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Structural Adversity and Health in South East London

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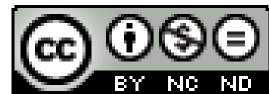

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Individuals and Institutions: Structural Adversity and Health in South East London

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Abstract

The UK has a long history of documenting health inequalities by SES. However, research that investigates differences in health by intersectional social identities is limited. Structural adversity represents an important risk factor for poor health outcomes and its distribution varies by social identity. Whilst much research has investigating the effects of structural adversity within a single life domain, the effects of multiple types of adversity, such as life events and discrimination across multiple life domains is under-researched. Furthermore, few studies on structural adversity use a mixed methods design to provide possible explanations for observed associations. This project therefore aims to:

1. Perform a review of the literature related to structural adversity and health inequalities

2. Estimate the prevalence and distribution of structural adversity across the domains of employment, housing and healthcare and to examine relationships between structural adversity and health and wellbeing

3. Explore the everyday experiences of individuals within employment, housing and healthcare institutions and the nature, effects of and responses to structural adversity

These aims are examined using mixed methods. Quantitative analysis makes use of survey data from the South East London Community Health Survey (SELCoH) phase 1 (N=1698) and phase 2 (N=1052). Statistical methods used include latent class analysis and weighted regression analyses. Thematic analysis of triangulated qualitative data was based on ethnographic observation and in-depth interviews with service providers, community organisations and SELCoH participants. Unique differences in the distribution of structural adversity by social identity emerged from using an intersectional approach and associations between structural adversity and health were

identified. Results from qualitative data suggested a range of structural mechanisms for these associations that included negative societal attitudes and government policy. Structural adversity in employment and housing contributed to health inequalities, which has important implications for health inequalities research and policy.

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Chapter 1 Introduction and literature review

1.1 Study overview

Health inequalities by both socioeconomic status (SES) and ethnicity are well documented (1, 2). Differences in SES are often argued to be an explanatory factor for ethnic inequalities in health (3). However, research has also documented health inequalities across SES within ethnic groupings and across ethnicity within SES strata (4, 5). Results from UK studies are consistent with the wider literature that SES partially explains associations between ethnicity and health (6, 7). In addition, health inequalities have also been documented once migration status has been intersected with both SES and ethnicity (8-10). The UK has a long history of documenting health inequalities by SES. However, research that investigates differences in health by intersectional social identities that take into account migration status, ethnicity and SES is limited (11).

A volume of research identifies social factors as highly significant in generating and sustaining health inequalities (2, 12). A recent review article comparing health outcomes across the life-course in the United States and England specifically highlighted the role of structural adversity in creating inequalities as a promising line of enquiry (13). Adversity or stress is often defined as conditions of threat, challenge, demands or structural constraint, which may or may not be threatening to a person's health depending on available resources (14). Structural adversity, such as job insecurity or poor housing conditions, are associated with psychological distress (15, 16), poor self-rated health (17, 18) and lower mental wellbeing (19, 20). Other sources of adversity can include chronic adversity, such as financial strain (21), or life events, such as being physically attacked or bereavement (22).

Considering adversity across key life domains of employment, housing and health at the institutional level may be particularly useful in highlighting how macro-level inequalities are enacted in micro-level interactions, which in turn reinforce macro-level inequalities

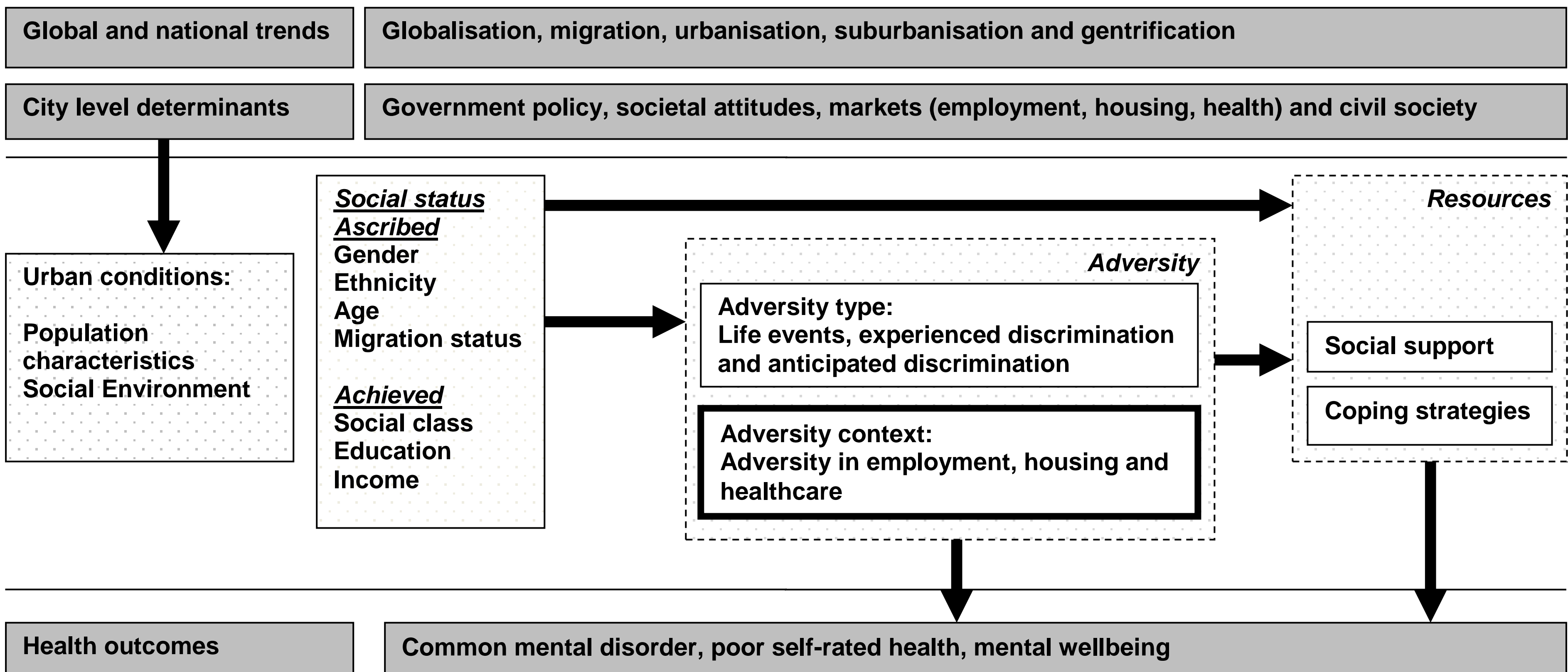
affecting disadvantaged groups cumulatively over time (23). Pearlin's explanatory model of the stress process provides a framework for testing the associations between multiple forms of adversity and poor health that operate at the institutional level, whilst taking into account the effects of both individual and collective coping strategies (24). A recent review suggested that effective evaluation of the impact of adversity on health outcomes and health inequality requires consideration of multiple forms of adversity, including experienced discrimination and anticipated discrimination (25). Yet, incorporating multiple forms of adversity in the same study is rare (26).

This thesis takes a broad social epidemiological approach to understanding the relationship between structural adversity, multiple social identities and health across multiple domains in an urban context. (27). The current study analyses unique data to explore the nature and interdependence of structural adversity, including experienced and anticipated discrimination, across key life domains of employment, housing and health, as well as their relationship to health and wellbeing outcomes in an inner city area. As will be described in the sociohistorical review below, the beginnings of health inequalities policy in the UK was based on urban public health research. However, much of the subsequent health inequalities policies in the UK have been based on national data and has continued to focus on SES inequalities rather than exploring intersectional social identities that are also inclusive of ethnicity and migration status.

Today, more than half the world's population lives in cities as urban areas continue to attract both internal and international migrants (28). While cities can provide access to more economic opportunities and easier access to public services, they are also characterised by inequalities in wealth and increased risk of adversity for marginalised groups (29). As urban populations continue to grow, understanding how social inequality, adversity and health are related in the diverse populations often found in urban contexts becomes increasingly important. Sandro Galea's conceptual framework for urban health links structural level determinants (e.g. migration, urbanization, government policy, markets and civil society) with urban living conditions (e.g. population

characteristics and social environment) (30). This framework is combined with the stress process model in this thesis to understand how adversity affects health in a diverse inner city community based in South East London (see Figure 1.1). Furthermore, an intersectional approach using mixed methods in this thesis captures both micro and macro processes more comprehensively and explores the underlying structural level drivers of inequalities, such as hegemonic states and processes that produce structural adversity and contribute to marginalisation and disadvantage.

Figure 1-1. Conceptual framework for adversity in urban health



1.2 Study aims

This study has three main aims relevant to the understanding of the relationship between adversity across domains of employment, housing and healthcare and health outcomes in a community sample based in South East London.

1. To perform a review of the literature on the relationship between structural adversity in employment, housing and healthcare with health and health inequalities
2. To estimate the prevalence and distribution of adversity across the domains of employment, housing and healthcare and to examine relationships between such adversity and health and wellbeing
3. To explore the everyday experiences of individuals within employment, housing and health institutions in South East London in order to understand why certain groups experience more adversity within these domains, how this is enacted in institutional settings and how individuals are affected and respond to this adversity.

1.3 Thesis outline

The study aims are contextualised in the remaining sections of Chapter 1, which provide an introduction to key concepts, a brief outline of the sociohistorical context of health inequalities in the UK and an overview of key literature and theory relevant to adversity and health. The historical context provides the overarching context of how the research literature aligns with changing government policy, markets and societal attitudes. The overview of key literature will describe sources of adversity across the three domains, alongside currently available research examining the prevalence, distribution and impact of each on health and wellbeing.

Chapter 2 introduces the methods used throughout the thesis, provides a rationale for the use of mixed methods in this study and details of how both quantitative and qualitative methods were used. Chapter 3 presents the results of latent class analysis that produced classes of intersectional social identities and the distribution of life events, coping strategies and health outcomes by these social identities using quantitative data. Chapter 4-6 presents results by each life domain; describing the prevalence and distribution of employment adversity, housing adversity and healthcare discrimination by social identities; exploring how individuals experience these adversities at the institutional level using qualitative data; and exploring the association between each type of adversity and health. Chapter 6 also explores how these adversities interrelate to impact health and wellbeing. Chapter 7 discusses the findings and how they relate to the wider literature. Policy and research recommendations are also made in light of the results and discussion.

1.4 Background

This section provides the background to the study, beginning with key concepts related to both health and health inequalities. The following section presents a brief sociohistorical summary of health inequalities research in the UK, and highlights the focus of these investigations and the relative absence of intersectional approaches. The theoretical framework of adversity and health is then introduced, accompanied by a review of the empirical literature investigating the impact of adversity on health and its role in health inequalities.

1.4.1 Key concepts

Given the complex and multi-dimensional nature of the concepts under investigation, clarification as to how both health and health inequalities are defined and measured in the context of this thesis is provided below. Further details on how these concepts were operationalised in the study can be found in section 2.2.3.

1.4.1.1 Health

Health is a complex and evolving concept that can be defined in a number of ways depending on differing perspectives and contexts. Two of the most dominant definitions in current discourse of health are the biomedical and social definition of health (31). The biomedical model defines health as the absence of disease, where disease is objectively defined through medicine as an abnormality in structure or function of the body (31). Such a narrow definition has been criticised for being over simplified and not taking into account a more subjective account of health (32). A social model of health takes a broader perspective by also articulating a person's situation in the world (33) and incorporating positive dimensions of health such as mental wellbeing (34). The World

Health Organisation's definition of health also advocates for a social model approach; 'a state of complete physical, mental and social wellbeing, and not merely the absence of disease and infirmity (WHO, 1948). A biomedical understanding of health is also criticised for its effects on response and resilience. In the biomedical model, individuals are burdened with personal responsibility for their illness without acknowledgment of the social structures that often produce ill health (35).

A number of health measures have been developed to assess people's current health in national surveys. Three such measures are used in this thesis and include self-report measures of common mental disorder and mental wellbeing, as well as subjective self-rated general health.

Common mental disorder

Common mental disorder (CMD) includes depressive disorders, anxiety disorders, obsessive-compulsive disorders and phobias (36). Depressive disorders are characterised by a cluster of symptoms which include low mood, lack of positive affect, irritability and fatigue (37). Anxiety disorders are characterised by symptoms which include excessive worry or fear and include both obsessive compulsive disorder and phobias. It has been argued that depression and anxiety should be measured unidimensionally due to the substantial overlap in both aetiology and symptoms (38) and due to their joint treatment (39). They are highly prevalent worldwide and are commonly encountered in general populations, especially in urban environments (40). They are often distressing and disabling, associated with problems with everyday functioning and incur individual and societal costs; representing a large public health burden (41).

Mental Wellbeing

More recently, the UK Government has identified mental wellbeing as a key measure of national progress and inequality (42); and associations with mental wellbeing have been

found to be relatively independent of symptoms of mental illness (20). As a substantial proportion of the general population do not report psychological distress it is argued that measuring positive wellbeing may distinguish between those with no CMD (43). Despite agreement that mental wellbeing is subjective and encompasses positive feeling, how it is measured in terms of hedonic (happiness) and eudemonic (optimal psychological functioning) wellbeing is still debated. Multidimensional measures, such as the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), are considered to be a more comprehensive measure of mental wellbeing (44) in comparison to measures that conceptualise wellbeing in terms of mood or feeling, such as the Positive and Negative Affect Scale (PANAS) (45) or single item measures of life satisfaction (46).

Self-rated general health

Self-rated general health provides a broad measure of an individual's overall health using a single item question and is used in several UK national surveys including the 2011 census (47). There is widespread agreement that this single item question provides a useful summary of how an individual perceives their overall health (48). Indeed, several studies have shown it to be a strong and independent predictor of mortality (49). It has also been shown to be a valid measure of health status across different ethnic groups (50). However, a randomly selected community health study in Stockholm, Sweden found that participants tended to overestimate their health in relation to others with increasing age which may contribute to a weak correlation between increased age and poor self-rated health, as participants assess their health in terms of expectations tied to ageing (51).

1.4.1.2 Health inequalities

In epidemiology, health inequality is broadly defined as variations in health status of individuals or defined groups in a population (52), where groups are often defined in terms of social or economic differences that reflect differences in status, power or resources. Health inequalities adversely affect socially disadvantaged groups and are judged to be unfair and unjust (53). It is also argued that they are largely avoidable (54). One of the most widely used theoretical frameworks, fundamental cause theory, postulates that health inequalities are caused by differences in SES and highlights its effect on access to resources (55). This theory also incorporates ascribed social identities, such as ethnicity, as fundamental causes alongside SES (56). Whereas these models highlight the relationship between social status and access to material resources, psychosocial models of health inequality focus on the effects of stress, stemming from disadvantaged social status, on health outcomes across the life-course (57). These are not competing accounts; disadvantaged social status can lead to both material disadvantage and accumulation of stress across the life-course, largely shaped by structural mechanisms.

Many researchers have focused on the relationship between SES and ethnicity (3) with some stating that SES differences are the primary explanation for ethnic inequalities in health. It does not, however, explain why ethnic minorities experience more adversity in employment and housing and the ethnic inequalities in health that exist within people of the same income bracket (58). Ethnicity in both the UK and US have been shown to be strongly stratified by SES (59, 60) but adjusting for SES does not fully account for the relationship between ethnicity and self-rated health (61). Discrimination has been explored as an explanatory risk factor for this excess inequality (62). The relationship between ethnicity, discrimination and health inequality is further complicated by migration status with the link between discrimination and health stronger in those who

are native born (63) or of higher SES (64). In particular, structural discrimination acts to reinforce boundaries that separate advantaged groups from disadvantaged groups and allows for advantage to be maintained; perpetuating social orders (65). By conceptualising structural discrimination as a primary process in reproducing social and health inequality, these inequalities can be reframed as political.

Socioeconomic indicators, ethnicity and migration status are important variables for understanding health inequality and it is important to outline how they are conceptualised in this study.

Socioeconomic indicators

SES is a multidimensional concept used to describe both the social and economic position of an individual, household or community in a given society. SES can be measured using a range of indicators including educational attainment, occupational social class, income and benefit receipt. Indicators of SES can be a signifier of resources and/or status related characteristics. For example, an individual's income can provide access to resources, such as better healthcare while educational attainment can increase a person's relative position in socially ranked hierarchies. These statuses can be a product of social structures that exist outside the individual and can also be achieved by the individual and 'integrated into how we feel and how we act' (66). Each SES indicator measures different but interrelated dimensions of SES. Relying on a single indicator will not necessarily account for short term fluctuations or changes in circumstances that affect overall SES (e.g. periods of unemployment). Utilising a number of sources of information that can account more holistically for an individual's socioeconomic status may be a more reliable approach (67). Moreover, there are patterns regarding the intersection of these variables which could be ignored if they were treated independently in a statistical model (68). SES has also been shown to have limited equivalence across ethnic groups and migration status. For example, findings

from the Fourth National Survey of Ethnic Minorities showed that within each social class band, household income for Pakistani and Bangladeshi people was half that of their White counterparts (58). Migrants with the same educational attainment as non-migrants were also found to earn less than their non-migrant counterparts in the UK Labour Force Survey (69).

Ethnicity and Migration status

In epidemiological research, ethnicity has been defined as a group that people belong to or are perceived by others to belong to, because of a shared culture, language, religion or skin colour (70). It is a complex concept that changes over time and by context and can be understood as a 'marker of identity, a vehicle for community mobilisation and a possible indicator of disadvantage, discrimination or privilege' (71). In the early nineteenth century 'race' evolved into a biological concept and humans were considered to be made up of separate races that were differentiated in terms of physical appearance, skin colour and behavioural attributes (72), justifying slavery, exploitation and colonialism. European colonialism and slavery established skin colour hierarchies that systematically privileged lightness, which still persist today (73), and so ethnic minorities may experience racism in different ways depending on the colour of their skin. The acceptance of such concepts led to racialisation of epidemiological research, where variation in population health was explained by racial differences (74). While both 'race' and 'ethnicity' are increasingly acknowledged as social constructs, the term ethnicity is more frequently used in health inequality research in the UK (75). More recent research on ethnic inequalities in health have relied on self-assigned ethnic groups (76) outlined in the UK census in 1991 (options included White, Black Caribbean, Black African, Black Other, Indian, Pakistani, Bangladeshi, Chinese or Other). These options were expanded in the 2001 Census to include White minority groups and mixed ethnicity (77). These tick box options limit the scope for more detailed description of ethnic identity but has allowed for more monitoring of ethnic inequalities in health. For the purposes of this

thesis, ethnicity refers to socially constructed identities that reflect the convergence of geographical origin, skin colour and exposure to prejudice and discrimination (78).

Migration status is an important social status to measure alongside ethnicity and SES. Definitions of 'migrant' vary among different data sources, datasets and law (79). For the purposes of this thesis, the term migrant is used in the broadest sense and refers to all persons residing outside their country of birth in order to understand the effects of migration status on health and health service use, while considering the importance of other migration-related factors such as length of residence and first language (8). In the UK, the migrant population currently stands at 12% while the proportion in London is much larger at 37% (80). Migrants from various places relocate for a variety of reasons across different points in their life course; there is not simply one migrant narrative that leads to a shared experience in host countries. This heterogeneity has implications for understanding the relationship between migration status and health. Therefore, methodologically, it is important to disaggregate migration status and investigate how migration status combines with other social statuses or identities to affect health.

Empirical evidence

Inequalities in health have been reported by common mental disorder (CMD), mental wellbeing and self-rated health, both nationally and in South East London (the area under study). Nationally, the prevalence of CMD was estimated to be 15.1% using data from the 2007 Adult Psychiatric Morbidity Survey (APMS), a random sample of private household residents, aged 16 and over, in England (81). However, women (18.4%) reported more CMD than men (11.6%) and within the female population, South Asians had higher rates of CMD (81). CMD was also associated with lower SES (81) and identifying as non-heterosexual (82). In South East London, CMD was also associated with low SES (83) and identifying as non-heterosexual (84), although no differences were found by ethnicity (85). Higher rates of CMD (24.2%) were reported for both

women (27.3%) and men (17.9%) compared to the national average, using data from the South East London Community Health Study (SELCoH), which applied similar methods to the APMS (85). Both studies used the same measure, the revised Clinical Interview Schedule (CIS-R). Nationally, mental wellbeing was measured in the APMS using a composite of items from different measures available in the survey, including three items from the 12 item Short Form Survey (SF-12) (86), three items from the Social Functioning Questionnaire (SFQ) (87) and one single item question in regards to happiness (88). Reduced mental wellbeing was associated with lower SES and female gender (20) and identifying as non-heterosexual (82). Lower mental wellbeing was reported in those who identified as Arab, Bangladeshi, Black, Indian or Pakistani in comparison to those who identified as White in the Annual Population Survey, which used the single item question (89). There is little data at the local level, with only inequalities by sexual orientation being identified (84). Self-rated poor health was associated with low SES, identifying as Muslim and non-white ethnicity at the national level using data from the 2001 Census (90). In South East London, the prevalence estimate of self-rated poor health was 19.2%; associations with female gender, Black Caribbean ethnicity and low SES were also identified (83).

In order to understand why such inequalities still occur both nationally and in South East London, it is important to understand the context in which they occur. The sociohistorical context of health inequalities policy in the UK is outlined below.

1.4.2 Sociohistorical context

This section presents an overview of the politics of health inequality and a historical review of the key policy documents and literature on health inequalities in the UK and how these inequalities have changed over time, with particular attention to ethnicity, migration status and socioeconomic status. The review will also focus on the structural factors in employment, housing and health services that have shaped adversity and impacted on both social and health inequality.

1.4.2.1 Politics of health

Health is considered an integral part of social citizenship and also a human right by the United Nations (91). In the UK, the welfare state and the introduction of the National Health Service (NHS) in 1948 intended to decommodify health by all citizens gaining access to health services and a certain standard of living (92). Together, access to fair employment, suitable housing and health are integral to having full social citizenship rights. However, in liberal welfare regimes, such as that in the UK, capitalism and citizenship remain at odds, with successive governments taking different political stances on the rights to health in a capitalist framework and, in turn, to health inequality policies (93). This tension often causes increased adversity for certain groups whose citizenship is questioned on the basis of their contribution to society or their ancestry.

1.4.2.2 1840-1940

The UK has a long history of investigating health inequalities (94). One of the earliest examples is from utilitarian social reformer Edwin Chadwick. In response to an influenza and typhoid outbreak in East London in the 1830s, the government commissioned Chadwick to lead an independent inquiry of sanitation which produced the 1842 report, 'The Sanitary Conditions of the Labouring Population of Great Britain' (95). The report concluded that disease within the poorer sections of society was in large part caused by poor living conditions and advocated for improvements. Despite evidence presented, it was reported that the recommendations received little support. However, with the incoming Liberal government of 1847 many of the recommendations were incorporated into the 1848 Public Health Act to both tackle the increasingly unhygienic conditions of urban areas and appease a growing labour movement predominantly based in cities (96). Industrialisation, migration to urban areas and a new mass electorate created between 1884 and 1928 have been reported to have facilitated the continued increase in the number of nationally provided welfare policies necessary to improve living conditions for the working class population (97). For example, the world's first statutory scheme of unemployment insurance was introduced in 1911. The enfranchisement of all working men in 1918 is also argued to have led to the rise of the Labour party which formed its first government in 1945, resulting in the major social reforms of the 1940s (98).

