that she is not getting enough help and support with childcare from friends and family.

At Sweep 1, Emma is in contact with two of Euan's grandparents: her own parents, who live within a 20-30 minute drive. Euan has a very close relationship with them, seeing them at least once a week. In fact, at Sweeps 1 and 2, Euan's grandparents

are Emma's only source of childcare, babysitting for him during the day and sometimes in the evening. However, Euan never stays overnight with Emma's parents and they never take him on day trips or excursions without Emma. Emma's parents look after Euan for around 10 hours per week at Sweep 1. By Sweep 2, this has increased to 40 hours per week and Emma pays her parents £50 per week for childcare. She finds it a struggle to pay this amount. By Sweep 3, Emma's childcare arrangements appear to become more complex: she still considers her parents to be her primary source of childcare - although they only look after Euan for six hours a week - but now Euan's paternal grandparents have moved to the area and they look after him for eight hours per week. By now no longer working, Emma has stopped paying her parents for childcare. By Sweep 4, the picture is further complicated as Euan is looked after by someone else for a total of 54 hours per week, by three different childcare providers. Now Emma's main childcare provider is a friend, who looks after Euan for 12 hours a week; he spends 10 hours per week in a local authority pre-school and the rest of the time with his grandparents.

Emma's use of services

Emma received Working Tax Credit, Child Tax Credit and Child Benefit throughout the four years of the survey, but she uses relatively few formal services other than a local-authority pre-school. Although Emma's neighbourhood lies in the middle SIMD quintile for access to services, the lack of availability of some services and facilities is compounded by the quality of those services. There is a play park in Emma's area, but she does not use it because she says there is no safe place for young children to play outdoors. The fact that Emma's neighbourhood is in the second most deprived quintile in Scotland for crime, twinned with her ambivalence about the safety of her area, suggests that she may feel prevented from using some of the services which are on offer.

Discussion - Emma's constructed biography

Emma experiences a great deal of instability and change in employment, income, childcare arrangements and extended family life during the four years of the study. Her accommodation, her partner and her partner's employment are her main points

of reference. It is possible that the stresses associated with these changes, and with living on a relatively lower income with a small child, have had an impact on Emma's mental health. Marryat and Martin (2010) found that those living in an area of deprivation were more likely to experience mental health problems. At Sweep 1, Emma is in only the 5th percentile of the cohort for positive mental health, and at Sweep 2 her 95th percentile stress and depression scores indicate some cause for concern. There is some improvement in Emma's mental health by Sweep 3: she moves from the 5th to the 10th percentile, while by Sweep 4 Emma's stress and depression scores have moved from some of the most concerning to among the least concerning in the cohort, similar to Rebecca's scores at Sweep 4.

Although we have no indication of Emma's mental health before Euan was born, the fact that her mental health and anxiety levels improved steadily in the two years post-partum to a very good level may indicate that Emma normally enjoyed good mental health but was finding it difficult to cope with a young child, full time work and inadequate child care.

Emma's narrative illustrates well how material constraints, group norms and personal identities overlap, and the effects that these competing claims can have on individual wellbeing. There is ambiguity around Emma's decision to give up work after Sweep 2. On the one hand, a lack of sufficient reliable childcare may have made it impossible to cope with the demands of full time work – to the extent that the pressures were seriously impacting on Emma's mental health - yet at Sweep 3, Emma says that she is actively looking for full time work, and at Sweep 4, although she is not working at the time of the interview, there is some indication that she had worked at some point during the previous year⁴⁸. In the first few years of Euan's life, Emma may have struggled to reconcile financial necessities with her own wishes and her social group's expectations around raising her child. It seems that Emma is trapped in a wage penalty situation where she is not able to earn enough money to pay for formal childcare, and she does not have access to sufficient - and

⁴⁸ Emma says that when Euan started pre-school, she went back to work.

sufficiently reliable - informal childcare to allow her to work consistently. She and her partner cannot easily afford for her not to work so that she can look after Euan herself.

By Sweep 4, Euan's SDQ score is 13, putting him in the 80th percentile of the cohort for behavioural difficulties. Marryat and Martin (2010) found evidence that the degree of a child's exposure to maternal mental ill-health affected child development outcomes. In their study, the relationships between maternal mental health and children's social, emotional and behavioural development remained statistically significant, even after maternal family characteristics and socio-economic factors were controlled for (Marryat and Martin 2010: vii). Euan's behavioural difficulties may therefore reflect Emma's mental health difficulties at Sweeps 1, 2 and 3. We can postulate that the behavioural difficulties arise because of problems with attachment, interaction and nurturing (Hollway 2006; Bowlby 1988). It is interesting to note the time-lagged nature of these behaviours, as Euan's early development was normal and Emma's mental health was excellent by Sweep 4, when the SDQ questionnaire was completed.

The narrative which emerges from Emma's account may suggest a more nuanced interpretation of Euan's SDQ score than might have been possible in the specification of a quantitative model. At Sweep 4, Emma says that although Euan did not want to go to pre-school and frequently complained about going, she can see a huge variety of benefits from his attendance, including educational and social development, experience of other adults and preparation for school. In this sense, Emma is just as aware of the value of learning to conform to the expectations of educational institutions as parents with a higher level of education and higher-status jobs. In this sense, her attitudes conform to those of a 'concerted cultivation' mother.

In spite of Euan's apparent behavioural difficulties, Emma is confident that he will be able to get along well enough with other children to be able to fit in at pre-school. She feels he knows enough about taking turns and sharing and that he is independent

enough to cope on his own. This discord between Euan's SDQ score and his mother's subjective assessment of his behaviour suggests further complexity in Emma's narrative: does she present her son in a positive light because her self-image as a good mother relies on a re-casting of reality where Euan is well-behaved and ready for pre-school; is this a cognitive dissonance reduction strategy to minimise in Emma's own mind the impact of her poor mental health during Euan's early life; or is it that the SDQ, designed by 'middle-class' researchers, measures behaviour which conforms to the norms and expectations of institutions from which the less-well-educated are excluded (Gillies 2007; Vincent and Ball 2007; Lareau 2003; Allat 1993). In other words, Euan's behaviour may be cause for concern in a middle class context, but he may in fact need quite different survival skills to negotiate the challenges in the world around him (Gillies 2005). Indeed, *'the cultural logic of childrearing at home [may be] out of synch with the standards of institutions'* (Lareau 2003: 3).

Turning to Emma's neighbourhood, a narrative voice emerges here which bespeaks Emma's lack of trust for many local residents and a 'them and us' attitude between parents and others in the area. Because of the lack of collective efficacy in the neighbourhood, parents must 'go it alone': the wider community is not reinforcing the norms and expectations which parents are trying to impart to their children (Odgers et al. 2009). Emma's responses suggest a self whose identity rests on belonging to a close personal network, on working to help support her family and on being a good mother. Poor housing, fear for personal safety and a lack of reliable, affordable childcare combine to undermine Emma's ability to actualise her sense of self, which threatens her mental health for much of the earliest part of Euan's life.

There is considerable instability in both the number of hours of childcare and in the childcare providers which Emma is able to access. There is also little relation between the number of hours Euan spends in childcare and Emma's work pattern. The fact that Emma works full time at Sweep 1 but uses only ten hours of childcare each week, coupled with the fact that Euan's grandparents are likely to look after him in the evening at least once a week may suggest that Emma works shifts: she

may look after Euan during the day, and work at night while he is asleep, with her partner providing the main care during those hours.

Emma's changing childcare situation may reflect a lack of confidence in those around her to be able to provide good quality, reliable childcare for a sufficient number of hours per week. This may be because both Emma's and her partner's parents are still working. Although Emma consistently says that she would be most likely to turn to her own parents first for childcare, and in spite of her frequent contact with her personal network, she is not confident about being able to find someone to look after Euan in an emergency. She consistently says that it would be difficult to leave Euan with someone for a few hours during the day, for a whole day or overnight. It is only at Sweep 3, where both sets of grandparents are close by, that Emma says she would find it easy to find last-minute child care for Euan. This confidence has evaporated by Sweep 4. These changes may suggest that Emma's relationships with her relatives are not always positive and consistent, or that both sets of grandparents are dealing with pressures which make it difficult for them to provide consistent childcare.

Although Emma has a strong personal network, it is not necessarily an effective one. Emma's identity appears to rest on being someone who 'belongs', is listened to, and is close to her family. Yet she does not *feel* supported. Two questions arise here: what is the direction of causality between mental health and social support? Secondly, is the inadequacy of support which Emma feels subjective or due to the lack of resources of actors in her network?

On the first point, maternal mental health is closely associated with socio-economic disadvantage and with deficits in relation to emotional and social support at the family, friendship and community level (Marryat and Martin 2010). In Emma's case, frequent interaction with a strong friendship network does not seem to be analogous to social support. Although she can activate some of the capital in her networks to access free child care, she is not able to draw on sufficient resources to achieve the outcomes she would choose. This lack of choice and power is likely to

lead to greater stress, anxiety and depression. Diminished feelings of self-efficacy can reduce resilience (Luthar 1999; Werner and Smith 1992). The lack of community spirit and collective efficacy which trouble her own neighbourhood remove a further safety net which could have protected Emma's mental health and Euan's behavioural development (Teasdale and Silver 2009; Pratt et al. 2004; Sampson et al. 1997).

On the second point, in spite of having access to a network rich in bonding ties, Emma may not be able to make and utilise bridging ties to activate capital (Portes 1998; Putnam 1993). If she could afford to, she would give up full time work to stay at home with Euan. But Emma also says that if she could afford good quality childcare which was reliable and convenient, she would work more hours. Emma would like to be able to access more and better childcare but can't afford it, so she must rely on informal networks, which are not always able to provide high-quality, consistent and reliable care. In many ways Emma's network reflects a pattern identified in the work of a number of social network researchers (Böhnke 2009 and 2007; Fram 2003; Burt 1992; Granovetter 1974; Stack 1974) where some networks, typically around those with lower status and fewer educational qualifications, can be rich in strong ties, but lack weak ties which can link them to those higher status individuals on the periphery of their network who have access to greater resources.

The narrative which emerges from Emma's account tells the story of an individual who is not at ease with the language of formal institutions: she does not feel a sense of entitlement to attention from professionals such as doctors or social workers. Emma attended some of her antenatal classes when she was pregnant with Euan: these were run by an organisation other than the NHS. She felt more comfortable asking family and friends for advice about pregnancy and birth, rather than health professionals. When she had concerns, she expressed these to family and friends, other mothers or referred to the midwife-issued 'Ready Steady Baby' book. Initially, Emma mistrusted professionals, believing that they were likely to interfere, but like Rebecca, her attitude to them became more positive over time. Whereas Rebecca may have revised her views to conform to her self-image of a well-educated woman

confident with dealing with institutions, it seems more plausible that Emma's opinion of professionals has been positively influenced by the diminishing likelihood of professional interference. This pattern once again echoes findings from qualitative studies (Vincent 2010; Gillies 2007; Lareau 2003) which suggest that mothers from more deprived backgrounds are more likely to feel a sense of constraint in their interactions with institutional settings.

Rita – an older mother who has never worked

Rita and her husband were both born outside the UK and both belong to a non-white ethnic group⁴⁹. English is not the language usually spoken at home. Neither Rita nor her husband has any qualifications⁵⁰ and Rita has never worked. Her husband works full time throughout the four sweeps of GUS in a routine or semi-routine occupation. Their first child, Ruby, is the GUS survey child: she was born when Rita was 35 years old⁵¹. Ruby was ten months old at the time of the Sweep 1 interview in 2005; she did not suffer from any long term health problem during the survey.

Rita, her husband and Ruby live in a flat which they rent from the Local Authority between 2005 and 2008. At Sweep 1, they had been living there for between three and five years.

At Sweep 1, the household income was between £10,000 and £11,999 per year, rising to between £12,000 and £14,999 per year at Sweep 2. There is no change at Sweep 3, but at Sweep 4, Rita says that she does not know what the household income is. Because Rita does not work, it is possible that she genuinely does not know the current income level, but the likelihood of this interpretation is diminished

⁴⁹ The sample of ethnic minority respondents in GUS is too small to allow more specific ethnicity information to be disclosed.

⁵⁰ Although the GUS questionnaire lists specifically UK qualifications, there are also two response options for other qualifications and other employment-related qualifications which would enable the recording of non-UK qualifications, were any present.

⁵¹ The mean age at primiparity among ethnic minority mothers in the GUS sample was 25, compared with 26 for white mothers in the sample.

by the fact that Rita knew what the household income was in all the previous sweeps. In addition, Child Benefit is usually paid to the mother, and Rita is aware of the other benefits which the household receives at Sweep 4, so it is possible that her 'don't know' answer reflects an unwillingness to disclose the household income information at this sweep. Rita says that she and her husband are coping on their current income, even though the household income is in the lowest quintile.

Rita was very happy when she first found out she was pregnant with Ruby. Rita's mental health improves steadily after Ruby's first year: at Sweep 1 her mental health score puts her in the most concerning quartile of the sample; she does not complete the stress and depression questions at Sweep 2; but by Sweep 3 her mental health score is average. By Sweep 4 Rita's mental wellbeing appears to have improved still further and she is in the least concerning ten percent of the sample for stress and depression. This improvement in Rita's mental health may be linked to Ruby starting pre-school and the associated reduction in childcare responsibility, but may also be a function of the increased support which she is able to access through her friendship network by Sweep 4 (Marryat and Martin 2010).

Ruby's early development is well into the top quartile of the sample at Sweep 1. Rita does not complete the Communication and Symbolic Behaviour questions for Ruby at Sweep 2, but Ruby's behavioural development is recorded at Sweep 4. Ruby displays slightly more difficulties than average: her score lies between the fiftieth and seventy-fifth percentile. However, this overall score masks strengths and difficulties in certain areas; Ruby does not display conduct problems or any signs of hyperactivity: her pro-social score is well above average in the seventy-fifth percentile. She does, however, have some concerning peer problems and displays some emotional symptoms⁵².

⁵² Ruby is in the ninetieth percentile on both sub-domains.

Rita's neighbourhood

Rita and her family live in a large urban area: it is in the most deprived SIMD quintile for education, employment, health, income and housing; it is in the second most deprived quintile for crime and in the middle quintile for access to services. Rita feels neither positive nor negative about her area's reputation. She does not have the sense that her area is going downhill and she would not choose to move to another neighbourhood. Overall, Rita is fairly satisfied with the area she lives in and thinks that it has a good community spirit.

Although Rita believes that the area has good community spirit and she generally feels safe in her neighbourhood, it seems that this 'community' is limited in her mind to other parents. Bringing up children well is not a priority for people in the area generally and the collective efficacy of the neighbourhood as a whole is weak: people in her area do not look out for each other's children; nor can they be trusted around them.

Rita rates the childcare, schools, leisure and health facilities in the area as average, but facilities for children and teenagers are poor. Rita is confident that there are safe public places where children can play and she often uses the local playpark. For Rita, the two most important characteristics of a good place to bring up children are having family and friends close by, and having access to good schools.

Rita's personal networks

Rita does not work and her close family do not live in the UK: her personal networks are therefore based entirely on informal friendships, mostly with other mothers.

Rita is in regular contact with all four of Ruby's grandparents, and Ruby is close to all four of them, but Ruby never sees them because they live outside the UK: they are never able to babysit or to take Ruby out on day trips.

Initially, Rita did not attend a mother and baby group or any parenting classes, but by Sweep 2 in 2006 she had joined a mother and toddler group, which she continued to

attend until 2008. At Sweep 2, Rita took Ruby to visit friends with children only once every three or four months, although she was visited by friends once or twice a week. By the time Ruby was nearly three in 2007, Rita was visiting her friends more often: once or twice a week, a pattern which continued at Sweep 4.

Rita says that she would turn to a friend for help in the first instance if she had to find someone to look after Ruby at short notice. Although Rita would find it easy to find a carer for Ruby for a few hours during the day, she is more reluctant to leave her for a whole day or overnight. This reluctance may be a function of Rita's less well established support network, although the pattern of confidence in her ability to access last-minute childcare over the four sweeps of the survey mirrors many GUS mothers and appears to be at least partly related to the child's developmental stage.

Rita says she has close relationships with some friends and feels close to most of her family. She is unsure whether her friends always take notice of her opinions, though, and she feels that, overall, she does not get enough support from friends and family living elsewhere.

Rita's use of services

Rita did not attend any antenatal classes because she did not know where they were taking place. At Sweep 1, Rita had never heard of Working Families Tax Credit, the Child Trust Fund, Sure Start, or Parentline Scotland, although she did know quite a lot about NHS 24. At Sweeps 1 and 2, Rita received only Child Benefit, but by Sweep 3, the household received Child Tax Credit in addition to Child Benefit; and by Sweep 4, the family accessed Working Tax Credit and Child Benefit. Although at Sweep 4 Rita's uptake of benefits is still not perfectly aligned with eligibility, there is a strong suggestion that enhanced personal networks and access to professional advice have helped her to pursue her family's interests. It is also possible that participation in the GUS survey increased Rita's awareness of these benefits and services.

Rita does not use any formal childcare until Ruby starts pre-school in September 2007: she cares for Ruby herself. The reasons for this may be cultural or because formal childcare was too expensive for the family. Rita says that if she could afford good quality childcare which was reliable and convenient she would prefer to go out to work or do a training course.

When she was pregnant with Ruby, Rita sought advice from health professionals; friends and family; and books and magazines whenever she had questions or concerns. She found family and friends to be the most useful source of information.

Discussion - Rita's constructed biography

It is possible that Rita's reluctance to disclose her household income at Sweep 4 reflects both her increasing awareness of the attitudes and dispositions dominant in mainstream Scottish culture and her struggle to incorporate those dispositions into her own self-image. Rita's household income is the lowest by some margin of the four case studies, yet she says that she and her husband are coping, whereas Suzanne - discussed below - finds it difficult to cope on nearly twice the income. This divergence highlights the subjectivity in individual perceptions of income but also the lifestyles associated with different social groups: it is possible that, relative to friends and family living abroad, Rita's household income is high so one of her identity strategies is to construct this income as sufficient. However as Rita comes into increasing contact with wider personal networks and service providers such as pre-school in Scotland, the external perception of her household income as low may become more apparent to her. Rita's unwillingness to disclose income information at Sweep 4 may be due to a reluctance to be defined as 'low income': her self-image may be partly based on her roles as wife, mother and friend in a respectable, self-sufficient family, an identity with which she finds the label of 'low income family' difficult to reconcile.

It is conceivable that Ruby's peer problems at pre-school entry are related to language and communication difficulties because English is not Ruby's first language. Bradshaw and Tipping (2010) found – in their analysis of the GUS child

cohort – that non-white children were significantly more likely to have peer difficulties at school entry than were white children (50% compared with 16%). However, the small size of the non-white sample means that this result should be treated with caution. Emotional difficulties refer to internalising behaviours such as anxiety and somatic complaints (Muris et al. 2003). Ruby is an only child: Bradshaw and Tipping found that the presence of siblings in a household appeared to reduce the risk of emotional difficulties at school entry. Rita reports that Ruby was well-prepared for and eager to start pre-school, but it is possible that in spite of the continuity of Rita's childcare and her non-authoritative but protective parenting style, Ruby was anxious about moving out of full time parental care into an environment which may have been culturally and linguistically unfamiliar.

The narrative which can be constructed from Rita's account of her neighbourhood between 2005 and 2008 points to an interesting process of reconstructing the self and re-casting past decisions in order to preserve a self-image of personal growth and self-sufficiency. Rita's narrative suggests not so much an unconscious assimilation and reproduction of the norms and expectations of her wider social group, but rather an increasing awareness of these dispositions and an accommodation of her own self-image to them.

The most important aspects of a 'good' neighbourhood for Rita are having family and friends close by, and having access to good schools. These priorities point towards a possible divergence in Rita's narrative from the theoretically expected pattern of childrearing practice which her education and social status might suggest. Qualitative research findings suggest that Rita would adopt an 'accomplishment of natural growth' strategy (Lareau 2003), but her conscious concern with personal networks - social capital - and education - cultural capital - suggests that she is more inclined to adopt a 'concerted cultivation' approach. The narrative which can be constructed from Rita's account implies that she is well aware of the power of symbolic capital and the benefits of activating that capital to encourage groups and institutions to comply with her preferences. However, Rita's immigrant status means

that her personal networks and her understanding of how to access services are – at least initially – more limited.

Rita's biography suggests a re-writing of her relationship with her neighbourhood over the four years of the survey. From the information available from her survey responses, it seems legitimate to hypothesise that Rita and her husband are immigrants to the UK. Rita's positive self-image is therefore likely to depend on her construction of a past decision to come to the UK as being the 'right choice', as leading to an improvement in circumstances. In order to preserve this self-image, she needs to believe that she is living in a decent neighbourhood. However, Rita's biography suggests that this self-image is increasingly reconstructed as she synthesises sensory information about material conditions and social expectations embodied in the world (Freeman 1993). At Sweep 2, Rita says that she wouldn't want to improve anything about her neighbourhood, but by Sweep 4, she would like to improve the quality of schools and would like to have friends and family close by. This does not appear to be simply a case of a relative newcomer to an area becoming more discerning as the changing needs of her child require her to access more varied services; Rita appears to be taking account not just of the physical realities of her area but also of some of the norms, expectations and dispositions of an increasingly wide personal network.

Turning to Rita's personal networks, it seems that these are formed to a great extent through necessity. Rita is unlikely to have the same set of cultural references as her wider social group, although she may have contact with friends from the same ethnic background. English is not her first language and she does not have any qualifications or employment. Acceptance into a social group is therefore Rita's only way of forming and activating symbolic capital. As Ruby gets older, Rita appears to cultivate her personal network increasingly by joining a mother and toddler group and by visiting friends more often. While this may simply reflect a desire for more social contact, taken in tandem with Rita's increased awareness and uptake of statutory services as the GUS study progresses it suggests a form of

concerted cultivation, albeit one that is restricted by Rita's limited access to cultural and social capital (Bourdieu 1986) and to the language of dominant institutions.

Rita's use of services becomes increasingly discerning over the four years of the survey. At least initially, her position as a non-native English speaker and her unfamiliarity with the services on offer appear to have acted as barriers to her accessing services. However, over time Rita's awareness of and her ability to mould services to her needs increased substantially.

Rita's relationship with professionals and institutions suggests a more complex narrative of parenting, again not one which can be easily pigeon-holed into a 'concerted cultivation' or 'accomplishment of natural growth' approach. On the one hand, Rita seems to feel more comfortable accessing informal advice, but on the other, she seems unsure about asking people for advice about parenting unless she knows them well. At Sweep 1, Rita felt that it was hard to know who to ask for advice about being a parent, but by Sweep 4, she appears more confident about knowing where to turn for help. It is possible that this increasing confidence is a function of a more mature personal network. Initially, Rita may have accessed advice from family living abroad, but as she developed symbolic capital within her social group she was more able to activate some of that capital in the form of advice.

As Rita's personal network becomes stronger, her trust in professionals diminishes: at Sweep 1, she does not believe that professionals such as doctors or social workers try to interfere or take over if they are asked for help and advice. By Sweep 2, she is ambivalent about this and by Sweep 4, Rita is convinced that professionals do try to interfere. An interesting counterpoint to this is that Rita turned directly to nursery school staff for advice on choosing a pre-school. This may be because she lacked other network ties with appropriate knowledge, but it also bespeaks a strong determination to secure good outcomes for Ruby. Once again, the narrative which emerges from Rita's account suggests that she is keenly aware of the value of maintaining contacts and engaging with institutions to try to achieve her preferences. She is also aware - consciously or unconsciously - of the centrality of educational

institutions in acting as guarantors of cultural capital and in determining acceptance into dominant social groups (Bourdieu and Passeron 1977). In other words, Rita appears to be seeking to adopt a concerted cultivation approach to Ruby's upbringing, but she also appears to become increasingly frustrated in her attempts to engage with professionals. Contrary to the pattern found in some qualitative examples (Lareau 2003), this frustration does not appear – by 2008 – to have diminished Rita's sense of equal entitlement to access and mould services to her needs.

Suzanne – a teenage mother in a managerial occupation

Suzanne is white, has Standard Grade qualifications and had her first child, Sally (who is the GUS survey child), when she was 19 in 2005. Suzanne works full time in a managerial/professional role throughout the four sweeps of the survey, although she changes employer at Sweep 3.

There are numerous changes in Suzanne's living arrangements and in her household income between 2005 and 2008. At Sweep 1, Suzanne is living as a single mother in a flat rented from the Local Authority. She had been living there less than a year in 2005. She moves again at Sweep 2 to a larger flat, this time rented from a housing association. Finally, in March 2007 she moves with Sally's father into a flat rented from the Local Authority, where the couple are still living at Sweep 4.

Although Suzanne declares herself a single mother in 2005 and 2006, she is still in a relationship with Sally's father. She describes her relationship with him as very good: he is closely interested in Sally and sees her every day, taking her out on day trips at least once a week. Sally's father buys equipment, toys and clothes for her on a regular basis, but does not make any formal financial contribution towards her maintenance until 2006.

Suzanne and her partner had lived together for over six months but moved apart after Sally was born. Both Suzanne and her partner were very happy when they found out that she was pregnant with Sally. Suzanne and Sally's father move back in together

as a couple when Suzanne falls pregnant again and at Sweep 4, in 2008, Suzanne has a new baby boy, a full brother to Sally.

Suzanne's partner is four years older than she is and works full time in a routine or semi-routine occupation. No information is supplied about his qualifications.

There is considerable variation in Suzanne's household income and in the benefits the household receives year-on-year. In 2005, her household income is between £15,000 and £17,999 per year. In 2006, when Sally's father starts to make regular financial contributions to her maintenance, Suzanne's annual income jumps to £56,000 or more per year. In 2007, when Suzanne and her partner are living together, the household income is between £32,000 and £37,999 per year. By 2008, the annual household income is between £26,000 and £28,999: Suzanne and her partner are finding it difficult to cope on this amount. Although considerable income variation is common among people with fewer educational qualifications who live in more deprived areas, part of the variation in income is likely to be due to changes in benefit payments and to Suzanne's second period of maternity leave (Godwin and Lawson 2009; Lewis 2006).

Suzanne's mental health fluctuates over the course of the survey. At Sweep 1, she is in only the 5th percentile for positive mental health. At Sweep 2, Suzanne's levels of stress and depression are still above average but give less cause for concern: she is around the 60th percentile of the sample. When Sally is two years and ten months old in 2007, Suzanne's mental health continues to be below average, around the lower quartile of the sample. By 2008 there is some improvement: her composite levels of stress and depression are only just below average. The composite score masks the fact that although Suzanne's levels of depression are higher, her stress levels are low - only the 25th percentile of the sample.

At the Sweep 1 interview, Sally was 10 months old and had problems with asthma which limited her ability to carry out normal day-to-day activities. At this time, Suzanne smoked 20 cigarettes a day. By the time Sally is one year and nine months

old, her problems with asthma are no longer so acute. In spite of this ongoing health problem, Sally's early development is good: at Sweep 1, she is in the 75th percentile of the sample on measures of communication and motor skills. When Sally is one year and nine months old, her scores on the Communication and Symbolic Behaviour measures are average for the sample. By the time Sally is nearly four, though, her behavioural development may give some cause for concern. Her total score on the Strengths and Difficulties Questionnaire at Sweep 4 puts her in the 90th percentile of the sample for concerning behaviour. In fact, Sally scores relatively normally on most of the sub-domains, but she appears to have particular difficulty with hyperactivity and conduct problems. Bradshaw and Tipping (2010) found that conduct problems were associated with lower household income and family instability: 44% of children in stable and repartnered lone parent families had a conduct score in the borderline or abnormal range compared with 31% of children who experienced parental separation and 23% in stable couple families. It is surprising that Sally should display problems with hyperactivity by age 4, since hyperactivity was found to be more common in boys than girls and among children whose parents used harsh discipline (Suzanne did not). Bradshaw and Tipping did find, however, that problems with hyperactivity were more common among children of younger mothers, in lower income households, and where there was more limited parent-child interaction. It is possible that the frequent changes of address and living arrangements with her father, combined with the fact that she was in full time childcare from an early age may have contributed to Sally's early developmental difficulties (Ryan and Claessens 2013; Bradshaw and Tipping 2010; Belsky et al. 2007; Ackerman et al. 1999).

Suzanne's neighbourhood

From 2005-2008, Suzanne lived in a large urban area. In spite of her frequent changes of address, she lived in deprived neighbourhoods throughout this time. In 2007, her neighbourhood was in the most deprived SIMD quintile for education, employment, income, housing and health, and in the second most deprived quintile for crime. It was in the second highest quintile for access to services.

In December 2005, Suzanne moved house for the second time in two years in order to move to a bigger home. She moved from a Local Authority flat to one owned by a housing association. Suzanne reported that if she could improve two things about her area, she would like to see less crime and cleaner streets and parks. In March 2007, she moved again, this time to move away from crime.

Suzanne is not a member of any local groups, principally because she doesn't have time to dedicate to them. She is however well aware of the services available in her area and takes advantage of them as appropriate. There is a childminder and a playground in her area which she sometimes uses, and a nursery which she often uses. She also uses the GP, local community health services and the public library from time to time. There is no pool near her flat in 2006, but when she moves to a new area in March 2007, she does use the pool there.

Suzanne is fairly satisfied with her new neighbourhood in 2007 and feels that it has a good community spirit. Like Rita, though, it seems as though Suzanne conceives of her community as consisting of friends and family, since although people look out for each other's children, most people can't really be trusted around them. On balance, Suzanne doesn't believe that hers is a good neighbourhood in which to bring up children; if she could improve two things about her neighbourhood, she would like to see better access to good quality affordable childcare and better facilities for young children. Of prime concern to Suzanne is likely to be the cost of sending Sally to a private nursery while she is working, as she rates the childcare facilities in her area as good. Suzanne's subjective feelings about her neighbourhood quality are somewhat at odds with the objective measures of deprivation; although her area is in the most deprived quintile on almost all SIMD sub-domains, it scores well on access to services and indeed Suzanne judges the childcare and healthcare facilities to be good, and the leisure facilities and local schools to be average. It is possible that although the collective efficacy and health, education and income levels in her area are low, service provision has been concentrated there. In contrast to the stereotype of the young 'single' mother, Suzanne makes full use of the services that are available in her area.