1.4.2.3 1940-1970

The Beveridge Report was produced in 1942 to tackle poverty and poor health through re-distribution of existing wealth (92). The incoming Labour government of 1945 used the report as a basis for major social reform that included massive social housing building schemes, the introduction of the NHS and full unemployment insurance. All of which significantly raised the living standards of the poorest in society over the next two decades. It is contended that the introduction of the NHS meant that health inequality became largely absent from health policy discourse for many years (97). It was simply assumed that all health inequalities could be tackled through the NHS.

Although the report resulted in dramatic policy changes that improved the social conditions of the poorest in society, it is also a product of its time. The resulting social reforms have retrospectively been criticized for focussing on the interest of UK born White males and, to some degree, perpetuating social exclusion based on gender, ethnicity and migration status (99). As social reforms continued to be implemented, sustained migration from both Europe and the Commonwealth driven by the post war economic boom were changing the character of the UK population. The social exclusion of migrants, particularly in employment and housing, was an outcome of such policies being formed before the arrival of mass migration (100). It has also been argued that successive post-war governments undertook an active role in the creation and manipulation of British nationality and migration policy subsequent to this mass migration, which often fuelled nationalism and racism in institutions and the British public (101, 102).

Non-White migrants were reported to have experienced the worst of such discrimination. Despite being British citizens, migrants from the Caribbean often had the most difficulty gaining employment (103). Before the 1968 Race Relations Act, housing discrimination

was widespread, with signs stating ‘No Blacks, No Irish, No dogs’ outside homes for sale or rent (104). Concerns about the health of urban areas were also increasingly linked to migration and the ‘pollution’ and ‘disorder’ that migrants were often perceived to bring to cities (29). Politicians argued that Black migrants in particular were taking advantage of free access to NHS services and were often used as scapegoats for poor service provision for White working class patients. Such arguments were used to call for increasing immigration control from the New Commonwealth (105). However, the period of economic expansion in the post-war years meant that despite prevalent and explicit discrimination, large migrant communities began to take root in large UK cities.

1.4.2.4 1970-1990

Despite the introduction of the welfare state and the NHS, health inequalities by SES were still persistent by the mid-1970s (106). Social researchers were increasingly concerned about these inequalities and persuaded the Labour government to set up an independent inquiry. Chaired by Douglas Black and published in 1980, the Black Report provided a comprehensive review of health inequalities by social class in England and Wales (97). It documented marked differences in both mortality and morbidity by social class in both males and females (34). The report suggested that the widening health gap was attributed to disparities in income, unemployment and housing conditions, as well as a marginal role by the health service itself (94). Although the authors did acknowledge evidence of racial discrimination in both employment and housing and that these factors could contribute to health inequalities, the report did not report on ethnic inequalities in health despite a growing ethnic minority population (34). This absence highlighted the marginalisation of ethnic minorities in health inequalities discourse in the UK (107).

Despite the dearth of evidence of social inequalities in health in this report, it was claimed that the new Conservative government tried to supress its dissemination. The report, which recommended a number of policies to tackle SES inequalities, did not align with neoliberal ideology of promoting the free market and increasingly minimal state provision of welfare (108). The Government's numerous neoliberal policies, such as the promotion of home ownership, restricting worker and trade union rights and cuts to welfare spending hit the working classes hardest and were accompanied by suggestions of a racialized discourse that targeted ethnic minorities and migrants (109). Although the Race Relations Act of 1976 had made discrimination unlawful in employment and in the provision of goods and services, implicit forms of discrimination remained prevalent. A report by the Policy Studies Institute described that when both Black and White testers with similar qualifications applied for work, the White tester was chosen for the job ten

times more often than the Black tester (110). Similarly, it has been reported that London health authorities were encouraged by the Conservative government to check Black patients were eligible for treatment due to concerns over health tourism. This culminated in NHS charges for certain people from overseas being introduced, which were described as racist by organisations such as the Commission for Racial Equality (105).

As the migrant and ethnic minority population continued to establish itself in urban areas, community and political groups formed to act as a buffer against ongoing discrimination and disadvantage. Ethnic minority community organisations that were set up in the 1960s, such as the West Indian Standing Committee (WISC) and the Indian Workers' Association (IWA) began working together on activities such as the Greater London Action for Racial Equality (GLARE) (111). Many of these organisations and actions were important in helping to set up minority ethnic businesses, supporting ethnic minority political candidates and safeguarding and promoting participation and equality (112).

1.4.2.5 1990-present

After 18 years of Conservative government, the incoming Labour government commissioned the Acheson report in 1997 to act as an update of the Black Report. The aims of the report were, again, to summarise inequalities in health and make recommendations on how to tackle them. It concluded that socioeconomic inequalities in health remained significant and had, in fact, widened since the Black Report. The report went further by highlighting inequalities by other social statuses such as ethnicity and gender (113). Evidence for ethnic inequalities in health was cited from the Fourth National Survey of Ethnic Minorities (FNSEM), which found that ethnic minorities were more likely to report poor self-rated health than the White majority (114). However, recommendations from the Acheson report essentially addressed gender, ethnic and SES health inequalities as separate issues.

Despite its limitations, the recommendations were welcomed by the New Labour Government, which supported a number of interventions to tackle health inequalities (115). Examples included working tax credits to address financial deprivation, benefits to enable young people of low income to stay in full time education and community based initiatives to reduce the effects of persistent disadvantage, called Health Action Zones (116). The Marmot review, commissioned before the change of government in 2010, again highlighted the role of structural factors in generating health inequalities in the UK and recommended consolidating policies carried out in the light of the Acheson Report with a minimum income for healthy living (117). The report did, however, criticise current health inequality policies which focussed on proximal causes such as health behaviours and advocated for focusing more on the structural determinants that shape conditions of daily life. In terms of ethnicity, the report noted that poor health outcomes in some ethnic groups were associated with their SES, but for some groups their health was worse than what would be expected given their SES (76). However, a much needed intersectional approach was not taken.

At the time of the 2011 census, 19.5% of the population in England and Wales identified as an ethnic minority but this population was still very much concentrated in urban areas. In London, 55.1% of the population identified as an ethnic minority and 36.7% were not born in the UK (118). Ethnic minority groups still continue to do worse in employment (119) and housing (120) compared to their White British counterparts. Despite the numerous interventions to tackle social inequality by New Labour, the economic recession of 2008-2011 and subsequent austerity has meant that inequalities in wealth and incomes have also continued to grow (117).

The following sections will outline the importance of understanding urban contexts in health, where given the diverse population, an intersectional approach to this research is critical.

1.4.3 The importance of place

Each individual occupies a position that is embedded in a larger social structure and embodies social identities such as gender and ethnicity that arise through socialization processes (121). Hierarchy of status and consequent differentiation and discrimination affect access to resources, opportunity, status and power and create a dynamic structure in which macro processes affect micro conditions (122), which is modified by place. Each place has unique risk and resilience factors that influence processes of structural adversity (123) so although national policies may permeate a place, local organisations and communities will vary in their practices and beliefs and regulate the effects of structural adversity on health outcomes.

Changes in the socioeconomic and demographic landscape of urban areas since World War II have resulted in often stark inequalities within the same city (29). Highly affluent areas can often be in close proximity to the most deprived areas of a city. Inequalities in access to employment, housing and health services have led to the social inequalities that characterise modern cities. 54% of the world's population now live in urban areas (28). As urban populations continue to grow it is becoming increasingly important to understand the role of a city in shaping its population's health. Urbanisation processes are continually changing the fabric of a city, through industrialisation, migration, suburbanisation and gentrification and multiple factors at multiple levels work together to influence health. Sandro Galea's conceptual framework for urban health links these urbanisation processes with municipal level determinants and urban living conditions (30) (as described in section 1.1) in order to understand how adversity affects health in urban environments.

The link between urbanicity and increased mental disorder are among the most consistent findings in psychiatric epidemiology (124-126). Two main hypotheses have

been proposed to account for differences in urban-rural rates of mental disorder: the social causation hypothesis and the social selection hypothesis (127). The social causation hypothesis assumes that various environmental stressors that are often more common in urban areas, such as poor housing, life events and social isolation, cause illness whereas the social selection hypothesis argues that mental illness leads to downward trajectory in socioeconomic status (SES) (128). Both processes are thought to contribute to observed associations (129)

Cities are also characterised by their resilient nature. They can have positive as well as negative effects on health. For example, cities provide economic opportunities, often have more accessible health services (130) and better social networks for marginalised groups (131). At the same time, the fabric of the city is constantly changing with changes in economy and migration patterns. Although national surveys provide helpful insights, they may underestimate the magnitude of health problems in some communities. Inner cities often have different socio-demographic and socioeconomic composition. For example South East London, has a much larger proportion of both ethnic minorities and migrants in comparison to the national average (47). These groups have been shown to experience more trauma and discrimination compared to White groups and non-migrant, respectively. Ethnic minorities in a representative sample of the city of Detroit, USA, were shown to experience more trauma than their white counterparts (132) while those who migrate for asylum or political reason in a community sample in South East London (SELCoH) were at higher risk of reporting post-traumatic stress disorder compared to non-migrants (133, 134). Both ethnic minorities and migrants have also been shown to experience a higher prevalence of discrimination compared to majority groups both internationally (65, 135) and in South East London (136). As experience of both adversity and resources has shown to be socially patterned in urban environments (137) it is also important to understand the role of differing social status, disadvantage and marginalisation in the associations between adversity and health in urban contexts.

1.4.4 Intersectional approaches to health inequality

The concept of intersectionality can be traced back to Black feminist theory on the intersection of race and gender (138). Specifically, intersectionality is an 'analysis claiming that systems of race, social class, gender, sexuality, ethnicity, nation and age form mutually constructing features of social organisation' which shape peoples' lives (139). Individual identity is only formed in and through such social relations. According to intersectional theory, social identities do not independently influence health, but multiple identities create dynamic processes where resources and adversities combine to affect health interdependently (140). Therefore, considering multiple identities simultaneously is critical for comprehensively understanding health inequalities. Yet, there is a paucity of data in the UK on structural discrimination based on multiple identities. Each individual simultaneously occupies multiple social identities that are embedded in larger social structures; institutions are an integral part of social structures and embody social identities such as gender and ethnicity that arise through socialization processes (121). Social identities do not act independently of each other; they work together to produce inequality. Intersectional theory can be used to further understand the role of discrimination in health inequalities by multiple social identities.

In the UK, health inequalities are often interpreted through differences in social class or SES. Intersectionality theory argues for a more complex understanding of identity, social position and inequality (11). An intersectional approach offers a more nuance understanding of health inequality and the underlying power relations that are related to these inequalities. Although much research has been conducted on the aggregation of SES and social class indicators in the UK (67), health inequality research in the UK has recently been criticised for the omission of the intersection of race and ethnicity with SES in these studies (11). Although limited, health inequalities have been investigated by

multiple social identities. In Canada, results from a nationally representative sample, the Canadian Community Health Survey, found that South Asian women and non-heterosexuals from low SES groups were more likely to report fair or poor self-rated health (9). In the US, researchers used data from the National Survey of American Life to investigate differences in mental health outcomes within different Black groups. They found that Black Caribbean migrants had a higher risk for 12-month and lifetime psychiatric disorders compared to African-Americans (10). A mixed methods study in the UK found ethnic minority migrants more likely to experience racism than non-migrants from ethnic minorities in social care work settings (141). The study used data from the National Minimum Data Set for Social Care (NMDS-SC) and triangulated qualitative data from in-depth interviews with employers, employees and service users. It highlighted nationalism and language skills as possible mechanisms leading to such differences in experiences of discrimination (141). These findings highlight that combating health inequalities is likely to be ineffective unless we understand how multiple disadvantaged identities intersect to affect the nature of adversity and health outcomes (142).

The subjectiveness of identity and the complex nature in which different social identities intersect is difficult to capture in a quantitative measure. Recent methodological research on using intersectionality in quantitative health research have outlined a number of approaches (143). These include using stratification and cross tabulation (144), multilevel modelling (9) and latent class analysis (145). A criticism of stratification strategies is that they tend to concentrate on intersectional social identities that are multiple disadvantaged rather than mixed locations of disadvantaged and privilege (140). Latent class analysis is a promising methodology to use if one considers all intersectional positions to be of equal interest as it can be used to identify subgroups in a population that can occupy intersectional positions of both disadvantage and privilege. Another similar criticism is the lack of integrating both social identities (e.g. race, gender, social class) with systems of oppression (racism, sexism and classism) in intersectional

research. Without this integration using mixed methods, intersectional approaches in quantitative research could risk reinforcing the intractability of inequality and offer little in the way of effective intervention.

The preceding sections have outlined the importance of understanding health inequalities in urban contexts and the intersectional approaches that are needed to do so. The following sections will outline the role of structural adversity in perpetuating these inequalities.

1.4.5 Adversity and health

As stated in the study overview, adversity or stress is often defined as conditions of threat, challenge, demands or structural constraint, which may or not be threatening to a person's health depending on available resources (14). Research during World War II first suggested that extreme environmental adversity experienced during combat could produce serious mental disorder (146). Interest in the role of adversity in the aetiology of psychiatric disorders increased in the post war period. There was a movement away from biological and genetic explanations for poor mental health towards social and environmental mechanisms. Researchers in this period hypothesised that adversity was a major cause of poor mental health and that sick and disorganised societies produced sick and disorganised citizens (147, 148).

Life events are important representations of adversity and individual stressors. These can include extreme situations such as natural disasters and war, as well as more frequently occurring events such as the losing a job, a death of a loved one or being the victim of physical abuse. The first study to incorporate a number of different stressors was conducted by Holmes and Rahe (22) who defined the term 'stressor' to represent demand from environmental, internal or social origin which causes an individual to adapt their usual patterns of behaviour. Their Social Readjustment Rating Scale (SRRS); a checklist of 43 life events was used to link adversity to poor health. Whereas these early studies provided descriptive epidemiological evidence of the association between adversity and poor health, an explanatory model was still lacking.

Much needed explanatory models of the relationship between adversity and poor health were provided by Pearlin's stress process model (24) and Lazarus and Folkman's descriptions of the 'stress reaction' (149). The 'stress reaction' describes the physiological and emotional responses as a result of perceived exposure to adversity.

Pearlin further conceptualised the stress process by linking three domains; the source of adversity (including major life events and chronic stress), the mediators of adversity (including coping and social support) and the manifestation of adversity (both physical and mental ill health). For instance, the experience of an adverse life event can have direct effects on health but may also create secondary stressors (e.g., losing a job leads to economic strains that are experienced as chronic stress) (21). When faced with such adversities, individuals can also draw on different resources to mediate its impact on health. For example, coping mechanisms can mediate the effects of a stressful situation, changing the perception of an event or management of symptoms of stress. Indeed, it has been suggested that the association between adversity and poor health outcomes is dependent on the individual's perception of the adversity (150), in that, the same event may be stressful to one person but not the next. More recently, studies have investigated the possible biological mechanisms for stress processes. Inflammation linked to physical health outcomes, such as cardiovascular disease and type 2 diabetes have been shown to be directly stimulated by stressful experiences and negative emotions (151). Uncovering how stress activates biological mechanisms to impact on health is an important line of investigation in stress research. However, these mechanisms do not consider the importance of social disadvantage and should not deflect from important social approaches.

Adversity and stress are not random occurrences. Events arise from the enactment of social roles and relationships as they relate to an individual's social identities (57). Exposure to adversity is associated with an individual's hierarchical position based on the value of different social identities, such as SES, ethnicity and migration status. This is supported by a large body of empirical research which provides evidence of the social patterning of adversity; low SES and male gender are consistently associated with increased exposure to life events but findings in the research literature for both ethnicity and migration status are mixed (137). Findings from a community health study in the city

of Detroit, USA, found White groups to report more stressful life events than Black groups (152) However, in a later study, also based in Detroit, greater exposure to violence was found in ethnic minority groups compared to White groups (132). Past research has also shown that asylum seekers and refugees experience more traumatic stressful life events (133) and that migrants may also experience post migration adversity, such as legal difficulties in their right to remain in a host country (135). This research provides evidence of the differential exposure to adversity based on various social identities. However, there is limited data on the distribution of adversity based on the intersection of different identities (153). Intersectional social identities need to be examined at each stage of the stress process as determinants of exposure to stress, coping resources and their relation to health outcomes.

Cumulative exposure to adversity across the life course has been associated with psychological distress (154, 155). Furthermore, measuring adversity more comprehensively by measuring life events, chronic stress and trauma explains more variance in psychological distress (156, 157). When adversity is measured cumulatively, marginalised groups, such as ethnic minorities and low SES groups are found to experience more stress (157, 158). For example, a random sample of 1264 participants from public schools in Miami, USA, found that measuring life events alone (without chronic stress) substantially underestimated differences between African-American and White groups and between low SES and high SES groups (157). Consequently, cumulative adversity has been shown to partially account for both socioeconomic (157) and ethnic (159) health inequalities. These studies provide evidence for the relationship between these types of adversity and health and their role in perpetuating health inequalities but other types of stress are also important. Incorporating discrimination stress and anticipatory stress into cumulative adversity could also further account for health inequalities while processes of structural discrimination may also be an explanatory factor for the social patterning of primary stressors.

1.4.6 Discrimination as adversity

At the interpersonal level, discrimination can be defined as the unequal treatment of persons or groups on the basis of assigned social identity (160) yet discrimination refers to all means of expressing and institutionalising social relationships of dominance and oppression (161). At the structural level, it refers to both (*a*) the policies and procedures of dominant institutions and the behaviours of persons who control these institutions and implement policies that purposely have differential effects on groups depending on their social identity (162) and (*b*) policies or practices that contribute to systematic disadvantage in unintended ways (163). These structural level biases result in limited access to social and economic resources while individual level bias relates to the quality of interpersonal interactions. However, most research on the effects of discrimination has been focused at the interpersonal level where it has been shown to have a direct effect on health outcomes throughout the life-course, and to play an important role in affecting inequalities in health (62). Yet, the lived experience of discrimination is much more complex as discriminatory processes take place at both the interpersonal and structural level. Experiencing discrimination in an institutional setting is likely to encompass both forms of discrimination and can influence health through several pathways. For example, through restricting access to services (164), lower quality services (165) and as psychosocial stress (84).

Discrimination can be experienced in different forms (e.g. racism, sexism, and classism). However, the effects on emotional responses has been shown to be the same whether the discriminatory experience was attributed to race, gender, class or any other reason (166). Attributing an experience of discrimination to a single social status may be problematic. On the one hand, an experience of discrimination may be perceived to have taken place for several reasons (particularly if that individual occupies multiple disadvantaged identities), yet often an individual may perceive they have been treated unfairly but are not able to attribute it to a particular reason. Anti-discrimination laws and

shifts in public attitudes towards minority groups have changed the ways in which discrimination is expressed and enacted. Current forms of discrimination are likely to be more implicit, which make discrimination all the more difficult to recognise, measure and challenge. Most importantly, evidence also suggests that it is the perception of unfair treatment rather than the perceived reason for the treatment that is detrimental to health (65).

Discrimination effects on health are predominantly assessed using scales measuring subjective experiences of discrimination. These scales have mostly been designed to investigate discrimination based on race but many have been adapted to measure discrimination based on a wider selection of attributes. One of the only scales to use neutral terminology is the Everyday Discrimination Scale (159) and is among the most widely used scales in epidemiological research on the effects of discrimination on health. No scale will be able to capture all experiences of discrimination due to experiences that individuals are not aware of and the reporting of events may be affected by underreporting (161). Major experiences of discrimination in institutions have been mainly studied using single item questions e.g. being unfairly fired from a job or being harassed by the police. In the UK, most research at the institutional level has been aimed at the domain of employment (6). However, some studies have also measured a number of major experiences in the same study (65, 84).

The main criticisms of these subjective measures are over-reporting, reverse causality and interviewer effect. Firstly, as it is the perception of discrimination that acts as a stressor, over-reporting (e.g., perceiving discrimination where there was no discrimination) may not necessarily be a problem. Moreover, groups most affected by discrimination may be the least able or willing to report it. This is supported by evidence that people typically report more discrimination for their group than themselves (167) and several studies have noted that there is a linear association between discrimination and health in high SES groups but a ‘U’ shaped association in those with fewer resources.

For example, the risk of poor health in minority groups who reported no discrimination is similar to those who reported high exposure to discrimination (168). These studies therefore suggest that self-reported discrimination may actually be underreported in marginalised groups leading to an underestimation of the effect of discrimination on health and health inequalities. Secondly, reverse causality argues that individual who are ill may report more negative experiences and discrimination. However, recent research which has found discrimination is also associated with early, pre-clinical indicators such as coronary artery calcification (169) and inflammation (170) provide evidence against this hypothesis. Recent research from this sample was also able to control for prior CMD in the relationship between discrimination and current CMD, supporting the direction of causality (136). Lastly, another important factor in measuring discrimination in surveys is the potential of interviewer effects. Recent research from the United States has suggested that Black participants are reluctant to reveal their true experiences of discrimination when talking to White interviewers (171-173) while in the UK, previous studies have suggested that discrimination may be a difficult topic to discuss, resulting in underreporting of perceived discrimination (174) .

Many studies have recorded levels of discrimination in the US (175). For example, the Midlife Development in the United States (MIDUS) survey, a national telephone-mail survey of 3032 participants, reported a prevalence estimate of 36% for lifetime exposure to any major experience of discrimination for the full sample and 75-90% for lifetime racial discrimination in Black groups (65). In the UK, prevalence estimates of discrimination have been reported by ethnicity; 12% of ethnic minority participants in the Fourth National Survey of Ethnic Minorities reported experiencing racially motivated verbal abuse and 36% reporting lifetime experience of having been refused a job or being treated unfairly at work in regards to a promotion (6). In South East London, discrimination was most prevalent among those in the Black Caribbean group but the prevalence of major experiences of discrimination was also notably high for other ethnic

minority groups including Black African, Mixed ethnicity and White Other (136). The population character of South East London differs from that of the national. Whilst national studies, such as the National Survey of Ethnic Minorities, have reported on the health outcomes of those who identify as Caribbean, Indian, Pakistani, Bangladeshi and Chinese, the SELCoH study has data on a sizeable Black African and White Other group which have previously been unrepresented in health inequalities research in the UK (136).

Religion is often conflated with ethnicity in the UK and many markers used to discriminate against ethnic groups are identical to those applied to religious groups, therefore making it difficult to separate these forms of discrimination (176). National data from the APMS survey in England, reported that the prevalence of religious discrimination was particularly high for those who identified as Muslim or Jewish, 17.1% and 15.4%, respectively (177). Likewise, research using data from the European Social Survey found migrants across Europe have reported high levels of perceived group discrimination, with higher rates among those who speak minority languages at home (178). Similarly, higher prevalence of employment discrimination was reported by migrants than non-migrants in South East London using data from the SELCoH study (136). There is scarce research on the prevalence of discrimination based on SES. 4.9% of individuals in the MIDUS study in the US attributed their experience of unfair treatment to social class (65). In the Netherlands, increased odds of perceived discrimination were observed in low SES groups using data from the Dutch Longitudinal Internet for the Social Sciences Panel, a sample which identified as predominantly White Dutch (179). Given that lower SES groups may perceive themselves as marginalised compared to high SES groups, discrimination may be an important factor in explaining socioeconomic inequalities in health (180). The marginalisation of minority groups, including ethnic minorities, migrants and low SES groups leads to fewer education and employment

opportunities, poorer housing conditions and reduced quality of care in health services (181, 182). Whether direct or indirect, discrimination is associated with poor health.

Evidence from recent systematic reviews has reported that perceived discrimination based on a number of attributes to be associated with psychological distress, reduced mental wellbeing (175, 183) and poor physical health (184, 185). In the UK, racial discrimination has also been shown to be associated with poor physical health (186), decreased mental wellbeing (186) and CMD (187). However, the results also suggested that there were differences in the experiences of specific ethnic minority groups. In a stratified community health study based in Leeds, UK, those who identified as Black experienced more discrimination than Indian or Pakistani groups and that discrimination was associated with depression and anxiety (187). However, discrimination in this study referred to harassment only. Results from the Adult Psychiatric Morbidity Survey 2007 also found that discrimination based on religion was association with CMD and the experience of discrimination due to religion varied by ethnic group (177). However, it should be noted that there were only four ethnic groups (White, Black, South Asian and Other) and the Black group was relatively small. The relationship between poor health outcomes and discrimination based on sexuality (82) and having a mental illness (188) is also well documented. There is relatively little research on the role of SES or social class discrimination on health. A recent study of young people in New York State, USA, using mediation analyses suggested that 13% of the effect of poverty on health can be explained by perceived discrimination (180). At the same time, many recent studies have found an association between reporting of racial discrimination with higher levels of education, such as the longitudinal coronary artery risk development in young adults study (CARDIA) in the USA (189). This suggests that the relationship between ethnicity and discrimination is further complicated by the intersection of SES.

Much of this research only looks at the relationship between discrimination and health by single social identities, which may miss important within group variation of minority

groups and does not take into account the importance of intersectional social identities. However, there are a few notable exceptions. For example, using data from the MIDUS study, USA, multiple disadvantaged status has been associated with experience of psychological distress and poor self-rated health in comparison to those with singular disadvantaged and privileged status and that this association is partially mediated by experiences of discrimination (190). Although a very important finding, the additive nature of the analysis focuses on multiple disadvantage only rather than mixed locations of disadvantage and privilege.

In order to measure discrimination more comprehensively it is necessary to include additional dimensions of discrimination. The anticipation of future discrimination or perceived threat of discrimination may have important links to health through both psychological responses and utilised coping strategies (191). The perceived threat of discrimination can involve prolonged periods of worry and rumination which can lead to dysregulation of both emotional and physiological functioning and elevated risk of poor health (192). Additionally, these processes may also result in the avoidance of certain situations and public services, limiting access to employment, housing and health opportunities (193, 194). Although, the perceived threat of discrimination is likely to occur more often in those who experience higher levels of discrimination, anticipated discrimination may also be based on the experience of family members and those who share minority status (194, 195).

Anticipated discrimination has been shown to be associated with poor health outcomes (196, 197). A national sample of adults in Sweden found that migrants reported more anticipated discrimination in employment (particularly migrants from African countries) and that anticipated discrimination was associated with poor self-rated health (196). Findings from the Exploring Health Disparities in Integrated Communities (EHDIC) study of adults residing in a Baltimore neighbourhood, USA found that Black groups had higher levels of anticipatory stress than their White counterparts. In addition, higher levels of

anticipatory stress was associated with depressive symptoms and partially accounted for ethnic inequalities in depression (197). Another US community study, the Chicago Community Adult Health Study, also found anticipatory stress to be associated with increased odds of hypertension in Black and Hispanic groups but not in White groups (198). This association remained even after adjusting for experienced discrimination and hypertension risk factors suggesting that anticipated discrimination may impact on health independently of experiences of discrimination.

Although anticipated discrimination has been shown to be an important factor in understanding the relationship between adversity and health there is little research on this topic in the UK. Similar to the national study in Sweden, findings from the Fourth National Survey of Ethnic Minorities in the UK found that the perception that most employers were racist was associated with poor self-rated health and high blood pressure (6). Perhaps a better measure of anticipated discrimination also measures response to such perceptions. The SELCoH study goes further by asking participants if anticipating discrimination has stopped themselves from applying for work or accessing services. Using data from the SELCoH study, anticipated discrimination was found to be more prevalent in ethnic minorities compared to White British groups and in recent migrants compared to non-migrants while also being associated with CMD (136). More evidence of the relationship between anticipated discrimination at the structural level needs to be documented in the UK and contextualised with other forms of adversity.

1.4.7 Adversity and institutions

Although structural factors have been acknowledged in the literature, most research has tended to place greater emphasis on behavioural mechanisms such as health behaviours and coping strategies (63). These mechanisms may have received more attention due to the perception that they are relatively easier targets for intervention compared to more distal factors. Whilst proximal factors are important to understand and interventions at this level may have some benefit, distal mechanisms, such as structural discrimination are likely to hold more explanatory power for understanding poor health and interventions at this level may be more effective at tackling inequalities. As described by Link and Phelan, structural factors embody access to important resources and affect multiple health outcomes via multiple mechanisms. In result, the association between structural factors and poor health remain even when proximal mechanisms change (55).

In order to investigate how structural adversity is enacted and impacts on health it is important to understand the role of institutions. Structural discrimination exists in policies and institutions (163) and, in turn, it permeates society through policy and practices and shapes social context on a national, local and individual level. Understanding the effects of structural adversity, including structural discrimination, on health requires a multilevel analysis. In this context, a multilevel analysis refers to investigating how structural discrimination is enacted in institutions dealing with such areas as housing, employment and health (199). However, there has been limited focus on uncovering the underlying macro-level drivers of health inequalities, such as government policy and economic systems, that produce structural discrimination (27) and understanding the effects of structural adversity and how they interrelate across key life domains (56).

The interface of institutional services is where macro processes, such as societal attitudes directly influence the interactions between individuals and institutional actors. This interface needs careful attention as it is micro level interactions between individuals and institutions where policy meets practice and where inequalities are generated and experienced, which, in turn, reinforce macro-level inequalities affecting disadvantaged groups over time (23). Institutional workers are the enactors of policy and mediate access to resources which are shaped by institutional pressures from above and service user expectations from below (200). There are few studies that use a qualitative design to understand how individual-institutional micro-level interactions at the local level interplay with macro-processes to affect inequalities in wellbeing and health. A recent review has argued that ethnography should be used alongside quantitative methods to document complex social processes (201). Ethnographic methods have been used in a number of organisational settings to describe the somatisation of macro social conditions within the individual and the nature of structural discrimination in more detail. For example, an ethnographic study of front line workers in non-governmental organisations in Louisiana, USA, illuminated the nature of the structural discrimination their clients faced in the wake of Hurricane Katrina and how this impacted health outcomes (201). Ethnographic methods were used in a study of employment adversity and health in Mexican migrant workers in California, USA, to highlight the role of hierarchies based on ethnicity and citizenship in employment and their effects on health (202). Such detailed data collected using ethnographic methods can be used to develop more in-depth explanations for quantitative associations (203).

As described above, the macro processes that generate inequalities need to be investigated in institutional contexts. Capitalism is an inherently unfair economic system that is built on the exploitation of natural resources and human labour and drives social inequality (108). Inequalities in housing, health and education are all determined by the wage structure under capitalistic systems. The UK welfare state was designed to curb

the excesses of capitalism and tackle these inequalities, yet under recent neoliberal government policy they have increased (93). Both societal attitudes and media portrayals of marginalised groups help to support both a neoliberal framework and immigration policy (204). Public policy across many domains offer different living experiences based on different social identities, with negative experiences affecting those of greater economic or social vulnerability. These effects may be particularly salient at certain life course transitions, such as early childhood and entering the employment or housing market (205). In turn, poor health outcomes are also linked to social contexts shaped by the macro-level drivers that produce poverty, adverse life events and neighbourhood instability (206). The following sections outline structural adversity across the domains of employment, housing and health services that impact health and the distribution of these experiences by social statuses.

1.4.7.1 Employment

A recent review commissioned by the British Academy detailed consistent evidence of the negative effects of employment related stress on both physical and mental health (207). The review also outlined that the recession of 2008-09 has increased the prevalence of employment adversity, impacting on both employment levels and job security. Employment markets are arguably a principal source of social inequality. Both unemployment and job insecurity are linked to poor health outcomes (208-211) and their distribution by both SES and socio-demographics are also well documented (212-214).

Unemployment

A recent systematic review confirmed that unemployment has been associated with poor health in a number of studies (215). The prominent role that unemployment plays in health inequalities has recently been highlighted in recent national studies in England. Research using data from the APMS 2007 found risk of CMD to be significantly greater in those who were unemployed and the risk of CMD increased in those who had been

unemployed for three years or more (216). Using data from the Individual Sample of Anonymised Records (a 3% sample of the 2001 UK Census) unemployment accounted for 81% of inequalities in poor self-rated health between high SES and low SES groups (17). Proposed mechanisms for the association between unemployment and poor health include; stress caused by job loss (15), financial strain and heightened vulnerability to other life events from ongoing unemployment (217), loss of psychosocial benefits of working, such as activity, time structure and social contact (218). Notably, research on unemployment and health has been criticised for not investigating how these associations differ by different social statuses, instead of study populations as a whole (215). According to the 2011 Census, there are large differences in the unemployment rates by ethnicity. Particularly high levels of unemployment were seen in Black African (17%), Black Caribbean (16%), Other Black (20%), Mixed White and Black Caribbean (16%) men and in Arab (19%), Bangladeshi (19%) and Black African (17%) women (219). Higher rates of unemployment in the UK are also seen in migrants (220) and those with lower educational attainment (221). Disadvantaged groups and minorities are not only consistently under-employed but they are also systematically hired into more tenuous and hazardous positions (212).

Job insecurity

Changes in employment markets and nature of work have led to increases in employment flexibility, temporary contracts and job insecurity (a worker's perception of fear of job loss or job instability) (207, 210). Temporary employment or job insecurity is now considered a social determinant of health with research consistently showing a relationship between job insecurity and poor mental health (212). A recent review has documented consistent evidence that workers in lower SES positions are exposed to more job insecurity in comparison to those in higher SES positions while both ethnic minorities and migrants have also been shown to be exposed to greater job insecurity (212). Both unemployment and job insecurity have been investigated as important

stressors in health research but these primary stressors have not been investigated alongside secondary stressors, such as experienced and anticipated discrimination within the same study in the UK (222). In addition, few studies have integrated structural (macro), institutional and individual (micro) level determinants of employment related health inequalities within the same study (210, 223).

Employment Related Discrimination

Discrimination is an important structural determinant of both unemployment and job insecurity. Experimental studies have been highlighted in recent reviews documenting employers' negative responses towards applicants based on a number of social identities including race or ethnicity (181) and migration status (224). For example, in a field experiment in the US, fictitious resumes were sent in response to job adverts posted in Boston and Chicago newspapers, with each resume assigned a very African American sounding name or a very White sounding name. The experiment found significant evidence of racial discrimination, with those with White sounding names receiving 50% more call backs for interviews (225). Understanding employer attitudes towards migrants is often complicated by race and ethnicity. In a recent experiment based in a large Canadian University, discrimination was observed towards Black South African migrants but not White South African migrants or Black Canadians in making hiring recommendations (226). A recent survey of over 1000 large UK employers commissioned by the Institute of Leadership and Management suggested that those who have been out of work for more than 6 months are viewed less favourably, with 30% of employers admitting that they would hesitate in hiring someone who was 'long-term' unemployed (227).

In the UK, 37% of respondents from the Fourth National Survey of Ethnic Minorities believed that more than half of British employers would refuse someone a job on the basis of ethnicity or religion (6) while in the US, a recent review pointed out that wages

for both African-American and Hispanic groups continue to be well below the level of White groups (181). Lack of ethnic parity in employment (228) and wages has existed in the UK for several decades (60, 229, 230) and amounts to gross discrimination. These experiences of discrimination not only deny groups fair access to employment opportunities and parity in employment conditions they also act as a secondary stressor on individual health. Discrimination in employment has been associated with a range of negative health outcomes, such as psychological distress (6, 231), anxiety and depression (232). In the Ethnic Minority Psychiatric Illness Rates in the Community (EMPIRIC) study, the prevalence of employment discrimination was associated with common mental disorder, with the highest prevalence of such discrimination in the Black Caribbean group (232).

1.4.7.2 Housing

The link between both adverse housing experiences, such as discrimination (233, 234) and homelessness (16, 235), and poor housing conditions (18, 236, 237) with poor health and wellbeing are well established. A recent report using data from the English Housing Survey (EHS) also highlighted the impact of both housing insecurity and poor housing conditions on mental health (238). However, the focus of adverse housing experiences in health research is narrow, often looking at street homelessness rather than the wider experience of homelessness that are inclusive of more temporary forms of accommodation (239).

The SES of households tends to vary between tenure types, largely reflecting the forces of broader social and economic selection into those tenures. While mental health has been found to vary significantly between tenure types, once tenure population differences were taken into account in a Australian household survey, the Household, Income and Labour Dynamics in Australia study, there is little evidence of an intrinsic relationship between tenure and mental health (240). Many groups are excluded from

homeownership and the associated material and psychosocial benefits (241) while the insecure nature of renting has also been linked to poor health (242). However, the relationship between renting and poor mental health was attenuated after adjusting for potential confounders in the Whitehall II cohort study, which suggested that housing quality was more important, particularly in explaining older people's health (243). In addition, minority ethnic groups are disproportionately concentrated in poorer quality rented accommodation (1) while young single men have been identified as being at particular risk of homelessness in a National survey on homelessness in the USA (244).

Housing Discrimination

Many people are also excluded from the housing market due to discrimination. Residential segregation based on race and ethnicity is the most widely studied outcome of structural discrimination (245), and has been linked with both negative physical and mental health outcomes in a recent review on discrimination in the US (181). In a qualitative study in East and South London, Somali refugees reported residential instability caused by violence and racial abuse (246). In the US, extensive audits conducted by the Department of Housing and Urban Development found that African-American and Hispanic groups experienced discrimination in home searches, with less information offered on properties, fewer opportunities to view and higher rejection rates for mortgages compared to White groups with similar credit profiles (247). There is also evidence of housing discrimination against ethnic minorities, migrants and benefit recipients in the UK. In an experimental study of discrimination in the London rental market, applications with African or Arabic names were 15% and 20% less likely to be invited for a viewing, respectively (248). Landlords and letting agents have always been discriminatory towards those in receipt of housing benefit, with 'No DSS' signs a frequent reminder in agent windows and it is argued that recent caps to housing benefit in 2013 have only increased these sentiments (249).

1.4.7.3 Health services

Although the National Health Service (NHS) is free at the point of access for all UK citizens there are still inequalities in access to secondary services and quality of care. Low SES groups have been shown to have more problems in both accessing and navigating health services in the UK. This was first described in the National Health Service (NHS) as the inverse care law, which describes that ‘the availability of good medical care tends to vary inversely with the need for it in the population served’ (250). This law has mostly applied to the geographical variation in healthcare supply with mixed findings. Research which adjusts for health need has found less service u in deprived areas in support of the inverse care law in some studies (251) while no associations were found in other studies (252).

Being an ethnic minority is associated with lower mental healthcare utilisation in the UK. For example, research has found Black and South Asian groups to be less likely to contact their GP regarding their mental health after controlling for SES and symptom severity using data from APMS (253). Within services, ethnic minorities have been shown to receive different care. The US National Hospital Ambulatory Medical Care survey found that ethnic minorities were less likely to receive adequate pain medication compared to their White counterparts among patients visiting Emergency departments with conditions with standardised pain management guidelines (254). Two comprehensive reviews on ethnic variations in mental healthcare in the UK have documented evidence that Black groups experience more adverse pathways, particularly those who identify as Black Caribbean (255, 256). The evidence is more mixed for migrants. Recent migrants have been shown to be less likely to be registered with a general practitioner (GP) in South East London (8). Nationally, recent migrants were also shown to be less likely to be registered with a GP, as measured through record linkage with the Personal Demographic Service database (8, 257) than non-migrants. Additionally, migrants were shown to be less likely to use secondary health services than

non-migrants by also linking data from the National Strategic Tracing Service (NSTS) and Hospital Episode Statistics (HES) data (258). In contrast, a recent study of a south east London community found no differences in service use between migrants and non-migrants using self-reported data (8).

However, a recent meta-synthesis of healthcare access in the UK concluded that health service utilisation is a problematic measure for assessing equality in health access due to the multiple complex processes for receipt of healthcare, with the authors suggesting these processes to be better conceptualised through candidacy (259). Candidacy describes 'the way in which people's eligibility for medical attention and intervention is jointly negotiated between individuals and health services' (259). This includes differences in perception of health, ability to navigate services, power dynamics and professional judgments that contribute to vulnerability in disadvantaged groups. An ethnographic study of diabetes care in the US also described the numerous ways in which SES influenced clinical interactions and led to poorer health outcomes for low SES patients (260). A more recent meta-synthesis of the problems disadvantaged groups face in accessing mental health in primary care also suggested a role for previous negative experiences and anticipated discrimination(261).

Discrimination in Healthcare

Refugees and asylum seekers have reported experiencing discrimination in health care (246), as have ethnic minorities (262) and older groups (263). In the UK, results for the Real Voices Survey reported that 49% of ethnic minorities had experienced discrimination in healthcare and 60% felt that current mental health services were not culturally sensitive (264). In a London based qualitative study of experiences of patients diagnosed with psychosis, Black Caribbean participants were more likely to attribute distress to racism in psychiatric services and society whereas white participants were more likely to attribute perceived discrimination to their mental illness (265). Poorer

treatment of Black Caribbean patients in mental health services is also well documented. This group is more likely to be admitted against their will (266) and less likely to stay engaged with services (267). Qualitative research commissioned by a local Health Action Zone in South East England found that expectation of unfair treatment in mental health services discouraged Black groups from accessing these services (268). A recent meta-synthesis also reported that low income groups also anticipate discrimination in healthcare, perceiving public services as a source of distrust and a risk to health and wellbeing (261, 269). A qualitative study of individuals seeking healthcare in deprived areas across the UK found that interactions with professionals can result in feeling judged, losing resources and a perception of increased surveillance which can lead to adverse consequences of vigilant coping and underuse of services (269).

1.4.7.4 Interrelation of domains

Adversity is a dynamic process where different types of stressors interrelate across domains. For example, someone who only has a temporary contract or is job insecure may experience financial strains which impact on housing opportunities and conditions. To fully understand how adversity affects health the interrelation of adversity across domains should be investigated.

1.4.8 Coping with adversity

Experiences of adversity may lead individuals to engage in different coping strategies to manage their stress (149). These strategies may differ depending on the situation and may include attempts to reduce, accept, avoid or master adversity. Two of the most commonly studied types of coping strategies are active coping and avoidance (or passive) coping (184). Active coping refers to behavioural and cognitive attempts to deal with adversity e.g. talking to the source of adversity or praying (270) whilst avoidance coping refers to avoiding the problem e.g. through self-distraction or substance use (271). Individuals tend to use a variety of coping strategies, but adversity that can be

changed or controlled tend to be associated with active coping while adversity that is seen as insurmountable tend to elicit more emotion focused strategies such as avoidance coping (272).

As with structural adversity and life events, coping strategies are also socially distributed (137, 273). Those individuals who are more vulnerable to experiencing adversity are also less likely to have resources available to them, in terms of social support, self-esteem or efficacious coping strategies to negate the negative impacts of adversity (156). A review of coping strategies and their relation to both SES and health described that high SES groups engage in more active coping than low SES groups (274). In a study of help-seeking attitudes and coping strategies of first year students in a large US university, ethnic minorities have been shown to report more avoidance coping (275). Experiences of discrimination has been linked to increases in this type of coping (276) as some individuals may have strong motivation to ignore certain types of discrimination but be more hypervigilant of others (273). Spiritual coping has been reported to be largely beneficial to health (277) and using data from the National Survey of American Life (NSAL), spiritual coping was shown to be more common in ethnic minorities (278). Both alcohol use and smoking have been found to be poor strategies to cope with stress (279) and as in other studies alcohol use is more prevalent in high SES groups (134) while smoking is more prevalent in low SES groups (280). Such differences in the distribution of coping strategies are likely to have an effect on how adversity impacts on health inequality.

Coping strategies can have protective or adverse effects acting as mediators in the association between adversity and health. For example, avoidance coping can be effective in blocking negative mood effects of perceived discrimination. However, frequent use of avoidance coping can lead to chronic risk behaviour, such as smoking, hazardous alcohol use and illicit drug use (184), which can have negative effects on health. Active coping has generally been found to have positive effects on health (281,

282). Active coping in the form of talking to a friends or family has been shown to reduce the association between job loss and physical illness in a community survey in a sample of a high unemployment area in Michigan, US (217), whilst experiences of unemployment have also been associated with increased smoking and problem drinking, even after adjusting for SES (283) in the longitudinal British birth cohort study (NCDS). Using data from the Southeastern Pennsylvania Household Health Survey, both poor living conditions and living in an unaffordable home are associated with increased odds of smoking (284). The type of coping strategy used will depend on the tractability of the problem, which may also influence a person's decision to access other sources of support.

An individual experiencing adversity may also access support through community networks, community organisations or local institutions. Coping through accessing community networks is argued to be critical to group identity formation and form collective interest to tackle structural adversity experienced by marginalised groups (285). Yet, structural adversity itself can create a barrier for group identity formation, often reinforcing social exclusion and stigmatization. In a UK qualitative study on community participation in African Caribbean groups, participants stated that a lack of unity at the community level was a distinct disadvantage and furthered their social exclusion and that there was a lack of motivation to nurture these networks (262). All communities have the potential to express and revise the meaning of their adversity as a form of resilience, healing and social recovery (286). Further research is needed to understand barriers to forming networks that can empower communities to tackle adversity.