Suzanne's personal networks

Suzanne has strong friendship and family networks, supplemented by bridging ties through her work contacts. Because her personal network is strong and established and because her time is limited, Suzanne does not attend a mother and toddler group or parenting classes at any point during the four years of the survey.

In spite of Suzanne's frequent changes of address, she remains in regular contact with all four of Sally's grandparents, and feels that Sally has a close relationship with them. The closeness of this relationship is further evidenced by the fact that Sally's grandparents babysit for her for an hour or more every day. They also have her to stay overnight and take her away for day trips at least once a month.

By the time Sally is one year and nine months old in 2006, Suzanne has established a pattern of taking her to visit friends with children every day; she is also visited by friends every day. By the time Sally is two years and ten months, these visits have reduced slightly in frequency to once or twice a week and continue in this pattern until Sally is nearly four.

Because of her strong friendship and family networks, Suzanne is confident that she would be able to find childcare for Sally at short notice. Although there are fluctuations, on the whole she would find it very easy to leave Sally with someone at short notice or in an emergency, either for a few hours during the day, a whole day or overnight. For the first three years of Sally's life, Suzanne would turn to her mother for last-minute childcare; at Sweep 4, Suzanne says that her mother-in-law would be her first port of call, possibly because her new flat is closer to her partner's parents.

Suzanne consistently feels that she has good relationships with a number of friends who take notice of her opinion, that she is close to most of her family and that, overall, she gets enough help and support from family and friends.

Suzanne's use of services

Suzanne was well aware of Working Families Tax Credit, the Child Trust Fund and NHS 24. She received Working Tax Credit, Child Tax Credit and Child Benefit in 2005 and 2006, when she was living as a single mother and working full time. Once she and her partner started cohabiting in 2007, they stopped receiving Child Tax Credit. In 2008, they were in receipt of Working Tax Credit and Child Benefit.

In spite of working full time, Suzanne takes Sally to the library from time to time, and by Sweep 4 Sally is taken to a live performance, such as a play, concert or pantomime at least once a month.

At Sweep 1, Suzanne uses a private nursery as her main childcare provider, although Sally's grandparents and another relative also provide childcare support. Suzanne pays £700 per month for a 40 hour per week placement, which she finds very difficult to pay. Indeed, it would seem that at this sweep Suzanne's childcare costs consume around half of her income. By Sweep 2, Suzanne has changed the nursery which Sally attends, now for 45 hours per week. This private nursery is still the main childcare provider and costs considerably less at £584 per month, although Suzanne still finds it difficult to pay this amount. These arrangements continue at Sweeps 3 and 4. It is not clear whether cost was the main consideration in moving nursery, or whether it is simply that the new nursery is closer to Suzanne's new flat. She simply says that she prefers the alternative arrangements.

At the age of three years and eleven months, Sally has still not started pre-school, although Suzanne says that she will start in the coming year. It is possible that Sally's conduct problems have delayed her entry to pre-school, or it may be that the private nursery she attends offers a pre-school curriculum and partnership nursery funding. With two children under five and working full time, it is also conceivable that Suzanne prefers to keep both her children at the same nursery, rather than having to organise separate school runs for a limited number of free pre-school hours in another establishment.

Throughout the survey, Suzanne feels confident asking professionals such as doctors and social workers for advice, without fear that they might interfere or try to take over.

Discussion - Suzanne's constructed biography

Suzanne's story defies many of the popular stereotypes about teenage mothers and suggests resourcefulness in the face of considerable instability. Suzanne's biography is an example of a 'concerted cultivation' approach to childrearing where it might not, theoretically, be expected. However, the narrative which can be constructed from her account suggests that the psychological, social and material pressures of maintaining this approach are considerable. In spite of the buffering effects of work and family networks Suzanne is faced with a challenge in constructing a unified sense of self which reconciles full time, high status work, raising young children and living in a deprived neighbourhood.

Suzanne's frequent changes of address reflect to some degree patterns distinguished in neighbourhood effects research (Hedman et al. 2011; Permentier et al. 2011; Permentier et al. 2009; Van Ham and Manley 2009): namely, that those living in deprived areas may move house in order to escape from crime, to improve the quality of their housing or to be nearer employment, but because of a reliance on friendship and family networks for support, there is a reluctance to move too far afield. In many cities, the concentration of social rented housing in certain areas also makes an out-of area move unlikely. In Suzanne's case, she moves three times in as many years to find a bigger flat and to move away from crime, but she is at all times living no further than 20-30 minutes' drive from both sets of Sally's grandparents. Her moves appear to have been only partially successful in improving her situation: Suzanne doesn't think her area has a good reputation and strongly feels that she would like to move if she could, even once she has moved to a new area in 2007. None of the changes of address lift Suzanne and Sally out of areas which are consistently in the 15% most deprived areas in terms of employment, income, health and education.

Suzanne's personal network, with its large number of redundant bonding ties, is typical of a younger mother with few educational qualifications (Maybelis and Marryat 2011; Bradshaw et al. 2008). In lieu of large amounts of raw economic capital, a close network can be strong in symbolic capital which can be activated to provide social support and informal childcare. This type of network would be typical of a mother pursuing the 'accomplishment of natural growth' childrearing approach. What is unusual about Suzanne's network is that it also includes weak ties to work colleagues which afford access to information and resources in other, more powerful groups (Lareau 2003; Burt 1992; Granovetter 1974). In fact, it appears that Suzanne is aiming to keep a foot in each camp.

In spite of her youth and relatively low level of qualifications, Suzanne's use of services is unusually astute: she appears to be confident in challenging authority and moulding services and institutions to suit her preferences. It is conceivable that she reports her living arrangements in such a way as to maximise the benefits available to her.

Suzanne's pursuit of 'concerted cultivation' is further evidenced by her concern to familiarise Sally with the language and references of dominant culture. She displays considerable parental effort in engaging Sally in cultural activities such as visits to the library and galleries, in spite of working full time.

Suzanne's attitude to authority figures aligns with the 'concerted cultivation' approach to parenting, yet there is some evidence from the biographical narrative which can be constructed from her account that Suzanne's attempt to maintain both a 'concerted cultivation' approach and close network ties is proving stressful. It may be difficult for Suzanne to maintain acceptance in her personal network while appearing to espouse norms and practices from other attractive social groups. Suzanne adopts parenting approaches associated with high status groups: she uses formal childcare and actively seeks to expose Sally to culturally enriching experiences. On the other hand, some of her parenting beliefs are associated with lower-status groups: she found friends and family to be a better source of advice than

health professionals when she was pregnant with Sally. There is some suggestion that Suzanne's acceptance in her personal network is undermined by her espousal of practices and perceptions which are not shared by the group. By Sweep 4, when Sally is nearly four, Suzanne feels less confident in her informal support network: she feels unsure about knowing where to turn for advice, and in asking those whom she does not know well.

Suzanne's identity appears to come under some stress from the competing demands of wanting to conform to the dispositions of her social group while at the same time wanting to use her ambition, status and resources to secure the best outcomes for Sally. Suzanne feels very strongly that she prefers working to staying at home looking after Sally: she would not give up work, even if she could afford to, but if money were no object she would like to reduce her hours so that she could spend more time with Sally. Once more, Suzanne's biography illustrates the challenges for new mothers in reconstructing their identities to incorporate the self-image associated with status, independence and competence won through employment with the role of carer and nurturer expected from motherhood (Griffiths 1995; Gilligan 1982). The challenge of integrating different aspects of the self is confounded in Suzanne's case by the challenge of maintaining acceptance in a network of close personal ties while seeking to cultivate increasing numbers of non-redundant bridging ties (Stack 1974).

5.3 Conclusion

This chapter has explored the extent to which mechanisms of social reproduction may operate in mothers' approaches to childrearing, operationalised through their personal networks and use of child-related services. The analysis presented in Section 5.2 cannot attempt to provide definitive evidence of social reproduction, nor does it finally solve the puzzle of whether – or to what extent - the assimilation and reproduction of habitus is unconscious. The biographies do, however, help to describe and explain how the material realities of qualifications, income and employment intersect with the social realities of family, friendship and wider

networks. The biographies explored the ways in which these material and social realities influence dispositions and identity, and in turn how self-image can influence the way the individual engages with the world. The accounts present interpretive analyses of the identity strategies which the four GUS mothers used to reconcile structural constraints, group norms and their own self-image. To that extent, the biographies are an exercise in empirical- and theory-based exploration of the ways that structure and the mind interact and are reproduced in the world.

A central theoretical concern of this thesis is the validity of Bourdieu's view that the reproduction of social inequality can be attributed to '*misrecognition of [the] arbitrariness*' (Bourdieu 1977: 167) of dominant forms of discourse and to individuals' willingness to make a virtue of necessity. The biographies suggest a weak form of habitus where the current order of things is not 'taken-for-granted', but where material realities, social motivation and the availability of symbolic capital contribute to mothers' identity formation in ways which are psychologically more or less stressful to maintain. Suzanne, for example, does not appear to take for granted the social 'fact' that those in managerial roles need to be highly qualified. On the other hand, she is subject to the material reality that Working Tax Credit and Child Tax Credit payments are higher for single mothers, and she acts accordingly. Although Suzanne may be able to some extent to engage with services and dominant institutions like Her Majesty's Revenue and Customs (HMRC) in a way which suits her preferences, this may adversely affect her mental health and levels of stress; she certainly does not seem to 'love the inevitable' as Bourdieu proposes (Bourdieu 1977: 77). Rebecca - whose educational background, employment status and family support network are more able to cope with the structure of the UK work and care policy package - appears to suffer less stress and anxiety during early motherhood.

The findings presented in this chapter support the subsequent analysis in four ways: firstly, they show the variety in real mothers' childrearing approaches, and highlight some of the reasons for this variety. Secondly, the findings draw out reasons why – in the Scottish context - some mothers adopt a 'concerted cultivation' parenting strategy, while others pursue the 'accomplishment of natural growth'. Thirdly, the

biographies offer an interpretation of the impact of the package of UK parenting policies on GUS mothers – both materially and psychologically – illustrating how some of the gaps in current provision play out in the real world. Finally, the accounts support the operationalisation of childrearing approach used in the statistical analysis which follows.

Unsurprisingly, the variation in mothers' personal networks and use of services arises from a much more complex set of factors than a single statistical model could capture effectively. Rebecca and Suzanne might be classed – statistically – as the same, because they both work in managerial/professional roles, yet their material circumstances and life experiences are poles apart. Similarly, the biographies show that mothers' adoption of either 'concerted cultivation' or 'accomplishment of natural growth' childrearing strategies is not a straightforward binary based on social class, but a set of attitudes and behaviours profoundly bound by the availability of services, resources to access them and personal networks to reinforce or undermine their use. Suzanne uses more formal child care than Rebecca, and exposes Sally to more cultural experiences than does Rebecca with Rosie. It is not possible to establish from the biographies the extent to which other caregivers such as grandparents, relatives or friends engage the survey children in structured enrichment activities.

The biographies straddle a pivotal time in Scottish politics and policy-making and they illustrate the material and social effects of those policies on four GUS mothers. In 2007 the Scottish Government administration changed from a Scottish Labour Party and Scottish Liberal Democrat coalition to the Scottish National Party. The tone of policy discourse also changed from a more-or-less unambiguous social welfarist approach to one focused on sustainable economic growth delivered in partnership with local groups⁵³. The biographies illustrate the impact of two contemporary policy areas: employment and care policy and neighbourhood policy.

⁵³ For a more detailed discussion of the policy context, see Chapter 3.

In all four biographies, the uptake of Working Tax Credit (WTC), Child Tax Credit (CTC) and Child Benefit is not perfectly aligned with eligibility and there appears to be considerable variation in the amount received year-on-year. Rita's initial failure to access any of the benefits to which her household is entitled reflects the position of ethnic minorities more generally: Chinese and Indian households' take-up is estimated to be 23% and 19% less than that of White households. This figure is around 5% for Pakistani and Black ethnic groups (Godwin and Lawson 2009).

The large fluctuations in household income seen in Emma and Suzanne's cases are likely to reflect genuine income variation due to maternity leave and movement into and out of the job market, but may also be a function of WTC/CTC overpayments and subsequent reduced payments. In 2006-07 two million households in the UK were affected by WTC/CTC overpayments (Godwin and Lawson 2009). The reporting burden on claimants for WTC and CTC is onerous and complex, and the structure of the benefits is '*vulnerable to the claimant making false declarations of single parent status*' (ibid., pp 8), which may have obtained in Suzanne's case. A weakness of the WTC/CTC model is that it reflects and perpetuates the one-and-a-half earner family pattern prevalent in the UK: the benefits

'increase the incentive to work for single parents and for the first earner in a couple, but they decrease the incentive to work for any second potential earner' (ibid.: 10).

Suzanne initially declares herself a single parent, possibly to maximise the benefits available to her from WTC and CTC, but when she and her partner are expecting a second child and Suzanne enters a second period of maternity leave, they move back in together.

UK family policy between 2005-2008 was based on a set of pragmatic, non-interventionist levers: long maternity leave with low-level wage replacement, income support in the form of cash benefits and the provision of free childcare places from the age of three. In Scotland in 2008, pre-school provision was 12 ½ hours per week for 38 weeks each year. As discussed in Chapter 3, the UK government's

conceptualisation of family as a private sphere sidesteps the problem that in many cases, women's choices to work or care are dependent on men's choices and that the 'choice' to work or care depends not just on adequate financial support, but also the availability and affordability of good-quality childcare before the child reaches age three (Lewis 2006). The four biographies bear witness to the fragmented nature of family policy: free childcare is only available for a limited number of hours per week once the child is three years old. Until then, mothers must rely on free childcare provided by friends and relatives or expensive private childcare. In both cases, the standard of care may be variable and its availability uncertain. The low value placed on unpaid care work puts mothers' identities as both carers and workers under stress. Emma, Suzanne and Rebecca all work full time after the end of statutory maternity leave, but Emma is not able to access sufficiently reliable childcare to enable her to keep working, while Suzanne pays a substantial proportion of her income to cover childcare costs. All three women value the financial independence which having their own income brings, but they struggle to reconcile this with the desire – and social expectation – to nurture: Suzanne and Rebecca would prefer to work fewer hours if they could afford to.

In 2007, the SNP moved from Labour's model of central allocation of block grant monies to Local Authorities towards a more explicitly performance-related model, governed by Single Outcome Agreements. Local Authorities would have more autonomy over budget allocation in return for annual reports on progress on specific Scottish Government performance indicators. Local Authorities, in turn, moved towards a model where services were delivered through Community Planning Partnerships involving representatives from the statutory and voluntary sectors. This model, at least in theory, meant that services were more responsive to local priorities and local need.

The biographies suggest that perceptions about community safety and community spirit are highly individual and that there is not always a straightforward linear relationship between the level of deprivation in an area and inhabitants' satisfaction with that area. This clearly presents challenges for policies aimed at generating

‘supportive communities’. Suzanne and Rita are both fairly satisfied with their area and feel that it has a good community spirit, although they live in deprived neighbourhoods. Even though Rita and Emma live in similarly deprived areas with similar levels of crime, Rita feels safe going out alone, but Emma does not. Conversely, Emma feels that there is a degree of collective efficacy among other parents in her area, whereas Rita does not. A number of studies suggest that neighbourhood cohesion can support parenting practice (Pratt et al. 2004; Silk et al. 2004; Sampson, Raudenbush and Earls 1997), and this does appear to be the case with Rebecca. She lives in an affluent neighbourhood where most people believe that bringing up children well is a priority and where most people can be trusted around children. Rebecca’s sense of living in a supportive community may contribute to her low levels of stress and anxiety and to Rosie’s stable behavioural development. The variety of experiences and perceptions evident in the GUS mothers’ biographies suggests that policy efforts to improve collective efficacy and community cohesion will have to make available sufficient financial support to enable people to give up their time and to address the competing needs and aspirations of those living in the same neighbourhood.

These constructed biographies help to clarify that even if individual cases in a dataset share the same score on certain variables, an individual’s unique constellation of variables can tell quite a different story. The interpreted narratives and identity strategies of the GUS mothers can be measured or controlled for only crudely and partially in a statistical model, because it would be impossible to include all the variables which have been taken into account here. What the analysis does indicate, however, is that Latent Class Analysis is an appropriate technique to use to try to capture as far as possible case-based variation in constellations of variables.

The biographies are also used to triangulate the results of the statistical analyses presented in subsequent chapters. In the next Chapter, the analysis seeks to identify a typology of childrearing approach in Scotland: the interpretation of the various childrearing types can be compared with the individual examples of childrearing approach presented here.

6 A typology of childrearing approach in Scotland.

This chapter considers whether Annette Lareau's typology of childrearing approach can be observed among a sample of mothers in Scotland. Studies carried out in the US and UK (Bodowski 2010; Vincent et al. 2010; Reay 2006 and 2004a) have found evidence in both quantitative and qualitative samples that some of the characteristics of the childrearing approaches of middle class parents correspond to characteristics of the 'concerted cultivation' approach; whereas the childrearing approach of working class parents often shares similarities with the 'accomplishment of natural growth' childrearing approach.

In this chapter, Latent Class Analysis is carried out to explore whether Lareau's typology can be observed in a large quantitative sample of mothers living in Scotland in the mid- to late 2000s. Key elements of the typology are: parental effort in actively fostering the child's talents and abilities; organised enrichment activities in which the child participates; and interventions in institutions. As set out in Chapter 4, the operationalisation of childrearing approach adopted in this thesis also includes parents' choice of childcare and parental networks.

The analysis finds that, when childrearing approach is defined in the way set out above, a two-class typology is not sufficient to capture the variation in mothers' childrearing approaches. Furthermore, Lareau's typology could not be replicated with a two-class model. Instead, this chapter presents an analysis which suggests that a childrearing typology with four groups is the best model to describe the different approaches of mothers in the Growing up in Scotland sample. In addition, this chapter argues that childrearing approach is not straightforwardly associated with indicators of social class. In moving away from the binary of 'middle class - concerted cultivation'; 'working class - accomplishment of natural growth', the analysis presents a broader range of childrearing approaches, and considers the complex constellations of material, cultural and social resources which are associated with them.

This chapter concludes with a discussion of how the policy discourse around parenting in the second part of the 2000s may have misunderstood and misrepresented the situation of many parents and their need for support in terms of benefits and services.

6.1 Restatement of relevant hypotheses

The two hypotheses which are tested in this chapter are:

- a) Lareau's typology of 'concerted cultivation' and 'accomplishment of natural growth' childrearing approaches can be observed in a sample of Scottish mothers.
- b) In the GUS sample, mothers with higher income, more education, and higher occupational status tend to adopt the 'concerted cultivation' approach.

The analysis presented below first tests whether mothers in the Growing up in Scotland sample can be grouped according to the fifteen indicators of childrearing approach set out in Chapter 4. Then the analysis considers the extent to which a mother's membership of one childrearing group or another is associated with indicators of socio-economic status, mental health and child development.

6.2 Outline of analysis steps

As discussed in Chapter 4, Latent Class Analysis is an appropriate statistical method for exploring whether people cluster into groups according to a set of observed indicators of their attributes, attitudes or behaviour. The observed indicators are hypothesised to reflect an unobserved latent variable (McCutcheon 1987). In this thesis, Latent Class Analysis is used to explore whether an unmeasured concept – approach to childrearing – can be inferred from GUS mothers' approach to friend,

family and work networks and their use of child-relevant services. The analysis steps are as follows:

- i) Select observed indicators based on theory and previous studies.
- ii) Recode indicators where necessary.
- iii) Fit Latent Class models using 2 through 7 group solutions.
- iv) Use model fit statistics and substantive reasoning to select the most appropriate model.
- v) Analyse the extent to which membership of the Latent Class groups is associated with a set of theory-based indicators.

6.3 Identifying a typology of childrearing approach in the GUS sample

Analysis steps i) and ii) are outlined in Chapter 4. In order to explore whether a typology of childrearing approach could be identified in the Growing up in Scotland sample, six Latent Class models were estimated using the fifteen indicators of childrearing approach described in Chapter 4. The software used to conduct the analysis was Mplus Version 7 (Muthen and Muthen 2012).

There are three main tools to help the researcher select the model with the most appropriate number of classes: log-likelihood-based information criteria; likelihood-ratio tests of model fit; and substantive reasoning. Chapter 4 offers a full explanation of the first two sets of tests, but in essence the log-likelihood-based information criteria give an estimate of how well the model fits the data by reporting a value related to the probability of observing the data that has been observed, given the model. Likelihood ratio tests compare two models, one with one extra class added, and report whether adding an extra class significantly improves the fit of the model.

Figure 6.1 sets out all three log-likelihood-based information criteria: the lowest value should correspond to the best-fitting model. The Bayesian Information Criterion (BIC) is the most reliable measure, particularly for models with categorical data and large sample sizes (see Nylund et al. 2007: 559 for a full explanation). As

can be seen from Figure 6.1, both Akaike's Information Criterion (AIC) and the sample-size adjusted Bayesian Information Criterion (ABIC) continue to decrease as more classes are added. BIC on the other hand tails off after the five class model, suggesting that models with more classes would not be parsimonious. The aim is to identify a model which reflects as much as possible the complexity within the data, while producing a worthwhile decrease in log-likelihood. In other words, this part of the analysis aims to find the model which presents the best balance between detail and parsimony. Figure 6.1 suggests that the four and class models should be considered: there is no further improvement in BIC after the five class model.

Figure 6.1 Likelihood-based information criteria for the Latent Class models (N=3,706)

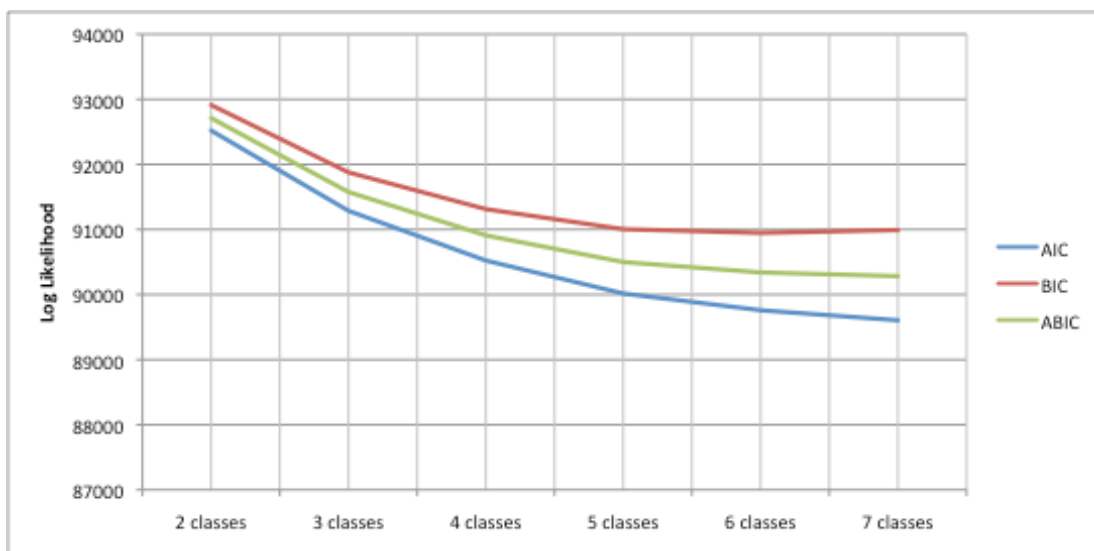


Table 6.1 Latent Class Analysis measures of the most appropriate number of classes (N=3,706)

Classes	% of bivariate residuals significant at the 5% level	Global Entropy	Lowest class-specific entropy	Adjusted LMR test p=
2	11.6	0.751	0.921	<0.001
3	9.7	0.720	0.845	<0.001
4	6.0	0.719	0.808	0.147
5	4.7	0.721	0.802	*
6	4.3	0.734	0.777	*
7	3.4	0.730	0.720	*

Table 6.1 shows further fit statistics for the Latent Class models. Looking first at the columns relating to entropy (the entropy criterion is a threshold beyond which

meaningful patterns in the data can no longer be observed), in all models the classes are reasonably well-specified. Entropy with values approaching 1 indicates clear delineation of classes (Celeux and Soromenho 1996). Each model's class-specific entropy is also good, indicating that there is no one class within the model which is particularly fuzzy or poorly specified. Entropy in this case is not a useful tool for selecting the model with the most appropriate number of classes; it does however provide a diagnostic for the fit of the models.

The final column in Table 6.1 shows p values for the Lo-Mendell-Rubin (LMR) likelihood ratio test (see Chapter 4 for a full explanation), which calculates a p value based on the k class model compared with the k-1 class model (for example it compares a three class model with a two class model and reports whether the three class model fits the data significantly better). The test is not based on the Chi-Square distribution, but rather on the distribution of the log-likelihood difference between the k and the k-1 models (the non-central chi-square distribution). The LMR test suggests that the four class model is not a significant improvement on the three class model ($p=0.147$, based on a significance threshold of 0.05). In their 2007 Monte Carlo simulation study, Nylund et al. found that:

'for a researcher fitting a series of LCA models, the LMR may result in p values that bounce around from being significant to nonsignificant and then back to significant again'. (2007: 563)

They therefore suggest that the first time the p value of the LMR is nonsignificant at the selected level might be a good indication to stop increasing the number of classes. Their advice has been followed here and the results of this test are not presented for the five through eight class models.

The BIC information criterion implies that a four or five class model may be best; the LMR test points towards a three class model. An examination of the model residuals (the second column in Table 6.1) suggests that a four class model may be the most appropriate (see Technical Appendix 6.1 for a discussion). Therefore the

three, four and five class models will be examined further to consider which makes the most substantive sense.

6.4 Comparing the 3 and 4 class models

Since the statistical tests do not offer a clear choice between the three, four and five class models, this section compares the three and four class models in terms of their interpretation and substantive meaning. Tables 6.2 and 6.3 set out the membership of each latent class, based on the most likely class assignment for each case. As can be seen from the middle column of each table, individuals may be fractionally assigned to more than one class. When comparing the three and four group solutions, it can be seen that the four group model does not simply sub-divide an existing class within the three group model: the addition of a new class seems to move a number of cases between groups. This suggests that the addition of an extra class may provide valuable nuance which is not captured by the three class model.

In Tables 6.2 and 6.3, labels are introduced for each latent class for ease of reference and interpretation. These labels were developed on the basis of an assessment of the substantive interpretation of the item response probabilities⁵⁴ for each class.

Table 6.2 Membership of the 3 class model (N=3,706)

	Estimated number in class	%
1 – Busy working mother	1025.6	27.7
2 - Confident, well networked	1704.2	46.0
3 – Weak ties, formal service use	976.2	26.3

Table 6.3 Membership of the 4 class model (N=3,706)

	Estimated number in class	%
1 – Busy working mother	886.2	23.9
2 – Constrained, strong ties	850.5	23.0
3 – Confident, well networked	1247.0	33.6
4 – Weak ties, formal service use	722.3	19.5

⁵⁴ Item response probabilities are the probability of an individual from a particular childrearing group selecting a particular response category of the survey question. Full item response probabilities for the three and four group models are presented in Table 6.5.

Table 6.4 shows a cross-tabulation of the most likely class membership for each case in the three and four group models: it shows that the ‘Busy working mother’, ‘Weak ties, formal service use’ and ‘Confident, well networked’ groups are rather stable: at least 95% of mothers who cluster into these groups in a three class model also cluster into these groups in a four class model. The key difference lies in the new ‘Constrained, strong ties’ group in the four class model. This new class draws its members from the other three classes: around half from the ‘Confident, well networked’ group, around a third from the ‘Weak ties, formal service use’ group and the remainder from the ‘Busy working mother’ group.

Table 6.4 Cross-tabulation of the 3 and 4 class Latent Class Analysis models

		4 class model			
3 class model		Busy working mother	Constrained, strong ties	Weak ties, formal service use	Confident, well networked
	Busy working mother	96.2%	15.2%	1.5%	1.5%
	Weak ties, formal service use	1.1%	32.2%	94.5%	0.0%
	Confident, well networked	2.7%	52.7%	4.0%	98.5%
	N=3,706	898	792	727	1,289
	TOTAL	100%	100%	100%	100%

Cross-tabulation based on classifying each case in its most likely class in each model. As LCA models allow cases to be partial members of several classes this therefore represents an approximation of the exact relationship (see Norris 2009:173).

It is worth exploring the characteristics of the three and four class solutions in greater depth in order to determine whether the new group in the four class solution has sufficient face validity to warrant the adoption of this model, particularly bearing in mind that theory and previous qualitative research might suggest a two class model.

Table 6.5 shows the conditional item response probabilities for the fifteen indicators of childrearing approach for the three and four group models. These values represent the likelihood of an individual from that childrearing group selecting that response category of the survey question: values closer to 1 indicate a higher likelihood of an individual in that class selecting that response category. A full key to the categories is provided at the end of the table.