Community organisations and institutions represent a number of coping resources to be accessed by individuals experiencing adversity. However, for an individual to best access these resources, they must feel a sense of belonging in order to express themselves and gain the support that they need. In absence of this, an individual may

feel excluded from such support and may seek support from a more specialised community organisation or institution depending on what they see their primary community to be (287). Whether an individual accesses generic or specialised services, communities and institutions allow for greater organisation to tackle underlying structural mechanisms that perpetuate inequalities through adversity (288).

1.5 Chapter summary

This chapter has provided an overview of how structural adversity impacts health outcomes and the disproportionate effects they have on those with disadvantaged social identities. Due to the very limited focus on the effects of different types of structural adversity on health outcomes in the UK, this thesis will consider the impact of both within the same study. Specifically, I will examine what associations exist between structural adversity and health across the domains of employment, housing and health within a diverse community in South East London. Understanding the effects of structural adversity requires a mixed-method multilevel analysis which focuses on multiple domains and uses intersectional theory to understand the disparate effects by multiple social identities.

The broad aims of the thesis are:

A1.1 To estimate the prevalence and distribution of structural adversity across the domains of employment, housing and health services and to examine relationships between these adversities and health and wellbeing

A1.2 To explore the everyday experiences of individuals within employment, housing and health institutions in South East London in order to understand why certain groups experience more structural adversity within these domains, how this is enacted in institutional settings and how individuals are affected and respond to this adversity.

The next chapter provides an overview of the methods used in this thesis, including the rationale for using a mixed methods approach, as well as describing both the quantitative and qualitative methods used in detail and how they were integrated comprehensively.

Chapter 2 Methods

2.1 Research design

2.1.1 Introduction

The preceding chapter of this thesis has highlighted important gaps in our understanding of the effects of employment, housing and healthcare adversity on health. As proposed in Chapter 1, the application of mixed methods to the investigation of health inequalities presents a promising perspective from which to address these gaps. Focusing on the important gaps in the literature and building on the recommendations identified in the literature review, a mixed methods study was designed and conducted to attain a comprehensive examination into the effects of adversity on health in South East London.

The aim of this chapter is to provide:

1. An overview of the research design employed in this mixed methods study. This will include sections that outline the aims and objectives of the study, the rationale for using mixed methods, and a description of the sequential explanatory design employed.
2. A description of the quantitative research methods, including details of the quantitative design, survey data, key variables and data analysis strategy involved.
3. A description of the methods employed in the design, collection and analysis of the qualitative data. Including details of both the ethnographic and in-depth interview components.

2.1.2 Research aims and objectives

The two main objectives of the study are as follows (i) to estimate the prevalence and distribution of adversity across the domains of employment, housing and healthcare and to examine relationships between indicators of adversity and health and wellbeing; and (ii) to explore the everyday experiences of individuals within employment, housing and healthcare institutions in the UK in order to understand why certain groups experience more adversity within these domains, how this is enacted in institutional settings and how individuals are affected by and respond to this adversity.

2.1.2.1 Hypotheses

Figure 2.1 presents a basic analytical model. Adversity affects health across multiple domains and by multiple social identities. Health outcomes under study include symptoms of common mental disorder (CMD), mental wellbeing and self-rated health. The following hypotheses will be tested (specific hypotheses for each domain are presented at the beginning of each results chapter):

2.1.2.1.1 Describing adversity

Quantitative hypotheses

1. Exposure to adversity will be greater among those with disadvantaged social identities (e.g. ethnic minority groups, migrants, lower socioeconomic status (SES) etc.)
2. Exposure to adversity will be greater among those with multiple disadvantaged identities (e.g. being a migrant and of low SES)
3. The distribution of adversity across social identities will differ depending on the domain of adversity (e.g. employment, housing or health)

Qualitative inquiries

1. Why are certain groups at more risk of experiencing employment, housing and healthcare adversity?
2. How is adversity enacted and experienced within institutional spaces?

2.1.2.1.2 Describing health outcomes

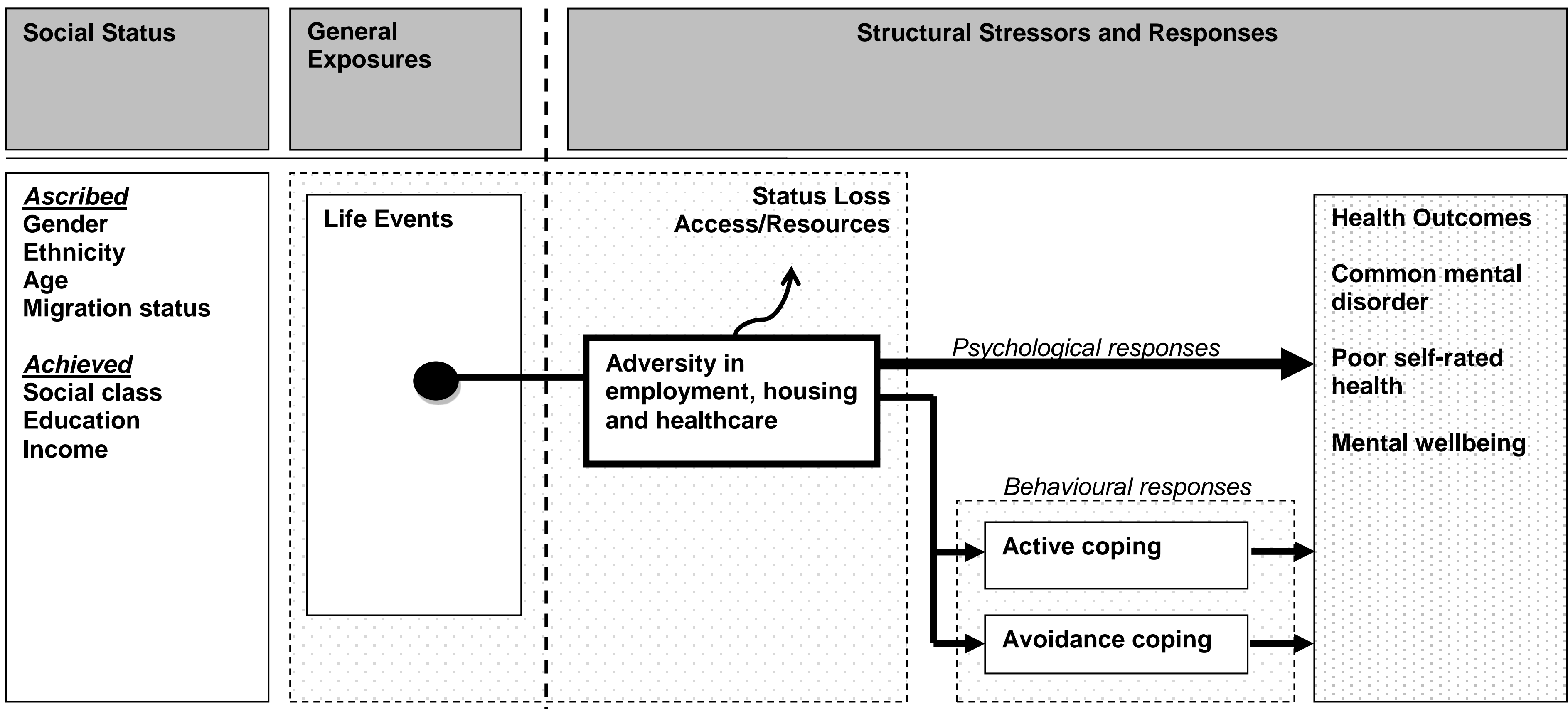
Quantitative hypotheses

1. Individuals who report more exposure to adversity will report more symptoms of CMD, lower mental well-being and poorer self-rated health.
2. Individuals who report more exposure to adversity will report more avoidance coping strategies and less active coping strategies
3. Coping strategies will act as mediators but will only partially attenuate the independent associations between adversity and health outcomes.
4. The association between adversity and health outcomes will remain after entering potential confounders (sociodemographic indicators, socioeconomic indicators and life events), although these will partially attenuate any association.

Qualitative inquiries

1. What are the psychological and behavioural responses to experiencing adversity in individuals and how do these affect health?

Figure 2-1. Basic theoretical model of structural discrimination and health outcomes



2.1.3 Mixed methods rationale

To address the research aims and objectives, the study adopted a mixed methods approach. Mixed methods are becoming increasingly utilised as a research practice especially in health research. It has been defined as 'the collection or analysis of both quantitative and qualitative data in a single study in which data are collected concurrently or sequentially, are given a priority, and involve the integration of data at one or more stages in the process of research' (p212) (289). More generally, it is an approach to knowledge that considers multiple viewpoints and perspectives, including the standpoints of both qualitative and quantitative research.

The rationale for adopting a mixed methods approach was driven by the need for both quantitative and qualitative methods to fully explore the relationship between adversity and health. The use of quantitative methods was chosen to first demonstrate 'who' experiences adversity across each domain and 'what' associations exist between experience of adversity and poor health and wellbeing. The use of qualitative methods was then chosen to explore from multiple perspectives 'why' certain groups experience more adversity and 'how' individuals are affected by and respond to these experiences. By using both quantitative and qualitative methods, the study aimed to provide a more detailed understanding of the research topic than could be achieved by using either method alone. Furthermore, the mixing of quantitative and qualitative data in this study demonstrate how the contextual and in-depth nature of qualitative findings and the generalizable information collated from quantitative data can be used to enrich the overall data. A transformative paradigm provides a framework for addressing inequality and injustice in society using mixed methods strategies (290) where quantitative data is used to quantify the problem and qualitative data is used to capture multiple community perspectives and highlight mechanisms that could be targeted to effect change.

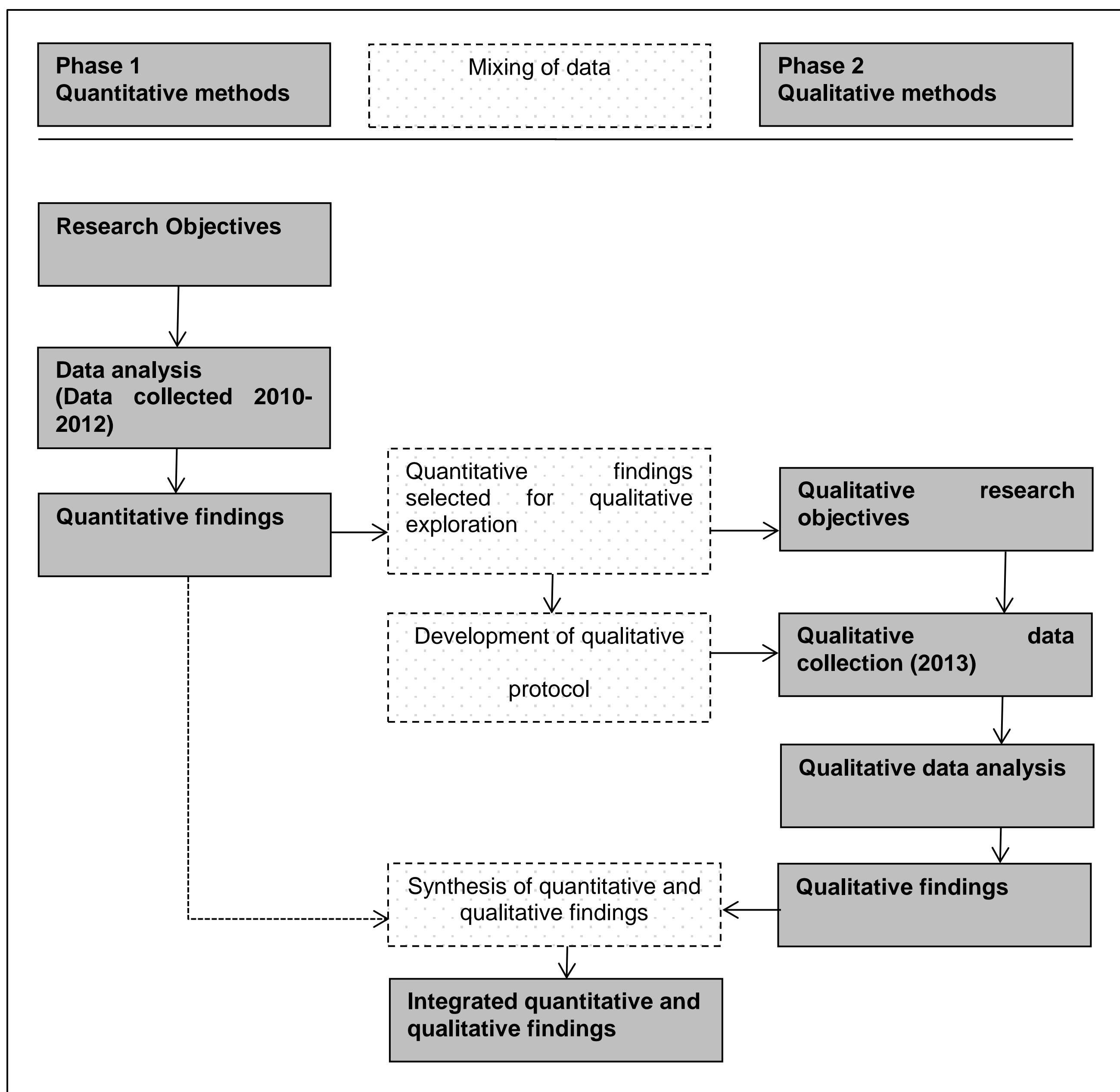
2.1.4 Sequential explanatory mixed methods design

There are a number of approaches to combining quantitative and qualitative data in mixed methods research identified in the literature (291) and there are several examples of its usage in the health research literature (292-294). Due to the timeline of the study; with the quantitative data already being collected at the point of receiving funding for the current study, a sequential explanatory design was used to structure the research design. The purpose of this design is to use qualitative data to enrich, expand and contextualise findings generated from quantitative data (203). In the first phase of the study, quantitative data was collected and analysed to provide generalizable information on the research topic. This information was used to inform the design of the qualitative phase. Subsequent qualitative data analysis provided further explanation of the initial quantitative findings and both the qualitative and quantitative data informed each other throughout the data analysis process.

In the quantitative phases of the study, data from the South East London Community Health Study (SELCoH) were analysed to examine 'who' was exposed to adversity and 'what' associations existed between indicators of adversity and health outcomes. The context of exposure to adversity across these domains was further explored using qualitative methods to understand why certain groups are at more risk of adversity and how these stressors are experienced by community members. Firstly, ethnographic research was conducted at community organisations in order to observe interactions between community members, service providers and community support workers with the aim of understanding how adversity are enacted at the institutional level. For further understanding of these observed interactions, in-depth interviews were then conducted with workers at both community organisations and service providers. In addition, a purposive sample of SELCoH participants who had reported exposure to adversity across the three domains was interviewed to explore these experiences from a community members' perspective.

A visual model of the study design is presented in Figure 2.2 to help illustrate the sequence of quantitative and qualitative methods and stages at which the methods were mixed.

Figure 2-2 Visual model of mixed methods study design



Both quantitative and qualitative studies are paying increasing attention to the generalisability of study results (295, 296). The generalizability of results will differ between the quantitative and qualitative components of this study. In terms of the

quantitative data, the results are intended to be generalizable to the area under study. The benefits of using the large representative sample of the SELCoH study increases their generalisability to other urban contexts with diverse populations and are complimented by the qualitative findings which are intended to be generalizable to existing theory in the literature. For the qualitative data, I will follow an analytical generalisation approach (297) where one judges the extent to which the findings in one study are generalised to another by similarities in social context in order to develop theory.

The following sections of this thesis present the detailed methods of both quantitative and qualitative data from data sources, data collection, measures and an overview of the analytical strategy.

2.2 Quantitative Phase

2.2.1 Introduction

This section reports on the methods from the quantitative phase of the mixed methods investigation. To meet the quantitative objectives, data from two phases of the South East London Community Health (SELCoH) Study were modelled using binary logistic regressions and linear regressions to test for associations between both ascribed and achieved social status with exposure to adversity and between exposure to adversity and three measures of subjective health. This section includes a description of the quantitative research design, a description of the survey data and the sample area. Section 2.2.3 continues with an overview of the measures used to meet the overall aims and objectives of the thesis. The quantitative section concludes in section 2.2.4 with an overview of the quantitative data analysis.

2.2.2 South East London Community Health Survey

The project utilised data from two phases of the SELCoH study. The South East London Community Health (SELCoH) study is a community survey of randomly selected households from two boroughs in South East London, Lambeth and Southwark. The survey assesses demographic and socioeconomic characteristics; physical and mental health symptoms; health service use; and a range of social stressors and psychosocial resources. SELCOH 1 data included 1698 adults, aged 16 and over, from 1075 households collected through computer assisted face-to-face interviews between 2008 and 2010. The second phase of data collection followed up 1052 of the 1698 adults from SELCoH 1 and took place between 2011 and 2013, mostly through face-to-face interviews.

SELCoH 1 was developed by epidemiologists and clinicians serving the local population to provide relevant prevalence estimates of both mental and physical health symptoms in

an ethnically and socioeconomically diverse inner city community. This was in response to growing emphasis on both translational research and the need for locally relevant epidemiological evidence that identifies public health need. Detailed information on these topics was also collected in order to make direct comparisons to the Adult Psychiatric Morbidity survey (APMS 2007) carried out by the Office for National Statistics (298). SELCoH 2 aimed to follow up respondents from SELCoH 1 to see if there were any changes over time and examine health outcomes longitudinally. SELCoH 2 also collected comparable data to a US community study to explore the role of discrimination in health inequalities. In addition, SELCoH 2 added several other topics including attitudes towards help-seeking for mental health problems, neighbourhood environment, coping strategies and also collected improved measures of both sociodemographic and socioeconomic indicators.

The SELCoH study was funded by the National Institute for Health Research (NIHR) Biomedical Research Centre and Dementia Unit at South London and Maudsley NHS Foundation Trust and King's College London and a joint infrastructure grant from Guy's and St Thomas' Charity and the Maudsley Charity. SELCoH 2 was also funded through the Economic and Social Research Council (ESRC). SELCoH I received ethical approval from the King's College Ethical Committee; reference CREC/07/08-152. SELCoH II received ethical approval from the King's College London Psychiatry, Nursing and Midwifery Research Ethics Committee; reference PNM/10/11-106.

Community context

The community study was conducted in the boroughs of Southwark and Lambeth in South East London. The boroughs are diverse in terms of both SES and ethnicity. In both boroughs, there is a higher level of deprivation than the national average but similar proportions of economically active and inactive residents in comparison to other boroughs in London (299).

According to the Office for National Statistics (ONS), London's population increased by 12% between 2001 and 2011 and now stands at over 8.2 million (300). This population growth is partially due to sustained migration over this ten-year period. In London at the time of the 2011 Census, 37% of residents in London were non-UK born compared to 27% in 2001 (301). South East London, the catchment area for the SELCoH study, is a traditional centre for many migrant communities in London. For example, Brixton, a neighbourhood in the London borough of Lambeth, has been a hub for migrants from the Caribbean since 1948 and the boroughs of Southwark and Lambeth have continued to attract migrant communities ever since, with added large West African and South American communities (302). In these two boroughs, 39% of the population were born outside of the UK, according to data from the 2011 Census (47).

In terms of SES, overall, South East London is relatively deprived in comparison to the England average, but notable pockets of high affluence are also found in the geographical area as well as areas of transformation, gentrification and renewal (303, 304). There are higher levels of educational attainment in the two boroughs yet unemployment levels are higher than the national average, with younger groups and ethnic minorities particularly at risk of unemployment (305). SELCoH 1 took place between 2008 and 2010 during the global economic crisis with SELCoH 2 following up the sample between 2011 and 2013 during the ongoing recession. Both boroughs have large stocks of social housing and there are higher levels of both renting from the local authority and private landlords in comparison to the national average. In contrast there are lower levels of owner occupied households (302, 306).

2.2.2.1 Sampling methods

The SELCoH surveys were designed to collect information from a representative sample of the general population living in private households in the boroughs of Southwark and Lambeth. Sampling methods were modelled on those used for the Adult Psychiatric Morbidity survey (298). 3600 addresses, stratified by borough, were randomly selected from the Small User Postcode Address File (PAF), which has near complete coverage

(307). The PAF excludes addresses which receive more than 50 post items per day, which are likely to be business or commercial properties. Of the 3600 addresses that were selected, a significant proportion (n=359) were excluded due to being vacant, non-residential or sheltered accommodation.[1] Contact was not established with 957 households in the sample and these were excluded from the sample, alongside 76 households where an initial contact was made but no further contact was made to establish participation. The final sample comprised of 1075 households of the 2070 randomly selected households from which contact was established, representing a 51.9% household participation rate. Of the 2359 adults (16 and over) eligible within the participating households, 1698 (71.9%) participated. Where possible, a short questionnaire about basic demographic information was sent to households where no contact was made.

2.2.2.2 Recruitment and data collection

SELCoH 1 respondents were recruited between 2008 and 2010. Letters and information sheets describing the study and inviting all eligible residents to participate were sent to the selected households. These letters were followed up by household visits by a member of the research team to establish contact with the household, answer any questions household members may have about the study, seek consent and make as many appointments for interviews as possible. Each household was visited at least four times at different times of the day before closing due to non-response. Trained interviewers conducted computer assisted face-to-face interviews with consenting household members. The interviews lasted approximately 1.5 hours and were carried out in participants' homes. Anthropometric measures were also collected including blood pressure and BMI.

Written informed consent was collected before starting the survey after reminding respondents that participation was voluntary and explaining confidentiality and data

[1] Duplicate addresses (n=31) and participants who participated in the initial pilot study (n=16) were also excluded.

protection procedures. Participants were also asked for additional consent to be re-contacted for future studies, access to participants' general practitioner (GP) and hospital records, access to participants' police records and consent to collect and store DNA samples. Participants were reimbursed with £15 on completion of the survey.

Of the 1698 participants from SELCoH 1, 94% (n=1589) agreed to be re-contacted. Of those who agreed to be re-contacted 1045 completed the survey in SELCoH 2. 136 of the SELCoH 1 participants were non-traceable due to relocation or incomplete contact information provided in SELCoH 1. Another 21 participants were ineligible due to poor health or being deceased. Out of the eligible SELCoH 1 participants who gave consent, the team were unable to contact 140 (9.7%) after four attempts and 247 (17.2%) participants refused to take part in SELCoH 2. An additional 7 participants who had originally not agreed to be re-contacted also took part in SELCoH 2 after other household members took part. Overall, 1052 participants took part in SELCoH 2, a participation rate of 73%. The SELCoH 2 sample was very similar to the SELCoH 1 sample in terms of sociodemographic and socioeconomic character, suggesting that systematic loss to follow up was limited (see table 2.1).

1023 SELCoH interviews were conducted face-to-face within households and 29 (2.8%) were conducted using Computer Assisted Telephone Interviews (CATI) for participants who were temporarily located outside of London during data collection. The CATI used a shortened interview protocol, omitting certain topics from the survey. As described in table 2.1, both the SELCoH 1 and SELCoH 2 sample was broadly representative of the local population with regard to sociodemographic and socioeconomic indicators.

Table 2-1 Comparisons of the SELCoH sample for SELCOH 1 and 2 with 2011 UK census information

	2011 UK Census for the SELCoH study catchment area[a] n (%)	SELCoH 1 study sample n (%)	SELCoH 2 study sample n (%)
Total samples [b]	N=591369	N=1698	N=1052
Sex			
Female	297830 (50.4%)	959 (56.5%)	615 (58.5%)
Male	293539 (49.6%)	739 (43.5%)	448 (41.5%)
Ethnic group			
White	329374 (55.7%)	1051 (63.4%)	683 (65.0%)
Mixed [c]	40938 (6.9%)	---	50 (4.8%)
Black-Caribbean	46860 (7.9%)	143 (8.7%)	85 (8.1%)
Black-African	82600 (14.0%)	234 (13.2%)	135 (12.8%)
Asian or Asian British	35483 (6.0%)	63 (3.5%)	39 (3.7%)
Other	56114 (9.5%)	205 (11.2%)	59 (5.6%)
Age groups			
16-29	156643 (32.3%)	577 (34.0%)	246 (23.4%)
30-59	262958 (54.2%)	876 (51.6%)	615 (58.4%)
60+	65474 (13.5%)	244 (14.4%)	192 (18.0%)

[a] South east London Boroughs of Lambeth and Southwark; data are provided by the UK Office for National Statistics

[b] Census sample are age 16 to 74 years and SELCoH sample are age 16 to 90; Frequencies may not add up to 100% due to missing values; percentages are unweighted

[c] Mixed ethnicity was not specified as a category in the SELCoH 1 study, but was included as a category in the SELCoH 2 study

2.2.2.3 Interpreters

Professional interpreters were booked through the South London and Maudsley (SLaM) National Health Service (NHS) trust in order to maximise participation form all communities in the sample area. Interpreters were used in interviews with 34 participants whose first language was not English in SELCoH 1 and 18 in SELCoH 2. The languages were Spanish, Portuguese, Polish, Turkish, French, Italian, Pashto, Twi, Bengali, Bulgarian, Gujarati, Japanese, Mandarin, Russian, Ukrainian, Urdu and Yoruba.

2.2.3 Measures

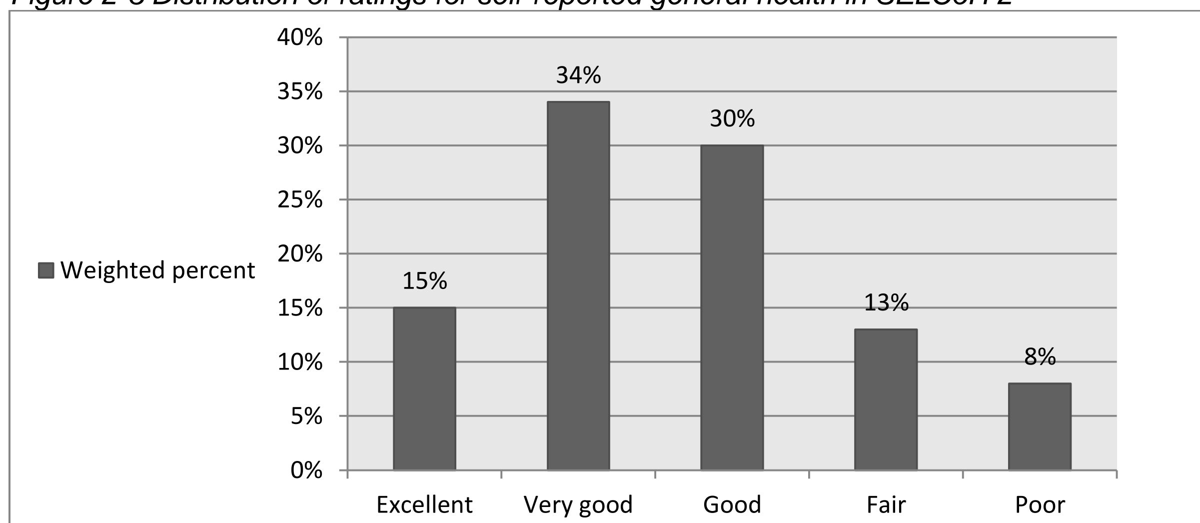
2.2.3.1 Health measures

Three outcome measures were selected from SELCOH 2 to provide a comprehensive picture of the effects of adversity across different dimensions of health. These included subjective measures of general health, common mental disorder and mental well-being.

2.2.3.1.1 Self-rated health

Self-rated health gives a holistic picture of both physical and mental health and is widely used in health surveys (50, 308). It was indicated by a single item in the 12 item Short Form (SF-12) questionnaire where participants rated their overall health as poor, fair, good, very good or excellent (48).

Figure 2-3 Distribution of ratings for self-reported general health in SELCoH 2



The responses were dichotomised into ‘excellent, very good or good’ and ‘fair or poor’. This choice of dichotomy has been employed in previous SELCoH studies (299, 309). As illustrated in Figure 2.3, 21% of the sample reported fair or poor health. The combined responses ‘fair or poor’ are referred to as ‘poor general health’ in the following analyses. There was no missing data for this variable.

2.2.3.1.2 Common mental disorder

Common mental disorder (CMD) was assessed with the Revised Clinical Interview Schedule (CIS-R), a structured interview that enquires about the following symptoms: fatigue, sleep problems, irritability, worry, depression, depressive ideas, anxiety, obsessions, memory and concentration, somatic symptoms, compulsions, phobias, physical health worries and panic. For each of these 14 domains, a screening question established whether the participant had experienced symptoms in the last month. If endorsed, follow up questions were asked concerning symptoms in the last 7 days. For each domain a score range of 0-4 may be obtained (except for depressive ideas; score range of 0-5). These are added up to produce a total CIS-R score ranging from 0-57. A total CIS-R score of 12 or more is commonly used to indicate the presence of CMD (310) and this threshold has been used in previous SELCoH studies (126, 299, 311).

Figure 2-4 Distribution of CIS-R scores in SELCoH 2

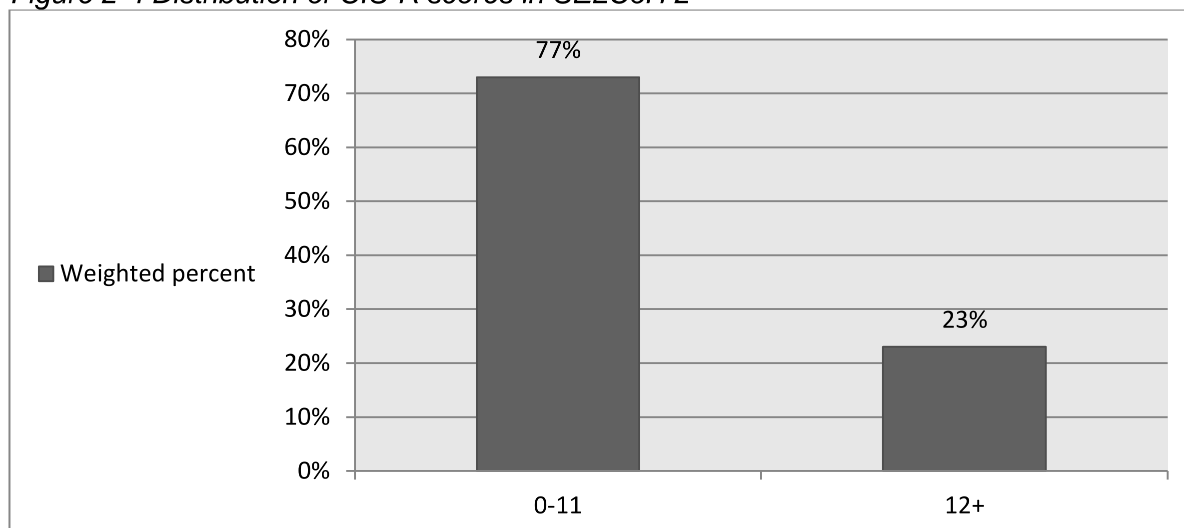


Figure 2.4 shows the distribution of CIS-R scores (0-11 and ≥12). As illustrated, 23% of participants scored above the threshold indicating the presence of CMD. The current analyses used the same threshold point of 11/12 and dichotomised the score into 'no common mental disorder' (score of 0-11) and 'presence of common mental disorder' (score of ≥12), with presence of common mental disorder representing the outcome of interest. There was no missing data for this variable.

2.2.3.1.3 Mental Wellbeing

Mental wellbeing was measured using the Shortened Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS), which has been used in a number of population surveys to measure both hedonic wellbeing (happiness) and eudemonic wellbeing (optimal psychological functioning), and is well validated (312). Cumulative scores (maximum total=35) from the 7-point likert scale were created (as illustrated in Table 2.2).

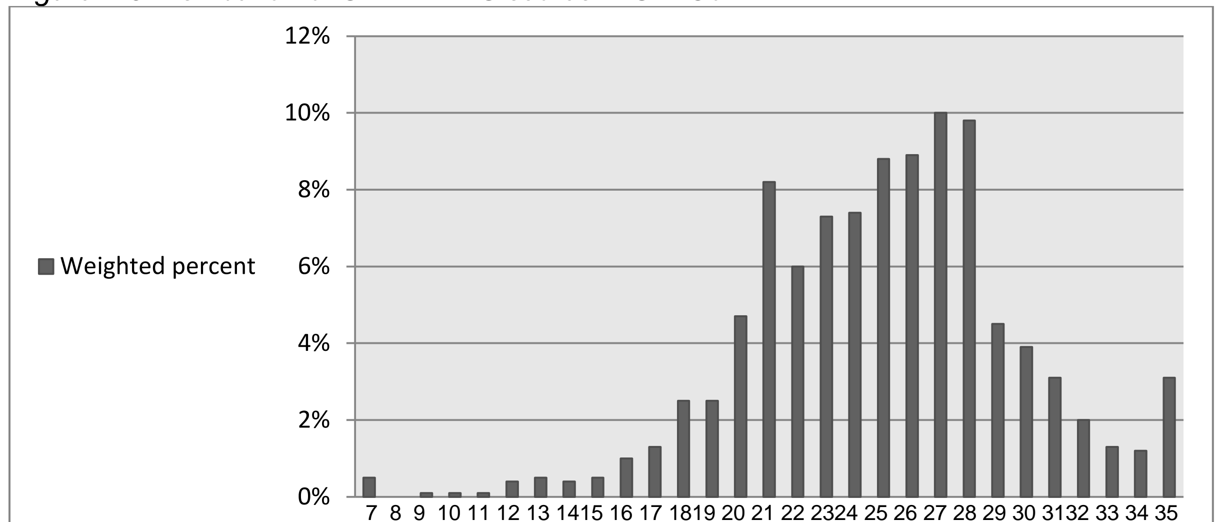
Table 2-2 Items, response categories and codes of the 7-item Shortened Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS)

Items *'Describe your experience of each over the last two weeks…'*	**Response categories**	***Initial codes***
I've been feeling optimistic about the future	None of the time	1
I've been feeling useful	Rarely	2
I've been feeling relaxed	Some of the time	3
I've been dealing with problems well	Often	4
I've been thinking clearly	All of the time	5
I've been feeling close to other people		
I've been able to make up my own mind about things		

SWEMWBS does not a have a 'cut off' level to divide the population into those who have 'good' and those who have 'poor' mental well-being in the way that scores on other mental health measures, such as the CIS-R do (313). Therefore, no cut off scores were used and the analyses presented differences between mean scores. In this population sample, SWEMWBS scores followed a normal distribution with the mean and median score both at 25 (see Figure 2.5). For sample sizes larger than 300 it is recommended to depend on the absolute values of skewness and kurtosis without considering z-values as the null hypothesis of normal distribution tend to easily be rejected in large samples with distributions that may not substantially differ from normality (314) . Skewness was below

the absolute skew value for normality of more than two (0.27) and the absolute kurtosis value was less than 7 (3.64). Therefore, there was not a substantial departure from normality (314). 29 participants who were interviewed via telephone (CATI) were not asked about their mental well-being due to the shortened protocol and one person refused to answer the questions. A total of 1022 participants answered questions on mental wellbeing.

Figure 2-5 Distribution of SWEMWBS scores in SELCoH 2



2.2.3.2 Adversity measures

2.2.3.2.1 Employment domain

Four measures from SELCoH 2 were used to measure adversity in employment; experienced discrimination, anticipated discrimination, unemployment and job insecurity.

Experienced discrimination

Experienced discrimination was indicated from the following question, 'At any time in your life, have you ever been unfairly not hired for a job?' (Response option: yes or no). This question was taken from the Midlife Development in the United States (MIDUS) survey (65, 315). All participants answered this question except for one participant who refused to answer the question.

Anticipated discrimination

Anticipated discrimination was indicated by the following question, adapted from the Discrimination and Stigma Scale (DISC) (194), 'how much have you stopped yourself from applying for work or for training/education because you thought you might experience unfair treatment?' Response options included not at all, a little, somewhat, a lot. Response options were dichotomised into not at all versus a little, somewhat or a lot as in previous studies using this measure (193). The derived responses are referred to as 'no anticipated discrimination' versus 'anticipated discrimination' in the following analyses. One participant refused to answer the question on anticipated discrimination.

Unemployment

Employment status was classified into the following categories at SELCoH 2: full-time, part-time, working students, non-working students, unemployed, permanent sick/disabled, retired and homemaker. Current unemployment was derived and made binary, grouping working, student, retired and homemaker as 'not currently unemployed'

compared to 'currently unemployed' as described in Table 2.3. Those who identified as permanently sick were excluded from analyses.

Table 2-3 Employment status in SELCoH 2

		SELCoH 2		Derived	
Derived Variable	**Categories**	**N**	**%**		
Working	Full time Part time Casual	638	63.2%	914	90.5%
Student	Student Student working	84	8.3%		
Retired/Other	Retired Homemaker	192	19.0%		
Unemployed	Unemployed	96	9.5%	96	9.5%
Excluded from analysis	Refused Permanently sick	1 41			

Job insecurity

Job insecurity was derived from the following 5-point likert scale question, 'Thinking of your current or most recent job, how much do you agree with the following statement, my job security is poor. Job insecurity was recoded to improve distribution due to small cell sizes when cross tabulated with the latent class variable. Strongly disagree, somewhat disagree and neither agree or disagree were coded as 'not insecure' compared to somewhat agree and strongly agree as 'insecure'. An additional 64 participants stated that the question was not applicable to them and were coded as 'not insecure'. 29 participants who were interviewed via telephone (CATI) were not asked about their job security due to the shortened protocol.

2.2.3.2.2 Housing domain

Two measures were used to measure adversity in the domain of housing; adverse housing experiences (lifetime) and poor housing conditions (current).

Adverse housing experiences

Adverse housing experiences combines experience of discrimination (lifetime) and experience of homelessness (lifetime). Experienced discrimination was indicated from the following question, 'at any time in your life, have you ever been unfairly prevented from moving into a neighbourhood because the landlord or a leasing agent refused to sell or rent you a house or apartment?' (Response option: yes or no). This question was taken from the Midlife Development in the United States (MIDUS) survey [23, 24]. There was no missing data for this question. Experienced homelessness was indicated from the following question, 'have you experienced a period where you slept in a park or temporary residence because you had no money to pay for rent?' This question was asked at Phase 1 and Phase 2. A derived variable was created so that any participant who responded 'yes' at either SELCoH 1 or 2 were categorized as 'experienced homelessness'.

Table 2-4 Lifetime experience of homelessness reported at SELCoH 1 and 2, and combined reporting

	Phase 1		**Phase 2**		**Combined**	
	N	**%**	**N**	**%**	**N**	**%**
Homelessness	72	6.7%	78	7.5%	106	10.3%
Missing					35	
Refused	4		0			
True missing	2		0			
CATI (not asked)	0		29			

Poor housing conditions

Poor housing conditions was derived by combining two variables measured at SELCoH 2: (i) the five point measure of current housing dissatisfaction was made binary, 'slightly or very dissatisfied' versus 'neither satisfied or dissatisfied, fairly or very satisfied' and (ii): interviewer observation of the current household coded as 'in need of attention' compared to 'in good repair'. These two variables were added together to make a binary variable, any poor housing conditions.

2.2.3.2.3 Health service domain

Two measures were used to measure adversity in the domain of healthcare at SELCoH 2; lifetime experience of discrimination and anticipated discrimination.

Experienced discrimination

Experienced discrimination was indicated with the following question, 'have you ever been unfairly treated when getting medical care?' (Response option: yes or no). This question was taken from the Midlife Development in the United States (MIDUS) survey [23, 24]. All participants answered this question except for one participant who refused to answer the question.

Anticipated discrimination

Anticipated discrimination was indicated by the following question, 'how much have you stopped yourself from contacting health services because you thought you might experience unfair treatment?' This was adapted from the Discrimination and Stigma Scale (DISC) [25]. Response options included not at all, a little, somewhat, a lot. Response options were dichotomised into not at all versus a little, somewhat or a lot as in previous studies using this measure (193). The derived responses are referred to as 'no anticipated discrimination' versus 'anticipated discrimination' in the following analyses. One participant refused to answer the question on anticipated discrimination.

2.2.3.3 Potential mediators: coping strategies

Experiences of stress and adversity can trigger individual psychological and behavioural responses, which include a number of coping strategies (273). These were indicated by survey questions (see Table 2.5) on how often participants employ the following strategies (never, rarely, some of the time, most of the time) to cope with general stress at SELCoH 2, adapted from the Telephone Administered Perceived Racism Scale (316). Coping behaviours were considered as potential mediators in analytical models as both potential protective and risk factors in the pathway between adversity and health outcomes. There were two missing values for each coping variable and an additional missing value for coping by avoiding the situation in the future, by trying to do something about it and by accepting it as a fact of life (all missing values were refusals).

Table 2-5 Coping behaviour questions used in SELCoH 2 survey

Coping Behaviour	
How often do you cope with unfair treatment? (never, rarely, some of the time, most of the time)	
Active coping	**Avoidant/passive coping**
by talking about the problem with someone you trust?	by eating sweets/fatty foods?
by trying to do something about it?	by drinking alcohol?
by praying?	by smoking cigarettes?
	by exercising?
	by avoiding the situation in the future?
	by accepting it as a fact of life?

These individual likert items have not been tested for internal consistency as a likert scale in previous studies. The coping behaviours were grouped together into two types of coping, active or avoidance/passive coping, in order to create two likert scales according to conceptualisation of coping strategies in the research literature (149). For

both potential scales, Cronbach's alpha coefficients were calculated in Stata 11 (see Table 2.6).

Table 2-6 Cronbach's Alpha coefficients for internal consistency of potential coping likert scales

Likert item	Full scale	Sub scale (active)	Sub-scale (avoidant)
by talking about the problem with someone you trust?	0.367	0.161	-
by trying to do something about it?	0.373	0.048	-
by praying?	0.466	0.494	-
by eating sweets/fatty foods?	0.367		0.247
by drinking alcohol?	0.317		0.206
by smoking cigarettes?	0.438		0.333
by exercising?	0.379		0.288
by avoiding the situation in the future?	0.442		0.324
By accepting it as a fact of life?	0.433		0.329
Scale/subscale	0.429	0.301	0.330

Both subscales had coefficients less than the recommended cut-off of 0.70 (317), as did individual likert items in each subscale and so items could not be used in a scale. Therefore, individual items were instead used to represent the following coping strategies: active coping (trying to do something about it) and avoidance coping (avoiding the situation in the future). Negative health behaviours were also seen as important for the model so coping using alcohol and smoking were included as individual items as was spiritual coping (by praying). These five variables were used in further analysis. The coping strategy variables were selected on the basis of theoretical and empirical evidence indicating that these coping strategies are associated with both adversity and health outcomes (318).

2.2.3.4 Potential confounders: life events

Life events during the entire lifetime were measure with the questions outlined in Table 2.7. Questions about life events were not included in the CATI interview schedule so data was missing for 29 respondents. A cumulative variable of life events (lifetime) was created by adding all reported events at SELCoH 2 and was considered as a potential confounder. The derived variable had missing data for a total of 35 participants; 29 who completed CATI and 6 who had refused to respond.

Table 2-7 Life events (lifetime)

Lifetime stressful life events
Has a spouse/partner, child, or other loved one died?
Have you ever seen something violent happen to someone?
Have you ever had a serious accident?
Have you been in combat in a war, lived near a war zone, or been present during a political uprising?
Have you ever been attacked, mugged, robbed, or been the victim of a serious crime?
Has anyone ever injured you with a weapon-gun, knife, stick etc.?
Has anyone ever hit you, bit you, slapped you, kicked you, or forced you to have sex against your wishes?
Have you ever lived with someone as a couple and that relationship ended in separation or divorce?
Has one of your children ever had a serious illness or accident?
Has your adult child moved back into your home?
Has your responsibility for the care of grandchildren increased substantially?
Has your ageing parent or in-law moved into your home?
Have you had to place your ageing spouse, in-law or parent into a nursing home?
Have you ever experienced any legal difficulties that have affected your right to stay in the UK?

The remaining potential confounders: age, gender and marital status are described in section 2.2.3.6.

2.2.3.5 Indicators of socioeconomic status

A range of socioeconomic indicators were selected from SELCoH 2 for use in the following analyses, to help capture the multidimensional nature of socioeconomic status (SES). The indicators include educational attainment, household income, social occupational status, benefit receipt, debt and housing tenure. A description of the construction and measurement of each indicator of SES is provided below.

2.2.3.5.1 Educational attainment

Educational attainment was measured using the highest educational attainment attained by the participant. SELCoH 2 participants were specifically asked if they had no qualifications, below GCSE level qualifications, GCSE level or equivalent qualifications, A level or equivalent qualifications, vocational qualifications, an undergraduate degree, a postgraduate degree or other qualification that was not listed above. The data from this question was aggregated into four levels of attainment: below GCSE level, GCSE level or equivalent, Vocational and A level or equivalent, and degree level and above. Five participants stated that they had other qualifications, four of which were vocational while one did not state what the qualification was and was excluded from analyses. Table 2.8 reports the educational attainment breakdown for the SELCoH 2 sample.

Table 2-8 Educational attainment in SELCoH 2

Educational attainment	**N**	**%**
Below GCSE level	119	12.9
GCSE level or equivalent	154	15.8
Vocational and A level or equivalent	269	25.8
Degree or above	509	45.5
Excluded from analyses:		
Other qualifications	1	

2.2.3.5.2 Household income

The SELCoH 2 survey asked participants to identify their annual gross household income from a choice of income bands ranging from £0-5,475 to £74,459 or more per annum. The data from this question was aggregated into four levels of household income: £0-12,097, £12,098-31,494, £31,495-52,976 and £52,977 or more per annum. Table 2.9 reports the household income breakdown for the SELCoH 2 sample.