Table 6.5 Conditional item response probabilities for the 3 and 4 class models

Frequency with which the mother played with her child at recognising letters, shapes, colours in last week	3 class model			4 class model			
	BWM	CWN	WTFSU	BWM	CST	CWN	WTFSU
Every day	0.296	0.304	0.277	0.304	0.237	0.328	0.294
Less often	0.704	0.696	0.723	0.696	0.763	0.672	0.706
Frequency with which the mother recited nursery rhymes with her child in the last week							
Every day	0.573	0.589	0.563	0.593	0.498	0.615	0.590
Less often	0.427	0.411	0.437	0.407	0.502	0.385	0.410
Mother's confidence in being able to access childcare at short notice for a few hours during the day							
Difficult	0.280	0.216	0.849	0.283	0.435	0.178	0.888
Easy	0.720	0.784	0.151	0.717	0.565	0.822	0.112
How many people the mother feels close to							
Lots of people	0.250	0.451	0.149	0.250	0.322	0.457	0.145
Some people	0.499	0.454	0.481	0.500	0.433	0.463	0.505
Few or no people	0.252	0.096	0.370	0.250	0.245	0.080	0.350
Whether the mother works							
Full time >=35 hours	0.249	0.113	0.101	0.289	0.011	0.149	0.133
Part time	0.539	0.511	0.355	0.617	0.086	0.650	0.471
Does not work	0.212	0.375	0.544	0.094	0.903	0.201	0.396
Whether mother regularly attended a mother and baby/toddler group in the last year							
Attended mother and baby group in past year	0.418	0.571	0.540	0.407	0.431	0.613	0.607
Did not attend mother and baby group	0.582	0.429	0.460	0.593	0.569	0.387	0.393
Whether the mother feels that professionals try to interfere if you ask for help or advice							
Agree	0.068	0.073	0.111	0.053	0.189	0.046	0.052
Neither agree or disagree	0.252	0.237	0.245	0.246	0.253	0.236	0.242
Disagree	0.679	0.690	0.644	0.701	0.558	0.718	0.706
Frequency of visits to library							
Visited library more than once a week in last year	0.054	0.066	0.093	0.054	0.063	0.067	0.103
Visited library at least once a month in last year	0.152	0.186	0.256	0.151	0.102	0.215	0.325
Visited library every few months in last year	0.219	0.186	0.206	0.226	0.138	0.206	0.233
Did not visit library in last year	0.575	0.562	0.445	0.569	0.698	0.512	0.340

Frequency of visits to concert, play or live performance							
Attended a live concert/play every few months or more in the last year	0.041	0.071	0.072	0.044	0.020	0.087	0.096
Attended a live concert/play at least once in the last year	0.178	0.197	0.196	0.186	0.114	0.225	0.232
Did not attend a live concert/play in the last year	0.781	0.731	0.733	0.770	0.866	0.689	0.671
Frequency of visit to galleries							
Visited gallery once a month or more in the last year	0.057	0.045	0.098	0.062	0.013	0.054	0.135
Visited gallery every few months in the last year	0.125	0.093	0.161	0.133	0.028	0.115	0.221
Visited gallery at least once in the last year	0.147	0.137	0.137	0.155	0.103	0.149	0.149
Did not visit gallery in the last year	0.671	0.725	0.604	0.650	0.856	0.682	0.496
Frequency with which mother visits friends with children							
Visits friends with children once a fortnight or less frequently	0.802	0.035	0.398	0.804	0.313	0.011	0.384
Visits friends with children once or twice a week or more	0.198	0.965	0.602	0.196	0.687	0.989	0.616
Frequency with which mother is visited by friends with children							
Visits friends with children once a fortnight or less frequently	0.984	0.176	0.548	0.976	0.430	0.169	0.559
Visits friends with children once or twice a week or more	0.016	0.824	0.452	0.024	0.570	0.831	0.441
Person mother would turn to for childcare at short notice							
Childminder	0.011	0.007	0.115	0.012	0.000	0.009	0.168
Friend, colleague or neighbour	0.010	0.043	0.440	0.008	0.101	0.030	0.517
Other family member; ref= child's grandparents	0.104	0.118	0.400	0.103	0.233	0.094	0.399
Whether the mother feels she gets enough help with looking after the child							
Don't need any help	0.044	0.024	0.186	0.035	0.104	0.016	0.143
Don't get any help	0.040	0.005	0.321	0.039	0.070	0.004	0.334
Don't get enough help; ref= get enough help	0.090	0.071	0.518	0.092	0.210	0.050	0.528
Main childcare provider							
Not using childcare	0.254	0.412	0.960	0.115	0.846	0.220	0.967
Other family member, friend or neighbour	0.066	0.116	0.707	0.058	0.289	0.097	0.784
Private playgroup, nursery or playschool	0.387	0.261	0.929	0.399	0.203	0.262	0.967
Local Authority playgroup, nursery or playschool	0.149	0.148	0.833	0.156	0.052	0.157	0.919
Childminder, nanny or babysitter; ref = child's grandparents	0.020	0.039	0.602	0.019	0.053	0.038	0.765

Reference categories are reported for the final three variables in the table because these are unordered categorical variables. For these variables, Mplus carries out a multinomial logistic regression equation for each latent class and reports the intercept for each response category for each class, compared to a reference response category.

It can be seen from Table 6.5 that the conditional item response probabilities for the ‘Constrained, strong ties’ group are very different to the ‘Weak ties, formal service use’ group, for example in relation to the mother’s confidence in being able to access childcare at short notice; the mother’s likelihood of not working; and the mother’s likelihood of not having engaged her child in structured enrichment activities (such as visits to the library, galleries or live performances) in the last year. These differences are masked in the three group model. Furthermore, as will be discussed further in the next section, the ‘Constrained, strong ties’ group corresponds closely to Lareau’s ‘accomplishment of natural growth’ childrearing approach. This important gain in nuance argues for the adoption of the four group model over the three group model: in the four group model, two groups can be observed which correspond to Lareau’s typology: the ‘Confident, well networked’ group has many attributes of the ‘concerted cultivation’ approach, while the ‘Constrained, strong ties’ group shares many characteristics of the ‘accomplishment of natural growth’ approach. The four group model suggests two other childrearing approaches, those of ‘Busy working mother’ and ‘Weak ties, formal service use’.

6.5 Comparing the 4 and 5 class models

The five class model was the model with the lowest BIC value, suggesting a good fit with the data. The reduction in model residuals (see Technical Appendix 6.1) was also high relative to the other models, apart from the four class model, where the reduction in the model residuals was higher. Although not reported in Table 6.1 for the reasons set out above, the LMR test for the five class model was non-significant ($p=0.143$), suggesting that the five class model was not a significant improvement on the four class model. The four and five class models were nevertheless also compared in order to determine whether the improvement in model fit of the five class model suggested by the reduction in BIC was justified in terms of substantive interpretation of the latent classes and model parsimony.

Tables 6.6 and 6.7 set out the size of each latent class in the four and five class models.

Table 6.6 Membership of the 4 class model

	Estimated number in class	%
1 – Busy working mother	886.2	23.9
2 – Constrained, strong ties	850.5	23.0
3 – Confident, well networked	1247.0	33.6
4 – Weak ties, formal service use	722.3	19.5

Table 6.7 Membership of the 5 class model

	Estimated number in class	%
1 – Busy working mother	842.0	22.7
2 – Constrained, strong ties	805.1	21.7
3 – Confident, well networked	943.4	25.5
4 – Weak ties, formal service use	520.0	14.0
5 - Good network, low support	595.4	16.1

Table 6.8 shows a cross-tabulation of the most likely class membership for each case in the four and five group models: it suggests that the newly formed ‘Good network, low support’ group draws around two thirds of its members from the ‘Weak ties, formal service use’ group, around one quarter of its members from the ‘Confident, well networked’ group and the remainder from the ‘Constrained, strong ties’ group.

Table 6.8 Cross-tabulation of the 4 and 5 class Latent Class Analysis models (N=3,706)

		5 class model				
4 class model		Busy working mother	Constrained, strong ties	Weak ties, formal service use	Confident, well networked	Good network, low support
	Busy working mother	91.1	0.0	16.6	0.2	0.5
	Constrained, strong ties	0.2	87.1	20.4	0.0	8.6
	Weak ties, formal service use	1.0	0.6	62.9	0.0	65.8
	Confident, well networked	7.7	12.3	0.0	99.8	25.2
	N=3,706	889	730	499	980	608
	TOTAL	100%	100%	100%	100%	100%

Cross-tabulation based on classifying each case in its most likely class in each model. As LCA models allow cases to be partial members of several classes this therefore represents an approximation of the exact relationship (see Norris 2009:173).

Table 6.9 compares the conditional item response probabilities for the fifteen indicators of childrearing approach for the four and five class models. This comparison indicates that the new ‘Good network, low support’ group in the five class model is similar in almost every respect to the ‘Weak ties, formal service use’ group from the four class model from which around two thirds of its membership is drawn. There are four indicators where the differences are notable: the ‘Good network, low support’ group is far more likely than the ‘Weak ties, formal service use’ group to visit and be visited by friends with children regularly. The ‘Good network, low support group is slightly more likely than the ‘Weak ties, formal service use’ group to feel that they get enough help with looking after their child and to report feeling close to lots of people. The ‘Good network, low support’ group, then, bears the closest resemblance to the ‘Weak ties, formal service use’ group, but displays some characteristics of the ‘Confident, well networked’ group from which around one quarter of its membership is drawn. However, although the members of this ‘Good network, low support’ group appear to have slightly better friendship networks and - by inference - slightly more strong ties than members of the ‘Weak ties, formal service use’ group, they are not as well supported nor are they as likely to feel close to lots of people as mothers in the ‘Confident, well networked’ group. In other words, this new fifth latent class appears to partition members of the ‘Weak ties, formal service use’ group into those whose networks have slightly more strong ties and who feel slightly more supported. It is argued that, bearing in mind the similarity of the ‘Good network, low support’ group to the ‘Weak ties, formal service use’ group in all other respects, this slight variation in personal network patterns does not warrant the adoption of the five class model; rather, the differences in conditional item response probabilities between the ‘Weak ties, formal service use’ and ‘Good network, low support’ groups reflect acceptable heterogeneity within the ‘Weak ties, formal service use’ latent class group.

Table 6.9 Conditional item response probabilities for the 4 and 5 class models

	4 class model				5 class model				
	BWM	CST	CWN	WTFSU	BWM	CST	CWN	WTFSU	GNLS
Frequency with which the mother played with her child at recognising letters, shapes, colours in last week									
Every day	0.304	0.237	0.328	0.294	0.303	0.253	0.330	0.278	0.298
Less often	0.696	0.763	0.672	0.706	0.697	0.747	0.670	0.722	0.702
Frequency with which the mother recited nursery rhymes with her child in the last week									
Every day	0.593	0.498	0.615	0.590	0.601	0.505	0.614	0.548	0.612
Less often	0.407	0.502	0.385	0.410	0.399	0.495	0.386	0.452	0.388
Mother's confidence in being able to access childcare at short notice for a few hours during the day									
Difficult	0.283	0.435	0.178	0.888	0.240	0.370	0.132	0.808	0.738
Easy	0.717	0.565	0.822	0.112	0.760	0.630	0.868	0.192	0.262
How many people the mother feels close to									
Lots of people	0.250	0.322	0.457	0.145	0.275	0.382	0.463	0.060	0.274
Some people	0.500	0.433	0.463	0.505	0.505	0.417	0.460	0.449	0.546
Few or no people	0.250	0.245	0.080	0.350	0.220	0.201	0.077	0.491	0.180
Whether the mother works									
Full time >=35 hours	0.289	0.011	0.149	0.133	0.271	0.012	0.170	0.191	0.083
Part time	0.617	0.086	0.650	0.471	0.639	0.116	0.701	0.357	0.492
Does not work	0.094	0.903	0.201	0.396	0.090	0.873	0.129	0.451	0.425
Whether mother regularly attended a mother and baby/toddler group in the last year									
Attended mother and baby group in past year	0.407	0.431	0.613	0.607	0.439	0.428	0.592	0.399	0.755
Did not attend mother and baby group	0.593	0.569	0.387	0.393	0.561	0.572	0.408	0.601	0.245

Whether the mother feels that professionals try to interfere if you ask for help or advice									
Agree	0.053	0.189	0.046	0.052	0.040	0.182	0.045	0.107	0.041
Neither agree or disagree	0.246	0.253	0.236	0.242	0.252	0.258	0.239	0.230	0.230
Disagree	0.701	0.558	0.718	0.706	0.708	0.560	0.715	0.663	0.729
Frequency of visits to library									
Visited library more than once a week in last year	0.054	0.063	0.067	0.103	0.056	0.063	0.065	0.067	0.109
Visited library at least once a month in last year	0.151	0.102	0.215	0.325	0.155	0.093	0.198	0.244	0.343
Visited library every few months in last year	0.226	0.138	0.206	0.233	0.226	0.123	0.200	0.211	0.261
Did not visit library in last year	0.569	0.698	0.512	0.340	0.564	0.722	0.537	0.479	0.287
Frequency of visits to concert, play or live performance									
Attended a live concert/play every few months or more in the last year	0.044	0.020	0.087	0.096	0.045	0.022	0.088	0.056	0.110
Attended a live concert/play at least once in the last year	0.186	0.114	0.225	0.232	0.187	0.111	0.225	0.198	0.248
Did not attend a live concert/play in the last year	0.770	0.866	0.689	0.671	0.768	0.867	0.687	0.746	0.642
Frequency of visit to galleries									
Visited gallery once a month or more in the last year	0.062	0.013	0.054	0.135	0.065	0.013	0.045	0.073	0.145
Visited gallery every few months in the last year	0.133	0.028	0.115	0.221	0.134	0.013	0.103	0.171	0.226
Visited gallery at least once in the last year	0.155	0.103	0.149	0.149	0.154	0.097	0.147	0.145	0.161
Did not visit gallery in the last year	0.650	0.856	0.682	0.496	0.647	0.877	0.705	0.611	0.468
Frequency with which mother visits friends with children									
Visits friends with children once a fortnight or less frequently	0.804	0.313	0.011	0.384	0.755	0.220	0.006	0.853	0.013
Visits friends with children once or twice a week or more	0.196	0.687	0.989	0.616	0.245	0.78	0.994	0.147	0.987
Frequency with which mother is visited by friends with children									
Visits friends with children once a fortnight or less frequently	0.976	0.430	0.169	0.559	0.964	0.351	0.154	0.928	0.208
Visits friends with children once or twice a week or more	0.024	0.570	0.831	0.441	0.036	0.649	0.846	0.072	0.792
Person mother would turn to for childcare at short notice									
Childminder	0.012	0.000	0.009	0.168	0.007	0.000	0.000	0.108	0.126
Friend, colleague or neighbour	0.008	0.101	0.030	0.517	0.011	0.077	0.000	0.346	0.430
Other family member; ref= child's grandparents	0.103	0.233	0.094	0.399	0.075	0.205	0.077	0.391	0.311

Whether the mother feels she gets enough help with looking after the child									
Don't need any help	0.035	0.104	0.016	0.143	0.026	0.079	0.016	0.231	0.059
Don't get any help	0.039	0.070	0.004	0.334	0.021	0.034	0.003	0.389	0.157
Don't get enough help; ref= get enough help	0.092	0.210	0.050	0.528	0.066	0.167	0.035	0.526	0.358
Main childcare provider									
Not using childcare	0.115	0.846	0.220	0.967	0.089	0.809	0.118	0.919	0.914
Other family member, friend or neighbour	0.058	0.289	0.097	0.784	0.037	0.256	0.092	0.657	0.433
Private playgroup, nursery or playschool	0.399	0.203	0.262	0.967	0.369	0.212	0.205	0.890	0.904
Local Authority playgroup, nursery or playschool	0.156	0.052	0.157	0.919	0.135	0.055	0.133	0.772	0.778
Childminder, nanny or babysitter; ref = child's grandparents	0.019	0.053	0.038	0.765	0.015	0.034	0.023	0.443	0.570

N= 3,706. BWM = Busy working mother; CWN = Confident, well networked; WTFSU = Weak ties, formal service use; CST = Constrained, strong ties; GNLS = Good network, low support.

Reference categories are reported for the final three variables in the table because these are unordered categorical variables. For these variables, Mplus carries out a multinomial logistic regression equation for each latent class and reports the intercept for each response category for each class, compared to a reference response category.

The three statistical tests of model fit used to select a model were not in accordance: the LMR test argued for a three class model; the model residuals argued for a four class model and the BIC argued for a five class model. An examination of the substantive interpretation of the three and four class models suggested that the four class model added valuable extra nuance which aligned with theoretical expectation and the findings of previous studies. There was, on balance, insufficient evidence to suggest that the extra granularity gained from the five class model outweighed the reduction in model parsimony or had adequate face validity to merit its adoption. For these reasons, the four class model was adopted for further analysis.

6.6 Interpreting the latent classes

In this section, the salient characteristics of each latent class are summarised under the headings of the key elements of childrearing approach set out in Chapter 4. The substantive interpretation of the classes is then discussed in detail and the classes are contrasted with Lareau's typology.

Parental effort

Mothers in the 'Confident, well networked' group are most likely to spend time every day practising letters and reciting nursery rhymes with their children; mothers in the 'Constrained, strong ties' group are the most likely to engage in these activities less frequently.

Structured enrichment activities

Mothers in the 'Weak ties, formal service use' group are the most likely to engage their child in structured enrichment activities such as visits to the library, concerts or galleries. Mothers in the 'Constrained, strong ties' group are the least likely to pursue these activities regularly. 'Busy working mothers' also tend to take part in these activities less frequently with their child.

Intervention in institutions

Mothers in the 'Constrained, strong ties' group are most likely to agree with the statement that professionals try to interfere when you ask them for help. Mothers in the other groups are all likely to disagree with the statement.

Childcare

The 'Weak ties, formal service' use group find it hardest to find last-minute childcare in an emergency. They are more likely to turn to someone outside their immediate family in these situations. Mothers in the 'Confident, well networked' group are most likely to report finding it easy to find last-minute childcare, although 'Busy working mothers' are also likely to report this. Both groups tend to use grandparental support in emergencies.

The 'Weak ties, formal service use' group are the most likely group either not to use childcare or to use a formal provider outside the immediate family. The 'Constrained, strong ties' group are highly likely not to use childcare. Both the 'Busy working mother' group and the 'Confident, well-networked' group tend to use the child's grandparents as the main childcare provider; where this is not the case, both groups are likely to use a private playgroup or nursery.

Personal networks

'Busy working mothers' are most likely to be working full time; mothers in the 'Constrained, strong ties' group are most likely not to be working. 'Busy working mothers' tend to have good support networks but their personal networks outside the family and work may be less well maintained. 'Constrained' mothers report feeling close to lots of people, and they visit friends relatively frequently, but they are also likely to report feeling that they do not get enough support with looking after their child. 'Confident' mothers are most likely to have attended a mother and baby group in the past year, to visit friends frequently and to report feeling supported.

Conversely, mothers in the 'Weak ties, formal service use' group are most likely to report feeling that they do not get enough support and that they feel close to few or no people. They tend to visit friends infrequently.

The analysis conducted so far points towards a typology of childrearing approach which is similar in some respects to Lareau's, but which extends the two group typology. Further, the latent classes do not align in any straightforward way with social class. Two of the latent classes share some characteristics with 'concerted cultivation' and the 'accomplishment of natural growth', but two further childrearing approaches are identified: 'Busy working mothers' share some of the characteristics of 'Confident, well networked' mothers in terms of parental effort and family support network, but they appear to have less time to maintain friendship networks and to take part in structured enrichment activities with their children. Mothers in the 'Weak ties, formal service use' group appear to have limited family and friendship networks, but they engage intensively in structured enrichment activities with their children.

Discussion

In this section, the characteristics of each latent class group are discussed further. It what follows, it should be remembered that the GUS mothers are assigned to the childrearing groups in a probabilistic fashion. Based on her responses to the 15 indicators of childrearing approach, each mother is assigned to her *most likely* childrearing group (although she may display some attributes associated with other groups, and therefore be partially assigned to more than one group in the LCA model). For this reason, the LCA model and the typology of childrearing approaches which is derived from it are not straightforwardly descriptive. They do not necessarily identify empirical groupings in society which are analogous to social class or cultural groups; instead, the LCA model and the typology simply indicate that there is sufficient evidence within the GUS sample to assert that the patterns of responses to the 15 indicators of childrearing approach cohere into four distinct groups. Neither do the latent class groups imply complete homogeneity within groups: both due to the nature of the individual variables and the LCA model itself, variation will exist in the precise constellation of responses to each survey question. However, the LCA model indicates that on balance, the types of responses to the 15 indicators of childrearing approach are sufficiently different between groups to

suggest that these are coherent, although heterogeneous groupings or types of childrearing behaviour. It is plausible to assume that salient aspects of the mothers' habitus - which is theorised as generating the childrearing approach - are also similar within latent class groups.

The 'Confident, well networked' group is considered first. This group shares many attributes of Lareau's 'concerted cultivation' approach, but the 'Confident, well networked' group should not be straightforwardly associated with a 'middle class' childrearing approach: none of the indicators used in the model are direct measures social class (such as income, education or occupation). Suzanne, one of the mothers whose constructed biography was presented in Chapter 5, shares many of the characteristics of a 'Confident, well networked' mother, yet she is not stereotypically 'middle class' because she has GCSE level qualifications and lives in a deprived area. Suzanne could be described as a typical 'Confident, well networked' mother because she has solid support from family and friendship networks; she takes active steps to encourage her daughter's participation in structured enrichment activities such as visits to the library and concerts and live performances; and she is confident in 'taking on' authority figures such as health professionals and the dominant institutions of society (such as HMRC) in order to mould situations to her preferences. Suzanne uses private childcare and more generally is astute in her uptake of the benefits and services on offer to her. Once again, note that none of these attitudes or behaviours implies class or status per se.

Suzanne's household income is in the middle income quintile, so she will have greater economic resources than some to be able to buy in private childcare and structured enrichment activities for her daughter, but the level of cultural capital that can be inferred from her level of education is not high. Through her personal networks and her managerial job, Suzanne appears to have a moderate level of social capital. An important difference between the 'Confident, well networked' group and Lareau's 'concerted cultivation' is the latter's assumption of membership in the middle class and the taken-for-granted nature of the mothers' confidence in their ability to comply with the evaluative standards of dominant institutions. Suzanne

appears to find the ‘Confident, well networked’ approach extremely stressful to maintain. Although the set of attitudes, attributes and behaviours associated with the ‘Confident, well networked’ group align with some of the dominant policy discourse on ‘good parenting’, there is no suggestion that mothers in this group are working under a habitus-driven autopilot. Not only does the ‘Confident, well networked’ childrearing group not map directly onto the Scottish middle class; there is no implication that this set of attitudes and behaviours necessarily follows on from a certain set of economic, cultural or social resources.

Suzanne’s case highlights the point that even if the latent class groupings are indicative of similarities in mothers’ underlying habitus (as well as their childrearing approaches), there is likely to be variation in habitus within each group as some mothers may be more established in their social position, and others may be in transition.

Turning next to the ‘Busy working mother’ group, this group shares many of the characteristics of the ‘Confident, well networked’ group in terms of trying to foster the child’s linguistic and cognitive skills; encouraging the child’s cultural participation; and in terms of their feelings of confidence or entitlement *vis a vis* authority figures. The key difference is that ‘Busy working mothers’ personal networks and ability to engage their child in structured enrichment activities appear to be more limited due to the time constraints imposed by work. It is not clear from the GUS data whether these ‘acculturation’ activities are carried out instead by the childcare provider, and this should be borne in mind when considering any association with this childrearing approach and children’s outcomes. Once again, membership in this group does not imply a certain social class, nor a set of specific material or social circumstances, although it is more likely that mothers who are working full- or part time will have higher incomes than those who are not working, and that these mothers are working in jobs where the benefits of work outweigh the costs of childcare.

Rebecca, another case study from Chapter 5, could be regarded as belonging to the 'Busy working mother' group. Rebecca is stereotypically middle class: she works full time in a professional job, lives in an affluent neighbourhood and has degree-level qualifications. She has strong social capital through family, mother/toddler group and work and she appears confident in meeting the evaluative standards of the dominant institutions of society. Rebecca rarely takes her daughter Rosie to the library or engages her in other structured enrichment activities; Rebecca's parents look after Rosie full time. The 'Busy working mother' group represents mothers whose responses to the 15 survey questions indicate that they share many of the attitudes and aspirations associated with the dominant norm of 'good parenting', but they may be limited in their ability to perform this role because of limited time. The members of this group may illustrate the ambivalence of society's expectations that mothers be nurturers and economic contributors: social reproduction requires investment in time as well as money (Reay 2000), and these mothers may be 'outsourcing' the acculturation of their children to grandparents or nursery staff.

Turning to the 'Weak ties, formal service use' group, the members of this group tend to feel socially isolated with relatively less informal or close social support. They are the group most likely to cultivate their children's linguistic and cognitive abilities, and to encourage their children's participation in cultural activities such as visits to libraries, museums and galleries. Note that this implies cultural consumption in the form of reading as well as beaux arts participation, both measures of cultural capital discussed in the literature (Barone 2006; Sullivan 2001; DeGraaf et al. 2000). These mothers are as likely as the 'Confident, well networked' or 'Busy working mother' groups to be confident of their ability to meet the evaluative standards of dominant institutions. In terms of cultural capital and the affective aspect of habitus, then, this group represents the set of attitudes and behaviours possibly most closely associated with the dominant norm of 'good parenting'. Social capital is a different matter: although mothers in the 'Weak ties, formal service use' group visit friends with children with similar frequency to mothers in the 'Constrained, strong ties' group, they do not feel close to people and do not feel well supported. Based on this group's higher likelihood of attending mother and toddler groups, and their higher likelihood

of visiting - rather than being visited - by friends, it is possible that many of these interactions take place in a more formal setting, such as a playgroup, rather than in friends' homes. Although the attitudes and behaviours associated with this group reflect dominant norms, once again there is no implication in the 15 indicators of childrearing approach that these attitudes and behaviours necessarily follow on from a specific set of economic, cultural or social circumstances.

This point is illustrated below. The 'Weak ties, formal service use' childrearing approach might be consistent with, for example, a professional couple who move frequently to follow prestigious jobs and who therefore have a lot of economic and cultural capital, but whose social networks are characterised by many weak, and few strong, redundant ties. However Rita, a third example from the constructed biographies presented in Chapter 5, shares some (though by no means all) of the characteristics of the 'Weak ties, formal service use' group. Rita is an immigrant to the UK whose first language is not English, who has no qualifications and who does not work. Rita's household income is in the lowest quintile, yet Rita appears to display confidence and self-assertiveness in the face of authority figures such as teachers. Because of her more limited personal networks, she relies on formal services for advice and support. However, Rita differs from the 'Weak ties, formal service use' group because she does not follow this group's pattern of developing children's cultural capital (at least as regards the dominant forms of British culture): she does not attend the library, gallery, museum or concerts with her daughter. The narrative which emerges from Rita's account suggests that she is keenly aware of the value of maintaining contacts and engaging with institutions to try to achieve her preferences. She is also aware - consciously or unconsciously - of the centrality of educational institutions in acting as guarantors of cultural capital and in determining acceptance into dominant social groups (Bourdieu and Passeron 1977). Rita's example serves to illustrate further how a set of attitudes and behaviours which constitute 'childrearing approach' do not imply one single set of material circumstances, cultural practices or individual identities, although salient aspects of the underlying habitus may be similar within groups.

Turning finally to the ‘Constrained, strong ties’ childrearing group, mothers in this group are more likely to be wary of authority figures and to have less confidence in their ability to meet the evaluative standards of the dominant institutions of society. This affective element is perhaps one of the most important features of the ‘Constrained, strong ties’ group: these mothers appear to lack confidence in their ‘sense of the game’. While this affective aspect of habitus is not necessarily indicative of lower social status, it is at least plausible to assume that individuals who perceive themselves to be of lower social status may feel less able to access the dominant modes of speech and behaviour, and may be excluded from dominant social groups.

Although ‘Constrained, strong ties’ mothers are likely to have strong family and friendship networks, their social capital - the ability to transform the symbolic capital of friendship into support - may be more limited. Mothers in this group do cultivate their children’s linguistic and cognitive abilities, but they may do so less intensively than mothers in the other childrearing groups. These mothers are also less likely actively to encourage their children’s cultural participation and consumption in high status fields such as reading, visits to museums, galleries or concerts. Participation in other activities is not recorded among the measures of childrearing approach. ‘Constrained, strong ties’ mothers may be taking their children swimming or to other enrichment activities, but these are not necessarily activities which previous research suggests are associated with the transmission of dominant cultural capital from parents to children.

Emma, another case study from Chapter 5, is an example of a mother whose childrearing approach resembles that of the ‘Constrained, strong ties’ group. Emma has a close network of friends and family whom she visits regularly, but she does not feel able to call on her network for support. Emma is arguably an illustration of the negative impact of the UK policy gap on individual lives. Emma and her partner cannot easily afford for her not to work after the end of paid maternity leave, but Emma is not able to earn enough to pay for formal childcare for her son. Informal arrangements with her parents and friends are not reliable or stable enough to enable

her to work, with the result that after Sweep 2 Emma moves out of employment. Emma's case illustrates how the underlying discourse of family policy and the fragmented nature of the work and care policies in Scotland and the UK impact particularly strongly on those with fewer economic, cultural and social resources. This latent class grouping differs from the other three to the extent that the attitudes and behaviours associated with this childrearing approach align less closely with the dominant norms of parenting, and may be associated with mothers of lower social status.

6.7 Factors associated with class membership

So far this chapter has tested the hypothesis that Lareau's typology of 'concerted cultivation' and 'accomplishment of natural growth' childrearing approaches can be observed in a Scottish sample. Bearing in mind the limitations of the data, there appears to be enough evidence to reject this hypothesis and to accept an alternative hypothesis that a latent variable 'childrearing approach' can be postulated which has four categories. The next stage of the analysis asks what factors are associated with membership of one childrearing group over another. The aim is to test the theory explored in qualitative research on the topic that childrearing approach is influenced by socio-economic status, and in particular by the economic, cultural and social resources to which parents have access.

The latent variable 'childrearing approach' now becomes the dependent variable in a multinomial logistic regression model. The analysis considers whether certain socio-economic and health and development attributes are associated with membership of the different categories of the latent variable. A number of predictor variables were selected (see Technical Appendix 6.2 for an explanation of this process), the continuous variables were mean-centred and dummy variables were created for the categorical indicators. Then the Latent Class model was run again. The reference classes for the dummy variables used in the regression are presented in Table 6.10.

The Scottish Index of Multiple Deprivation (SIMD), the ONS-SEC measure of occupational classification and the Communication and Symbolic Behaviour Scale scores used in the analysis are discussed in Technical Appendix 6.2. The statistically significant results from the multinomial logistic regression are presented in Table 6.11. The odds shown are the odds for each variable compared with the reference class, ‘Confident, well networked’. Of particular note is the fact that area deprivation as measured by the Scottish Index of Multiple Deprivation was not significantly associated with group membership for any of the childrearing groups, once other factors in the model are taken into account. Neither were the children’s Communication and Symbolic Behaviour Scale social or speech composite scores. These non-significant results are not presented in Table 6.11.

Table 6.10 Reference categories used in the multinomial logistic regression analysis

Independent variable dummies	Reference category
Study child is second child	Study child is first child
Study child is third or subsequent child	
SIMD second least deprived quintile	Least deprived SIMD quintile
SIMD middle quintile	
SIMD second most deprived quintile	
SIMD most deprived quintile	
Mother is from a non-white ethnic group	Mother is White
Vocational qualification below degree level	Degree level qualification
Scottish Highers or equivalent	
Standard Grade or equivalent	
No qualifications	
Intermediate occupations	Professional/managerial occupations
Small employers and own account workers	
Lower supervisory	
Routine/semi-routine occupations	
Never worked	
Income less than £10,000 p.a.	£56,000 + p.a.
£10,000 - £19,999	
£20,000 - £28,999	
£29,000 - £43,999	
£44,000 - £55,999	
Rents from Local Authority or Hsng. Assc.	Owner occupier
Rents privately	

Table 6.11 Multinomial logistic regression on the latent variable 'childrearing approach'

Classes of the latent variable	Busy working mother	Constrained, strong ties	Weak ties, formal service use
y variables:	Odds (std. err.)	Odds (std. err.)	Odds (std. err.)
Study child is second child		1.65** (0.148)	1.96*** (0.136)
Study child is third or subsequent child		2.67*** (0.189)	2.99*** (0.189)
Mother is from another ethnic group		0.30** (0.501)	
Vocational qualification below degree level		1.53* (0.216)	0.57*** (0.161)
Highers or equivalent			0.51** (0.249)
Standard Grade or equivalent		1.94** (0.245)	0.49** (0.225)
No qualifications		2.41** (0.320)	0.35** (0.384)
Intermediate occupations			
Small employers and own account workers			
Lower supervisory		1.91** (0.299)	
Routine/semi-routine occupations		1.50** (0.205)	
Never worked		3.75** (0.435)	
Income less than £10,000 p.a.		2.80** (0.382)	
£10,000 - £19,999			
£20,000 - £28,999			
£29,000 - £43,999			
£44,000 - £55,999			
Rents from Local Authority or Housing Association		2.00*** (0.187)	1.59** (0.209)
Rents privately		1.85** (0.242)	1.83** (0.252)
Mother's age at primiparity	1.04*** (0.012)		1.08*** (0.014)
Mother's standardised stress score	1.17** (0.074)		1.32** (0.084)
Mother's standardised anxiety/depression score		1.20** (0.087)	1.28** (0.089)
Child's CSBS symbolic composite score	0.88** (0.042)	0.89** (0.046)	0.91* (0.049)

N=3,706; ***= p<0.001; **= p<0.05; *= p<0.10

The odds shown in Table 5.7 are the odds for each variable compared with the reference class, 'Confident, well networked'.

Busy working mother

‘Busy working mothers’ are likely to have been older at primiparity than ‘Confident, well networked’ mothers, and they are also more likely to suffer from higher levels of stress. Their children are likely to have slightly lower scores on the CSBS symbolic communication scale than the children of ‘Confident, well networked’ mothers.

Constrained, strong ties

The odds of mothers in the ‘Constrained, strong ties’ group having had two or more children before the GUS survey child was born are over twice as high as those of mothers in the ‘Confident, well-networked’ group. ‘Constrained’ mothers are significantly less likely than ‘Confident’ mothers to belong to another ethnic group. ‘Constrained’ mothers are likely to have lower levels of education than mothers in the ‘Confident, well networked’ group: the odds of their having no qualifications are more than twice the odds of ‘Confident’ mothers having no qualifications. ‘Constrained’ mothers are more likely to have lower occupational status: the odds of their never having worked are over three times greater than the odds of ‘Confident’ mothers never having worked.

Although not presented in Table 6.11, when partners’ education and employment status were also controlled for in the model, the odds of the partners of ‘Constrained’ mothers also not working are more than twice the odds of partners of ‘Confident’ mothers not working (odds are 2.41; SE 0.404; $p=0.03$). The odds of ‘Constrained’ mothers having a household income below £10,000 per year are nearly three times those of ‘Confident, well networked’ mothers.

‘Constrained, strong ties’ mothers are more likely to be renters than owner-occupiers: the odds of them renting from a housing association are twice those of ‘Confident, well networked’ mothers. ‘Constrained’ mothers are more likely to suffer from anxiety and depression than ‘Confident’ mothers, and their children are more likely to have lower scores on the CSBS symbolic communication scale.

Weak ties, formal service use

The odds of mothers in the ‘Weak ties, formal service use’ group having had two or more children before the GUS survey child was born are three times as high as those of mothers in the ‘Confident, well-networked’ group. ‘Weak ties’ mothers are more likely to have been educated to degree level and to have been slightly older at primiparity than mothers in the ‘Confident, well-networked’ group. The ‘Weak ties, formal service use’ group are also more likely to suffer from higher levels of stress, anxiety and depression than ‘Confident’ mothers. ‘Weak ties’ mothers are more likely than ‘Confident, well networked’ mothers to rent than to be owner-occupiers, and their children may score slightly lower on the CSBS symbolic communication scale than the children of ‘Confident’ mothers.

6.8 Discussion

Busy working mothers

The ‘Busy, working mother’ approach is defined by the work patterns of the mother: these mothers may have reliable family networks (they tend to feel that they are getting enough help with looking after their child) but they may not have time to cultivate personal networks outside of family and work: they are the second most likely group (after the ‘Weak ties’ group) to report feeling close to few or no people, and they are the group least likely to visit their friends regularly. The regression analysis suggests that these mothers were older at primiparity, so they are more likely to have had an established career. They are also more likely than the mothers in the ‘Confident, well-networked’ group to have had children before the GUS survey child. It is possible that the need to support a larger family is an important factor in these mothers’ decision to return to work. There are no significant differences in the education level or employment status of these women’s partners compared with the partners of ‘Confident, well networked’ mothers.

The children of ‘Busy, working mothers’ tend to score lower on the CSBS symbolic communication scale than the children of ‘Confident, well-networked’ mothers. No causal explanation for this can be inferred from the model: these mothers are not

significantly different from ‘Confident’ mothers in terms of education, occupational status or household income, and their childcare choices are similar. It is however reasonable to hypothesise that the pressures of work, arranging childcare and care work in the family may lead to higher levels of stress for these ‘Busy working mothers’. Lareau (2003) does discuss the tensions between employment and care work for both middle- and working class mothers, but her focus is on how work impacts on the mother’s ability to cultivate her child’s talents through engagement in structured enrichment activities. Lareau sees work impacting differently on the ‘concerted cultivation’ and ‘accomplishment of natural growth’ childrearing approaches: middle class mothers who work will use their networks to ensure that their children do not miss out on enrichment activities. These mothers are also more likely to have greater autonomy and flexibility in their work which enables them to schedule work around their children’s activities. Working class mothers, on the other hand, tended to have less flexible working patterns and often had long commutes on public transport which made it difficult to support their children’s engagement in activities.

In the typology presented in this thesis, work - particularly full time work - and its impacts on childrearing approach are considered independently of class in Lareau’s sense. Unsurprisingly, though, ‘Busy working mothers’ are more likely to have higher levels of qualifications and higher occupational status than ‘Constrained’ mothers⁵⁵. Level of education is likely to be related to level of employment, but more significantly, it appears that those mothers who work full time tend to be better qualified and are therefore likely to attract a higher salary. It is possible that mothers on lower salaries without support from a partner are not able to earn enough to pay for full time childcare. Some of the constructed biographies in Chapter 5 illustrate the difficulties associated with making childcare arrangements on a full time basis.

⁵⁵ This analysis is not presented here: it was obtained using the ‘Constrained, strong ties’ group as the reference class and is available from the author on request.

Constrained, strong ties

Mothers in the ‘Constrained, strong ties’ group conform most closely to Lareau’s description of the ‘accomplishment of natural growth’ childrearing approach. They display some of the markers of lower social status which are likely to have an impact on the transfer of inequality between generations. These mothers tend to have fewer qualifications, to have lower status jobs and to be on lower incomes than mothers in the ‘Confident, well-networked’ group. Like mothers who adopt the ‘accomplishment of natural growth’ childrearing approach, these ‘Constrained, strong ties’ mothers have strong friendship and family networks: they are likely to feel close to lots of people and to visit friends regularly. They are the group least likely to work and on the whole are not using childcare. These are the conditions under which an ‘accomplishment of natural growth’ approach could thrive, where *‘children experience long stretches of leisure time, child-initiated play, clear boundaries between adults and children, and daily interactions with kin’* (2003: 3).

Mothers in the ‘Constrained, strong ties’ group are not confident in dealing with professionals and they are the group least likely to engage their child in structured enrichment activities, particularly those activities which are regarded as expressions of class ‘tastes’ (Vincent and Ball 2007). This childrearing approach may be positive inasmuch as it allows children time to be children, to have more autonomy and to grow and develop at their own pace. Lareau noted that children of the ‘accomplishment of natural growth’ approach tended to have more energy, to complain less of being bored and to ‘whine and badger’ less (2003: 238). However, if these mothers feel a sense of constraint in the face of authority and do not feel comfortable adopting the dominant set of cultural repertoires, then they may feel excluded and powerless and be less able to use their resources to influence outcomes to their advantage. This is not to say that mothers in the ‘Constrained, strong ties’ group do not nurture their children’s cultural and social capital, but they appear to do so less intensively (and conceivably in less high status fields) than mothers in the other childrearing groups. Of particular importance is the affective aspect of this groups’ childrearing approach: their uncertainty about being able to recognise and meet the evaluative standards of dominant institutions.

Weak ties, formal service use

The 'Weak ties, formal service use' group is perhaps the most interesting group in terms of Lareau's typology. On the one hand these mothers tend to be older at primiparity and better educated than mothers in the 'Confident, well-networked' group, suggesting higher socio-economic status. On the other hand they tend to have more children and to suffer from higher levels of stress, anxiety and depression, factors more associated with mothers of lower socio-economic status. Although large families are stereotypically associated with mothers of low socio-economic status, in fact the percentage of GUS children who are third or subsequent children is the same in the GUS sample for those on the lowest and on the highest incomes. These factors might suggest that the 'Weak ties, formal service use' childrearing approach is one adopted by mothers of relatively high socio-economic status who have larger families and little time to cultivate strong friendship networks. Family networks may also be weaker: the partners of mothers in this group are more likely to have degrees than the partners of 'Confident' mothers, so it is possible that these parents are moving away from wider family support to follow higher-status jobs. 'Weak ties' mothers are also much more likely to be private renters than mothers in the 'Confident, well-networked' group. This may be further evidence to support hypotheses about the geographical mobility of this group: a more mobile family with weaker ties may be less likely to be owner-occupiers.

The 'Weak ties, formal service use' group are most likely to take their children to the library and galleries frequently, yet they do not feel supported and do not feel close to many people. It seems legitimate to conclude that the childrearing approach of this group is characterised by an efficient network of weak ties with few redundant ties. This kind of network may be highly effective at maintaining and activating social capital, it may help the mother to learn about and access information and opportunities and may therefore be a network that is effective at helping to transfer advantage between generations, but this sort of network may not provide enough strong ties to enable these mothers to access reciprocal emotional support. This may be a cause of their higher levels of anxiety and depression.

The children of mothers who adopt the ‘Weak ties, formal service use’ childrearing approach are more likely to score lower on the understanding of words and use of objects than the children of mothers in the ‘Confident, well-networked’ group. Lower scores on this measure can - for some children - be linked with challenging behaviours (Eadie et al. 2010) and have been shown to be associated with maternal depression (Murray 1992). It should be noted that some studies have found that depressed mothers tend to be more critical of their children’s behaviour (for example Webster-Stratton and Hammond 1988). In the GUS questionnaire, the CSBS scale is based on parent report, so it is possible that the direction of causality between maternal depression and poorer scores on the CSBS symbolic scale is two-way. Depressed mothers may underplay or fail to notice their children’s development of symbolic communication. Leaving aside the question of the impact of parent report, both maternal stress and depression and the child’s CSBS symbolic communication score are significantly associated with childrearing approach at Sweep 2 of GUS.

The ‘Weak ties, formal service use’ childrearing approach could therefore be defined as analogous to the ‘concerted cultivation’ approach: this approach may be effective in transferring material advantage to the next generation, but the emotional deficits which accrue from it may undermine or impair some of the positive outcomes which the approach - consciously or unconsciously - seeks to achieve.

6.9 Conclusion

This chapter explored whether the conclusions drawn from qualitative research about socially patterned childrearing approaches could be replicated with quantitative data from a different geographic locale with different social challenges and a different policy environment, as discussed in Chapter 3. The GUS data do appear to suggest that an unobserved, unmeasured concept of childrearing approach may be inferred from observed measures of parental effort, personal networks and childcare choices. Four distinct patterns of childrearing approach have been identified, in contrast to the two approaches described in qualitative research. In the Growing up in Scotland

sample, a two group typology does not adequately capture the variation in childrearing approach. The suggested four group typology encompasses the ‘concerted cultivation’ and ‘accomplishment of natural growth’ approaches suggested by Lareau (2003), but extends this to include a group of working mothers and a new group which displays many of the characteristics of ‘concerted cultivation’ in terms of parental effort in engaging their children in structured enrichment activities, but which diverges from ‘concerted cultivation’ in terms of the mothers’ mental health and social capital.

The findings of this chapter echo those of Chapter 5. The GUS mothers’ constructed biographies suggested that material realities, social motivation and the availability of symbolic capital contribute to mothers’ identity formation in ways which are psychologically more or less stressful to maintain. The regression analysis found that all three childrearing groups are more likely to suffer from higher levels of either stress or depression than mothers in the ‘Confident, well-networked’ group. The ‘Busy, working mothers’ stress could simply be attributable to the logistical difficulties of working and mothering, but these higher levels of stress could also arise from the difficulty of reconciling images of the self as earner and nurturer.

The higher levels of anxiety and depression associated with mothers in the ‘Constrained, strong ties’ group may be attributable to the challenges of bringing up children on low incomes. Much of the policy discourse of the 2005-2008 period implied that mothers should also be earners (see Chapter 3 for a discussion). There was a certain stigma associated with, for example, being a single mother on benefits (Vincent 2010). Yet it would be very difficult for mothers with few or no qualifications to earn enough to cover childcare costs. Emma’s biography in Chapter 5 suggested that although mothers in the ‘Constrained’ group are more likely to have strong ties with family and friends, these personal networks may not always be relied upon to offer consistently available, quality childcare.

The higher levels of depression experienced by mothers in the ‘Weak ties, formal service use’ group may be attributable to feelings of isolation. Griffiths (1995) explains the conceptual link between social isolation and depression as follows:

[t]he social relationships an individual makes are both the source of self-identity and also the source of evaluation of the self by oneself’ (Griffiths 1995: 116).

In other words, belonging is central to self-esteem. People who are in the centre of social groups are more likely to have aligned their feelings with those of the group. Mothers on the periphery of groups - those with weak ties - may not have aligned their feelings fully with those of the group, which may result in a conflict between the true self and the feelings required by attractive social groups (Griffiths 1995). This feeling of being ‘divided against oneself’ may lead to higher levels of anxiety and depression.

The analysis carried out in this chapter suggests that the childrearing approaches identified are not directly synonymous with social class. Apart from the ‘Constrained, strong ties’ group which appears to be consistent with mothers with fewer economic, cultural and social resources at their disposal, the other latent classes cannot be directly predicted by socio-economic indicators. Although the ‘Weak ties, formal service use’ group has been presented as manifesting many middle class attributes, mothers who adopt this childrearing approach are also more likely to live in social housing than ‘Confident, well-networked’ mothers and their partners are more than twice as likely not to be working⁵⁶. As the constructed biographies in Chapter 5 suggested, there are likely to be many possible combinations of material and social circumstances experienced by individual mothers, not all of which can be captured by a statistical model.

Maybellis and Marryat (2011) found that many individual aspects of GUS mothers’ personal networks and service use were associated with socio-economic group. This

⁵⁶ Odds are 2.45; SE 0.446; p=0.045

analysis however suggests that when a constellation of personal networks and service use attributes are taken together, the relationship to social class may be more complex. Chapter 7 explores another aspect of the relationship between socio-economic status and this constellation of attributes by examining the effect of neighbourhood deprivation on childrearing approach.

6.10 Technical Appendix 6.1

Table 6.12 LCA: further measures of model fit (N=3,706)

Classes	Free parameters	% change in BIC	% of bivariate residuals significant at the 5% level	% change in % of sig. bivariate residuals
2	63	*	11.6	*
3	95	-1.11	9.7	-16.4
4	127	-0.61	6.0	-38.1
5	159	-0.34	4.7	-21.7
6	191	-0.06	4.3	-8.50
7	223	0.05	3.4	-20.9

The first column in Table 6.12 points towards one of the weaknesses of the model design. All of the models have a large number of free parameters. With fifteen binary, ordinal and unordered categorical observed indicators and 3,706 survey respondents the number of possible response combinations is considerable (over 2,500 for most of the models). In other words, there is potentially a very large framework into which the data can be fitted rather loosely: it is easier to specify a model that is relatively unconstrained. In addition, as discussed in Chapter 4, the distribution of responses for many of the indicators is highly skewed, further complicating the task of a model which seeks to estimate the probability of each respondent's group membership. This skewed distribution leads to a number of cells with few cases, with the result that the data do not well approximate the Chi-Square distribution (Nylund et al. 2007: 545) so a standard Chi-Square test of model fit cannot be used.

Table 6.12 also reports the percentage of bivariate residuals which are significant at the 5% level. Norris (2009: 113) notes that:

'If a high proportion of the residuals associated with a solution are significant (at the 0.05 level) then this would suggest that many cases deviate substantially from the preference patterns identified by the latent class solution. Adding more classes to a model will reduce the number of significant residuals as the new model should better represent the heterogeneity within the sample. Once adding additional classes to the

model does not have a marked effect on the level of significant residuals ... it is reasonable to argue that adding additional classes does little to improve model fit.'

There is no generally agreed threshold for a suitably low percentage of significant residuals; this measure of model fit should be used in conjunction with other measures and with substantive reasoning to determine the correct number of classes. From Table 6.12 it can be seen that the improvement in the percentage of bivariate residuals for the four class model is substantial, suggesting that the four class model captures well the heterogeneity in the model and that it may therefore be preferable.

6.11 Technical Appendix 6.2

In their paper on the inclusion of covariates in a Latent Class model, Clark and Muthen (2009) highlight the undesirability of simply saving each case's most likely latent group membership and using this as the dependent variable in a multinomial logistic regression. Each case may be partly assigned to some or all groups. By treating the latent variable as an observed variable with a fixed rather than probabilistic value, the measurement error within the assignment of cases to classes is ignored. This is likely to lead to artificially reduced standard errors and a possible Type 1 error. Instead Clark and Muthen argue for a one-step analysis procedure where the covariates are included while the latent classes are formed. They recommend using the pseudo-class Wald Chi Square Test (Asparouhouv and Muthen 2007) to help select significant predictors from a large number of possible variables. This is a Wald test for equality of means across latent classes. A large Wald Chi Square value and a low p value indicate that there are statistically significant differences in the means of the predictor variables across classes.

The Wald test for equality of means was performed on a number of predictors of socio-economic group suggested by theory and earlier research (see Bradshaw et al. 2008; Crompton 2008; Anderson et al. 2007) and the significant predictors were included in the regression model. These are set out in Table 6.13 The study child's gender and the index of urban/rural location were not found to be significant and were excluded at this stage of the model-building process.

SIMD refers to the Scottish Index of Multiple Deprivation 2004⁵⁷. SIMD is an area-based measure of deprivation which combines thirty eight indicators across seven domains, namely: income, employment, health, education, skills and training, housing, geographic access and crime. The total SIMD rank is based on the

⁵⁷ For a more detailed description of the design of SIMD see <http://www.scotland.gov.uk/Topics/Statistics/SIMD/BackgroundMethodology> (accessed 02/05/13).

weighted sum of the scores in the seven sub-domains. The analysis carried out in this chapter uses SIMD quintiles ranging from most deprived to least deprived.

ONS-SEC classification refers to the Office for National Statistics' Socio-economic Classification. This is a measure based on occupational classification and is designed to reflect socio-economic status⁵⁸.

The Communication and Symbolic Behaviour Scale (Wetherby and Prizant 2001) is an age-sensitive diagnostic questionnaire which aims to identify at an early stage any retardation in children's development of communication skills (social subscale), use of sounds and words (speech subscale) and understanding of words and use of objects (symbolic subscale). In these subscales, a higher score is better; a lower score indicates possible concern.

Table 6.13 Wald Chi Square test of mean equality across latent classes

Predictor	Wald Chi Square
Study child's birth order – third or subsequent child	83.08***
Mother's age at primiparity	379.24***
Tenure – rents from Local Authority or Housing Assn.	341.13***
SIMD – most deprived quintile	85.02***
Mother is from a non-white ethnic group	18.09***
Mother's highest level of education – no qualifications	111.72***
Mother's ONS-SEC – never worked	85.65***
Mother's level of stress	74.00***
Mother's level of anxiety/depression	106.02***
Household income – less than £10,000 p.a.	188.35***
Child's CSBS social score	13.71**
Child's CSBS speech score	44.06***
Child's CSBS symbolic behaviour score	58.73***

***= p<0.001; **=p<0.05

A pairwise correlation matrix of the independent variables was examined to check for collinearity. The highest correlation was 0.5 (between income and ONS-SEC classification); most correlations were much lower. A correlation of at least 0.7 between two independent variables is generally treated as the threshold for when multicollinearity becomes a mathematical certainty (Pratt and Godesy 2003: 624). The models were run with and without income, but the estimates did not change

⁵⁸ For a discussion of the limitations of the ONS-SEC, especially for women, see Crompton 2008.

substantially. The Variance Inflation Factor function is not available in Mplus, so multicollinearity diagnostics were calculated in STATA using the `collin` function. The highest tolerance value was 0.97 and no Variance Inflation Factor was higher than 3.68. These suggest that multicollinearity is not sufficiently high as to skew the model estimates (Belsley et al. 2004).

7 The power of place or the location of power? Childrearing approach and the neighbourhood context

The previous chapter tested whether the findings reported in US and English qualitative research on childrearing approach could be replicated using quantitative data from a Scottish sample. It explored whether Scottish mothers adopted the ‘concerted cultivation’ or the ‘accomplishment of natural growth’ approach and concluded that there is evidence to support a typology of four childrearing approaches which incorporates and extends Lareau’s (2003) typology. The analysis indicated that the childrearing approaches identified are not directly associated with typical markers of class such as occupation, education and income. This chapter extends that investigation by exploring the effects of residential locale on childrearing approach.

7.1 The power of place

It is worth pursuing the question of whether neighbourhood makes a difference to childrearing approach because of the gathering momentum within Scottish and UK policy towards area-based interventions and community empowerment (see Chapter 3 for a full discussion). During the years 2005-2008, Scotland saw a form of double devolution, with responsibility for policy implementation moving increasingly away from central government to Local Authorities. From 2007, the SNP Scottish Government introduced Single Outcome Agreements, which essentially held Local Authorities to account in terms of a set of fifteen National Outcomes, but gave them considerable freedom in the allocation of block grant funding for policy implementation and service delivery. In tandem with this change in the mechanisms of policy implementation and reporting came an increased emphasis in the policy discourse around active citizenship and community empowerment. The policy drive towards a mixed economy of service provision - with Third Sector organisations

contracted to provide services - was less pronounced in Scotland than in England (Danson and Whittam 2011). The Scottish Government tended to emphasise the value of the Third Sector not so much as service provider but as a conduit through which individuals could be reached and encouraged to participate in planning local services. The explicit aim of local participation was to generate local services which were more closely suited to local need; the implicit aim was to try to foster greater trust between local residents, a stronger sense of community and a higher proportion of active (voting) citizens. Scottish policy of the mid- to late 2000s made a clear causal link between 'strong, resilient communities' and 'active citizens' (see Scottish Executive 2009 and 2008).

Much store was set, therefore, by the quality of a neighbourhood and that neighbourhood's sense of community empowerment. Thriving neighbourhoods were understood to contribute to thriving citizens of the future. But the evidence base for the influence of neighbourhood on childrearing approach and children's outcomes does not point towards one simple set of causes and solutions (Galster 2010). Although qualitative research has provided evidence of how neighbourhood context can influence childrearing approach (see for example Atkinson and Kintrea 2004), it has been very difficult to show any significant effects of neighbourhood in quantitative samples, often because of the difficulty of defining 'neighbourhood'. This chapter therefore offers a further attempt to measure whether neighbourhood characteristics are significantly associated with childrearing approach, and considers how these findings compare with those of the case studies presented in Chapter 5.

Studies of neighbourhood effects on children's outcomes (Odgers et al. 2009; Teasdale and Silver 2009; Colder et al. 2006; Pratt et al. 2004; Silk et al. 2004) suggest that the most likely mechanism through which neighbourhood influences children's behavioural development is the neighbourhood's capacity to support or undermine parents' efforts to raise their children. Where there are high levels of trust and shared values in a community, members of the community are more likely to monitor and enforce conforming behaviour. This combination of factors - termed 'collective efficacy' (Sampson, Raudenbush and Earls 1997) - is likely to help

parents to ‘socialise’ their children, that is, to provide consistent examples of accepted norms of behaviour. This chapter considers whether a mother’s feelings about the level of collective efficacy in her area are associated with the childrearing approach she adopts. Some research (Simmons et al. 1996; Earls, McGuire and Shay 1994; Furstenberg 1993) suggests that mothers living in more deprived areas may be more directive with their children in order to protect them from perceived (and actual) risks. This chapter also looks at objective measures of neighbourhood deprivation and finally considers whether subjective feelings about collective efficacy and objective measures of neighbourhood deprivation are significantly associated with childrearing approach when other socio-economic factors are taken into account.

The aim of this part of the analysis is to explore the basis for the Scottish Government’s policy discourse. The neighbourhood indicators used for the analysis were measured in 2007, the year the Scottish Government introduced Single Outcome Agreements. The results challenge the logic implicit in the policy discourse that a greater sense of collective efficacy and community empowerment would come about almost as a hoped-for side effect of participation in local decision-making. Commentators on the community empowerment discourse have argued that government not only failed to put in place adequate support to allow individuals to participate effectively, but also that pushing responsibility for service delivery into the hands of active citizens detracted attention from the state’s responsibility to address the underlying causes of low collective efficacy, such as poverty, poor housing, fear of crime and high unemployment (Danson and Whittam 2011; Ellison 2011; Williams 2011; Wallace 2009).

The results of Chapter 6 suggest that neighbourhood deprivation - measured by SIMD quintile - is not significantly associated with a mother’s childrearing approach when other factors such as education and occupational status are controlled for. The analysis carried out in this chapter explores that finding further. While the SIMD measure used in Chapter 6 was a categorical observed variable, this analysis models neighbourhood deprivation as a continuous latent variable. Here we assume that

neighbourhood deprivation is an unobserved, unmeasured concept which can only be captured imperfectly by a set of observed variables (such as the number of alcohol- or drug-related hospital admissions or number of people claiming unemployment benefit). In this way, the model takes into account the measurement error which exists between the model and the world.

7.2 Restatement of relevant hypotheses

The two hypotheses addressed in this chapter are as follows:

c) GUS mothers' childrearing approach is associated with their subjective assessment of the level of collective efficacy in their neighbourhood and with objective measures of neighbourhood deprivation. Mothers living in areas with low collective efficacy and high deprivation are more likely to adopt a childrearing approach akin to the 'accomplishment of natural growth'.

d) When a range of socio-economic factors are controlled for, subjective assessment of neighbourhood collective efficacy and objectively measured neighbourhood deprivation are not significantly associated with childrearing approach.

7.3 Outline of analysis steps

The analysis steps carried out in this chapter were as follows:

- i. Select observed indicators of collective efficacy and neighbourhood deprivation based on theory and previous research.
- ii. Recode indicators where necessary.
- iii. Carry out exploratory factor analysis on the two sets of observed indicators - collective efficacy and neighbourhood deprivation a) to check that there is sufficient evidence that the observed indicators can be combined to summarise latent variables and b) to assess the nature of those variables.

- iv. Regress the latent class variable childrearing approach – estimated in Chapter 6 - onto the latent variable collective efficacy to assess the extent to which childrearing approach is associated with the respondent’s beliefs about the level of collective efficacy in her area.
- v. Regress the latent class variable childrearing approach onto the latent variable neighbourhood deprivation to assess the extent to which it is associated with childrearing approach.
- vi. Carry out a multinomial logistic regression of collective efficacy, neighbourhood deprivation and other socio-economic indicators onto childrearing approach to assess whether there is still a significant association between neighbourhood measures once other socio-economic factors are controlled for.

7.4 Defining the latent variable ‘collective efficacy’ using Exploratory Factor Analysis

The aim of this part of the analysis is to combine a number of questionnaire items together to create a factor, and then to consider the reliability and validity of that factor in representing the unmeasured concept of ‘collective efficacy’. Collective efficacy is assumed to be a continuous latent variable with an underlying linear distribution running from weak to strong, but which can only be partially captured by the eight observed measures chosen to operationalise it. Other survey questions could also have been chosen to measure different aspects of the concept, but this analysis is limited by the questions available in the Growing up in Scotland questionnaire. The question wording and response distribution of the eight items chosen to operationalise collective efficacy are set out in Table 7.1.

The variables chosen to operationalise collective efficacy are seven highly skewed five-point likert scales and one binary variable. The likert scales were recoded into binary variables with ‘Strongly agree’ and ‘agree’ being coded as 1 and other categories coded 0. Even so, Table 7.1 shows that around two thirds of the GUS mothers generally agreed with the positive statements around collective efficacy.

Table 7.1 Question wording and response distribution for the observed measures of collective efficacy.

GUS Sweep 3: N=3,706	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I feel safe when I am out alone in this neighbourhood during the day	39.3%	55.5%	2.8%	1.9%	0.5%
I feel safe when I am out alone in this neighbourhood after dark	15.7%	48.9%	15.8%	16.5%	4.5%
People around here look out for each other's children	13.7%	50.6%	21.2%	11.0%	1.2%
Most people around here can be trusted with children	9.2%	48.2%	28.9%	7.6%	1.0%
People around here hold shop doors open for pushchairs	8.1%	58.0%	20.0%	11.3%	1.4%
Bringing up children well is a priority for people in this area	11.2%	54.5%	23.6%	7.2%	1.0%
This is a good area to bring children up in	17.2%	57.8%	14.3%	7.7%	2.7%
	Yes	No			
Are there are public places in your area where children can play safely?	71.7%	27.3%			

Table shows unweighted percentage of respondents selecting each category.