Table 2-9 Annual household income in SELCoH 2

Annual Household income	**N**	**%**
£0-12,097	176	20.9
£12,098-31,494	240	26.8
£31,495-52,976	203	20.4
≥£52,977	328	31.9
Excluded from analyses:		
Don't know	96	
Refused	9	

105 participants were excluded form analyses as 96 participants said that they did not know the annual household income and 9 participants refused to answer the question.

2.2.3.5.3 Benefit receipt

The SELCoH 2 survey asked participants to name all state benefits that they receive as an individual. Participants were categorised as receiving benefits if they received any means tested benefits or working age benefits (see table 2.10). Those participants who received non-means tested benefits such as child benefit or state pension were classified as not receiving benefit. In total, 308 participants were classified as receiving state benefit (32.0%)

Table 2-10 Receiving benefit classification

Receiving benefit	**Not receiving benefit**
Job seekers allowance	No benefits
Income support	Child benefit
Working tax credits	State pension
Employment support allowance	Attendance allowance
Incapacity benefit	Maternity leave
Statutory sick pay	
Disability living allowance	
Industrial injuries benefit	
Asylum support	
Carer's allowance	
Council tax benefit	
Education maintenance allowance	
Housing benefit	

2.2.3.5.4 Social occupational class

Social occupational class was measured by current occupation or most recent occupation categorized according to the Registrar General's classification (319) into six categories: professional (I), managerial/technical (II), skilled non-manual (III-NM), skilled manual (III-M), semi-skilled (IV) and unskilled (V). For this analysis, social class was condensed into four categories to improve the distribution and ease interpretation: (1) professional or managerial; (2) skilled; (3) unskilled or semi-skilled; and (4) no social class assigned (see table 2.11). The majority of those who had no social class assigned were students who had never been in employment (62%).

Table 2-11 Social Occupational class at SELCoH 2

Derived variable	Categories	N	%
Professional and Managerial	Professional Managerial/Technical	506	48
Skilled	Skilled Non-manual Skilled Manual	286	27.1
Unskilled or semi-skilled	Semi-skilled Unskilled	183	17.4
No social class assigned		77	7.3
Excluded from analysis:		0	

2.2.3.5.5 Housing tenure

Housing tenure is classified as own/mortgage, private rented, social housing and other. Other was made up of 38 participants who said that they lived rent free and 7 participants who were currently living in work-related tenure.

Table 2-12 Tenure in SELCoH 2

Derived variable	Categories	N	%
Private owned/Mortgaged	Private owned (self) Private owned (family) Mortgaged Shared ownership	405	39.7
Private Rented	Rented-private sector	222	21.8
Social Housing	Rented-voluntary sector Rented-local authority	348	34.1
Other	Rent free Other	45	4.4
Excluded from analyses:			
CATI interview		29	
Don't know		3	

2.2.3.6 Socio-demographic indicators

Socio-demographic measures include self-reported age, gender, ethnicity, sexual orientation, relationship status and migrant status. Migration status indicators include country of birth and length of stay in the UK in years.

2.2.3.6.1 Age

Age at SELCoH 2 was captured in the survey by asking, 'what was your age on your last birthday?' There was no missing data for this variable.

2.2.3.6.2 Gender

Gender was captured at SELCoH 2 by asking if participants identified as male, female or transgender. There were no missing data for this variable.

2.2.3.6.3 Marital status

Participants were asked what their current relationship status was at SELCoH 2. Options included: single, married/civil partnership, in a relationship, separated, divorced and widowed.

2.2.3.6.4 Ethnicity

The item measuring ethnicity at SELCoH 2 asked, 'which of the following best describes your ethnicity?' Participants then identified their ethnicity by selecting a category from a list of Arab, Bangladeshi, Black African, Black British, Black Caribbean, Chinese, Gypsy/Romany/Irish Traveller, Indian, Latin American, Mixed (Asian and White), Mixed (Black African and White), Mixed (Black Caribbean and White), Other, Other Asian, Other Black, Other Mixed, Other White, Pakistani, White British, White English, White Irish, White Scottish or White Welsh. In table 4, the initial responses are recorded in column, ethnicity (1). Categories were taken from the UK census list (320).

A number of discrepancies were found in cleaning the ethnicity variable. Those participants who chose the ‘Other’ categories also had the option of giving more information in a free text box in the survey. 18 of these participants responded with an answer that match one of the other 21 categories and therefore were recoded as such. One participant described their ethnicity as ‘human’ and was recoded as refused to answer. After this cleaning process, these responses were recoded into the following variables; White British, White Other, Black African, Black Caribbean, Black British, Black Other, Asian, Chinese/Other Asian, Other, Mixed, Latin American’ (see table 2.13; column 2).

Table 2-13 Ethnic groups and derived ethnic groups at SELCoH 2

Ethnic group (1)	Ethnic group (2)	Ethnic group (3)
White British (306) White English (207) White Scottish (13) White Welsh (10)	White British (536)	**White British (536)**
Black Caribbean (50)	Black Caribbean (50)	**Black Caribbean (85)**
Black African (111)	Black African (111)	**Black African (135)**
Black British (57)	Black British (57)	-
Bangladeshi (6) Indian (18) Pakistani (12) Chinese (12) Other Asian (20) Latin American (21) Arab (2) Other (13)	Asian (36) Chinese/Other Asian (32) Latin American (21) Other (15)	**Non-White Other (98)** *Includes: Asian (39), Chinese/Other Asian (29), Other (9) and Latin American (21).*
Mixed(White/Asian) (9) Mixed (White/Black Caribbean) (9) Mixed (White/Black African) (7) Other mixed (23)	Mixed (48)	**Mixed (50)**
Other White (123) White Irish (22)	White Other (145)	**White Other (147)**

Due to small sample sizes for some ethnic groups, the variable was further collapsed for analysis: White British, Black Caribbean, Black African, Non-White Other, Mixed and White Other. Those in the Black British group were recoded as Black African or Black

Caribbean depending on their parents' ethnicity and/or ethnicity recorded in SELCoH 1, where Black British was not included as an option.

2.2.3.6.5 Migration status

Migration status was indicated by self-reported country of birth and length of stay in the UK. Participants who reported being born in the UK, Great Britain, England, Wales, Scotland or Northern Ireland were coded as non-migrants and those who reported any other country of birth were coded as migrants (as reported in SELCoH 1). 5 participants were not asked about country of birth because the question was introduced to the SELCoH 1 survey after the recruitment process had started. Reported length of stay was used to further categorize migrants into groups of 10 years or less, 11 to 20 years and more than 20 years of residing in the UK. These derived categories were informed by previous studies examining migrant health in SELCoH 1 (8).

2.2.3.6.6 First language

Participants were asked to report their first language in SELCoH 2. First languages were categorized as English vs. other languages. There was no missing data for this question.

2.2.3.6.7 Religion

Participants reported their religion by answering the following question at SELCoH 2, 'what is your religious affiliation?' Participants were given 18 tick box options to choose (see table 2.14). These options were collapsed into four categories; no religion (atheist and agnostic), Christian, Muslim and Other.

Table 2-14 Religious affiliation as reported in SELCoH 2

Religious affiliation	Derived religion
Agnostic (94)	None (403)
Atheist (148)	
None (161)	
Baptist (23)	Christian (525)
Catholic (171)	
Church of England (196)	
Jehovah's Witness (13)	
Methodist (10)	
Pentecostal (46)	
Seventh Day Adventist (3)	
Other Christian (63)	
Muslim (78)	Muslim (78)
Buddhist (12)	Other (46)
Jewish (2)	
Hindu (10)	
Sikh (6)	
Other (16)	

2.2.3.6.8 Sexual orientation

Participants described their sexual orientation in SELCoH 2. Answers were categorised as heterosexual vs. non heterosexual (homosexual, bisexual or other). 4 participants refused to answer the question.

2.2.4 Data analysis

2.2.4.1 Latent Class Analysis

Latent class analysis (LCA) was used to define groups of people within the sample based on both socioeconomic and sociodemographic variables and create typologies of disadvantage. The main reason for using LCA in this study was for data reduction purposes. There are a lot of sociodemographic and socioeconomic variables in the study that are useful for addressing the research aims of this project but their use is limited by the fairly small sample size. In addition, LCA allows for all variables to be used while simultaneously taking an intersectional approach to the analysis. LCA is an established data driven statistical methods which allows the classification of individuals in a sample to be assigned into groups based on conditional probabilities (321). In effect, individuals within each group will have a similar pattern of responses to a series of categorical variables. This method was suitable for this dataset as sample size was above 500 (322).

Variables for LCA

The following variables were used in the LCA; 4 determinants of socioeconomic status (educational attainment, social occupational class, annual household income and benefit receipt), ethnicity, migration status, first language, religion and sexual orientation (all variables described in section 2.2.3). Age and gender were entered into the latent class analysis as co-variates only to improve proper class assignment. Previous research has shown that including significant covariates of class membership in an LCA model is generally beneficial, providing additional information that can be used in the estimation process (322).

Missing data

Maximum likelihood estimation was used to account for missing data, under the assumption of data missing at random (MAR), using all information that was available to estimate the full model. Any participants with full missing data were excluded from the models (323).

LCA analysis

Variables were entered into models as either categorical or nominal variables and analyses were carried out in MPlus 6. LCA generates parameters for modelling class membership, allowing the relationship between the observed and latent variables to be analysed. Parameters for the latent class models were estimated using maximum likelihood techniques. To ensure successful convergence at the global maximum 50 random sets of starting values and 10 optimizations were used (323). All models were inspected for replication of the log likelihood value to increase confidence that the best fitting solution was found (324).

Decisions on optimal number of latent classes for the three separate LCA analyses were informed by using the following goodness of fit statistics: Akaike's Information Criteria (AIC) (325), Bayesian Information Criteria (BIC) (326), sample size adjusted Bayesian Information Criteria (SSABIC) (327), entropy (328), the number of bivariate residuals (BVR) (329) and the Lo-Mendell-Rubin likelihood ratio test (LMR-LRT) (330) . Lower values for AIC, BIC and SSABIC all indicate a better fit in LCA models. BIC is a measure of model fit with penalisation for additional classes and recent research has shown this measure to be the most reliable indicator of best fit (324). Entropy is a measure of the classification accuracy for an individual participant and higher entropy reflects better classification (328). The number of bivariate residuals can be used to assess model fit with greater than 4 bivariate residuals suggestive of poor fit (329). The LMR-LRT statistic was used to compare classes with similar values across the other goodness of fit statistics. If the LMR-LRT statistic had a significant probability value ($p<0.05$), the n+1 class model was checked to see if this had a better solution. Where goodness of fit statistics were similar between classes, response probability profiles were inspected to

see which solution contained the most informative classes (323). After selecting the final model, the probabilities of belonging to each group can be obtained for each individual and so each individual can be assigned to a group. These latent classes can then be used for examination of the relationship between latent class membership and experience of adversity and the health outcomes of interest.

2.2.4.2 Overview of quantitative analytical strategy

In addressing aim 2, quantitative analysis was performed in Stata 11 (331). Survey commands (svy) were used for estimates of prevalence and associations where appropriate to generate robust standard errors. All analyses accounted for clustering by household and for variation within household non-response. Clusters and weights have been calculated and included in the dataset for SELCoH 1 and SELCoH 2. In order to address the sample attrition problem from SELCoH 1 to SELCoH 2, inverse probability weights were also calculated from the predicted response probabilities derived from a logistic regression model of response to participation in SELCoH 2. In all table in this thesis frequencies are unweighted, while mean estimates, percentage estimates, coefficients and odds ratios are calculated using the appropriate weights, unless otherwise specified.

As both categorical and continuous measures are used in this thesis, statistical methods include cross-tabulation with chi-squared tests and Rao & Scott corrections, logistic regression, and linear regression. Cross-tabulations examine bivariate relationships between independent variables and outcomes. Percentage prevalence estimates are estimated with 95% confidence intervals and the Chi-square statistic with Rao & Scott corrections test the bivariate associations by comparing the observed distribution of cell counts against the expected distribution. Regression methods test the direction and strength of specific associations, calculating effect sizes with 95% confidence intervals. The quantitative analytical strategy employed by each domain is described in full detail in each results chapter.

2.3 Qualitative phase

This section reports on the methods from the qualitative phase of the mixed methods investigation which sought to understand the relationship between adversity and health in more detail and give context and meaning to the quantitative data. To meet this objective, the study explored the dynamic relationships between (i) public service providers, specifically those providing services in the sectors of housing, employment and health, (ii) residents of South East London who try to access resources and (iii) community support workers who support residents to access these resources. Ethnography and in-depth interviews were utilised at sites chosen within the South East London catchment area where institutional practices could be observed alongside interactions between residents, community support workers and service providers.

The qualitative part of the study took place in two phases: (i) ethnographic research at community organisations, followed by (ii) in depth interviews with 11 community support workers, 7 service provider workers and 12 SELCoH participants who had reported experiencing adversity in at least one of the following domains; employment, housing or health services.

2.3.1 Ethnographic research

2.3.1.1 What is ethnography?

Ethnography mainly consists of participant observation which involves observing what goes on in a setting over an extended period of time. It also involves shadowing and talking to members of this setting in order to understand the rationality and context of actions (332). These methods have been used in a number of organisational settings (333, 334). Using ethnography in this study enabled the study of individuals and teams operating in an everyday context (335) which contributed to a richer understanding of

social contexts and uncovered social phenomena that would not necessarily be uncovered from formal interviews.

2.3.1.2 Rationale

Experience of adversity, such as discrimination, in the domains of housing, employment and health are often characterised by experiences of disempowerment in interactions between service users and institutional actors (336). Structural discrimination, in particular, is a process which helps those in a position of power maintain advantage by limiting other groups access to resources (337). Many of these mechanisms operate implicitly, often ambiguous for those experiencing it and difficult to challenge. Therefore, it was important that I took into account multiple perspectives by collecting accounts from different actors in this process through in depth interviews as well as observing interactions in this process through ethnographic research. This provided much needed contextual information on the processes and mechanisms involved in structural discrimination and other forms of structural stress.

Community organisations are generally independent of government, motivated by a desire to achieve social goals and usually involve grassroots action or empowerment of marginalised groups to address issues that affect them. In this study, community organisations refer to governmentally funded organisations that work directly with marginalised or vulnerable groups across South East London to help them access employment, housing and health services. Support workers advocate for those who are disempowered and mediate relationships between community members and service providers. Thus, support workers provide a unique perspective on the relationship between individuals and institutions and how adversity impact on community members health.

2.3.1.3 Sites

Community organisation 1

Community organisation 1 provides counselling, advice and advocacy to young people up to the age of 25 with a range of issues including housing, employment and health problems. They employ a holistic approach to helping service users by spending time to identify problems across many different domains to try and understand why a person may be struggling with homelessness, unemployment, or problems accessing health and social services. Workers help service users by empowering them to become proactive in tackling these problems, facilitating this process by providing them with the information and support that they need to do this and providing a safe and relaxed environment for young people to talk about their problems as well as in-house counselling services.

The research involved 60 hours of ethnography and conducting in-depth interviews with five members of staff at this community organisation from May to July 2013. The open layout of the office was very conducive to observations as I was able to observe all members of the team at the same time as well as observe worker-service user interactions within the same space. There was a small space at the front of the site where young people could wait for their counselling or advice appointment and use the services computers for applying for work or tailoring their CVs. Private rooms were connected to this space for counselling appointments or when advice sessions needed to be conducted in private. The office space also directly connected to this waiting area, where all members of staff were stationed apart from management who had a separate office. Boundaries between these spaces were fluid for both staff members and service users which created a very relaxed environment for the young people using services.

Community organisation 2

Community organisation 2 provides support to homeless people, people living in insecure and temporary accommodation and tenants struggling to sustain their tenancies, whom often have a range of other health and employment issues. Support worker roles include helping people find suitable accommodation through both local authority/voluntary sector and private rented sector. Their holistic approach to improving peoples' lives also means that they supply routes into training and employment as well

as helping people navigate social and health services, particularly those with mental or physical health problems, suffering domestic violence, and those with alcohol and substance use issues. Workers spend time helping service users identify problems across many different domains and empower them to become more proactive in handling their problems by providing them with the information and support that enables them to do this.

The research involved 60 hours of ethnography and conducting in-depth interviews with six members of staff at the community organisation from July to October 2013. The site was divided into 5 distinct areas: a managers' office, staff office, interview room, meeting and activity rooms and a reception. During my observations, I was mostly based in the staff office so that I could observe all staff members and negotiate observing their interaction with service users on an individual basis. Due to the layout of the office space, observing in other areas of the office had to be constantly negotiated. The partitioning of the office into its separate spaces also divided workers form service users. A volunteer managed the reception and sat with service users waiting for advice or to see their caseworker and a key-coded door separated them from the workers.

2.3.1.4 Access

Access to these two sites was formally negotiated early on in the project. I had contact with both organisations before approaching them to take part in the study through my work with the Health Inequalities Research Network (HERON), King's College London. This previous relationship made setting up an initial meeting to discuss the project possible in a very short time frame. Both organisations agreed to take part in the study verbally and written approval via email was subsequently received. The agreement at each organisation was for a three month period of observation, where I would be on-site one day per week to observe practice and talk to staff members through informal interviews.

After written approval was granted from team managers at each organisation, information sheets were sent to the organisations to be circulated to all team members before their next team meeting. I was given permission to attend staff meetings at both organisations to explain the study to all staff members, answer questions from staff and address any concerns about the research. Most importantly, the meeting gave me an opportunity to explain the process of individual consent to all team members. The organisation had consented to the research study taking place but I needed consent from each individual to be able to observe them in their everyday role. Workers were given an additional information sheet and consent form at the meeting and were asked to consider taking part in the study. All workers provided written consent to take part in the study. Although all workers at both sites agreed to take part in the study, access remained an ongoing negotiation. Throughout my time at both organisations, workers were asked on a regular basis for their continued agreement to be observed. Although written consent was not obtained from any of the workers' clients, when I accompanied a staff member for a contact with a client, the client was asked in advance if they consented to my presence and making observations of the support worker. Verbal consent to my presence during these contacts was recorded in my field notes.

2.3.1.5 Observation

Observations at both sites were recorded in the researcher's fieldwork diary (see appendix B3) and included observations of the many different types of interactions: worker-worker, worker-service user, worker-researcher etc. as well as reflections on interactions, nature of the work and the relation of the observations to the research topic. This fieldwork allowed me to explore the everyday experiences of individuals in the community accessing services across the domains of housing, employment and health through the perspective of the community support workers and gain the workers views on the nature, effects of and responses to structural discrimination and the impact of such exclusion on health and well-being. Notes, questions and emerging themes were recording during the time of the observations and on re-reading the notes after

observations had finished. These formed the basis of the ethnographic transcripts (see appendix B4). All observations were recorded in anonymised form and no personal identifiable information was collected or recorded during observations.

2.3.1.6 Reflexivity, fieldwork role and relationships

A researcher's social status and attitudes that have been shaped by their socio-historical location have an influence on the data that is collected and how it is interpreted (335) and this must be taken into account when drawing conclusions from the research. Prior to commencing the PhD and working as a research assistant on the SELCoH study at King's College London, I had been working as a community support worker in North London, assisting local residents to access housing, employment and health services. Due to these past experiences as a support worker, I had some knowledge of the perspectives that community support workers may hold on the problems that their clients face in accessing services across the three domains, including experiences of adversity. Throughout the process of both data collection and data analysis I needed to make sure that my previous experience did not influence how I recorded or interpreted this data. In addition, I had to ensure that my previous relationships with individuals at both organisations through my role at HERON did not have an impact on the dynamics of the fieldwork. I had good rapport with these individuals but I also ensured that I maintained my role as researcher during fieldwork at all times.

The roles that researchers take in ethnographic research can vary depending on the social setting. Observation can be completely covert (where researchers take part in a social setting without informing actors that they are being observed), overt (where researchers do not partake in any social action with participants at all) or researchers can be participating and observing at the same time. My role as a researcher in the ethnographic settings involved both observation and participation, and combined being both an 'outsider' and an 'insider'. I was an 'outsider' in the sense that I did not work at these sites and could provide an account of the practices from an outsider's perspective but, in some ways I was accepted as an 'insider' as I had previous experience of working

as a community support worker and was able to share experiences with workers and engage them in informal interviews around the activity taking place throughout the working day. Benefits of being an 'insider' included ease in building trust and rapport with participants and being granted access to workers thoughts and opinions and gain greater understanding of institutional practice. However, good rapport also meant spending a lot of my time on site engaging workers on a number of topics that often had nothing to do with the research. Another disadvantage of being an 'insider' was that workers often assumed that I understood many of the processes involved in their work and useful details may have been missed where I did not illicit further information.

2.3.2 Recruitment for in-depth interviews

After completing ethnographic fieldwork at both community organisations, in depth interviews were conducted with 11 community support workers working at these organisations. In addition, it was also important to gain direct perspectives from multiple viewpoints. Therefore, in depth interviews were also conducted with 7 frontline service provider staff and 12 SELCoH participants (residents of South East London) who had reported experience of adversity in order to address the aims of the study. Sampling and recruitment of SELCoH participants is outlined in section 2.3.2.2. In terms of recruiting the other stakeholders, I intended to recruit 10 community support workers and 6 frontline service providers. I decided to recruit more participants working in community support organisations due to their holistic work role and resulting interaction with employment, housing and healthcare services. Due to time constraints of the PhD, I decided to interview only two frontline workers from each type of service provider. The only inclusion criteria for interviews with both community support workers and frontline service provider workers was that they were currently working or had worked for the service provider in the past year and had at least twelve months experience in the role. Interviews were held at the most convenient place for the participants and took approximately 45 minutes to one hour and £10 cash as compensation was offered for their time. All interviews were conducted without other staff members or family members

present so that interviewees could be as open with their answers when possible. The following sections outline how I gained access to service providers and recruitment processes for both service provider workers and SELCoH participants.

2.3.2.1 Access to service providers

Gaining access to service providers in the domain of housing, employment and health proved far more difficult than accessing the community support organisations.

Housing services

In housing, I first attempted to contact service managers for housing and homelessness statutory services across South East London. These services provide advice and assistance to local residents who are struggling with current tenancies or are homeless. I received initially positive responses from two out of three services that were approached by email but was unable to arrange a meeting to discuss the research further after several communications with managers. After several other unsuccessful attempts to arrange meetings with statutory services across the sample area I used the online professional networking site, LinkedIn, to contact people who were currently working as housing options officers or had recent experience of this role in the sample area. I initially contacted six people through the website and received one positive response to take part in the research. The contact had worked in a local Housing Options office for 12 months but had recently started a new role with a local charity. This was the only participant who was recruited in this manner. During this time, as a new local authority tenant in the area I received an invitation to a welcome event for new tenants. The main speaker at the event happened to be the Director of Housing Services. I attended the event and took the opportunity to talk directly to the director, who I had previously sent an email to, about the study and they verbally agreed to the project, granting me access to one of the local housing options offices. A few days later I had received permission via email and set up a meeting at the local office. At the meeting, I gained permission to

conduct in-depth interviews with the team manager and a member of the frontline staff and a date was set up for these interviews.