The first two indicators used to operationalise collective efficacy are measures of subjective feelings of safety. The other six indicators were originally designed for and used as part of the independent evaluation of the Starting Well Health Demonstration Project (Bradshaw et al. 2009: 35). Starting Well focussed on child health and ran in several deprived areas in Glasgow between 2000 and 2003. A key aim of the project was to demonstrate that child health could be improved by, amongst other things, enhancing community-based resources for parents and their children. Theory and previous research into collective efficacy suggest that it is legitimate to operationalise collective efficacy in terms of fear as well as child-friendliness because subjective feelings of safety, particularly in relation to public spaces, are an important aspect of a parent's confidence in their neighbourhood's ability to enforce collective norms of behaviour (Simmons et al. 1996; Earls, McGuire and Shay 1994; Furstenberg 1993).

Exploratory Factor Analysis⁵⁹ was carried out on the eight collective efficacy indicators for two reasons: firstly, to assess the evidence that the observed indicators do in fact measure the latent variable. Secondly, to explore the dimensions of the underlying concept to aid substantive interpretation of the final model. Understanding how feelings about collective efficacy work is likely to aid interpretation of how this concept affects childrearing approach.

Table 7.2 shows the correlations between the eight observed variables. The mean correlation for all of the items is 0.5: a value of 1 would indicate a perfect correlation. The item '*this is a good area in which to raise children*' correlates well with almost all the other items (the correlation with the item '*people hold shop doors open for pushchairs*' is less strong). This covariation offers some preliminary assurance that it is legitimate to group these variables together to summarise dimensions of the latent variable.

Exploratory factor analysis was then carried out on the eight observed variables. The rotated⁶⁰ factor loadings for the one factor solution are presented in Table 7.3. These factor loadings describe the extent to which each of the eight questionnaire items correlates with the factor – the hypothesised latent variable collective efficacy. All of the loadings are above 0.5: Hair et al. (2006: 128) suggest that loadings of 0.5 or greater are considered '*practically significant*', while loadings of 0.7 or greater are considered '*indicative of well-defined structure and are the goal of any factor analysis*'. Five of the eight items have loadings of 0.7 or greater: this provides further evidence that the eight observed variables can be grouped together to form a factor.

⁵⁹ See Chapter 3 for an explanation of the technique.

⁶⁰ Geomin rotation was used. This is the default oblique rotation method used in Mplus 7.

Table 7.2 Correlation matrix for the 8 indicators of collective efficacy

	1	2	3	4	5	6	7	8
1 Respondent feels safe in her neighbourhood during the day	1							
2 Respondent feels safe in her neighbourhood after dark	0.745	1						
3 There are safe public places for children to play	0.481	0.343	1					
4 People look out for each other's children	0.408	0.334	0.329	1				
5 Most people can be trusted with children	0.490	0.375	0.268	0.704	1			
6 People hold doors open for pushchairs	0.392	0.333	0.340	0.417	0.357	1		
7 Bringing up children well is a priority for people in the area	0.455	0.437	0.393	0.557	0.577	0.410	1	
8 This is a good area in which to raise children	0.622	0.603	0.559	0.531	0.561	0.443	0.767	1

Correlations shown are the tetrachoric correlations calculated in Stata 11 to take account of the binary nature of the variables. All correlations are significant at the 0.01 level. Sample size varies between correlations due to missing data: approximate sample size for each correlation is 3,650. Correlations in bold are greater than the mean correlation of 0.473.

Table 7.3 Rotated factor loadings for the EFA 1 factor solution

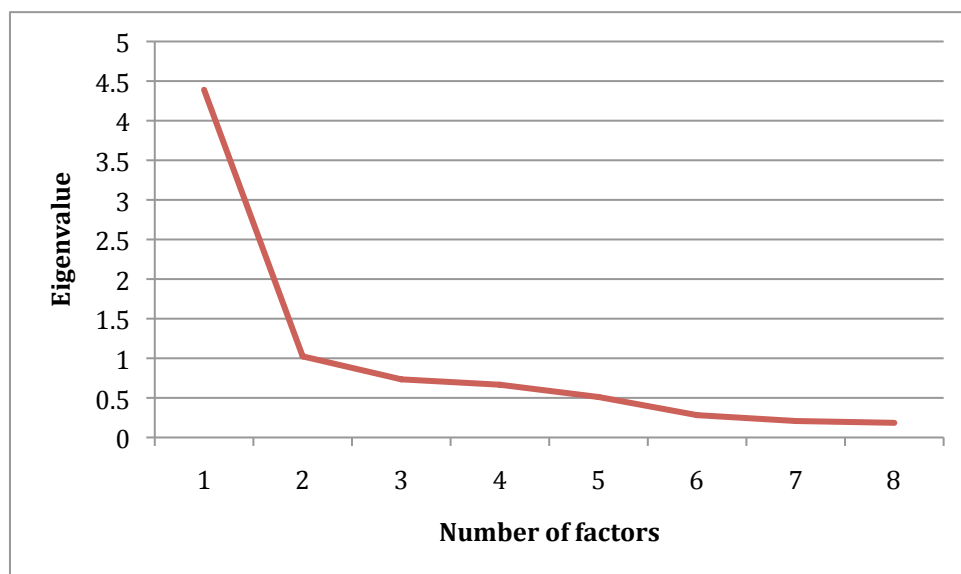
1 Respondent feels safe in her neighbourhood during the day	0.766
2 Respondent feels safe in her neighbourhood at night	0.653
3 There are safe public places for children to play	0.542
4 People look out for each other's children	0.749
5 Most people can be trusted with children	0.764
6 People hold doors open for pushchairs	0.527
7 Bringing up children well is a priority for people in the area	0.777
8 This is a good area in which to raise children	0.875

All loadings are significant at the 5% level

Exploratory factor analysis conducted using MPlus 7 to account for the binary nature of variables and missing data. N=3,706.

Having established that it is appropriate to form a factor from the eight observed variables chosen to operationalise collective efficacy, the next step is to examine different model solutions and then to select the best fitting model. An examination of the factor structures can aid understanding of how the topics covered by the questionnaire items bridge to the concept of collective efficacy. Exploratory factor analysis was carried out for one through four factor solutions and the results are presented in Figure 7.1 and Table 7.4.

Figure 7.1 Eigenvalues for EFA of 8 collective efficacy measures (N=3,706)



The Kaiser-Guttman rule (Guttman 1954), a scree plot (Cattell 1966) and model fit indices were used along with substantive reasoning to assess the reliability of the model solutions. Figure 7.1 shows a scree plot of the Eigenvalues for the one through eight factor solutions. The Eigenvalue is the amount of variance in the observed variables which is accounted for by the factor representing the latent variable collective efficacy. The Kaiser-Guttman rule states that factors with Eigenvalues lower than one should be discounted. This would suggest a two factor solution (the second factor has an Eigenvalue of 1.024), but Hair et al. (2006) note that when the number of variables is less than 20, the Kaiser-Guttman rule tends to extract too few factors, suggesting that a three factor solution may be preferable.

According to the scree plot approach, trivial common variance or ‘rubble factors’ (Hoyle and Duvall 2004: 304) begin after the ‘elbow’, or the point on the graph where the line flattens out. The scree plot in Figure 7.1 would also suggest a two factor solution, however Zwick and Velicer (1986) found that the scree test typically results in the retention of too many factors.

Both the Kaiser-Guttman rule and the scree test point towards a two factor solution, however Table 7.4 shows an array of more recently developed fit statistics to guide the selection of the best fitting model.

Table 7.4 Fit statistics for models positing 1 through 4 factors underlying responses to the 8 manifest variables hypothesised to measure the latent variable collective efficacy (N=3,706)

k	df	χ^2	p	CFI	RMSEA	RMSEA _{.05}	RMSEA _{.95}
1	20	401.682	<0.001	0.940	0.072	0.066	0.078
2	15	131.732	<0.001	0.981	0.050	0.042	0.058
3	7	19.736	<0.001	0.998	0.022	0.011	0.034
4	2	2.103	0.350	1.000	0.004	0.000	0.033

The Chi-Square test is significant for the one, two and three factor models, but this test requires stringent assumptions which may be unrealistic, since it is a test of whether the model holds exactly in the population (Browne 1984). Chi-Square is also likely to lead to the over-extraction of factors (Hoyle and Duvall 2004). The comparative fit index (CFI) is above 0.95 for the two and three factor models: a cut point of 0.95 or greater has been recommended as justification for the adoption of a particular model (Mulaik and Millsap 2000), suggesting that either the two or three factor model could be adopted. Brown and Cudeck (1993) suggest that for EFA the upper confidence limit of the Root Mean Square Error of Approximation (RMSEA) should be no greater than 0.05, however 0.08 typically is considered acceptable as the maximum value of the upper limit (Hoyle and Duvall 2004). Based on the Kaiser-Guttman rule and the scree test a two factor model should be adopted; based on the more recently developed fit statistics of CFI and RMSEA, a two or three factor solution should be adopted. Since the statistical tests are not conclusive, the factor structures for the two and three factor model solutions will be examined to see which model solution makes the most substantive sense. The factor structures are

presented in Table 7.5. The factor structure matrix shows the correlation between the questionnaire items and the factors. This indicates which items measure the factors best⁶¹.

Table 7.5 Factor loadings for the 2 and 3 factor solutions: exploratory factor analysis on 8 indicators of collective efficacy

2 Factor solution	Safety	Children a shared priority	
1 Respondent feels safe in her neighbourhood during the day	0.871	0.449	
2 Respondent feels safe in her neighbourhood after dark	0.751	0.400	
3 There are safe public places for children to play	0.568	0.399	
8 This is a good area in which to raise children	0.833	0.728	
4 People look out for each other's children	0.422	0.844	
5 Most people can be trusted with children	0.443	0.819	
7 Bringing up children well is a priority for people in the area	0.642	0.714	
6 People hold doors open for pushchairs	0.460	0.478	
3 Factor solution	Safety	Mutual trust	Children a shared priority
1 Respondent feels safe in her neighbourhood during the day	1.254	0.494	0.567
2 Respondent feels safe in her neighbourhood after dark	0.597	0.415	0.576
4 People look out for each other's children	0.337	0.856	0.534
5 Most people can be trusted with children	0.381	0.825	0.538
3 There are safe public places for children to play	0.389	0.366	0.556
7 Bringing up children well is a priority for people in the area	0.359	0.675	0.752
8 This is a good area in which to raise children	0.501	0.644	1.015
6 People hold doors open for pushchairs	0.335	0.471	0.472

Exploratory factor analysis conducted using MPlus 7 to account for the binary nature of variables and missing data. Analysis includes all cases which answer at least one question. N=3,706.

An examination of the factor structures shows that in the three factor solution two of the items have factor loadings greater than 1 (*‘respondent feels safe in her area during the day’* and *‘this is a good area in which to bring up children’*). This can mean that the items are extremely reliable and that the factor completely explains

⁶¹ Professor Linda Muthen, Mplus discussion forum, Sunday, June 17, 2007.

variance in this item. However, factor loadings greater than 1 can also mean that too many factors have been extracted⁶². For this reason, a two factor solution will be adopted. It follows that a two factor solution is the model which best fits the data, since the eight observed variables comprise two sets of questions, one about personal safety and the other about the child-friendliness of an area.

The two factor solution suggests that fear and trust are important dimensions of a respondent's subjective assessment of the level of collective efficacy in her area. Item 8 loads strongly onto both factors, suggesting that both factors capture elements of the child-friendliness of an area and linking the dimensions of fear and trust. Where physical safety is threatened and where the public realm is not safe for children, this is likely to have an impact on childrearing approach, as levels of parental stress increase and parents adopt coping strategies such as stricter parenting styles (Vincent, Ball and Braun 2010; Atkinson and Kintrea 2004). In contrast, where children are felt to be a shared priority, parents can feel supported in their childrearing approach.

7.5 Collective efficacy and childrearing approach

The next step in the analysis is to regress the categorical latent variable childrearing approach onto the continuous latent variable collective efficacy to test the hypothesis that childrearing approach is associated with subjective assessment of neighbourhood collective efficacy. One possible approach would be to estimate a structural equation model⁶³, however the number of dimensions in the data make this approach extremely computationally intensive. There is a further problem: because many of the fifteen indicators of childrearing approach are highly skewed, there is not sufficient variation between some of the childrearing classes to allow the model to

⁶² Factor loadings greater than 1 can point to negative residual variances, meaning that too many factors have been extracted. Linda Muthen, Mplus discussion board 02/05/05
<http://www.statmodel.com/discussion/messages/8/178.html>

⁶³ There are a number of definitions of structural equation models, but these models often take the form of regressions where both the predictor and response variables are latent variables.

provide reliable estimates. In order to overcome these limitations in the data and the model assumptions, a distribution of factor scores was saved for the two factors estimated for collective efficacy (‘safety’ and ‘children a shared priority’) and these values were used in the subsequent analysis. Technical Appendix 7.2 discusses this problem and the solution adopted more fully.

A multinomial logistic regression model was estimated: the factors are regressed onto each of the latent classes. One class is selected as the reference class so that each parameter can be interpreted as the change in log odds of being in a given class for a one unit increase of the corresponding predictor (Van Horn et al. 2009). In this case, the ‘Confident, well networked’ group has been selected as the reference class because it is the largest class. Table 7.6 displays the model results in odds ratio format.

Table 7.6 Results of the multinomial logistic regression of the two factors measuring collective efficacy on the latent class variable childrearing approach

	Safety		Children a shared priority	
	Odds ratio	Standard Error	Odds ratio	Standard Error
Busy, working mother	1.17	0.133	0.79**	0.110
Constrained, strong ties	0.40***	0.140	1.31**	0.116
Weak ties, formal service use	1.07	0.139	0.82*	0.114

N=3,706, ***=p<0.001; **=p<=0.05; *=p<0.10

The reference class is the ‘Confident, well networked’ group.

These results suggest that mothers in the ‘Constrained, strong ties’ group are much less likely to feel safe in their neighbourhood, both in terms of personal safety and the safety of their child, than mothers in the ‘Confident, well networked’ group. Mothers in the ‘Busy working mother’ and ‘Weak ties, formal service use’ groups are less likely to feel that children are a shared priority in their area than mothers in the ‘Confident, well networked’ group. Conversely, mothers in the ‘Constrained, strong ties’ group are more likely to feel that children are a shared priority in their area than are mothers in the ‘Confident, well networked’ group.

7.6 Defining the latent variable ‘neighbourhood deprivation’ using Exploratory Factor Analysis

EFA was initially carried out on the seven subdomains from the Scottish Index of Multiple Deprivation (SIMD) 2006 in order to establish whether these observed indicators could be said to measure the latent variable ‘neighbourhood deprivation’. These subscales are routinely combined into a weighted scale which is treated as an observed variable, but this analysis seeks to capture the dimensions of neighbourhood deprivation as a latent variable. The problem with treating SIMD as an observed variable is that it assumes that there is no measurement error within the SIMD indicator and that it perfectly represents levels of deprivation in the population. By including the sub-domains as a factor hypothesised to predict variation in a latent variable ‘neighbourhood deprivation’, we acknowledge the imperfect nature of the measurement variables in our model and we can account in other ways for the measurement error that undoubtedly exists between the model and the world. Table 7.7 sets out the indicators used to measure each SIMD subdomain. Table 7.8 presents the response distributions for each.

Initially when exploratory factor analysis was carried out, all seven domains were included. However, the Geographic Access subdomain was weakly negatively associated with the other domains (see Table 7.9): it appeared that shorter travel times were associated with higher deprivation in the GUS sample. The inference from this result is that more affluent areas appear to have longer travel times to access services. This is possibly because more affluent areas tend to be predominantly residential, whether suburban or rural, and housing is less concentrated.

Deprived areas are likely to have shorter travel distances to access services, although this may not always be the case, particularly in rural areas or areas where social housing is concentrated on the outskirts of cities. Because of the low correlation with the other SIMD subdomains and the problematic interpretation of the geographic access subdomain, it was excluded from further analysis.

Table 7.7 Indicators used to measure the SIMD subdomains

SIMD 2006 income subdomain
Number of Adults (aged 16-59) claiming Income Support (Department for Work and Pensions (DWP) April 2005)
Number of Adults (aged 60 plus) claiming Guaranteed Pension Credit (DWP May 2005)
Number of Children (aged 0-15) dependent on a claimant of Income Support (DWP April 2005)
Number of Adults claiming (all) Job Seekers Allowance (DWP April 2005)
Number of Children (aged 0-15) dependent on a claimant of Job Seekers Allowance (all) (DWP April 2005)
SIMD 2006 employment subdomain
Working Age Unemployment Claimant Count averaged over 12 months (NOMIS 2005)
Working Age Incapacity Benefit claimants, men aged under 65 and women aged under 60 (DWP August 2005)
Working Age Severe Disablement Allowance claimants (August 2005 DWP)
Working Age Compulsory New Deal participants - New Deal for the under 25s and New Deal for the 25+ not included in the unemployment claimant count (DWP August 2005).
SIMD 2006 health subdomain
Standardised Mortality Ratio (ISD, 2001-2004)
Hospital Episodes Related to alcohol use (ISD, 2001-2004)
Hospital Episodes Related to drug use (ISD, 2001-2004)
Comparative Illness Factor (DWP, 2005)
Emergency admissions to hospital (ISD, 2001-2004)
Proportion of population being prescribed drugs for anxiety, depression or psychosis (ISD, 2004)
Proportion of live singleton births of low birth weight (ISD, 2001-2004)
SIMD 2006 education subdomain
School pupil absences (2003/4-2004/5)
Pupil performance on SQA at stage 4 (2002/3-2004/5)
Working age people with no qualifications (2001 Census)
17-21 year olds enrolling into higher education (HESA (2002/3-2004/5)
People aged 16-18 not in full time education (DWP 2005, HESA 2004/5)
SIMD 2006 geographic access subdomain
Drive time to a GP
Drive time to a Petrol Station
Drive time to a Post Office
Drive time to a Shopping facilities
Drive time to a Primary School
Drive time to a Secondary School
Public transport time to a GP
Public transport time to a Post Office
Public transport time to Shopping Facilities
SIMD 2006 housing subdomain
Persons in households that are overcrowded (2001 Census)
Persons in households without central heating (2001 Census)
SIMD 2006 crime subdomain
Recorded Crimes of Violence
Recorded Domestic housebreaking
Recorded Vandalism
Recorded Drugs Offences
Recorded Minor Assault

Source: Scottish Executive 2006. NOMIS = Office for National Statistics labour market statistics; ISD = NHS Information Services Division; HESA=Higher Education Statistics Authority

Table 7.8 Response distribution for the observed measures of neighbourhood deprivation - SIMD subdomains (N=3,706)

	Unweighted percentage of respondents in each category						
	Access	Education	Employment	Health	Housing	Income	Crime
Least deprived	13.99%	21.61%	22.55%	22.02%	20.99%	23.79%	23.70%
2	17.76%	19.85%	21.93%	22.07%	22.34%	20.61%	22.64%
3	21.48%	22.75%	20.92%	19.31%	20.39%	20.21%	17.51%
4	24.59%	16.35%	17.64%	19.82%	21.85%	16.06%	19.14%
Most deprived	22.18%	19.44%	16.96%	16.78%	14.43%	19.34%	17.02%

Table 7.9 Correlations between the 7 SIMD subdomains

	1	2	3	4	5	6	7
1 Access domain	1						
2 Education domain	-0.279	1					
3 Employment domain	-0.309	0.886	1				
4 Health domain	-0.333	0.880	0.945	1			
5 Housing domain	-0.346	0.757	0.740	0.754	1		
6 Income domain	-0.357	0.902	0.954	0.931	0.786	1	
7 Crime domain	-0.474	0.690	0.722	0.730	0.581	0.739	1

Correlations shown are the polychoric correlations calculated in Stata 11 to take account of the categorical nature of the variables. N= 3,650.

Exploratory factor analysis was carried out again on the six remaining SIMD subdomains and the results are presented below. Table 7.10 shows that all six SIMD sub-domains are highly correlated with each other. Table 7.11 shows that all of the indicators correlate highly positively with the factor (the continuous latent variable ‘neighbourhood deprivation’). There is therefore good evidence that these six indicators measure the factor well.

Table 7.10 Correlations between the 6 SIMD subdomains

	1	2	3	4	5	6
1 Education domain	1					
2 Employment domain	0.886	1				
3 Health domain	0.880	0.945	1			
4 Housing domain	0.757	0.740	0.754	1		
5 Income domain	0.902	0.954	0.931	0.786	1	

Correlations shown are the pairwise polychoric correlations calculated in Stata 11 to take account of the categorical natures of the variables. N=3,650.

Table 7.11 Rotated factor loadings for the EFA 1 factor solution

Education domain	0.923
Employment domain	0.979
Health domain	0.964
Housing domain	0.801
Income domain	0.979
Crime domain	0.761

Exploratory factor analysis conducted using Mplus 7 to account for the categorical nature of the variables and missing data. N=3,706.

The next stage of the analysis was to explore the dimensions of the latent variable ‘neighbourhood deprivation’. Because the SIMD subdomains have been designed to be combined into one measure, we would expect that a one factor solution would be the most appropriate. One- and two-factor solutions were estimated in MPLus; the three-factor solution did not converge. In fact, Figure 7.2 does appear to indicate that a one factor solution fits the data best. Only one factor has an Eigenvalue over 1, while the scree plot depicted shows the ‘elbow’ at two factors, pointing to a one-factor solution, as the scree test typically results in the retention of too many factors (Zwick and Velicer 1986).

Figure 7.2 Eigenvalues for EFA of 6 neighbourhood deprivation measures (N=3,706)

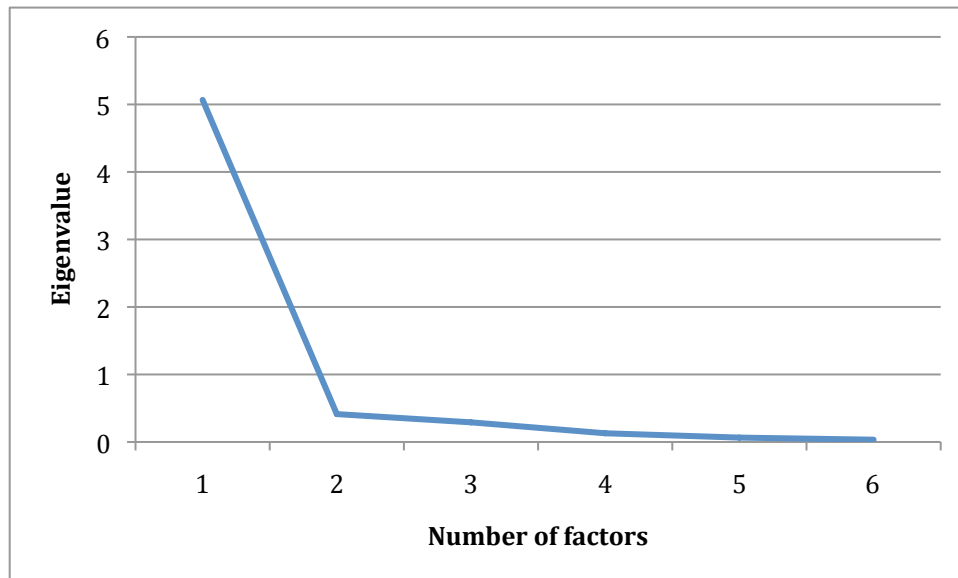


Table 7.12 Fit statistics for models positing 1 and 2 factors underlying responses to the 6 manifest variables hypothesised to measure the latent variable neighbourhood deprivation (N=3,706)

k	df	χ^2	p	CFI	RMSEA	RMSEA _{.05}	RMSEA _{.95}
1	9	42.323	<0.000	0.999	0.034	0.024	0.044
2	4	8.229	0.0835	1.000	0.018	0.000	0.036

Table 7.12 shows an array of more recently developed fit statistics to guide selection of the best-fitting model. The Chi-Square values also suggest a one-factor solution. The RMSEA values are all within acceptable margins, but the confidence intervals for the RMSEA values for the two-factor solution are very wide (as shown in the final two columns of the table). This indicates that the one factor solution may be the most stable.

7.7 Neighbourhood deprivation and childrearing approach

The analysis now proceeds as in Section 7.5. To test the hypothesis that childrearing approach is influenced by neighbourhood deprivation, the categorical latent variable childrearing approach is regressed on the continuous latent variable neighbourhood deprivation. The neighbourhood deprivation is expressed as a distribution of factor scores. The mean of neighbourhood deprivation is allowed to vary across the four categories of the latent class variable childrearing approach. Once again, to estimate the model, Mplus carries out a multinomial logistic regression of the factor on each of the latent classes. One class is selected as the reference class so that each parameter can be interpreted as the change in log odds of being in a given class for a one unit increase of the corresponding predictor (Van Horn et al. 2009). Table 7.13 displays the model results in odds ratio format.

Table 7.13 Results of the multinomial logistic regression of the factor neighbourhood deprivation on the latent class variable childrearing approach

	Odds ratio	Standard Error
Busy, working mother	0.99	0.024
Constrained, strong ties	1.30***	0.026
Weak ties, formal service use	0.99	0.026

N=3,706, ***=p<0.001

The reference class is the 'Confident, well networked' group.

This model suggests that as levels of neighbourhood deprivation increase, the odds of being in the 'Constrained, strong ties' group compared with the 'Confident, well networked' group also increase. There is no significant difference between the other childrearing groups in terms of neighbourhood deprivation.

7.8 Assessing the influence of collective efficacy and neighbourhood deprivation on childrearing approach, controlling for other factors

The final step in the analysis tests hypothesis d) ‘when a range of socio-economic factors are controlled for, subjective assessment of neighbourhood collective efficacy and objectively measured neighbourhood deprivation are not significantly associated with childrearing approach’. In order to test this hypothesis, a multinomial logistic regression was carried out, regressing the continuous latent variables collective efficacy and neighbourhood deprivation onto the categorical latent variable childrearing approach. Other control variables were later added to the model as in Chapter 6.

A regression with a categorical and continuous latent variables as well as observed variables would be extremely computationally demanding, so in this part of the analysis a set of factor scores (or ‘plausible values’ - see Technical Appendix 7.3) for the collective efficacy factors and the neighbourhood deprivation factor were saved for each case and a distribution of these values was used in the regression model. The significant results are displayed in Table 7.14.

Table 7.14 compares the regression coefficients from ‘model 1’ where childrearing approach is regressed on the same set of explanatory variables discussed in Chapter 6, with ‘model 2’: the model which includes these explanatory variables and the three factors measuring neighbourhood quality, safety and child friendliness. It can be seen that none of the neighbourhood variables were significantly associated with childrearing approach, when other socio-economic, mental health and child development measures were controlled for. Indeed, the addition of these variables does not in the main change the coefficients for the other explanatory variables.

Table 7.14 Multinomial logistic regression of neighbourhood variables on childrearing approach

Classes of the latent variable	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
	Busy working mother		Constrained, strong ties		Weak ties, formal service use	
y variables:	Odds (std. err.)	Odds (std. err.)	Odds (std. err.)	Odds (std. err.)	Odds (std. err.)	Odds (std. err.)
Study child is second child			1.65** (0.148)	1.69*** (0.149)	1.96*** (0.136)	2.07*** (0.141)
Study child is third or subsequent child			2.67*** (0.189)	2.71*** (0.199)	2.99*** (0.189)	3.01*** (0.189)
Mother is from another ethnic group			0.30** (0.501)	0.30** (0.495)		
Vocational qualification below degree level			1.53* (0.216)	1.54* (0.224)	0.57*** (0.161)	0.56*** (0.166)
Highers or equivalent					0.51** (0.249)	0.51** (0.249)
Standard Grade or equivalent			1.94** (0.245)	1.96** (0.252)	0.49** (0.225)	0.49** (0.226)
No qualifications			2.41** (0.320)	2.58** (0.317)	0.35** (0.384)	0.37** (0.376)
Intermediate occupations						
Small employers and own account workers						
Lower supervisory			1.91** (0.299)	1.94** (0.289)		
Routine/semi-routine occupations			1.50** (0.205)	1.49** (0.201)		
Never worked			3.75** (0.435)	3.90** (0.448)		
Income less than £10,000 p.a.			2.80** (0.382)	2.72** (0.382)		
£10,000 - £19,999						
£20,000 - £28,999						
£29,000 - £43,999						
£44,000 - £55,999						
Rents from Local Authority or Housing Association			2.00*** (0.187)	1.87** (0.192)	1.59** (0.209)	1.50* (0.217)
Rents privately		1.45* (0.223)	1.85** (0.242)	1.94** (0.235)	1.83** (0.252)	1.87** (0.244)
Mother's age at primiparity	1.04*** (0.012)	1.05*** (0.012)			1.08*** (0.014)	1.08*** (0.014)
Mother's standardised stress score	1.17** (0.074)	1.17** (0.074)			1.32** (0.084)	1.32** (0.082)
Mother's standardised anxiety/depression score			1.20** (0.087)	1.19* (0.091)	1.28** (0.089)	1.28** (0.085)
Child's CSBS symbolic composite score	0.88** (0.042)	0.88** (0.043)	0.89** (0.046)	0.88** (0.048)	0.91* (0.049)	0.91* (0.047)

N=3,706; ***= p<0.001; **= p<0.05; *= p<0.10

Model 1 = childrearing approach regressed on the explanatory variables shown in Table 7.14; Model 2 = childrearing approach regressed on the explanatory variables shown and the factors neighbourhood quality, neighbourhood safety and child-friendliness. The odds shown in Table 7.14 are the odds for each variable compared with the reference class, 'Confident, well networked'.

The main influence - and it is modest - which the addition of the neighbourhood level variables has on the model is that 'Busy working mothers' are slightly more likely to rent privately than 'Confident, well networked' mothers. The size of the odds changes marginally for some of the explanatory variables, but this does not affect the interpretation of the results.

7.9 Summary and discussion of findings

The results presented in this chapter highlight the importance of neighbourhood in understanding childrearing approach, but they also highlight the difficulty of isolating the effects of neighbourhood beyond the individual characteristics of the people who live there. The analysis found that mothers who felt more afraid in their neighbourhood, and who felt that the neighbourhood was not safe for children, were more likely to adopt the 'Constrained, strong ties' childrearing approach, rather than the 'Confident, well networked' approach. Mothers who have a stronger subjective sense that children are a shared priority in the area are more likely to adopt the 'Constrained, strong ties' childrearing approach, whereas mothers who feel less convinced that children are a shared priority are more likely to adopt the 'Busy working mother' or 'Weak ties, formal service use' approaches, compared to the 'Confident, well networked' approach. As levels of deprivation in an area increase, so do the odds of mothers adopting the 'Constrained, strong ties' childrearing approach, compared with the 'Confident, well networked' approach.

The direction of causality is not clear from these results: the literature would suggest that neighbourhood is prior to childrearing approach (Odgers et al. 2009; Teasdale and Silver 2009; Colder et al. 2006; Pratt et al. 2004; Silk et al. 2004), but it is equally possible that childrearing approach influences a mother's attitude to her neighbourhood. Taking first of all the argument that neighbourhood influences childrearing approach through collective efficacy (measured in this chapter by two factors, safety and the sense that children are a shared priority), this analysis suggests that mothers who feel that their area is unsafe are more likely to adopt a childrearing approach characterised by: less engagement in formal structured enrichment

activities; mistrust of authority; and greater use of informal childcare than mothers who feel that their neighbourhood is safer⁶⁴. This echoes some aspects of Lareau's (2003) and Gilles' (2007 and 2005) analyses of parenting in the neighbourhood context: mothers living with many risks are more likely to adopt a more directive, protective childrearing approach which is appropriate to their circumstances but which may not conform to the middle class 'ideal' of parenting which has been subsumed into much policy discourse, and therefore into the design of many services for parents⁶⁵.

However, it is equally possible to reverse the argument and posit that childrearing approach influences a mother's attitude to her neighbourhood: mothers who adopt the 'Weak ties, formal service use' approach may come into contact with fewer people locally, so their sense of children being a shared priority may be weaker. Conversely, mothers who adopt the 'Constrained, strong ties' approach are by definition more likely to have frequent contact with a close network of family and friends locally, so this childrearing approach may be influencing these mothers' beliefs about the level of child-friendliness in their area. Certainly these results align with Lareau's (2003) description of the personal networks of the mothers who adopted the 'accomplishment of natural growth' childrearing approach: 'working class' and 'poor' mothers relied on the support of family and friends - as well as children's peers - to protect children and mitigate the risks present in the local area. Vincent et al. (2010: 286) found - in relation to childcare choices - that working class parents were more fearful for their children's physical safety than were their middle class counterparts. It is possible that mothers who adopt the 'Constrained, strong ties' childrearing approach perceive that their area is more child-friendly because

⁶⁴ There is a growing body of research which suggests that feelings of safety and victimisation are not always directly linked with the levels of serious crime in an area (see Hale 1996 for a summary); however some studies suggest that higher levels of minor crimes in disadvantaged areas and the greater exposure to risk experienced by vulnerable people tend to lead to increased levels of fear (Larsson 2009; Pantazis 2000). These factors may partly explain why mothers in the 'Constrained, strong ties' group (who are more likely to live on low incomes and in social housing) are more likely to feel that their areas are unsafe.

⁶⁵ See Chapter 3 for a discussion.

these mothers have family and friendship networks which are concentrated in their locality. Mothers of higher social status may have personal networks which are spread over a wider geographical area. 'Constrained, strong ties' mothers may also have greater cause to call on their informal support networks than mothers who can 'buy in' more formal services.

The analysis indicates that collective efficacy is associated with childrearing approach, but it is not the case that 'Confident, well networked' mothers feel safer and believe that their neighbourhoods are more child-friendly than other childrearing groups. Feelings of safety are only significant for the 'Constrained, strong ties' group. The analysis also suggests that beliefs about the level of child-friendliness in an area may be linked to how much contact the mother has with people in her local area: 'Busy working mothers' and mothers in the 'Weak ties, formal service use' groups are less likely to believe that their area is child-friendly than 'Confident, well networked' mothers, even though there is no significant difference in the level of area deprivation between the three groups. This ambiguity around the direction and magnitude of neighbourhood effects makes the task of area-based policy more difficult.

The level of neighbourhood deprivation is only significantly associated with childrearing group for the 'Constrained, strong ties' childrearing approach; this significant association disappears when other socio-economic factors are controlled for. Indeed, neither neighbourhood deprivation nor collective efficacy are significantly associated with childrearing approach when other factors are taken into account. This suggests that in the GUS sample - bearing in mind the limitations of the data for area-based analysis - area-based indicators are not the main factors shaping childrearing approach. This is not to say that residential locale and peer group are unimportant for childrearing approach: the constructed biographies presented in Chapter 5 suggest that they are, for example Suzanne moved home on a number of occasions to move to a safer area and to be closer to a preferred childcare provider. However, the results presented in this chapter suggest that policy efforts to

improve collective efficacy and community cohesion should be secondary to the aims of addressing economic, educational and health inequalities.

7.10 Technical Appendix 7.1: Consideration of the multi-level approach, limitations of the data and weighting

A somewhat lateral approach needs to be taken to the analysis of neighbourhood effects in GUS. It is not possible to analyse the effects of intuitively defined neighbourhoods, because the GUS data were not collected according to administrative or geographical neighbourhood boundaries; the GUS sample was drawn based on estimated birth rate. In order to ensure that there were enough births in a sampling unit to provide a sufficiently large achieved sample, datazone areas within Scotland were aggregated with the result that the geographically based sampling clusters used in GUS are relatively large and incorporate areas with varying degrees of deprivation. Intermediate Geography areas⁶⁶ - which are based both on geographical and more intuitive definitions of neighbourhood - contain too few cases in the GUS sample to satisfy the assumptions of multi-level modelling. Neither sampling cluster nor Intermediate Geography are suitable grouping variables so the multilevel modelling approach is not possible.

The advantage of multi-level models is that they can partition variance and measure whether between-area variance is greater than within-area variance. In the model adopted in this chapter, some of the between-area variance is accounted for by the cluster weight. Within-area variance is partly accounted for by individual variance on area-based indicators: collective efficacy and neighbourhood deprivation.

There are advantages to the single-level model adopted in Chapter 7. It is difficult to accurately define neighbourhood boundaries because the concept of neighbourhood is subjective and administrative boundaries are often crude (Leventhal and Brooks-Gunn 2000). This problem is at least partly circumvented here because the neighbourhood variables included in this chapter are either measured at the datazone level - and are therefore based on a very small aggregation of - usually - similarly

⁶⁶ See <http://www.scotland.gov.uk/Publications/2005/02/20732/53084> (accessed 08/05/13)

advantaged/deprived post-codes - or are based on individual subjective concept of neighbourhood.

There are significant limitations to the data in GUS which have impacted on the way the analysis has been designed for this chapter. The fifteen indicators of childrearing approach are only available at Sweeps 2 and 4 of GUS; some of the fifteen indicators are measured at other sweeps, but not all. The variables measuring collective efficacy are only available at Sweep 3. The indicators of neighbourhood deprivation at Sweep 3 are the Scottish Index of Multiple Deprivation 2006 subdomains.

A utilitarian assumption therefore had to be made: that a respondent's feelings about the collective efficacy in her area did not change between Sweep 2 and Sweep 3, even if she moved home between the two sweeps. In other words the analysis assumes that the respondent's answers to the collective efficacy questions would have been the same (or very similar) had the questions been asked a year earlier, along with the questions used to operationalise childrearing approach. The alternative would have been to exclude the cases where the mother had moved home between sweeps, which would have resulted in the deletion of 12.8% of cases and a dataset of N=3,245 instead of 3,706. Such an approach would undoubtedly have introduced significant bias to the estimates generated by the analysis, since those living in more deprived circumstances are more likely to move frequently. SIMD at Sweep 2 and moving house were highly significantly related (Chi-Square = 30.28; $p < 0.001$). These individuals' beliefs about levels of collective efficacy in their area would have been excluded from the analysis. Chi-Square tests show that there are significant differences (at the 5% level) in the response patterns of respondents who moved house compared with respondents who had not moved to seven of the eight measures of collective efficacy. For these reasons the approach taken represents the lesser of two evils: the 'no change' assumption may introduce some bias, but any bias is unlikely to be as systematic and on such a large scale as excluding the cases who moved house between sweeps.

Because more than two sweeps of data are used in the analysis, Sweep 3 longitudinal weights are used for this chapter.

7.11 Technical Appendix 7.2 Bayesian estimation in Mplus and the use of plausible values

One possible approach to the analysis conducted in this chapter would be to estimate a set of structural equation models⁶⁷ to explore the association between the neighbourhood variables and childrearing approach, however the number of dimensions in the data make this approach extremely computationally intensive. There is a further problem: because many of the fifteen indicators of childrearing approach are highly skewed, there is not sufficient variation between some of the childrearing classes to allow the model to provide reliable estimates. Chung et al. (2006), explain that when regressions are carried out on latent class variables using maximum likelihood estimation the calculation of standard errors is based on the assumption that the log-likelihood is a concave function. Chung et al. liken this function to an inverted bowl which spills water: *'if the observed data log-likelihood is concave, then the inverse of the Hessian matrix⁶⁸ of this log-likelihood consistently estimates the covariance matrix for the maximum likelihood estimates'* (2006: 726). In Chapter 7, this procedure fails because the log-likelihood is not concave. The log-likelihood is not concave because there is not sufficiently strong variation in some of the parameters between latent classes. This is because the response options offered in the GUS questionnaire to some of the indicators of childrearing approach do not measure variation in responses very effectively, so there is sometimes little variation to predict. For example, at Sweep 2, nearly three quarters of mothers would turn to the child's grandparents for childcare in an emergency. Nearly three quarters feel that they get enough help with looking after their child. In these cases the variation between latent classes is not sufficiently strong to satisfy the statistical assumptions

⁶⁷ There are a number of definitions of structural equation models, but these models often take the form of regressions where both the predictor and response variables are latent variables.

⁶⁸ The Hessian matrix is essentially a matrix of numbers which describes the collective function of all the variables under scrutiny. In this case, the Hessian matrix would describe the function of all 8 measures of collective efficacy. Once the Hessian matrix has been defined, it can be used to test whether the critical points are minima, maxima, or saddle points., in other words, to test whether the model has converged.

required to produce maximum likelihood estimates. This problem is confounded when the predictors are also skewed, as is the case with the collective efficacy variables.

In order to overcome this problem a Bayesian estimation procedure is used in Mplus. Bayes estimation is less computationally demanding than maximum likelihood estimation. In short, this procedure allows a distribution of factor scores to be saved for use in subsequent analyses. The Bayesian approach estimates a set of 'plausible values' (Asparouhov and Muthen 2010), which are multiple imputations for missing values corresponding to a latent variable, in this case the factors collective efficacy and neighbourhood deprivation. Plausible values are given for each observation together with a summary over the imputed datasets for each observation and each latent variable. Plausible values are more accurate and more informative than factor scores (Asparouhov and Muthen 2010). Whereas factor scores are based on the frequentist view that parameters are fixed and that maximum likelihood estimates have a normal distribution, plausible values are based on the Bayesian view that parameters have a prior distribution and that estimates have a possibly non-normal posterior distribution. Because model priors can come from previous studies or hypotheses based on theory, Bayesian estimation is well suited to exploring and testing substantive theory, particularly with the type of non-normal data typically available in the social sciences (Asparouhov and Muthen 2010a).

8 The role of childrearing approach in explaining differences in children's behaviour at entry to primary school.

The aim of this chapter is to explore whether GUS mothers change their childrearing approach during their child's preschool years, and to try to understand some of the factors which are associated with any change in childrearing approach. The analysis then examines whether the mother's childrearing approach influences her child's behavioural development at age 5, when he or she would be starting primary school in Scotland. This chapter extends the analysis presented in previous chapters by taking a dynamic approach to exploring childrearing approach and its effects across a pivotal section of the lifecourse.

If childrearing approach is, as a number of studies have argued (Irwin and Elley 2011; Vincent 2010; Gillies 2007 and 2005; Lareau 2003; Allat 1993), an important site of social reproduction then it is important to consider whether childrearing approach can change, and what factors might influence this change. Lareau suggests that as class positions change, so do parenting practices (Lareau 2003: 250). This chapter tests whether changes in childrearing approach are associated with changes in socio-economic position.

It is also important to try to explore and measure the effect of different childrearing approaches on children's behaviour, as measured by the Strengths and Difficulties questionnaire (SDQ) (Goodman et al. 2000). According to Lareau, the children of parents who are confident in dealing with authority figures and society's institutions and who engage their children in a number of structured enrichment activities (such as visits to the library, museums or live performances) are more likely to develop a sense of entitlement and a belief that they can mould situations to suit their preferences (the 'concerted cultivation' approach). On the other hand, the children of parents who adopt the 'accomplishment of natural growth' childrearing approach

may develop an increasing sense of constraint and lack of trust in authority figures. Chapter 4 discussed the rationale for using the SDQ subscales for pro-social behaviours and conduct problems as proxies to measure behaviours indicating - respectively - feelings of entitlement or constraint. We might expect for example that children of mothers who have adopted the ‘Confident, well-networked’ approach (analogous to Lareau’s ‘concerted cultivation’) would display fewer conduct problems and more pro-social behaviours than the children of mothers who had adopted the ‘Constrained, strong ties’ approach (see Chapter 4 for a discussion). Children’s behaviour in school is itself an important indicator of future wellbeing because it can act as a mechanism of social reproduction: behaviour influences teacher and peer attitudes to children which can in turn influence teacher expectations of pupils’ behaviour and attainment (Reay 2006; Plewis 1997; Bennet et al. 1993; Blatchford et al. 1989). Teachers may make assumptions about pupils and treat them differently because of their class (Bourdieu and Passeron 1977: 73).

8.1 Outline of the chapter

The analysis steps carried out for this chapter were as follows:

- i. Carry out Latent Class Analysis on the same 15 measures of childrearing approach used in Chapter 6, this time measured at Sweep 4 when children are aged 4, and select the best-fitting model. Check the substantive interpretation of the classes.
- ii. Compare the Sweep 4 Latent Class Analysis solution with the Sweep 2 solution to examine whether the number, size and interpretation of the classes is similar.
- iii. Estimate an LCA model with covariates using Sweep 4 data to confirm the substantive interpretation of the latent classes.
- iv. Produce a transition matrix to look at individual movement between latent classes over time.
- v. Explore specification of the Latent Transition Model without covariates.

- vi. Include covariates and a distal outcome⁶⁹ in the Latent Transition Model.

Because the analysis carried out for step (i) is identical to that undertaken in Chapter 6 on the Sweep 2 data, the explanation of the measures used to determine the best-fitting model are reported more briefly.

The specific hypotheses tested in this chapter are as follows:

e) GUS mothers whose social status improves between Sweep 2 and Sweep 4 are more likely than other mothers to adopt a childrearing approach akin to ‘concerted cultivation’.

f) Children whose mothers adopt a childrearing approach akin to the ‘accomplishment of natural growth’ are more likely to display conduct problems at entry to primary school. The children of mothers whose childrearing approach approximates ‘concerted cultivation’ are less likely to display conduct problems and are more likely to display pro-social behaviours.

8.2 Latent Class Analysis of childrearing approach at Sweep 4

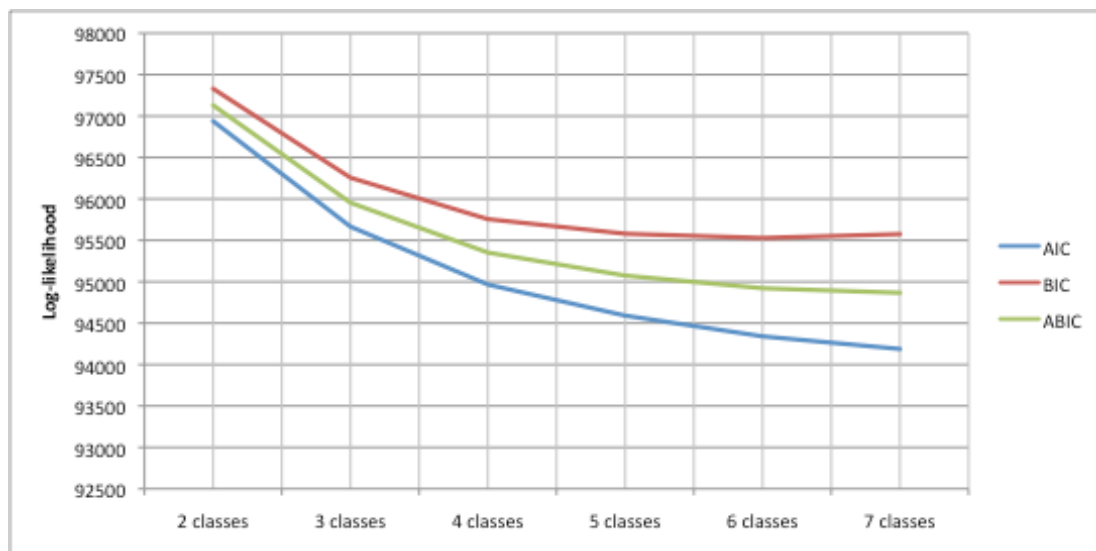
Six Latent Class models were estimated using Mplus Version 7 (Muthen and Muthen 2012) and the measures of model fit discussed in Chapters 4 and 6 were used to choose the model with the most appropriate number of classes.

Figure 8.1 depicts three likelihood-based tests of model fit. The closer the model fits the data, the lower the log-likelihood values should be. The Bayesian Information Criterion (BIC) is the most reliable measure of the three when the sample size is

⁶⁹ A distal outcome is a variable measured after the period of a longitudinal model. In this case, the longitudinal model will explore changes in childrearing approach between the child’s second and fourth birthdays. The distal outcome is the child’s behavioural development, measured by the SDQ subscales when the child is around 5 years old and has entered primary school.

large (greater than 500) and the variables are categorical (Nylund et al. 2007; Li and Nyholt 2001). Figure 8.1 indicates that the improvement in log-likelihood levels out after the five class model, suggesting that adding additional classes would not improve the fit of the model.

Figure 8.1 Likelihood-based information criteria for the Latent Class models (N=3,706)



The goodness-of-fit measures set out in Table 8.1 offer alternative evidence on which to base the selection of the most appropriate model of childrearing approach at Sweep 4. These tests point towards a four class model. The percentage of bivariate residuals which are significant at the 5% level tails off after the four class model: adding two, three and four classes to the model results in quite substantial improvements in fit, whereas the five-plus class models show more modest increases. The entropy of all models is good (0.70 and above), suggesting that the classes are stable and well-specified. The Lo-Mendell-Rubin (LMR) test compares for example the four class model with the three class model and then reports whether the four class model is a significant improvement on the three class model. The LMR test for the four group model is only marginally significant (significant at the 10% level but not at the 5% level), however the interpretation of the classes in the four group model is the same as in the four group model at Sweep 2 (see Table 8.3

below) and makes the most substantive sense, suggesting that the four class model reflects the complexity in the data in the most parsimonious way.

Table 8.1 Latent Class Analysis measures of the most appropriate number of classes (N=3,706)

Classes	% of bivariate residuals significant at the 0.05 level	Global Entropy	Lowest class-specific entropy	Adjusted LMR test p=
2	9.7	0.773	0.917	<0.001
3	8.2	0.734	0.822	<0.001
4	4.3	0.739	0.797	0.082
5	3.6	0.735	0.798	*
6	3.4	0.714	0.757	*
7	2.4	0.711	0.716	*

Based on these goodness-of-fit measures a four class model may be adopted tentatively. Having explored the most appropriate number of classes on a statistical basis, the next step is to consider the substantive interpretation of the classes to establish whether the four class model is also the most useful analytically. This is undertaken in the next section.

8.3 Comparing the Latent Class Analysis measurement models at Sweep 2 and Sweep 4

So far the analysis in this chapter suggests that the latent variable ‘childrearing approach’ - measured by 15 observed indicators of family, friendship and work networks and use of child-related services - has four classes at Sweep 2 and Sweep 4 of the GUS dataset, when the survey children were nearly two and nearly four years old respectively. Analysis of the four class solution showed that the size of the classes was similar between the two measurement points, as presented in Table 8.2. By Sweep 4 the ‘Confident, well-networked’ and ‘Busy working mother’ groups were slightly larger than they had been at Sweep 2; the other two classes were slightly smaller. The ‘Confident, well networked’ group was the largest class at both sweeps. Conditional item probabilities for the four class solution at Sweep 2 and Sweep 4 were compared to see whether the substantive interpretation of the classes

was similar over time. The results are presented in Table 8.3. Conditional item probabilities are the probability of a member of each class selecting that particular response item in the survey questionnaire.

Table 8.2 Membership of the four class model at Sweeps 2 and 4 (N=3,706)

	Estimated number in class		%	
	Sweep 2	Sweep 4	Sweep 2	Sweep 4
1 – Busy working mother	886.2	928.5	23.9	25.0
2 – Constrained, strong ties	850.5	748.9	23.0	20.2
3 – Confident, well networked	1247.0	1430.1	33.6	38.6
4 – Weak ties, formal service use	722.3	599.5	19.5	16.2

The substantive interpretation of the classes is very similar between Sweeps 2 and 4, to the extent that it is legitimate to adopt the same names for each latent class group at both sweeps. There appears to be some evidence to say that the latent concept ‘childrearing approach’ is measured quite reliably by the 15 observed indicators, that the latent variable has four categories and that the latent classes are relatively stable over time.

Parental effort

By Sweep 4, only marginal differences exist between the frequency with which mothers in the different childrearing groups play at reciting nursery rhymes or recognising letters, shapes and numbers with their children. Mothers in the ‘Constrained, strong ties’ group are very slightly less likely to play at recognising letters and shapes every day, while mothers in the ‘Weak ties, formal service use’ group are slightly more likely to engage in this activity daily. Mothers in the ‘Confident, well networked’ group are slightly more likely to play at reciting nursery rhymes with their children every day.

Table 8.3 Conditional item probabilities for the four class solution at Sweep 4 (N=3,706)

	Sweep 2				Sweep 4			
	BWM	CST	CWN	WTFSU	BWM	CST	CWN	WTFSU
Frequency with which the mother played with her child at recognising letters, shapes, colours in last week								
Less often	0.696	0.763	0.672	0.706	0.603	0.688	0.613	0.590
Every day	0.304	0.237	0.328	0.294	0.397	0.312	0.387	0.410
Frequency with which the mother recited nursery rhymes with her child in the last week								
Less often	0.407	0.502	0.385	0.410	0.373	0.374	0.305	0.353
Every day	0.593	0.498	0.615	0.590	0.627	0.626	0.695	0.647
Mother's confidence in being able to access childcare at short notice for a few hours during the day								
Difficult	0.283	0.435	0.178	0.888	0.256	0.400	0.146	0.862
Easy	0.717	0.565	0.822	0.112	0.744	0.600	0.854	0.138
How many people the mother feels close to								
Lots of people	0.250	0.322	0.457	0.145	0.231	0.261	0.088	0.406
Some people	0.500	0.433	0.463	0.505	0.515	0.406	0.433	0.468
Few or no people	0.250	0.245	0.080	0.350	0.253	0.333	0.479	0.126
Whether the mother works								
Full time >=35 hours	0.289	0.011	0.149	0.133	0.283	0.006	0.161	0.124
Part time	0.617	0.086	0.650	0.471	0.573	0.186	0.634	0.464
Does not work	0.094	0.903	0.201	0.396	0.144	0.808	0.205	0.412
Whether mother regularly attended a mother and baby/toddler group in the last year								
Attended mother and baby group in past year	0.407	0.431	0.613	0.607	0.138	0.131	0.205	0.275
Did not attend mother and baby group	0.593	0.569	0.387	0.393	0.862	0.869	0.795	0.725
Whether the mother feels that professionals try to interfere if you ask for help or advice								
Agree	0.053	0.189	0.046	0.052	0.040	0.288	0.030	0.073
Neither agree or disagree	0.246	0.253	0.236	0.242	0.300	0.321	0.301	0.263
Disagree	0.701	0.558	0.718	0.706	0.660	0.390	0.669	0.665
Frequency of visits to library								
Visited library more than once a week in last year	0.054	0.063	0.067	0.103	0.131	0.122	0.144	0.164
Visited library at least once a month in last year	0.151	0.102	0.215	0.325	0.306	0.191	0.302	0.402
Visited library every few months in last year	0.226	0.138	0.206	0.233	0.253	0.157	0.266	0.251

Did not visit library in last year	0.569	0.698	0.512	0.340	0.310	0.529	0.288	0.183
Frequency of visits to concert, play of live performance								
Attended a live concert/play every few months or more in the last year	0.044	0.020	0.087	0.096	0.223	0.039	0.301	0.281
Attended a live concert/play at least once in the last year	0.186	0.114	0.225	0.232	0.446	0.236	0.451	0.411
Did not attend a live concert/play in the last year	0.770	0.866	0.689	0.671	0.331	0.725	0.248	0.308
Frequency of visit to galleries								
Visited gallery once a month or more in the last year	0.062	0.013	0.054	0.135	0.098	0.023	0.106	0.149
Visited gallery every few months in the last year	0.133	0.028	0.115	0.221	0.238	0.077	0.230	0.294
Visited gallery at least once in the last year	0.155	0.103	0.149	0.149	0.209	0.148	0.196	0.188
Did not visit gallery in the last year	0.650	0.856	0.682	0.496	0.454	0.753	0.468	0.368
Frequency with which mother visits friends with children								
Visits friends with children once a fortnight or less frequently	0.804	0.313	0.011	0.384	0.825	0.355	0.032	0.427
Visits friends with children once or twice a week or more	0.196	0.687	0.989	0.616	0.175	0.645	0.968	0.573
Frequency with which mother is visited by friends with children								
Visits friends with children once a fortnight or less frequently	0.976	0.430	0.169	0.559	0.995	0.436	0.075	0.541
Visits friends with children once or twice a week or more	0.024	0.570	0.831	0.441	0.005	0.564	0.925	0.459
Person mother would turn to for childcare at short notice								
Childminder	0.012	0.000	0.009	0.168	0.012	0.000	0.012	0.161
Friend, colleague or neighbour	0.008	0.101	0.030	0.517	0.020	0.085	0.055	0.507
Other family member; ref= child's grandparents	0.103	0.233	0.094	0.399	0.108	0.266	0.118	0.383
Whether the mother feels she gets enough help with looking after the child								
Don't need any help	0.035	0.104	0.016	0.143	0.031	0.091	0.014	0.179
Don't get any help	0.039	0.070	0.004	0.334	0.020	0.070	0.006	0.395
Don't get enough help; ref= get enough help	0.092	0.210	0.050	0.528	0.113	0.196	0.057	0.544
Main childcare provider								
Not using childcare	0.115	0.846	0.220	0.967	0.012	0.324	0.012	0.607
Other family member, friend or neighbour	0.058	0.289	0.097	0.784	0.084	0.532	0.123	0.815
Private playgroup, nursery or playschool	0.399	0.203	0.262	0.967	0.372	0.325	0.308	0.958
Local Authority playgroup, nursery or playschool	0.156	0.052	0.157	0.919	0.279	0.890	0.331	0.973
Childminder, nanny or babysitter; ref = child's grandparents	0.019	0.053	0.038	0.765	0.197	0.000	0.141	0.905

BWM = Busy working mother; CWN = Confident, well networked; WTFSU = Weak ties, formal service use; CST = Constrained, strong ties.

Reference categories are reported for the final three variables in the table because these are unordered categorical variables. For these variables, Mplus carries out a multinomial logistic regression equation for each latent class and reports the intercept for each response category for each class, compared to a reference response category.

Structured enrichment activities

At Sweep 4, mothers in the ‘Constrained, strong ties’ group still conform most closely to Lareau’s (2003) definition of the ‘accomplishment of natural growth’ childrearing approach: they are least likely to have involved their child in structured enrichment activities such as taking them to a library, concert or gallery in the past year. Mothers in the ‘Weak ties, formal service use’ group are most likely to take their child to the library and galleries frequently, while ‘Confident, well networked’ mothers are most likely to take their child to live performances every few months or more.

Intervention in institutions

Mothers in the ‘Constrained, strong ties’ group are the most likely to believe that professionals try to interfere if you ask them for help or advice; the other three childrearing groups have roughly equal probabilities of disagreeing with the statement.

Childcare

Mothers in the ‘Weak ties, formal service use’ group are more likely than mothers in the other childrearing groups not to use childcare at Sweep 4; however, where they do use childcare, these mothers have a high probability of using formal services such as a nursery or childminder, compared with using the child’s grandparents. ‘Busy working mothers’ and ‘Confident, well networked’ mothers both have low probabilities of not using childcare; but they do not have high probabilities of using formal childcare. The pattern of their response probabilities suggests that these mothers may use grandparental support for childcare in conjunction with private or Local Authority nurseries. Mothers in the ‘Constrained, strong ties’ group have a high probability of using Local Authority nurseries as their main childcare provider.

Personal networks

Patterns in mothers’ personal networks are fairly stable between Sweep 2 and Sweep 4: ‘Busy working mothers’ are still the least likely to visit or be visited by

friends regularly; 'Confident, well networked' mothers are still the most likely to visit and be visited by friends at least once a week. Mothers in the 'Weak ties, formal service use' group are still the most likely to turn to someone outside the immediate family for childcare at short notice. These mothers are also the most likely at Sweep 4 to say that they either do not get enough help or do not get any help with looking after their child.

The basic substantive interpretation of the four groups is therefore fairly robust over time, but there are also some significant changes in the response patterns of the groups between the two measurement occasions at Sweep 2 and Sweep 4. These changes will now be discussed.