Employment services

Job Centre Plus is a working-age statutory support service. The agency provides services primarily to those attempting to find employment and to those who require financial support due to unemployment to assist them in finding employment or provision of social security as the result of an incapacity to work due to illness. The organisation works within the Government's Department of Work and Pensions (DWP) framework. The services are provided at 16 centres throughout South East London through frontline employment advisors. As the main statutory service for residents in the sample area to find employment, it was imperative to gain the perspective of people working in this organisation who have a direct relationship with both residents seeking employment and local employers. I first decided to approach the district manager for Job Centre Plus, South London as they are responsible for relationships with external organisations. Unfortunately, the proposal was swiftly rejected with the manager stating that it was not DWP policy to take part in external research projects due to the sensitive nature of the business. In spite of this rejection, I decided to keep trying to gain access through other avenues. Other researchers had successfully conducted research at local Job Centre Plus offices by contacting local centres directly (338). I visited two local centres but was told to direct my enquiry to the district manager. During this time, a colleague at King's College London who had been working with the DWP on a research proposal was able to forward my proposal on to the DWP directly. The DWP was able to grant access and I was put in touch with managers at two local centres in South East London. Through these contacts, I was able to set up meetings to discuss the study further with the centres and gain permission to conduct brief (one day of observations and informal interviewing at each centre) ethnographic research and in depth interviews with two members of front line staff.

Heath services

In health services, I decided to interview general practitioners (GP) as they have the most direct contact with local residents and often the first point of contact for community members experiencing health problems. I approached GPs directly by writing letters and following up letters with a direct email to the GP surgery manager. Unfortunately, all GPs who were approached were not able to take part in the research due to work commitments. I was eventually able to gain permission from two GPs who were also research staff in a department within King's College London. These participants both worked as GPs part time at surgeries serving local populations in South East London.

2.3.2.2 Recruiting SELCoH participants

Only those who had agreed to be re-contacted for future research at SELCoH 2, were currently living in the sample area and had experienced adversity in housing, employment or health service use domains were considered for inclusion (n=175; see figure 2.6). It was decided prior to sampling to aim for approximately 10-12 interviews to maximise the amount of data collected while considering practical constraints. Participants from the SELCoH 2 study were selected via stratified sampling to make sure the qualitative sample was balanced by type of structural adversity (housing, employment or health) and sociodemographic factors (such as gender, ethnicity, migration status; see table 2.15).

Using the database containing all of the SELCoH contact details, introductory letters and information sheets were posted to selected participants with information about how to take part in the study. This study was conducted alongside SELCoH 3 and a member of the research team was able to recruit participants for the current study alongside the main SELCoH Phase 3 study. If the participant agreed to take part in the study, I then called the participant in order to explain the study in further detail and to set up a time to conduct the interview either on the same day as the SELCoH Phase 3 interview or on a separate day if that was more convenient. 7 interviews were conducted at the participant's home and 5 interviews were conducted at the Clinical Research Facility at King's College London immediately after the participants SELCoH 3 interview.

Figure 2-6 Sampling of SELCoH participants

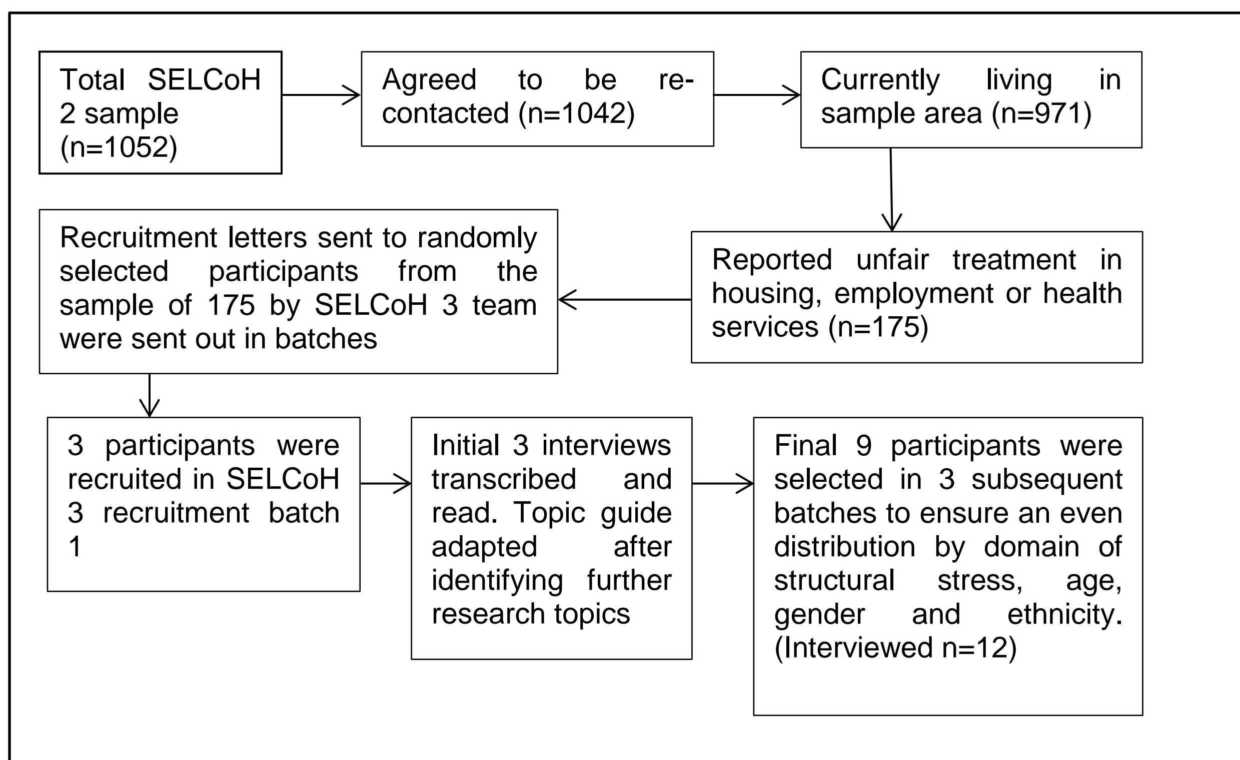


Table 2-15 Sample characteristics of qualitative in-depth interviews (SELCoH sample)

	Experienced adversity in:			Sociodemographics			
Participant	Employment	Health	Housing	Age	Gender	Ethnicity	Migration status
1	N	Y	Y	55+	F	White Other	Migrant
2	Y	Y	N	30-55	F	Black Caribbean	UK born
3	Y	Y	N	55+	M	White British	UK born
4	N	Y	N	30-55	F	Black African	Migrant
5	Y	N	N	55+	F	White British	UK born
6	Y	N	N	55+	M	White British	UK Born
7	Y	N	N	17-29	M	Black Caribbean	Migrant
8	Y	N	N	17-29	M	White British	UK born
9	Y	N	N	17-29	F	Black African	UK born
10	Y	N	Y	55+	F	Black African	Migrant
11	Y	N	Y	17-29	F	White British	UK born
12	Y	Y	Y	30-55	M	Black Caribbean	UK born

2.3.2.3 Interviews guides

Separate interview topic guides were produced for SELCoH participants, community support workers and service providers. They were formed by examining the research literature on adversity and health, preliminary findings from the quantitative data and ethnographic fieldwork. An outline of the topic guide and example questions used for workers in both community organisations and service providers is outlined in Table 2.16 and for SELCoH participants in Table 2.17. A semi-structured interview approach was taken so that all topics from the interview guide could be covered but also allow the interviewee to elaborate and add information that they felt were relevant to their narrative. After each topic guide question, probe questions were asked where necessary.

Table 2-16 Topic guide for community organisation and service provider workers

Topics	**Example question**
Work history	*How long have you been working in this role? Can you tell me how/why you got into this profession?*
Organisational role	*Could you tell me about the work of the organisation? Could you tell me more about your specific role?*
Typical clients	*What kind of problems are your clients dealing with? Could you give me an example of a typical client and/or problem?*
Clients' experiences of unfair treatment	*What kind of unfair treatment do clients complain about? Have you witnessed any unfair treatment towards your client group?*
Advocate role/supporting clients	*In what ways do you help clients access services? Can you give me an example of how your role as an advocate has changed an interaction between a client and service provider?*
Organisational processes	*Are you under pressure to meet organisational targets? What pathways are open for clients to complain about unfair treatment?*
Barriers to clients	*What barriers do your clients face in accessing services?*

Table 2-17 SELCoH participant interview topic guide and example questions

Topic	Example question
Experience of unfair treatment	*Could you tell me about when you were unfairly not leased a property?*
Effect of experience on health	*Could you tell me how this experience affected your health and well-being?*
Reason for discrimination	*Do you ever think that you are treated unfairly in any other situations for the same reasons?*
Anticipating future discrimination	*Would you change how you act in future situations because of this experience or feeling that something unfair may happen?*
Coping mechanisms	*What kind of things did you do to cope with this situation?*
Interactions with organisations	*In the service that you experienced unfair treatment did any policies or rules help protect you from unfair treatment?*

2.3.2.3.1 Pilot SELCoH participant interviews

Three SELCoH participants were recruited in an initial batch. These initial 3 interviews were transcribed and preliminarily coded so that amendments could be made to the topic guide where necessary. The following changes were made to the topic guide after the initial three interviews:

1. Further questions were added to the topic guide so that participants were asked about all three domains regardless of whether they reported stress in this domain as one participant reported experiencing discrimination in a domain that they had not reported about in the SELCoH 2 survey.
2. A further question asking about experiences of privilege was also added to the topic guide.
3. An additional probe question was added under the topic anticipation of future unfair treatment, ‘Would you change how you act in future situations?’ in order to receive clearer answers on the topic.
4. Additional questions were added to the end of the interview guide to gauge to what extent the participant felt they were in control of their lives.

5. Interview technique was also improved after listening to the interviews and amending how I elicited key information.

2.3.2.4 Data storage

Personal details of all participants were stored in a secure place separately from the information that was collected in ethnographic field notes and interviews. Only the principal researcher was able to link personal data with the transcribed data and no personal identifiers were attached to the interview data or recordings.

2.3.2.5 Ethics

The qualitative study received approval from the King's College London research ethics committee, reference PNM/12/13-109.

2.3.3 Analysis

These data were subject to thematic analysis using NVivo 10, a computer programme designed for qualitative data management, to create a thematic framework to be compared with existing theories in the literature (339). The data were analysed in the following stages (340):

Transcription

The data collected from observations, staff interviews and interviews with SELCoH participants were all fully transcribed. I transcribed all ethnographic field notes and the first two staff interviews and the first two SELCoH interviews in order to familiarise myself with the data as much as possible. All other interviews were transcribed by a professional transcriber employed by the research team.

Familiarisation

Transcripts were read several times and initial coding categories were noted as a draft framework.

Coding

These initial codes were applied to the transcripts. Codes were applied to short sentences or phrases in the text by hand. These codes were amended during this process. Interviews were then input into NVivo 10 to facilitate the management of the data. An independent researcher with experience of qualitative data analysis read two selected interviews and the draft coding framework was discussed.

Themes

Codes were refined by collapsing, merging and deleting codes. Different codes that could be fitted together were grouped into provisional themes in tables. Some of the themes identified were connected to the interview topics covered while some emerged from the data itself. These provisional themes were refined using thematic mapping to double check if themes fitted the data. Once themes were defined, a paragraph was written about each theme and how it relates to other themes from the data to clearly define what the themes are. These themes were also examined alongside existing theories to illustrate how the current findings are contextualised with existing literature on the topic.

2.4 Overview of analysis by results chapter

Quantitative and qualitative data were integrated throughout the analyses. A summary of the specific aims of each results chapter and the analytical strategy employed is provided below. Chapter 3 describes the formation of latent classes for use in subsequent results chapters. The following results chapters describe the relationship of employment (Chapter 4), housing (Chapter 5) and healthcare adversity (Chapter 6) with the latent classes and health outcomes. As these three chapters employ the same methodological approach, the aims and analytical strategy employed are generalised. Specific aims and hypotheses are described in each results chapter.

All quantitative analyses applied appropriate weights to account for clustering, non-response and sample attrition between S1 and S2. Where quantitative data was cross tabulated, unweighted frequency distributions and weighted percentage prevalence estimates were estimated, testing proportional differences using Chi-squared tests with Rao and Scott corrections. All estimates were calculated with 95% confidence intervals, and exact p-values from statistical tests are presented.

2.4.1 Chapter 3 Aims and methods

This chapter aims to describe the generated latent classes and their relationship to adversity, health outcomes, coping strategies and life events.

2.4.1.1 Aims

1. to estimate the distribution of adversity, life events and coping strategies by sociodemographic and socioeconomic indicators
2. to generate and describe latent classes of advantaged and disadvantaged social identities based on the individual associations between the sociodemographic and socioeconomic indicators with adversity, life events and coping strategies
3. to estimate the prevalence of adversity, life events, coping strategies and health outcomes by generated latent classes
4. to test associations between generated latent classes and health outcomes

2.4.1.2 Data

Data from SELCoH 1 and 2 were used to describe the distribution of adversity, life events, coping strategies and health outcomes. The measures used are briefly outlined below.

2.4.1.3 Measures

Outcome variables

Four variables were used as indicators of adversity in these analyses: perceived discrimination in (i) employment, (ii) housing, (iii) health services, as well as (iv) any discrimination across the three domains. These were chosen to represent adversity from each of the three domains (see section 2.2.3.2.1). Other outcome variables included life

events (section 2.2.3.4) and coping strategies. Coping strategies included active coping, spiritual coping, avoidance coping, coping with alcohol and coping with smoking (see section 2.2.3.3). For the purposes of the analyses in this chapter, these 5 coping variables were dichotomised (never or rarely vs. some or most of the time) for ease of interpretation as in previous SELCoH analyses (84). Three health outcome variables were used: common mental disorder, self-rated health and mental wellbeing. Detailed descriptions of these variables are provided in section 2.2.3.1.

Independent variables

The independent variables included sociodemographic and socioeconomic variables that describe social status. Sociodemographic variables include: gender, age, ethnicity, migration status, first language, religion and sexual orientation. Socioeconomic indicators include educational attainment, occupational social class, annual household income and benefit receipt (see section 2.2.3.5 and 2.2.3.6). The distribution of independent variables is shown in Table 2.18.

Table 2-18 Characteristics of the sample

Variable	Categories	Distribution n(%) n	%
Sociodemographics			
Gender	Male	437	47.5
	Female	615	52.5
Age (in years)	16-29	246	30.5
	30-44	333	32.5
	45-64	344	27.7
	65+	129	9.3
Marital status	Single	270	28.5
	In a relationship	692	64.9
	Separated/divorced/widowed	87	6.6
Ethnicity	White British	536	49.7
	Black Caribbean	85	8.4
	Black African	135	13.4
	White Other	147	13.6
	Non White Other	98	9.5
	Mixed	50	5.4
Migrant status	Born in the UK	668	65.4
	Migrant (0-10)	126	12.8
	Migrant (11-20)	110	10.9
	Migrant (21+)	133	10.9
First Language	English	839	80.4
	Other	213	19.6
Religion	None	403	40.3
	Christian	525	47.8
	Muslim	78	7.7
	Other	46	4.2
Sexual Orientation	Heterosexual	985	93.5
	Non-heterosexual	63	6.5
SES			
Social occupational class (SOC)	No SOC assigned	77	8.9
	Unskilled./semi-skilled manual	183	16.8
	Skilled manual	286	27.2
	Professional & managerial	506	47.1
Educational attainment	No qualifications/GCSE	260	23.3
	A Level	262	26.5
	Degree or above	530	50.2
Any benefits	No	797	75.8
	Yes	255	24.2

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.

2.4.1.4 Analysis

Aim 1 Distribution of adversity and coping strategies

In addressing the first aim, all outcome variables (indicators of adversity, life events, coping strategies and health outcomes) were cross-tabulated against sociodemographic and socioeconomic indicators. Mean scores are presented for number of life events (continuous variable).

Aim 2 Describing latent classes

In addressing the second aim, latent class analysis was used to generate latent classes to use in further intersectional analyses. Sociodemographic and socioeconomic indicators were entered into a model in MPlus 6 to generate latent classes of advantaged and disadvantaged social identities. Models were selected using criteria as described in section 2.2.4.1. The generated latent class variable was then described by sociodemographic and socioeconomic indicators in Stata 11.

Aim 3 Distribution of adversity, life events and coping strategies by latent classes

In addressing the third aim, all outcome variables were cross-tabulated against the latent class variable. Mean scores are presented for continuous variables.

Aim 4 Latent classes and health outcomes

For the final aim, unadjusted regression models estimated the associations between the latent class variable and the health outcome variables for reference in subsequent analyses. Models adjusting for age and gender were also tested.

2.4.2 Chapter 4-6: Aims and methods

These chapter aim to investigate the relationship between adversity in employment (Chapter 4), housing (Chapter 5), healthcare (chapter 6) and health outcomes using mixed methods. Additionally, Chapter 6 also aims to understand how these adversities interrelate to affect health outcomes. Each chapter has the following broad aims:

2.4.2.1 Aims

1. *(Quantitative)* To estimate the prevalence of each adversity and the distribution of this adversity by the generated latent classes.

2. *(Qualitative)* To describe why certain groups experience more adversity and how it is enacted at the institutional level.

3. *(Quantitative)* To test associations between each type of adversity and health outcomes.

4. *(Quantitative)* To test the mediating effects of different coping strategies in the associations between indicators of adversity and health outcomes and the role of potential confounders; age, gender and stressful life events.

5. *(Qualitative)* To describe the pathways in which adversity affects health from multiple perspectives.

2.4.2.2 Data

In addition to SELCoH data, the following qualitative data were used: ethnographic field notes; in-depth interviews with 11 community support worker who assist community members to navigate employment, housing and health services; 7 interviews with service providers including three housing officers, two employment advisors and two general

practitioners (GPs) and 12 interviews with SELCoH participants who had experienced adversity in employment, housing and/or healthcare.

2.4.2.3 Quantitative measures

The quantitative measures used in each chapter are outlined in table 2.19.

Table 2-19 Quantitative Measures used in Chapters 4-6

	Chapter 4 **Employment adversity**	**Chapter 5** **Housing adversity**	**Chapter 6** **Healthcare adversity**
Outcome variables	Common mental disorder, Self-rated health, Mental wellbeing (see section 2.2.3.1)		
Independent variables	Experienced discrimination Anticipated discrimination Unemployment Job insecurity (see section 2.2.3.2)	Adverse housing experiences Poor housing conditions (see section 2.2.3.2)	Experienced discrimination Anticipated discrimination (see section 2.2.3.2)
Potential mediators	Active coping, Spiritual coping, Avoidance coping, Coping by smoking, Coping by alcohol (see section 2.2.3.3)		
Potential confounders	Latent classes Age (continuous) and Gender Life events (see section 2.2.3.4) [a]Health outcome at SELCoH 1	Latent classes Age (continuous) and Gender Marital status Life events (see section 2.2.3.4)	Latent classes Age (continuous) and Gender Life events (see section 2.2.3.4) [a]Health outcome at SELCoH 1

[a]Health outcome at SELCoH 1 also tested as possible confounder in models including experienced or anticipated discrimination where possible

2.4.2.4 Analysis

The analytical methods used to address both the quantitative and qualitative aims of these chapters are described below.

Aim 1: Distribution of adversity

In order to address Aim 1, prevalence estimates of the adversity variables were calculated for the sample. These variables were then cross-tabulated against the latent class variable, age and gender (They were also cross-tabulated against marital status and tenure in Chapter 5 due to their importance as descriptive variables of housing adversity). Unadjusted logistic regression models estimated the association between these variables and the adversity variables. Models adjusting for age and gender are also presented.

Aim 2 How is adversity enacted?

In order to address Aim 2 qualitative data was used to more fully describe and complement the quantitative analysis for Aim 1. Quotes were organised by theme and subtheme and a thematic map was produced to show how different themes at the structural and institutional level were related to adversity. The interpretation of the themes was supported with detailed quotations.

Aim 3 Adversity and health outcomes

In order to address Aim 3, distribution differences in health outcomes by indicators of adversity were tested using Chi-square tests with Rao & Scott corrections, while regression methods tested the strength of the associations.

Aim 4 Potential mediators and confounders

In order to address aim 4, tests for mediation followed the steps outlined by Baron and Kenny (341). This involved establishing associations between: (i) indicators of adversity and the health outcomes (tested in aim 3); (ii) adversity and the potential mediators (coping strategies); and (iii) the potential mediators (coping strategies) and the health outcomes. In order to complete the second step, ordinal logistic regressions were used to test the associations between each indicator of adversity and coping strategies. Associations were considered significant at a conventional p-value of 0.05.

The final step of mediation testing involved adding identified potential mediators into models testing the association between individual indicators of adversity and health outcomes. A coping variable was considered to have a mediating effect where there was a substantial attenuation in the association between an indicator of adversity and a health outcome and the mediator was significantly associated with the outcome in the model. A 10% change in an unadjusted unexponentiated coefficient was considered as a substantial attenuation (342) and conventional p-values of 0.05 were considered statistically significant.

In order to examine whether the association between the adversity indicators and health outcomes remained after accounting for potential mediators and confounders (age, gender, marital status and life events) a series of regression analyses were conducted. Block adjusted models separately tested the associations between indicators of adversity and health outcomes with the following potential confounders entered separately: (i) latent classes; (ii) age, gender (and marital status in Chapter 5) and (iii) life events.. This allowed identification of potential confounders in the fully adjusted models. Again, a 10% change in an unadjusted unexponentiated coefficient was considered as a substantial attenuation. Fully adjusted models included both potential mediators and confounders. Further adjustment for CMD or poor self-rated health at SELCoH 1 was made where testing the associations between experienced or anticipated discrimination with CMD and poor self-rated health, respectively. As mental wellbeing was not measure at

SELCoH 1, adjustments for potential confounder could not be made in testing the associations between discrimination and mental wellbeing.

Aim 5 Describing adversity's impact on health

In order to address Aim 5 qualitative data was used to more fully describe and complement the quantitative analysis for Aim 3 and 4. Quotes were organised to provide descriptive and explanatory accounts of the data and identify themes related to the psychological and behavioural responses to adversity using a stress process theory model (24). Quotes were inserted to illustrate the themes.

Chapter 3 Discrimination, life events and coping strategies by sociodemographics, socioeconomic indicators and generated latent classes of social identities

3.1. Introduction

This chapter aims to provide an overview of the sociodemographic and socioeconomic distribution of discrimination across the domains of employment, housing and healthcare, life events (cumulative stressful life events which do not include adversity in employment, housing or health) and coping strategies; how the sociodemographic and socioeconomic distribution of these experiences were used to generate latent classes of social identity; and the prevalence of discrimination, life events, coping strategies and health outcomes by the generated latent classes.