A factor central to this analysis is the time-varying nature of childrearing approach. Many studies of parenting practices and childrearing approach as sites of social reproduction have taken snapshots of parents' beliefs and practices at one time point; this analysis considers childrearing approach longitudinally. An important change which can be seen in the response patterns set out in Table 8.3 relates to the mother's main childcare provider: the Scottish Government offered free pre-school places to all three and four year olds in the period 2005 - 2008. This provision was 12 ½ hours per week for 38 weeks each year. At Sweep 2 mothers would no longer be receiving any financial support from statutory maternity pay. No other policies are designed to act as a wage replacement for mothers who are doing care work; Child Benefit and Child Tax Credit are designed as income supplements. For mothers of two-year-olds at Sweep 2, the welfare state provided no free, universal childcare. Mothers' childcare choices at this sweep are therefore likely to be strongly influenced by income, available support and class-based preferences and act as strong markers of socially patterned childrearing approach (Vincent, Ball and Braun 2010). By Sweep 4, the primary childcare provider for most children is a Local Authority run pre-school, although mothers in the 'Weak ties, formal service use' group are more likely than the other groups to use a private nursery, nanny or childminder. At Sweep 4, 'Busy working mothers'' uptake of Local Authority pre-school places is the lowest of all the childrearing groups. This may be because the state provision of 12 ½ hours

per week on its own does not enable mothers to work full time. In addition, most Local Authority nurseries close at 3pm, possibly explaining the need for mothers who work full time to use a number of flexible childcare options such as grandparental care or childminders.

By Sweep 4, more mothers are working. The ‘Confident, well-networked’ group are more likely to be working full time than they were at Sweep 2; the ‘Constrained, strong ties’ group are more likely to be working part time than they were at Sweep 2, although mothers in this group are still the group most likely not to be working by Sweep 4.

At Sweep 4, all childrearing groups are less likely to have attended a mother and toddler group in the last year. This could be explained by some mothers’ return to work and by the increasing demands placed on children’s time by pre-school⁷⁰. There is however a substantial change in the number of people which ‘Confident, well networked’ mothers and mothers in the ‘Weak ties, formal service use’ group report feeling close to. At Sweep 2, ‘Confident, well networked’ mothers were likely to report feeling close to lots of people; by Sweep 4 they had a much higher probability than at Sweep 2 of reporting feeling close to few or no people. The converse is true for mothers in the ‘Weak ties, formal service use’ group, who at Sweep 4 were more likely to report feeling close to lots of people than they were at Sweep 2. A plausible explanation for this is that the opportunities for making and maintaining weak ties are more numerous as children enter pre-school and mothers return to work. This could enhance the personal networks of mothers who rely on more formal structures, but the increasing focus on formal network settings such as work and pre-school may have been detrimental to the personal networks of mothers who had more informal, strong ties. This may explain why ‘Confident, well networked’ mothers are less likely to report feeling close to lots of people at Sweep 4. They are still likely to report feeling close to some people.

⁷⁰ This change could also be related to the respondent’s interpretation of ‘toddler’, which is often understood to refer to children younger than 4.

Cultural activities such as visits to the library, gallery or a concert are more likely across the board by Sweep 4. This may be linked to the children's developmental stage: many cultural events and live performances are geared towards children aged three and over, once language is more firmly established.

8.4 Factors associated with class membership: the LCA model with covariates

Having explored the substantive interpretation of the latent classes based on item response probabilities, the next step in the analysis is to carry out a multinomial logistic regression to examine which factors predict class membership at Sweep 4. This analysis regresses the latent variable 'childrearing approach' onto a set of independent variables to assess the extent to which a mother's membership of one childrearing group or another is associated with indicators relating to socio-economic status, mental health and her child's development. The aim of this analysis is two-fold: first, the results can be used to verify that the interpretation of the latent classes conforms to theoretical expectation; second, the analysis can flag up any interesting changes in the predictive power of the independent variables between Sweep 2 and Sweep 4.

The reference categories used for the independent variables are set out in Table 8.4. The same independent variables were used as for the Sweep 2 data, with the addition of a variable recording whether there was a new baby in the household by Sweep 4, and the survey child's SDQ Total Difficulties Score.

Table 8.4 Reference categories used in the multinomial logistic regression analysis

Independent variable dummies	Reference category
Study child is second child	Study child is first child
Study child is third or subsequent child	
New baby in family	No new baby in family
SIMD second least deprived quintile	Least deprived SIMD quintile
SIMD middle quintile	
SIMD second most deprived quintile	
SIMD most deprived quintile	
Mother is from a non-white ethnic group	Mother is White
Vocational qualification below degree level	Degree level qualification
Scottish Highers or equivalent	
Standard Grade or equivalent	
No qualifications	
Intermediate occupations	Professional/managerial occupations
Small employers and own account workers	
Lower supervisory	
Routine/semi-routine occupations	
Never worked	
Income less than £10,000 p.a.	£56,000 + p.a.
£10,000 - £19,999	
£20,000 - £28,999	
£29,000 - £43,999	
£44,000 - £55,999	
Rents from Local Authority or Hsng. Assc.	Owner occupier
Rents privately	

Table 8.5 Multinomial logistic regression on latent variable ‘childrearing approach’ (N=3,706)

Classes of the latent variable	CST odds (Std. Err.)		WTFSU odds (Std. Err.)		BWM odds (Std. Err.)	
	Sw2	Sw4	Sw2	Sw4	Sw2	Sw4
y variables:						
Study child is second child	1.65** (0.148)	1.63** (0.160)	1.96*** (0.136)	1.89*** (0.153)		1.21* (0.113)
Study child is third or subsequent child	2.67*** (0.189)	2.63*** (0.186)	2.99*** (0.189)	2.53*** (0.187)		
New baby in the household since Sweep 2		1.73*** (0.155)				0.70** (0.130)
Mother is from another ethnic group	0.30** (0.501)	0.49* (0.366)				
Vocational qualification below degree level	1.53* (0.216)	1.61* (0.252)	0.57*** (0.161)	0.57** (0.168)		
Highers or equivalent		2.03** (0.318)	0.51** (0.249)	0.61* (0.267)		
Standard Grade or equivalent	1.94** (0.245)	2.26** (0.276)	0.49** (0.225)	0.53** (0.231)		
No qualifications	2.41** (0.320)	3.10** (0.350)	0.35** (0.384)	0.48** (0.367)		
Intermediate occupations						
Small employers and own account workers						0.68* (0.231)
Lower supervisory	1.91** (0.299)	1.91** (0.307)				
Routine/semi-routine occupations	1.50** (0.205)	2.13** (0.222)				
Never worked	3.75** (0.435)	3.81** (0.391)				
Income less than £10,000 p.a.	2.80** (0.382)	3.36** (0.384)				0.59* (0.301)
£10,000 - £19,999		1.80* (0.352)				
£20,000 - £28,999						
£29,000 - £43,999						
£44,000 - £55,999						
Rents from Local Authority or Hsng. Assc.	2.00*** (0.187)	1.90** (0.263)	1.59** (0.209)	2.35** (0.254)		1.49* (0.226)
Rents privately	1.85** (0.242)	1.97*** (0.175)	1.83** (0.252)	1.79** (0.200)		
Mother's age at primiparity			1.08*** (0.014)	1.09*** (0.014)	1.04*** (0.012)	1.03** (0.011)
Mother's standardised stress score	1.20** (0.087)		1.32** (0.084)	1.19** (0.085)	1.17** (0.074)	
Mother's standardised anxiety/depression score		1.40*** (0.093)	1.28** (0.089)	1.51*** (0.087)		1.24** (0.083)
SDQ total difficulties score at Sweep 4		1.03** (0.014)		1.03* (0.015)		1.02* (0.013)

The full results of the multinomial logistic regression model are not set out in Table 8.5; only the significant predictors from the Sweep 4 model are included and compared to the coefficients (in odds ratio format) and the significance levels of the same predictors from the Sweep 2 model. The odds shown in Table 8.5 are the odds for each variable compared with the reference class, 'Confident, well-networked'.

Table 8.5 suggests that the factors associated with class membership are relatively stable between Sweep 2 and Sweep 4. Some results which were significant at Sweep 2 are no longer significant at Sweep 4 and vice versa, but the direction and magnitude of the coefficients is similar in almost all cases. The odds of a mother on very low income (less than £10,000 per year) and with no qualifications belonging to the 'Constrained, strong ties' group are higher at Sweep 4 than at Sweep 2. This change could be interpreted as meaning that low income and low educational status have a greater effect on childrearing approach as the child gets older.

The predictors of latent class membership are therefore very similar to those reported in Chapter 6. In summary, at Sweep 4 the odds of mothers on very low incomes adopting the 'Constrained, strong ties' approach are over three times greater than the odds of these mothers adopting the 'Confident, well-networked' approach. The odds of mothers with no qualifications being in the 'Constrained, strong ties' group are three times greater than the odds of these mothers belonging to the 'Confident, well-networked' group.

Mothers in the 'Busy working mothers' group are more likely to have been slightly older than 'Confident, well-networked' mothers when their first child was born. They are less likely than the 'Confident' mothers to have had another baby by Sweep 4. They are more likely to suffer from higher levels of anxiety and depression than the 'Confident, well-networked' mothers.

Mothers who adopt the 'Weak ties, formal service use' approach to childrearing tend to have higher levels of qualifications and to have been older at primiparity than

mothers in the ‘Confident, well-networked’ group. They tend to suffer from higher levels of stress, anxiety and depression and their children are slightly more likely to display behavioural difficulties at age 4. The odds of these mothers being private renters or renting from a housing association are greater for these ‘Weak ties’ mothers than for ‘Confident, well networked’ mothers, compared to being an owner-occupier.

8.5 Transitions between childrearing groups over time

The next stage in the analysis is to move from examining the two static models of the latent variable ‘childrearing approach’ from Sweep 2 and Sweep 4 of the GUS dataset towards a dynamic model that considers how individual mothers move between childrearing groups over time. The first step in this process is to look at what proportion of mothers stays in the same childrearing group and what proportion moves into a different group. Table 8.6 shows the percentage of mothers from each childrearing group at Sweep 2 who are in each childrearing group at Sweep 4. The values in bold on the diagonal represent the ‘stayers’ who do not move class; the other values are ‘movers’ between classes.

Table 8.6 Preliminary transition tables based on cross-sectional LCA results

N=3,706		Sweep 4			
		Confident, well-networked	Busy working mother	Constrained, strong ties	Weak ties, formal service use
Sweep 2	Confident, well-networked	51.7%	27.6%	19.8%	21.2%
	Busy working mother	19.6%	43.5%	13.1%	14.5%
	Constrained, strong ties	15.9%	13.9%	51.7%	17.0%
	Weak ties, formal service use	12.8%	15.1%	15.4%	47.3%
TOTAL		100%	100%	100%	100%
N		1,463	1,016	605	622

Table 8.6 is produced by saving the most likely class membership for each case at Sweep 2 and Sweep 4. From this table it can be seen that the ‘Confident, well-networked’ and ‘Constrained, strong ties’ groups have the most stayers. Nearly 30% of ‘Busy working mothers’ at Sweep 4 had been ‘Confident, well networked’ mothers at Sweep 2. Around 16% of ‘Confident, well networked’ mothers at Sweep 4 had been in the ‘Constrained, strong ties’ group at Sweep 2; but nearly 20% of ‘Constrained, strong ties’ mothers at Sweep 4 had been ‘Confident, well networked’ mothers at Sweep 2. This suggests that that it is more unlikely for mothers in the ‘Constrained, strong ties’ group to transition into the ‘Confident, well networked’ group than for ‘Confident’ mothers to become ‘Constrained’.

These results are cross-sectional; a Latent Transition model must now be specified to examine the probabilities of mothers transitioning out of one childrearing group into another, and to explore what factors are associated with those transitions.

8.6 Specification of the Latent Transition Model

A Latent Transition Model estimates the probability of cases moving between latent class groups over time. It can be specified in three different ways: assuming complete measurement invariance, partial measurement invariance and complete measurement non-invariance (Nylund 2007). Complete measurement invariance implies that all measurement parameters are identical across time. Complete measurement non-invariance implies that all the item probabilities for the four classes may be different across time. Partial measurement invariance allows some parameters to change, while others are held constant.

As can be seen from Table 8.3 presented earlier in this chapter, the latent classes are similar over time, but with two substantive differences: the main childcare provider and the mother’s feelings about the number of people she is close to. Models were estimated assuming complete measurement non-invariance and partial measurement invariance (allowing transition probabilities to vary for main childcare provider and the mother’s feelings about the number of people she was close to) and the models

were compared using BIC values to assess which one best fit the data. A model assuming complete measurement invariance was not estimated because such a model would not be theoretically robust in this case. The model assuming complete measurement non-invariance had the lower BIC value and was adopted⁷¹.

8.7 The Latent Transition Model

Having selected an appropriate measurement model, the next step in the analysis was to develop the structural model. A Latent Transition model assuming complete measurement non-invariance was estimated and the latent transition probabilities noted. These are set out in Table 8.7.

Table 8.7 Estimated transition probabilities based on the ‘empty’ Latent Transition model without covariates or distal outcome

N=3,706		Sweep 4			
		Constrained, strong ties	Weak ties, formal service use	Busy working mother	Confident, well-networked
Sweep 2	Constrained, strong ties	0.97	0.00	0.00	0.03
	Weak ties, formal service use	0.00	0.97	0.02	0.01
	Busy working mother	0.00	0.00	0.75	0.25
	Confident, well-networked	0.00	0.01	0.13	0.86

Table 8.7 suggests that the probability of a mother maintaining the same childrearing approach between Sweep 2 and Sweep 4 of GUS is high. The ‘Constrained, strong ties’ and the ‘Weak ties, formal service use’ groups have the highest probabilities of being ‘stayers’ (97% in both cases) and therefore have the lowest probabilities of transitioning to a different childrearing group. The probabilities of mothers moving between the ‘Busy working mother’ group and the ‘Confident, well networked’ group are slightly higher: mothers who adopted the ‘Confident, well networked’

⁷¹ See Raftery 1995 and Muthen 2010 <http://www.statmodel.com/discussion/messages/13/278.html?1353371927>) for a full discussion of the technique for comparing Latent Transition models.

approach at Sweep 2 have a probability of 0.13 of adopting the ‘Busy working mother’ approach by Sweep 4. Women who were ‘Busy working mothers’ at Sweep 2 have a 25% chance of adopting the ‘Confident, well networked’ childrearing approach by Sweep 4. The reasons for the slightly higher probabilities of transitions between these groups are investigated next.

At this point it may be worth recalling the hypotheses which this chapter aims to test and the questions which gave rise to them:

- i) Do GUS mothers change their childrearing approach over time?
- ii) Are changes in socio-economic status associated with changes in childrearing approach?
- iii) What are the effects of childrearing approach on children’s behavioural development at entry to primary school?

The initial Latent Transition model whose results are set out in Table 8.7 answers the first of these questions: the likelihood of mothers changing their childrearing approach during the GUS survey child’s formative years appears to be low. The second question implies two analysis steps: how do changes in a mother’s socio-economic status affect the probability of her transitioning into a different childrearing group; and how are status changes associated with childrearing approach at Sweep 4, given a mother’s childrearing approach at Sweep 2?

For the first of these analysis steps, covariates can be added to the Latent Transition model which are allowed to influence the latent transition probabilities, or the likelihood of a mother changing her childrearing approach between Sweep 2 and Sweep 4. In Mplus, it is only possible to include one binary covariate in the model at once when the focus of interest is the influence of a covariate on latent transition probabilities⁷². Therefore the Latent Transition model is not able to control for the

⁷² It would have been possible to include more than one continuous covariate, but these were not available for the measures of interest.

effects of numerous covariates on the dependent variable as might be the case in general multinomial logistic regression models.

Since the most likely transitions were between the 'Busy working mother' and 'Confident, well networked' childrearing approaches, it was assumed that these transitions were related to changes in working patterns. A binary variable was computed flagging whether the mother was working more hours per week at Sweep 4 than she had been at Sweep 2 and this variable was included as a covariate in the Latent Transition model. From a theoretical perspective this thesis is also concerned with finding out whether a change in socio-economic status is related to a change in childrearing approach. Changes in working hours may also be linked to changes in income and socio-economic status. In order to investigate whether changes in socio-economic status are associated with changes in childrearing approach, a binary variable was computed which flagged whether the mother had experienced any one of: an increase in household income; an increase in level of educational qualifications; or any upward movement on the occupational classification scale (either at the individual or household level). Technical Appendix 8.1 sets out the descriptive statistics for these two covariates, and discusses their limitations.

Two Latent Transition models were estimated, one including the covariate flagging and increase in working hours, the other including the covariate flagging any improvement in socio-economic status and the effects of these covariates on the latent transition probabilities were observed. Figure 8.2 is a graphical representation of the models. The 15 observed indicators of the latent variable 'childrearing approach' which were measured at Sweep 2 of GUS are represented by the square boxes labelled u1- u15. These same observed variables, this time measured at Sweep 4 of GUS, are represented by the square boxes labelled u16 - u30. The circles labelled Sw2 and Sw4 represent the latent variable childrearing approach at Sweep 2 and Sweep 4. The arrows running from these circles to the square boxes indicate that the latent variables are 'predicted by' the two sets of observed variables. The arrow running from the Sweep 2 latent categorical variable to the Sweep 4 latent categorical variable childrearing approach indicates that class membership at Sweep

4 is influenced by class membership at Sweep 2. The covariate *cx* is circled to indicate that it represents a categorical latent variable. In Mplus, the classes of this ‘latent’ covariate are defined using the values of an observed variable, in this case changes in working hours or changes in socio-economic status. Childrearing approach at Sweep 2 and Sweep 4 are regressed onto the covariate, and class probabilities are allowed to vary across the observed groups in the sample (Muthen and Muthen 2012: 237). Sweep 4 longitudinal weights and complex sampling weights are used to account for cluster and primary sampling unit.

Figure 8.2 Latent Transition model with binary covariate influencing latent transition probabilities

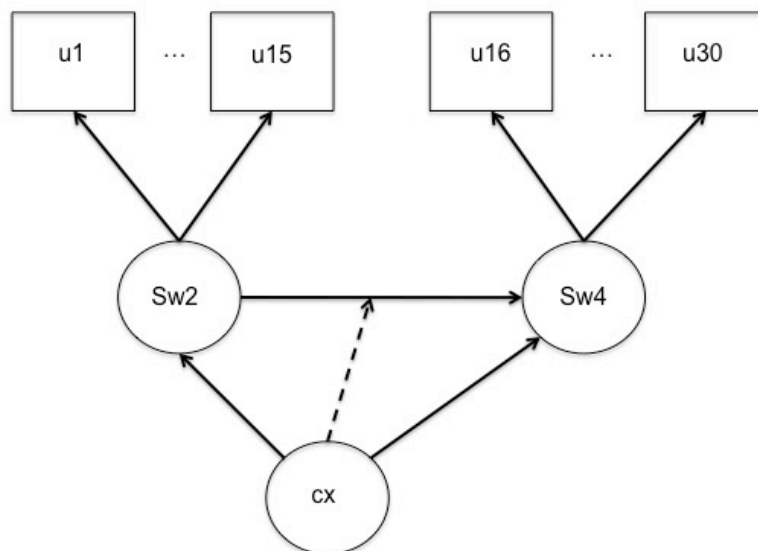


Table 8.8 displays the probability of mothers in each childrearing group working more hours at Sweep 4 than they had at Sweep 2. Table 8.9 displays the estimated probabilities of mothers transitioning between different childrearing groups when the covariate measuring change in working hours is taken into account.

Table 8.8 Probabilities associated with working hours at Sweep 4 for each childrearing group

N=3,706	Constrained, strong ties	Weak ties, formal service use	Busy working mother	Confident, well-networked
Worked more hours per week at Sweep 4 than had at Sweep 2	0.09	0.21	0.31	0.40

Table 8.9 Transition probabilities for the Latent Transition model with binary covariate: working hours

N=3,706		Sweep 4			
		Constrained, strong ties	Weak ties, formal service use	Busy working mother	Confident, well-networked
Sweep 2	Constrained, strong ties	0.86	0.03	0.04	0.08
	Weak ties, formal service use	0.03	0.95	0.01	0.01
	Busy working mother	0.01	0.01	0.73	0.25
	Confident, well-networked	0.03	0.01	0.12	0.84

Table 8.10 displays the probability of mothers in each childrearing group experiencing an improvement in socio-economic status between Sweep 2 and Sweep 4. Table 8.11 displays the estimated probabilities of mothers transitioning between different childrearing groups when the covariate measuring change in socio-economic status is taken into account.

Table 8.10 Probabilities associated with changes in socio-economic status at Sweep 4 for each childrearing group

N=3,706	Constrained, strong ties	Weak ties, formal service use	Busy working mother	Confident, well-networked
Socio-economic status better than at Sweep 2	0.24	0.18	0.23	0.34

Table 8.11 Transition probabilities for the Latent Transition model with binary covariate: socio-economic status

N=3,706		Sweep 4			
		Constrained, strong ties	Weak ties, formal service use	Busy working mother	Confident, well-networked
Sweep 2	Constrained, strong ties	0.95	0.02	0.00	0.03
	Weak ties, formal service use	0.00	0.96	0.02	0.02
	Busy working mother	0.00	0.00	0.75	0.25
	Confident, well-networked	0.00	0.01	0.13	0.86

Tables 8.9 and 8.11 suggest that the effects of the covariates on the transition probabilities are very small. The largest effects are those of a change in working hours on the probabilities associated with transitions out of the ‘Constrained, strong ties’ group. Table 8.9 suggests that an increase in the number of hours worked per week reduces the probability of a mother adopting the ‘Constrained, strong ties’ childrearing approach at Sweep 4, and marginally increases the probability of her adopting one of the other childrearing approaches, particularly the ‘Confident, well networked’ approach. The effect of working more hours at Sweep 4 has an almost negligible effect on the probabilities of transitioning between the other childrearing groups.

The covariate measuring changes in socio-economic status also has a minimal impact on the probability of mothers changing childrearing approach between Sweep 2 and Sweep 4: an improvement in socio-economic status increases fractionally the probability of a mother in the ‘Weak ties, formal service use’ group at Sweep 2 adopting the ‘Confident, well networked’ childrearing approach at Sweep 4. There is also a very small increase in the probability of a mother in the ‘Constrained, strong ties’ group at Sweep 2 adopting the ‘Weak ties, formal service use’ childrearing approach at Sweep 4.

8.8 The distal outcome: children’s behavioural development at entry to primary school

The third question which this chapter explores is the effect of a mother’s childrearing approach on her child’s behavioural development at entry to primary school. As discussed earlier in this chapter, two distal outcomes are examined: the child’s score on the SDQ conduct problems subscale and his or her score on the SDQ pro-social behaviours subscale at Sweep 5, when the child would be aged 5 and starting primary school. Descriptive statistics for these subscales are provided and discussed in Chapter 4. Sweep 5 longitudinal weights and complex sampling weights are used.

Table 8.12 displays the values for the distal outcome measures. The distal outcome is intended to measure the effects of childrearing approach after the period considered by the longitudinal model. The values presented in the table are the mean scores on the SDQ conduct problems and pro-social behaviours subscales for the children at Sweep 5, when they would be entering primary school (standard errors are reported in brackets). A different mean for each SDQ subscale is estimated for each latent class. The p value, based on a Wald test of the equality of means, reports whether the distal outcome means for each childrearing group are significantly different from each other (Nylund 2007: 58).

Table 8.12 Child’s mean score on SDQ conduct problems and pro-social behaviours subscales at age 5 by mother’s childrearing approach

N=3,491	Sweep 5 Sample	Childrearing approach at Sweep 4			
		Constrained, strong ties	Weak ties, formal service use	Busy working mother	Confident, well-networked
Conduct problems	1.68 (1.42)	2.24*** (0.09)	1.66*** (0.08)	1.68*** (0.05)	1.55*** (0.05)
Pro-social behaviours	8.23 (1.64)	8.06*** (0.09)	8.04*** (0.08)	8.18*** (0.07)	8.41*** (0.05)

***=p<0.001. The values shown are the mean SDQ scores; standard errors are reported in brackets. For the Sweep 5 sample statistics, the standard deviation is reported.

From Table 8.12 it can be seen that the children of mothers who adopted the ‘Constrained, strong ties’ childrearing approach at Sweep 4 are more likely to display conduct problems at entry to primary school than are the children of mothers who adopted the ‘Confident, well networked’ approach. The mean scores on the conduct problems subscale for children of mothers in the ‘Weak ties, formal service use’ and ‘Busy working mother’ groups are very close to the sample mean; the mean score of children of the ‘Constrained, strong ties’ group is worse than the GUS Sweep 5 sample mean, while the mean score of children from the ‘Confident, well networked’ group is better than the sample mean.

Table 8.12 suggests that the children of mothers who adopted the ‘Confident, well networked’ childrearing approach were more likely to display pro-social behaviours at entry to primary school than were the children of any of the other childrearing groups. Children of the ‘Confident, well networked’ group had the highest mean

scores, while children of the ‘Constrained, strong ties’ and ‘Weak ties, formal service use’ groups had the lowest mean scores, below the sample mean.

8.9 Discussion

Summary of results in Chapter 8

The results presented in this chapter indicate that the typology of four childrearing approaches presented in Chapter 6 on the Sweep 2 data is also appropriate for summarising the childrearing approaches of mothers at Sweep 4 of GUS. The socio-economic and child development factors associated with the four childrearing approaches are fairly stable between Sweep 2 and Sweep 4. The longitudinal models presented in this chapter indicate that the probability of mothers adopting one of the other childrearing approaches between Sweep 2 and Sweep 4 is low. The most likely transition is from the ‘Busy working mother’ to the ‘Confident, well networked’ childrearing approach. Covariates measuring changes in socio-economic status and work hours had minimal impact on mothers’ likelihood of changing childrearing approach, although an improvement in socio-economic status made transitions from the ‘Weak ties, formal service use’ group to the ‘Confident, well networked’ group and from the ‘Constrained, strong ties’ group to the ‘Weak ties, formal service use’ group marginally more likely. An increase in the number of hours worked per week between Sweep 2 and Sweep 4 made a transition out of the ‘Constrained, strong ties’ childrearing approach (and in particular a move from this group into the ‘Confident, well networked’ group) slightly more likely. Finally, children’s mean scores on the SDQ conduct problems and pro-social behaviours subscales at entry to primary school were found to be significantly different for each of the childrearing groups. The children of mothers who had adopted the ‘Constrained, strong ties’ childrearing approach displayed on average more conduct problems than the children of other childrearing groups. The children of mothers who had adopted the ‘Confident, well networked’ childrearing approach displayed on average more pro-social behaviours than the children of other childrearing groups.

Do changes in socio-economic position lead to changes in childrearing approach?

The results of this chapter, then, present a picture of stability rather than change which challenges Lareau's postulation that parenting practices may change as class positions change (Lareau 2003: 250). One possible reason for this apparent stability is the short time span considered by the longitudinal model: two years is little time for new class dispositions to become embedded and consistently displayed through an individual's childrearing approach. The GUS mothers may make small changes to some of their attitudes and behaviours over the two years, but these changes are not of sufficient magnitude to move them into a different childrearing group. The changes may nevertheless have an incremental impact on mothers' childrearing approach, which might have been captured if the longitudinal model had measured a longer time span.

In speculating that parenting practices change along with class positions, Lareau may have had in mind the full course of a parent's childrearing years, for example from a child's birth to their teens, but there are two difficulties with this speculation. On the one hand there exists a fairly weighty body of research (see Johnson and Kosykh 2008 for a summary) which suggests that a child's early years (in particular 0 to 3 and certainly before starting primary school) are crucial in forming patterns of identity and behaviour which persist throughout life. On this basis, even if a parent's class positions and parenting practices changed over the course of 18 years, the child would be significantly influenced by the most early parenting practices. Secondly, it is difficult to see what factors might bring about an improvement in class position beyond an uplift in income, education or employment status, all of which are difficult to achieve while doing care work for a young child. Such changes would require the use of childcare or might be more likely to take place at the household, rather than at the individual level. It is not clear how changes in a partner's socio-economic status would affect the childrearing approach of the mother⁷³.

⁷³ The covariate used to measure changes in socio-economic status includes a measure of change in household occupational classification, but since only around 5% of cases changed their household

Alternatively, it is also possible that Lareau's speculation referred to class positions across a society: for example the decline of a manufacturing class and the rise of a service class could bring about new class dispositions or habitus which would shape different childrearing approaches. However, it is unlikely that shifting class positions across a society would do away with the underlying structures of more and less powerful groups, and it is often the more powerful groups which design policy - in particular parenting policy - around their own models of behaviour. As discussed in greater detail in Chapter 3, the aim of policy should not be to train working class parents to act like middle class parents (Gillies 2007), but to ensure that the benefits and services provided by the state meet the real (rather than perceived) needs of all parents, not just those whose childrearing approach most closely approximates that of the higher status groups in society.

Changes in childrearing approach: 'Busy working mother' to 'Confident, well networked' mother

The most likely change in childrearing approach identified in the Latent Transition model was from the 'Busy working mother' to the 'Confident, well networked' group. An intuitive interpretation of this 25% probability might suggest that 'Busy working mothers' at Sweep 2 become 'Confident, well networked' mothers at Sweep 4 because they have another child, move out of full time work and therefore have more time to pursue a 'concerted cultivation' approach to childrearing. However, the results of the regression of childrearing approach at Sweep 4 onto a set of covariates which is presented in Table 8.5 suggested that 'Busy working mothers' were less likely than 'Confident, well networked' mothers to have had another child between Sweep 2 and Sweep 4. Of the mothers who did have another baby between the two sweeps, 40% were 'Confident, well networked' mothers; only 22% were 'Busy working mothers'.

ONS-SEC classification between Sweep 2 and Sweep 4, the effect of these changes on the transition probabilities cannot be modelled separately.

It is also possible that this transition is related to changes in work patterns: 'Confident, well networked' mothers have a 40% probability of working more hours at Sweep 4 than they had at Sweep 2, so the differences between the childrearing approaches may be smaller: because of their higher likelihood of working, the childrearing approach of the 'Confident, well networked' mothers may approximate more closely that of the 'Busy working mothers'. This may also explain why 'Confident, well networked' mothers at Sweep 2 have a 13% probability of transitioning into the 'Busy working mother' group at Sweep 4.

A third possible explanation for the most likely transition pattern from 'Busy working mother' to 'Confident, well networked' mother is the developmental stage of the child. Some of the key differences between the 'Busy working mother' and 'Confident, well networked' approach at Sweep 4 relate to the frequency with which the mother visits friends and the child's engagement in structured enrichment activities. By age 4, children would be more able to tolerate - for example - visits to a friend's house after pre-school or at the end of the mother's working day. The same is true of structured enrichment activities such as visits to the library or live performances. In this way, the childrearing approach of 'Busy working mothers' may have changed over the two years to more closely approximate that of the 'Confident, well networked' mothers.

A final explanation for the most likely transition pattern relates to the availability of free pre-school places for four year olds by Sweep 4 of GUS. 'Busy working mothers' are more likely to use a private nursery, whereas 'Confident, well networked' mothers are more likely to use a Local Authority nursery. It is possible that the greater availability of free preschool places encourages some of the Sweep 2 'Busy working mothers' to adapt this part of their childrearing approach to more closely approximate that of the 'Confident, well networked' mothers by Sweep 4. By Sweep 4, more 'Busy working mothers' may use Local Authority nurseries as their main childcare provider, even if they have to supplement the free hours with paid hours in order to secure adequate childcare to enable them to work full time.

Stability in childrearing approach - ‘Weak ties, formal service use’

The reasons for the very high probability of mothers in the ‘Constrained, strong ties’ and ‘Weak ties, formal service use’ groups in particular maintaining the same childrearing approach between Sweep 2 and Sweep 4 have been touched on above. To elaborate: because many of the observed indicators of childrearing approach were based on highly skewed likert scales and were recoded into binary variables, the model may not be sensitive enough to capture small changes in mothers’ childrearing approach. These changes may well be present and may affect the mother’s childrearing approach in ways not apparent in the results of the Latent Transition analysis.

The ‘Weak ties, formal service use’ childrearing approach appears to be the most stable over time. It is possible that the relative social isolation of mothers in this group reduced the number of external influences on childrearing behaviour. A more plausible explanation for this group’s stability is the close approximation of this childrearing approach to the norm of ‘good parenting’ presented in the media and in policy. These mothers tend to be highly educated, to display a high level of parental effort in terms of cultivating their children’s language and cognitive skills and to engage their children in structured enrichment activities. The key differences between these mothers and ‘Confident, well networked’ mothers are that they tend to be older, to have more children and to suffer from higher levels of stress, anxiety and depression. Unlike the ‘Confident’ mothers, ‘Weak ties’ mothers are not typically able to rely on informal support networks. Although their childrearing approach may conform to a model of ‘good parenting’, the ‘Weak ties’ approach may be more stressful for mothers to maintain in the absence of sufficient informal support.

Changes in childrearing approach: moves out of the ‘Constrained, strong ties’ group

It appears that an increase in working hours makes a transition out of the ‘Constrained, strong ties’ group more likely. It is possible that the availability of free pre-school places enabled some mothers to work who might otherwise not have been able to because of the high cost of childcare or the absence of reliable informal

childcare support from family or friends. However, the free provision only extended to 12 ½ hours per week, or the equivalent of three mornings, so a mother would either have to work part time or combine the free pre-school place with other childcare provision. Nevertheless, the ability to work more hours may - for a small number of mothers - have brought an increase in income which enabled them to involve their child in a greater number of structured enrichment activities or to visit friends more regularly, one of the key differences in childrearing approach between the 'Constrained, strong ties' and 'Confident, well networked' groups.

It should be noted, though, that the covariate measuring change in socio-economic status had a lesser effect on the likelihood of transitioning out of the 'Constrained, strong ties' group than the covariate measuring working hours. Since much of the change captured by the status covariate relates to changes in income, this may suggest that the transition pathways out of the 'Constrained, strong ties' group into the other childrearing groups is not simply to do with an increase in income. Indeed, for some mothers a move into work may actually represent a fall in income. There may however be other factors associated with work - such as new contacts - which influence changes in childrearing approach.

Limitations to the models

Other modelling approaches could have been adopted instead of the Latent Transition models: a distribution of latent class membership probabilities could have been saved for each case at Sweep 4 and an imputed dependent variable created for a multinomial logistic regression model in which a number of covariates - including childrearing approach at Sweep 2 - were included. Such an approach would have allowed for an assessment of the relative influence of a number of factors on childrearing approach at Sweep 4 simultaneously, each controlling for the effects of the other. However, this modelling approach would not have allowed for an examination of the likelihood of a mother transitioning between childrearing groups between Sweep 2 and Sweep 4. Nor would such an approach have taken account of the probabilistic nature of latent class membership in the same way.

Conclusion

The results presented in this chapter tend to suggest that there is insufficient evidence in the GUS sample to support unequivocally Lareau's postulation that parenting practices change as class positions change. This chapter indicates that the childrearing approach of many mothers in Scotland was likely to be rather stable during their child's pre-school years. This is not to say that childrearing approach is fixed and that policy can have no role in supporting parents. The constructed biographies presented in Chapter 5 suggested that mothers' identities, beliefs and behaviours did change over the first four years of their child's life, but that their childrearing approach was constrained by material circumstances as well as by the norms of behaviour in their social group. Changes in circumstances such as a return to work or a child starting pre-school may bring about an adaptation of the self image and new childrearing behaviours which conform to that self-image, but which are not adequately captured by the longitudinal model.

Bearing in mind the limitations of both the qualitative and quantitative results presented in this thesis, it may be asserted that the childrearing approaches of mothers in Scotland do not all conform to the 'Confident, well networked' model assumed by policy. Scotland's policy interpretation of the social investment model during 2005-2008 encouraged mothers to work but failed to offer a seamless package of support in terms of maternity and/or paternity pay and childcare (Cantillon 2011; Daly 2010). Advice and support for parents privileged the norm of the cultivation of the child's innate skills, talents and abilities and emphasised the importance of structured enrichment activities (Scottish Government 2008). Childrearing approaches which diverged from the policy norm of 'Confident, well networked' were largely ignored, unless they were perceived as resulting in children's anti-social behaviour, in which case they were pathologised (Nixon et al. 2010; Gillies 2005b).

The argument is advanced that the generally higher levels of stress, anxiety and depression observed among mothers in the other three childrearing groups (as opposed to the 'Confident, well networked' group) may be at least partly explained by the stress associated with the dissonance between individual mother's identities

and childrearing approaches on the one hand and the model of childrearing approach implied by the dominant set of discourses on the other.

The results presented in this chapter replicate Lareau's findings in terms of the impact of childrearing approach on children: by entry to primary school, there were significant differences between the GUS children in terms of their conduct problems and pro-social behaviours, based on the childrearing approach adopted by their mother. The significance of these results should not be overstated: there are likely to be multiple influences on behaviour which are not included in the models presented in this chapter, for example gender, ethnicity and ecological factors such as peer group effects. It is also possible that these results could have been attenuated, had it been feasible to include more covariates in the model. However, many of the 15 observed indicators of childrearing approach have been shown to be associated with SDQ scores in previous research (such as frequency of social visits, see Bradshaw and Tipping 2010), which offers some reassurance that at least some of these factors are already controlled for in the model.

Neither are the effect sizes particularly large. However there is clear evidence that children's behaviour is significantly different across childrearing groups, and not just between the 'Constrained, strong ties' and 'Confident, well networked' groups: the pro-social behaviour scores of children whose mothers adopted the 'Weak ties, formal service use' approach are the lowest of all the childrearing groups. These findings support the findings of previous studies (Henderson 2013; Bodovski 2010; Ermisch 2008; Lareau 2003; Sullivan 2001) that childrearing approach matters, not just for the wellbeing of parents, but also for the wellbeing of children.

The current suite of parenting and early years policies in Scotland may not be taking full account of the needs of parents who adopt childrearing approaches which diverge from the 'Confident, well networked' approach. This analysis suggests that policies and services to support parents and young children need to take account not only of economic inequality, but also of differences in the cultural and social

resources of different social groups, without implicitly assigning greater value to one set of childrearing practices over another.

8.10 Technical Appendix 8.1: descriptive statistics for covariates in the LTA model

Working hours

The respondent's reported number of hours worked per week were used to compute the variable flagging whether there was an increase between Sweep 2 and Sweep 4 (displayed in Table 8.13). It should be noted that a variable measuring working pattern (whether full time, part time or not working) is one of the observed indicators of childrearing approach, so this measure could not be used as a covariate in the model. The covariate is limited to the extent that it cannot distinguish between an increase of one hour or thirty hours of work per week. Further, increases in working hours do not lead to a uniform increase in earnings or socio-economic status; mothers working in higher-status jobs may be able to work fewer hours and still earn more than mothers working in lower paid jobs. This covariate is included in the model to explore whether the more likely transitions between childrearing group - between the 'Busy working mother' and 'Confident, well networked' groups - are related to changes in mothers' work.

Table 8.13 Descriptive statistics for the LTA covariate flagging increase in number of hours worked per week

	Percent
Respondent worked the same number or fewer hours per week at Sweep 4 than she had at Sweep 2	43.4%
Respondent worked more hours at Sweep 4 than she had at Sweep 2	56.6%
Total N	3,707

Socio-economic status

A binary variable was computed which flagged whether the mother had experienced any one of: an increase in household income; an increase in level of educational qualifications; or any upward movement on the occupational classification scale (either at the individual or household level). The descriptive statistics for this covariate are set out in Table 8.14 below.

Table 8.14 Descriptive statistics for the LTA covariate flagging increase in socio-economic status

	Percent
The respondent's socio-economic status remained the same or worsened between Sweep 2 and Sweep 4	58.2%
The respondent's socio-economic status improved between Sweep 2 and Sweep 4	41.8%
Total N	3,707

Tables 8.15-8.18 set out the descriptive statistics for the four component measures of the covariate. From these it can be seen that very few respondents (2.6%) experienced an increase in educational level between Sweep 2 and Sweep 4 of GUS; a small percentage (5.6%) experienced an improvement in personal or household ONS-SEC classification. Over a third of respondents, however, experienced an increase in household income between Sweep 2 and Sweep 4. There is a danger, therefore, that this covariate is essentially measuring an increase in income. However, it is argued that some life developments which may have effected an improvement in socio-economic status may not have been adequately captured in the other three component measures but may be reflected in the income measure. For example, an individual may have experienced an improvement in job autonomy and responsibility which is not of sufficient magnitude to lift them into a higher ONS-SEC occupational classification category, but which may nevertheless have had a positive impact on their socio-economic status. Because the income measure in GUS is more finely gradated for lower incomes (the income bands are narrower), the income measure is more likely to capture small changes of this nature.

Table 8.15 Descriptive statistics for the components of the LTA covariate flagging increase in socio-economic status - income

	Percent
The respondent's household income remained the same or fell between Sweep 2 and Sweep 4	63.5%
The respondent's household income increased between Sweep 2 and Sweep 4	36.5%
Total N	3,707

Table 8.16 Descriptive statistics for the components of the LTA covariate flagging increase in socio-economic status - education

	Percent
The respondent's highest level of educational qualifications remained the same between Sweep 2 and Sweep 4	97.4%
The respondent's highest level of educational qualifications improved between Sweep 2 and Sweep 4	2.6%
Total N	3,707

Table 8.17 Descriptive statistics for the components of the LTA covariate flagging increase in socio-economic status - household ONS-SEC

	Percent
The respondent's household ONS-SEC occupational classification remained the same between Sweep 2 and Sweep 4	94.4%
The respondent's household ONS-SEC occupational classification improved between Sweep 2 and Sweep 4	5.6%
Total N	3,707

Table 8.18 Descriptive statistics for the components of the LTA covariate flagging increase in socio-economic status - personal ONS-SEC

	Percent
The respondent's personal ONS-SEC occupational classification remained the same between Sweep 2 and Sweep 4	94.4%
The respondent's personal ONS-SEC occupational classification improved between Sweep 2 and Sweep 4	5.6%
Total N	3,707

Additional information - new baby in the household by Sweep 4

In addition to the two models reported in Chapter 8, a further Latent Transition model was estimated to investigate whether a new baby in the household by Sweep 4 influenced the transition probabilities. The descriptive statistics for this measure are set out in Table 8.19. About one quarter of the GUS mothers had a baby subsequent to the survey child between Sweep 2 and Sweep 4. Of those mothers who had another baby, the over 40% were 'Confident, well-networked' mothers at Sweep 4; only around 18% adopted the 'Constrained, strong ties' approach.

Table 8.19 Additional information: descriptive statistics for whether there was a new baby in the household by Sweep 4

	Percent
No new baby in the household since Sweep 2	75.0%
New baby in the household by Sweep 4	25.0%
Total N	3,707

The inclusion of this covariate in the model had a negligible effect on the transition probabilities.

It will be noted that the final N reported in the LTA models is 3,706, whereas the N reported in these descriptive statistics is 3,707. This is because the primary sampling unit and cluster information was missing from one case, which was excluded from the longitudinal model.

9 Conclusion

This thesis has sought to contribute to the body of research on the role of childrearing approach in the reproduction of social inequality. The analysis has explored whether the socially patterned childrearing approaches observed in US and English studies could also be observed among a sample of mothers in Scotland. A four group typology was presented which shared some elements of the ‘concerted cultivation’ and ‘accomplishment of natural growth’ approaches suggested by Lareau (2003), but which extended these to include a group of working mothers and a new group whose members display many of the characteristics of ‘concerted cultivation’ in terms of cultural capital, but who diverge from ‘concerted cultivation’ in terms of their social capital.

Three of the childrearing approaches identified in this study are not straightforwardly associated with indicators of social class: there is no suggestion of any hierarchy of social status between the ‘Confident, well networked’, ‘Weak ties, formal service use’ and ‘Busy working mother’ childrearing groups. Rather, each of these three childrearing approaches appears to illustrate the deployment of differing balances of symbolic capitals. ‘Confident, well networked’ mothers may have moderate to high levels of social and cultural capital; ‘Weak ties, formal service use’ mothers are likely to have high levels of cultural capital but lower levels of social capital; while ‘Busy working mothers’ may to some extent be devolving responsibility for the transmission of some social and cultural capital to others, be they relatives or formal childcare providers. Not touched on in this account is the role of economic capital in shaping the childrearing behaviours of these three groups. There is no significant difference in the level of income or occupational status between these three groups, although mothers in the ‘Weak ties, formal service use’ group are more likely to have higher educational qualifications than mothers in the other groups. The constructed biographies presented in Chapter 5 illustrate the variation in economic, cultural and social resources which form the framework for the mothers’ childrearing approaches: Suzanne’s childrearing approach aligned her with the ‘Confident, well networked’

group, yet she was not stereotypically middle class. It therefore appears that among these childrearing groups, economic capital is just one resource which is deployed alongside other forms of capital. Different childrearing groups may choose to deploy economic capital in different ways, depending on the availability of other types of capital (Bourdieu 1986).

These three childrearing approaches have an important element in common: they seem to be underpinned by an orientation (conscious or unconscious) to the evaluative standards of dominant culture. In all three groups, mothers are confident in dealing with dominant institutions in a way that suggests a sense of entitlement to have these institutions engage with their preferences. These three childrearing approaches also align most closely with the dominant norm implied by government policy and by media representations of 'good parenting'. That is not to say that mothers who adopt these childrearing approaches are necessarily embodying and reproducing these norms in an unconscious or taken-for-granted way; there is some evidence in the GUS sample that some mothers may find these childrearing approaches more or less stressful to maintain. Suzanne's constructed biography provides an illustrative scenario: her cultural and social resources may not be those typically associated with a high status group, but she tries and appears to succeed in conforming to many of the evaluative standards of dominant culture. Her higher status occupation and moderate level of income are likely to be linked to her success in this approach. It is at least plausible to conclude, though, that the effort of assuming a different habitus is a contributory factor to her high levels of stress and anxiety.

The 'Constrained, strong ties' group is a somewhat different case. A key characteristic of this childrearing approach is the affective aspect of habitus: mothers' feelings of uncertainty or constraint in the face of authority figures and dominant institutions. This factor, taken alongside the lower levels of income, occupational status and education associated with membership in this group, suggests that generally mothers in this group tend to be of lower social status than mothers in the other childrearing groups. It would appear that mothers in this group

are at most risk of being excluded from the arbitrary codes of behaviour which act as markers of high status. These mothers also have the least access among the four childrearing groups to economic, cultural and social capital. Perhaps most importantly, mothers in the 'Constrained, strong ties' group are most likely to suffer from the fragmented nature of employment and family policy in the UK, a policy package designed implicitly to align with a middle class norm of childrearing. Emma's constructed biography illustrates the way in which her efforts to work and find reliable, high-quality childcare are undermined by the lack of affordable childcare for children under 3. It is hard for Emma to earn enough to pay a private childcare provider, but her family and friendship networks are not able to offer sufficiently reliable childcare to allow Emma to work full time. The family and employment policy framework, designed by '*young, white, middle class technocrats*' (Bourdieu 1999: 627), is built on and perpetuates the myth of meritocracy and of the desirability of working hard to get ahead, yet the policy framework itself operates to keep individuals of lower social status in their place. Bourdieu's description of schools could be applied with equal validity to government policy in this field: it '*demand[s] of everyone alike that they have what it does not give*' (Bourdieu 1977b: 494 quoted in Sullivan 2001: 894).

The analytic approach adopted in this thesis suggests that there is value in considering cultural processes at the individual level as well as in aggregate (Irwin 2009). More extensive mixed methods research with the GUS sample may be an avenue for further investigation, enabling researchers to better understand how material and social constraints are experienced by the individual, as well as observing the effects of these constraints within a representative sample.

The Latent Class Analysis of the GUS data offers a new way of examining childrearing approach which departs from the quantitative studies that have gone before (for example Henderson 2013; Sullivan et al. 2013; Bodovski 2010; Ermisch 2008). This thesis conceptualised childrearing approach as a latent variable which cannot be measured directly. The analysis considered the association between a mother's *most likely* childrearing approach and her child's behaviour scores,

therefore acknowledging the imperfect nature of the statistical measures. The Latent Class Analysis method is therefore one which may merit further investigation in the context of research which seeks to investigate factors associated with childrearing behaviours and their effects on children's outcomes.

There are several limitations to both the qualitative and quantitative analyses presented in the preceding chapters. The biographies are necessarily limited by the fact that the GUS mothers had no opportunity to tell their stories in their own voice; their narrative voice has been constructed from their survey responses. A somewhat different picture of the mothers' beliefs, motivations and feelings might have emerged had they had the opportunity to tell their own stories. In addition, the nature of the survey measures available in GUS complicates the task of statistical modelling: many of the measures of interest seek to capture qualitatively investigated concepts which may not have the sorts of thresholds commonly measured by quantitative variables. For example, at what point does a measure recording 'feeling close to lots of people' become 'feeling close to some people'? Responses to these questions are likely to be subjective. In many cases, multi-category likert scales had to be recoded into binary variables because of the lack of variation in the responses. This had the result that some differences between latent classes may have been masked. Finally, the nature of the variables may mean that the longitudinal models were not sensitive enough to capture small changes in mothers' childrearing approach during their child's pre-school years.

In spite of the limitations described above, the analysis presented in the preceding chapters does offer some tentative evidence to support the findings of previous qualitative and quantitative studies into childrearing approach (Irwin and Elley 2011; Vincent et al. 2010; Bodovski 2010; Ermisch 2008; Gillies 2007; Lareau 2003; Allatt 1993). The findings offer new information about childrearing approach in a different geographical area to that investigated in the previous studies, suggesting that the concept of socially patterned childrearing approaches holds true across a number of populations. The analysis also emphasises the observation of Irwin and Elley 2011 and Lareau 2003 that there is considerable variation in childrearing approach within

classes - be they social classes or latent classes. This thesis advances the argument that a two-category typology of childrearing approaches which coalesce along class lines may mask important differences in childrearing approach which are not directly predicted by class.

The questions posed in Chapter 2 are now considered in turn.

Do mothers in Scotland adopt socially patterned childrearing approaches akin to Lareau's 'concerted cultivation' and the 'accomplishment of natural growth'?

The analysis presented in Chapters 5 to 8 suggests that there is some evidence to support a typology of childrearing approaches which includes childrearing approaches similar to 'concerted cultivation' and the 'accomplishment of natural growth'. The results of Latent Class Analysis of the GUS data suggested a typology of four childrearing approaches which was stable between the child's second and fourth birthdays. These four childrearing approaches align with the childrearing approaches of the mothers considered in the constructed biographies: Emma's childrearing approach aligns in many respects with that of the 'Constrained, strong ties' group; Rebecca's childrearing approach aligns with that of the 'Busy working mother' group; Rita's approach aligns in some respects with that of the 'Weak ties, formal service use' group and Suzanne's childrearing approach aligns with that of the 'Confident, well networked' group.

The biographies illustrate how childrearing approach in the GUS sample does not appear to be shaped by class as strongly as has been implied in some studies of childrearing approach (Gillies 2007; Lareau 2003). For example, Suzanne lives in a relatively deprived area, has school-level qualifications, had her first child at the age of 19 and was living as a single mother at the time of Sweep 1, all characteristics typically associated with 'working class' mothers. Yet Suzanne works full time in a managerial occupation and many of her beliefs, behaviours and choices in relation to childrearing align closely with those of the 'Confident, well networked' approach. Suzanne takes her daughter to the library from time to time and to a live performance

at least once a month. She is confident in dealing with authority figures, and uses a private nursery as her main childcare provider. Suzanne visits friends with children at least once a week, all behaviours typical of ‘Confident, well networked’ mothers. One respect in which Suzanne does not conform to the ‘Confident, well networked’ model is in her levels of stress, which are above average. Suzanne’s biography suggests that her adoption of the ‘Confident, well networked’ childrearing strategy is not a ‘given’ based on her social class (indeed Suzanne is in many ways a class migrant), but rather reflects a set of attitudes and behaviours profoundly bound by the availability of services, resources to access them and personal networks to reinforce or undermine their use.

What is the relationship between neighbourhood context and childrearing approach for mothers in Scotland?

The analysis of neighbourhood effects suggests that mothers living in deprived areas are more likely to feel both that their area is not safe for bringing up children, and that bringing up children is a shared priority for people in their area. As levels of deprivation in an area increase, so do the odds of mothers adopting the ‘Constrained, strong ties’ childrearing approach, compared with the ‘Confident, well networked’ approach.

The results presented in Chapter 7 suggest that beliefs about the level of child-friendliness in an area may be linked to how much contact the mother has with people in her local area: ‘Busy working mothers’ and mothers in the ‘Weak ties, formal service use’ groups are less likely to believe that their area is child-friendly than ‘Confident, well networked’ mothers, even though there is no significant difference in the level of area deprivation between the three groups. ‘Busy working mothers’ and ‘Weak ties’ mothers are also less likely to have strong ties with people living in the local area.

The quantitative analysis emphasises the importance of neighbourhood in understanding childrearing approach, but it also underlines the difficulty of isolating

the effects of neighbourhood beyond the individual characteristics of the people who live there. Neighbourhood-level factors were not found to be significantly related to childrearing approach when other factors were controlled for. These findings align with the findings of the constructed biographies to the extent that perceptions about community safety and community spirit are highly individual and there is not always a straightforward linear relationship between the level of deprivation in an area and inhabitants' satisfaction with that area.

The variety of experiences and perceptions evident in the GUS mothers' biographies suggests that policy efforts to improve collective efficacy and community cohesion will have to make available sufficient financial support to enable individuals to give up their time and to address the competing needs and aspirations of those living in the same neighbourhood.

Can childrearing approach change over time? What are the reasons for a change?

The analysis found that a mother's childrearing approach can change over the formative first years of her child's life, but that some transition pathways are more likely than others. When each mother's most likely childrearing approach at Sweep 2 and Sweep 4 was considered, only between 44 and 52 per cent of mothers maintained the same childrearing approach between the two time points. However, when a longitudinal model was estimated to examine the likelihood of mothers changing to one of the other childrearing approaches over the two years, the likelihood of a change was negligible for the 'Constrained, strong ties' and 'Weak ties, formal service use' groups. Moves between the 'Confident, well networked' and 'Busy working mother' groups were more likely. Mothers who had been 'Busy working mothers' at Sweep 2 had a one in four chance of adopting the 'Confident, well networked' childrearing approach at Sweep 4. One plausible explanation for this transition pathway relates to the availability of free pre-school places for four year olds by Sweep 4 of GUS. 'Busy working mothers' are more likely to use a private nursery, whereas 'Confident, well networked' mothers are more likely to use

a Local Authority nursery. It is possible that the greater availability of free pre-school places encouraged some of the Sweep 2 'Busy working mothers' to adapt this part of their childrearing approach to more closely approximate that of the 'Confident, well networked' mothers by Sweep 4. Visiting friends more regularly was also one of the behaviour changes which could contribute to 'Busy working mothers' moving into the 'Confident, well networked' group: it is possible that working mothers found social visits after work to be more feasible with older children.

An improvement in socio-economic status made transitions from the 'Weak ties, formal service use' group to the 'Confident, well networked' group and from the 'Constrained, strong ties' group to the 'Weak ties, formal service use' group marginally more likely. An increase in the number of hours worked per week between Sweep 2 and Sweep 4 made a transition out of the 'Constrained, strong ties' childrearing approach (and in particular a move from this group into the 'Confident, well networked' group) slightly more likely. These findings suggest that there is insufficient evidence in the GUS sample to support Lareau's (2003) contention that as class positions change, so do parenting practices. However it is possible that the short timescale considered by the longitudinal model (seeking to capture change in the mother's childrearing approach between her child's second and fourth birthdays) did not allow enough time for any changes in the mothers' circumstances, attitudes and beliefs to become systematically embedded in their childrearing practice. Further, the nature of the variables used to operationalise childrearing approach is such that fairly substantial change in a number of measures would be required to move a mother into another childrearing group. Therefore the longitudinal model may not have been able to capture more subtle changes in status position or habitus. The constructed biographies do suggest that some mothers experienced changes in certain aspects of their childrearing approach over the first four years of their children's lives: Rita for example became more confident in her interactions with authority figures over the four years, and more able to use services to achieve her objectives, yet these changes were not enough to place her in a different childrearing category by Sweep 4.

To what extent can a mother's childrearing approach explain variation in her child's behaviour at entry to primary school?

This thesis supports the findings of previous studies (Henderson 2013; Bodovski 2010; Ermisch 2008; Lareau 2003; Sullivan 2001) that childrearing approach matters, not just for the wellbeing of parents, but also for the wellbeing of children: by entry to primary school, there were significant differences between the GUS children in terms of their conduct problems and pro-social behaviours, based on the childrearing approach adopted by their mother. Even bearing in mind the limitations of the models and the relatively small effect sizes, there appears to be sufficient evidence to argue that parenting and early years policies should take account of the variety of childrearing approaches and their potential impact on children. These findings suggest that there may be value in further research to explore the reasons for the observed variation in children's SDQ scores according to their mother's childrearing approach.

It should be noted that 'positive behaviour' as measured by the SDQ subscale in essence measures the behaviours associated with the dominant set of cultural repertoires; other behaviours may be better adapted to suit daily life in more deprived circumstances (Gillies 2007; Lareau 2003). Higher scores on the conduct problems sub-scale and lower scores on the pro-social behaviours sub-scale of the SDQ should not be taken to imply deficiencies in the parenting abilities of the other childrearing groups; it is simply that the 'Confident, well networked' childrearing approach appears to be the most effective at transferring an implicit understanding of dominant norms of behaviour to children.

Summing up

The implications of this research for policy are straightforward enough, but the implementation of policy in terms of the development of services for parents and children is not. There can be little argument that more effective economic redistribution is central to reducing social inequality, but the cultural barriers to

equality cannot be ignored (Reay 2006). Education and qualifications - cultural capital - have been championed by successive governments as some of the most effective tools for levelling the social playing field, yet social group norms and parenting practices are likely to exert an important influence on children before they ever start school. Many aspects of education from the discourse of school choice, to parental involvement, to choice of school subjects, to decisions on whether to enter higher education, to choice of course to type of employer are influenced to varying degrees by the cultural practices of the family and wider social group (Reay et al. 2009; Reay 2006; Zimdars et al. 2009; Sullivan 2003 and 2001). The power of education as a social leveller is therefore overestimated.

Three factors in particular complicate the task of designing a set a policy levers to tackle the social inequality which is grounded in economic, cultural and social resources and which appears to be reproduced through parents' childrearing practices: first, policy makers tend to adopt the dominant discourses around what are 'normal' or 'desirable' childrearing practices; second, the implementation of policy is rarely uniform and tends to adapt to local cultural norms; and third, policy can have unintended consequences. Social inequality persists in part because dominant groups are constantly seeking distinction, constantly seeking to maintain their exclusivity from other groups in society by cultivating certain images of the self, ways of presenting the self, tastes and lifestyle choices (Bourdieu 1984). It is unlikely, short of the realisation of a utopian society, that this impulse will change, but policy makers and service providers can be alert to this impulse and take steps to minimise economic and social barriers to the institutions of society which tend to embody dominant cultural practices. Both Lareau (2003) and Reay (2006) suggest that initial teacher training for school and pre-school staff should include the requirement on teachers to take a more reflexive approach and to develop knowledge and understanding of different class cultures and the impact of class on education. In this way, teachers might be better placed to recognise and validate different cultural norms and modes of behaviour. Lareau (2003) suggested that teachers learn to 'code switch' - that is, to adopt a linguistic style appropriate to a certain status group - and to encourage their pupils to do the same. While this approach has its advantages as a

practical solution it is hard to see how such ‘bilingualism’ could avoid perpetuating the status of the elaborated over the restricted code.

More concretely, the findings of this study suggest that there would be value in continuing to extend community participation in the policy making process. In this way, policy could take account from the outset of different material circumstances and different cultural practices around childrearing. Services to deliver policies to support parents and children could be designed in close consultation with a wide range of potential service users. For such an approach to be effective, however, government both in Westminster and Holyrood needs to be clear about its motives for pursuing the increased participation of women in the labour market and to be clear also about the practical implications of this approach, which would include provision of a range of affordable, flexible, high-quality childcare options. An effective suite of policies and services is needed to support this goal effectively.

The current suite of parenting and early years policies in Scotland may not be taking full account of the needs of parents whose childrearing approach differs from dominant norms, nor of the needs of those parents who seek to align themselves with dominant childrearing practices, but who lack the economic, cultural or social resources to do so easily. This research suggests that policies and services to support parents and young children need to take account not only of economic inequality, but also of the impact of differing economic resources on the cultural and social resources which parents can deploy as part of their childrearing approach.

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