3.1.1. Rationale

A core aim of epidemiology is to understand patterns (prevalence and incidence) of disease across populations and their underlying causes in order to inform policy, prevention and biomedical research. Stress theory provides a useful approach to understanding the relationship between adversity and health outcomes and an important first step in this process is to examine the distribution of discrimination, life events and coping strategies by social statuses (273). We know that disadvantaged social status is associated with a range of adversity across the domains of employment, housing and health, including discrimination (65). However, prevalence estimates vary depending on context, methods used and the domain under investigation e.g. employment or housing.

In most cases, experiences of adversity are usually documented using one category of difference e.g. by sexual orientation or ethnicity. As introduced in Chapter 1, the concept

of intersectionality proposes the examination of multiple aspects of identity simultaneously to gain a more nuanced understanding of how social status is related to both exposures and health outcomes (138). However, there is limited research using intersectional approaches to investigate these matters which may uncover within category differences and provide greater insight into the association between adversity and health outcomes.

Intersectional approaches in health research have been used far more extensively in qualitative studies. There are examples of intersectional approaches in quantitative work (143) but very few use an intersectional approach to understand the effects of adversity on health (145). Intersectional approaches are often limited by small cell counts; latent class analysis offers a solution not only as a convenient data reduction tool but can also be used to identify subgroups in a population that can occupy intersectional positions. I will address these methodological limitations in this chapter by generating latent classes of social identities where groups represent differing positions of privilege and disadvantage; and provide prevalence estimates of both health outcomes and exposures by the generated latent classes.

3.1.2. Aims

A3.1 to estimate the distribution of discrimination across the domains of housing, employment and healthcare, life events and coping strategies by sociodemographic and socioeconomic indicators

A3.2 to generate and describe latent classes of advantaged and disadvantaged social identities based on the individual associations between the sociodemographic and socioeconomic indicators with discrimination, life events and coping strategies

A3.3 to estimate the prevalence of discrimination, life events, coping strategies and health outcomes by generated latent classes

A3.4 to test associations between generated latent classes and health outcomes

3.2. Results

3.2.1. Distribution of discrimination, life events and coping strategies

3.2.1.1. Discrimination

Table 3.1 shows the sociodemographic and socioeconomic distribution of discrimination across the three domains of employment, housing and healthcare. 18.3% of the sample reported lifetime experience of structural discrimination in at least one of these three domains. Discrimination in employment was the most common experience (12.9%). The proportion of those reporting employment discrimination was highest in the 45-64 year old age group ($p<0.001$), those who identified as Black Caribbean or Black African ($p=0.003$), migrants who had lived in the UK for less than 20 years ($p=0.002$) and those whose first language was not English ($p<0.001$). In relation to SES, low household income groups ($p=0.001$) and those who were currently receiving benefit ($p<0.001$) were also more likely to report discrimination. In contrast, there were no differences by gender, religion, sexual orientation educational attainment or social occupational class. Only 1.7% of the sample reported experiencing discrimination in housing. The proportion of those reporting housing discrimination was highest for those who identified as Black African or Mixed ethnicity ($p=0.003$), those who identified as Muslim ($p=0.034$), low household income groups ($p=0.001$) and those in receipt of benefit ($p<0.001$). There were no differences by gender, age, migration status, first language, educational attainment and social occupational class. However, due to small cell sizes, cross tabulated prevalence estimates of housing discrimination should be interpreted with caution. 5.6% of the sample had experienced healthcare discrimination. The proportion of those reporting healthcare discrimination was highest for females ($p=0.003$), those who reported being affiliated with ‘Other’ religions ($p=0.002$), low household income groups ($p=0.010$) and those in receipt of benefits ($p<0.001$). There were no differences by other demographic or socioeconomic characteristics.

Table 3-1 Perceived discrimination in employment, housing and healthcare by sociodemographic and socioeconomic indicators

	Employment			**Housing**			**Healthcare**			**Any domain**		
	n	**%(95% CI)**	***p***	**n**	**%(95% CI)**	***p***	**n**	**%(95% CI)**	***p***	**n**	**%(95% CI)**	***p***
Total Sample (n=1052)	138	12.9(10.9-15.0)		18	1.7(0.1-2.5)		62	5.6(4.2-6.9)		198	18.3(15.9-20.6)	
Sociodemographics												
Gender			0.436			0.974			0.006			0.220
Male (n=437)	62	13.8(10.8-17.4)		8	1.7(0.9-3.5)		16	3.4(2.1-5.6)		76	16.7(13.4-20.5)	
Female (n=615)	76	12.1(9.7-15.0)		10	1.7(1.1-2.8)		46	7.5(5.6-9.9)		122	19.7(16.7-23.1)	
Age			<0.001			0.326			0.611			0.001
17-29 (n=246)	22	9.0(6.0-13.3)		5	1.9(0.8-4.6)		11	4.2(2.3-7.5)		35	14.0(10.2-18.9)	
30-44 (n=333)	40	12.2(8.9-16.4)		4	1.3(0.5-3.4)		20	5.7(3.7-8.8)		56	16.6(12.8-21.3)	
45-64(n=344)	68	20.2(16.3-24.8)		4	1.3(0.5-3.4)		23	6.6(4.4-9.7)		88	26.0(21.6-30.8)	
65+ (n=129)	8	6.7(3.4-12.8)		5	3.9(1.6-9.1)		8	6.3(3.2-12.1)		19	15.3(10.0-22.7)	
Ethnicity			0.003			0.003			0.120			0.002
White British(n=536)	49	8.7(6.7-11.4)		4	0.8(0.3-2.1)		26	4.4(3.0-6.5)		74	13.0(10.5-16.1)	
Black Caribbean (n=85)	18	21.3(14.0-31.1)		1	0.8(0.1-5.3)		6	6.0(2.8-12.4)		23	26.2(17.9-36.6)	
Black African (n=135)	26	19.2(13.4-26.9)		6	4.6(2.0-10.2)		4	2.8(1.0-7.7)		33	24.5(17.9-32.6)	
White Other(n=147)	21	14.3(9.2-21.4)		4	2.4(0.9-6.5)		12	8.2(4.7-14.1)		33	22.0(15.9-29.7)	
Non-White Other (n=98)	16	15.0(9.2-23.5)		0	0		7	7.6(3.7-15.0)		21	20.7(13.9-29.6)	
Mixed (n=50)	7	14.0(6.8-26.5)		3	5.9(1.8-17.1)		6	10.3(4.7-21.2)		13	23.8(14.3-36.7)	
Migrant Status			0.002			0.118			0.559			0.002
Migrant 0-10 years (n=126)	25	20.4(13.9-28.9)		3	2.5(0.8-7.8)		8	5.7(2.9-11.0)		33	26.4(19.2-35.0)	
Migrant 11-20 years (n=110)	21	19.9(13.1-29.0)		4	3.9(1.5-10.2)		9	8.2(4.2-15.2)		29	26.3(18.7-35.6)	
Migrant >21 years (n=133)	19	14.2(9.2-21.2)		4	2.8(1.0-7.2)		6	4.5(2.0-9.7)		27	20.1(14.1-27.7)	
UK born (n=668)	72	10.3(8.2-12.7)		7	1.1(0.5-2.2)		37	5.1(3.7-7.1)		106	18.3(16.1-20.8)	
First Language			<0.001			0.408			0.449			<0.001
English (n=839)	95	11.0(9.1-13.3)		13	1.6(0.9-2.7)		47	5.3(4.0-7.0)		140	16.0(13.7-18.6)	

Other (n213)	43	20.8(15.7-27.1)		5	2.4(1.0-5.8)		15	6.6(4.0-10.7)		58	27.5(21.8-34.1)	
Religion			0.264			0.034			0.001			0.065
None (n=403)	48	11.3(8.6-14.8)		7	1.7(0.8-3.7)		20	4.5(2.9-6.9)		65	15.2(12.0-19.0)	
Christian (n=525)	70	13.2(10.5-16.5)		6	1.1(0.5-2.4)		32	6.0(4.2-8.4)		102	19.2(15.9-22.9)	
Muslim (n=78)	14	19.5(11.8-30.4)		4	5.7(2.1-14.3)		2	2.0(0.5-7.6)		18	24.3(15.6-35.6)	
Other (n=46)	6	12.9(6.1-25.4)		1	1.8(0.2-11.7)		8	17.4(8.9-31.2)		13	27.4(16.9-41.1)	
Sexual Orientation			0.928			0.670			0.965			0.914
Heterosexual (n=985)	129	12.9(10.9-15.2)		17	1.8(1.1-2.9)		58	5.6(4.3-7.2)		185	18.3(16.0-20.8)	
Non-heterosexual (n=63)	8	12.5(6.2-23.4)		1	1.1(0.2-7.8)		4	5.5(2.0-13.8)		12	17.7(10.2-29.1)	
SES Indicators												
Educational Attainment			0.357			0.914			0.462			0.436
GCSE or below (n=260)	28	12.1(8.5-17.0)		5	1.8(0.7-4.5)		20	7.1(4.6-10.9)		50	19.7(15.3-25.1)	
A Level/Vocational (n=262)	42	15.5(11.5-20.6)		5	1.9(0.8-4.7)		15	5.2(3.1-8.6)		55	20.0(15.5-25.4)	
Degree or above (n=530)	68	11.9(9.4-15.0)		8	1.6(0.8-3.1)		27	5.0(3.4-7.3)		93	16.7(13.7-20.2)	
Social occupational class			0.115			0.482			0.086			0.281
Class I & II (n=506)	63	11.6(9.1-14.7)		8	1.5(0.8-3.1)		23	4.3(2.9-6.5)		87	16.3(13.3-19.8)	
Class III (n=286)	45	16.2(12.3-21.1)		6	2.1(0.9-4.6)		20	6.3(4.1-9.7)		64	22.1(17.6-27.3)	
Class IV & V (n=183)	25	14.4(9.7-20.8)		4	2.6(0.9-6.8)		9	4.9(2.5-9.4)		32	18.0(12.8-24.7)	
None assigned (n=77)	5	7.0(3.0-15.7)		0	0		10	10.8(5.7-19.4)		15	17.8(11.0-27.6)	
Household Income (annual)			0.005			0.001			0.002			<0.001
£0-12,097 (n=176)	33	19.7(14.3-26.4)		5	3.7(1.5-8.5)		19	10.5(6.8-16.0)		50	29.2(22.9-36.5)	
£12,098-31,494 (n=240)	33	14.2(10.3-19.4)		10	3.9(2.1-7.3)		18	7.3(4.6-11.4)		55	22.9(18.1-28.7)	
£31,495+ (n=531)	58	10.2(7.9-13.1)		1	0.2(0.0-1.6)		21	3.6(2.3-5.5)		75	13.3(10.7-16.4)	
Benefit Receipt			<0.001			<0.001			<0.001			<0.001
No (n=797)	88	10.6(8.5-12.9)		7	0.9(0.4-1.8)		33	3.8(2.7-5.3)		121	14.4(12.2-17.0)	
Yes (n=255)	50	20.2(15.7-25.6)		11	4.4(2.4-7.9)		29	11.1(7.7-15.5)		77	30.3(24.9-36.4)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
CI=confidence interval

3.2.1.2. Life events and coping strategies

The distribution of life events and coping strategies are described in Table 3.2.and 3.3. The mean score for number of lifetime life events was 3.1 (SD ±1.89; range 0-9). Males reported they had experienced more life events than females ($p<0.001$) and the mean score of life events was largest in the 45-64 year old age group ($p<0.001$). In terms of ethnicity and migration status, the White British and White Other ethnic group had higher mean scores that the other ethnic groups ($p=0.004$), while those born in the UK also had higher scores that the migrant groups ($p<0.001$). Higher mean scores were also observed in those affiliated with 'Other' religions ($p=0.037$). In addition, those with low educational attainment, low household income and receiving benefits all reported experiencing more life events than those with high educational attainment ($p<0.001$), high household income ($p<0.001$) and no benefit receipt ($p<0.001$), respectively. There were no differences by first language, sexual orientation or social occupational class.

A large proportion of the sample (89.6%) endorsed using active coping for general stress. However, there were differences by sociodemographic and socioeconomic indicators. There was a higher proportion of active coping in females compared to males ($p=0.020$) and in non-heterosexuals compared to heterosexuals ($p=0.019$), while this strategy was used less by those in the 65 years old and above age group compared to other age groups ($p<0.001$). Those in social occupational class I and II reported using active coping more than those in other social occupational classes ($p<0.001$). Those with high educational attainment, high household income and no benefit receipt all reported using active coping more than those with low educational attainment ($p<0.001$), low household income ($p<0.001$) and in receipt of benefits ($p<0.001$), respectively. Conversely, there were no differences by ethnicity, migration status, first language or religion.

Approximately one third of the sample reported using spiritual coping to cope with general stress. There was a higher proportion of spiritual coping in females in comparison to males ($p<0.001$). The use of spiritual coping was also highest in the 65

years old and older age group ($p=0.014$). There was a higher proportion of spiritual coping in those who identified as Black Caribbean or Black African in comparison to the other ethnic groups ($p<0.001$) and in migrants and those whose first language was not English in comparison to non-migrants ($p<0.001$) and those whose first language was English ($p<0.001$), respectively. As expected, there was a low proportion of spiritual coping in those who were not affiliated with any religion ($p<0.001$). In terms of SES indicators, there were higher proportions of spiritual coping in those individuals with low educational attainment ($p<0.001$), in social occupational classes IV and V ($p<0.001$), in low income households ($p<0.001$) and those receiving benefits ($p<0.001$). Additionally, there was a lower proportion of spiritual coping in non-heterosexuals compared to heterosexuals, but this was only marginally significant ($p=0.054$).

Table 3-2 Stressful life events and coping (active and spiritual) by socio-demographic and socioeconomic indicators

	Life events		Active coping			Spiritual coping		
	μ(95% CI)	***p***	**n**	**%(95% CI)**	***p***	**n**	**%(95% CI)**	***p***
Total Sample (n=1052)	3.1(3.0-3.3)			89.6(87.8-91.5)			33.2(29.7-36.6)	
Sociodemographics								
Gender		<0.001			0.020			<0.001
Male (n=437)	3.5(3.3-3.6)		375	87.3(84.3-90.4)		117	26.3(22.1-30.9)	
Female (n=615)	2.8(2.7-3.0)		563	91.7(89.5-93.9)		246	39.4(35.3-43.7)	
Age		<0.001			<0.001			0.014
17-29 (n=246)	2.6(2.4-2.9)		226	91.8(87.7-94.6)		70	27.9(22.0-34.7)	
30-44 (n=333)	2.8(2.6-3.0)		315	94.2(90.8-96.4)		119	34.6(29.1-40.5)	
45-64(n=344)	3.9(3.7-4.1)		301	87.0(82.8-90.3)		115	32.8(27.6-38.3)	
65+ (n=129)	3.6(3.2-3.9)		96	74.4(66.1-81.3)		59	46.4(37.7-55.4)	
Ethnicity		0.004			0.916			<0.001
White British(n=536)	3.3(3.1-3.5)		473	89.2(86.3-91.5)		93	15.1(12.3-18.5)	
Black Caribbean (n=85)	2.9(2.5-3.3)		80	92.5(83.2-96.8)		53	59.5(47.7-70.3)	
Black African (n=135)	2.8(2.4-3.1)		121	88.7(81.9-93.2)		110	80.1(71.8-86.5)	
White Other(n=147)	3.3(3.0-3.7)		134	91.5(85.7-95.1)		39	25.3(18.7-33.3)	
Non-White Other (n=98)	2.7(2.3-3.0)		86	89.2(81.2-94.0)		52	50.6(40.1-61.1)	
Mixed (n=50)	2.9(2.5-3.4)		44	89.2(78.2-95.0)		15	29.2(17.9-43.7)	
Migrant Status		<0.001			0.143			<0.001
Migrant 0-10 years	2.6(2.3-3.0)		115	90.7(83.7-94.9)		70	55.8(45.7-65.5)	
Migrant 11-20 years	2.8(2.4-3.1)		105	95.2(89.0-98.0)		66	57.9(47.8-67.3)	
Migrant >21 years	3.6(3.3-4.0)		114	86.0(78.9-91.0)		68	50.6(41.6-59.5)	
UK born (n=668)	3.2(3.1-3.4)		592	89.3(86.7-91.4)		156	22.1(18.8-25.8)	
First Language		0.065			0.231			<0.001
English (n=839)	3.2(3.0-3.3)		753	90.2(88.0-92.0)		240	27.2(23.8-30.9)	

Other (n213)	2.9(2.6-3.2)		185	87.3(82.1-91.2)		123	57.7(50.4-64.7)	
Religion		0.037			0.366			<0.001
None (n=403)	3.2(3.0-3.4)		366	91.3(88.1-93.6)		13	3.3(1.9-5.8)	
Christian (n=525)	3.1(2.9-3.3)		465	89.1(86.1-91.5)		277	52.5(47.6-57.3)	
Muslim (n=78)	2.7(2.3-3.1)		66	85.0(74.5-91.6)		56	69.5(55.8-80.5)	
Other (n=46)	3.7(3.1-4.2)		41	88.6(75.7-95.1)		17	33.7(21.3-48.8)	
Sexual Orientation		0.722			0.019			0.054
Heterosexual (n=985)	3.1(3.0-3.3)		875	89.3(87.1-91.0)		347	33.9(30.4-37.6)	
Non-heterosexual (n=63)	3.0(2.6-3.5)		61	97.5(90.5-99.4)		14	21.7(12.9-34.1)	
SES Indicators								
Educational Attainment		<0.001			<0.001			<0.001
GCSE or below (n=260	3.6(3.3-3.9)		202	78.9(73.7-83.3)		106	38.5(32.2-45.3)	
A Level/Vocational	3.1(2.9-3.4)		235	89.6(84.9-92.9)		114	41.5(35.1-48.2)	
Degree or above (n=530)	2.9(2.7-3.1)		501	94.6(92.2-96.3)		143	26.3(22.3-30.8)	
Social occupational class		0.154			<0.001			<0.001
Class I & II (n=506)	3.1(2.9-3.3)		478	94.2(91.6-96.1)		142	26.8(22.8-31.2)	
Class III (n=286)	3.2(3.0-3.5)		236	83.8(79.0-87.7)		99	33.7(28.0-39.9)	
Class IV & V (n=183)	3.3(3.0-3.5)		155	86.0(80.2-90.3)		84	43.6(36.0-51.4)	
None assigned (n=77)	2.7(2.3-3.1)		69	90.0(81.3-94.9)		38	45.5(34.2-57.2)	
Household Income		<0.001			<0.001			<0.001
£0-12,097 (n=176)	3.7(3.4-4.0)		148	85.2(79.2-89.7)		91	50.4(42.5-58.4)	
£12,098-31,494 (n=240)	3.3(3.0-3.5)		202	85.5(80.3-89.4)		97	39.6(32.9-46.6)	
£31,495+ (n=531)	2.9(2.7-3.0)		499	93.8(91.3-95.6)		131	23.8(19.7-28.3)	
Benefit Receipt		<0.001			<0.001			<0.001
No (n=797)	2.9(2.8-3.1)		727	91.8(89.7-93.5)		249	29.9(26.2-33.8)	
Yes (n=255)	3.7(3.5-4.0)		211	82.8(77.5-87.1)		114	43.5(36.9-50.4)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
CI=confidence interval

64.1% of the sample indicated that they used avoidance coping to cope with general stress (Table 3.3). In terms of sociodemographic indicators, there was a higher proportion of avoidance coping in those who identified as Black Caribbean, Black African and Non-White Other in comparison to the White British group ($p<0.001$). There was a higher proportion of avoidance coping in migrants compared to those who were UK born ($p<0.001$). There was also a higher proportion of avoidance coping in those whose first language was not English and those who had a religious affiliation compared to those whose first language was English ($p=0.003$) and those with no religion ($p=0.012$), respectively. Conversely, there were no differences by SES indicators.

38.2% of the sample used alcohol and 22.3% of the sample used smoking to cope with general stress. There was a higher proportion of coping by alcohol in males ($p=0.001$) and in age groups under 65 years old ($p<0.001$). Additionally, there were higher proportions of coping by alcohol in those who identified as White British ($p<0.001$), UK born ($p<0.001$), whose first language was English ($p<0.001$), those who were not affiliated with any religion ($p<0.001$) and non-heterosexuals ($p=0.001$). There was a lower proportion of coping by smoking in the 65 years old and over age group ($p=0.013$), in the Black African group ($p<0.001$) and in migrant groups ($p=0.012$). In terms of SES indicators, the proportion of those using alcohol to cope increased with educational attainment ($p<0.001$) and household income ($p<0.001$) while the proportion of those using smoking to cope decreased with educational attainment ($p<0.001$) and household income ($p=0.007$).

Table 3-3 Coping (avoidance, by alcohol, by smoking) by socio-demographic and socioeconomic indicators

	Avoidance coping			Coping (alcohol)			Coping (smoking)		
	n	**%(95% CI)**	***p***	**n**	**%(95% CI)**	***p***	**n**	**%(95% CI)**	***p***
Total Sample (n=1052)		64.1(61.1-67.1)			38.2(34.9-41.5)			22.3(19.5-25.0)	
Sociodemographics									
Gender			0.049			0.001			0.120
Male (n=437)	266	61.0(56.2-65.5)		186	43.2(38.4-48.2)		101	24.5(20.5-28.9)	
Female (n=615)	414	66.9(63.0-70.6)		204	33.7(29.9-37.7)		118	20.3(17.2-23.9)	
Age			0.293			<0.001			0.013
17-29 (n=246)	148	60.1(53.7-66.1)		91	36.9(30.8-43.4)		63	25.9(20.7-31.9)	
30-44 (n=333)	225	67.2(61.9-72.1)		150	45.8(40.1-51.6)		67	21.0(16.6-26.1)	
45-64(n=344)	225	64.8(59.4-69.9)		132	39.0(33.8-44.6)		77	23.9(19.4-29.2)	
65+ (n=129)	82	64.6(55.8-72.5)		17	13.8(8.5-21.6)		12	10.1(5.8-16.9)	
Ethnicity			<0.001			<0.001			<0.001
White British(n=536)	310	57.5(53.3-61.7)		265	51.5(46.7-56.3)		127	25.4(21.6-29.6)	
Black Caribbean (n=85)	60	70.7(60.0-79.4)		21	24.9(17.0-35.0)		18	21.6(14.0-31.8)	
Black African (n=135)	114	82.7(73.7-89.1)		16	12.3(7.8-18.8)		8	5.9(2.9-11.6)	
White Other(n=147)	95	63.7(55.1-71.6)		52	36.6(28.6-45.3)		34	26.6(19.5-35.1)	
Non-White Other (n=98)	69	68.1(57.6-77.0)		23	26.5(18.1-37.1)		23	25.6(17.6-35.7)	
Mixed (n=50)	31	61.9(47.6-74.5)		13	26.1(15.5-40.4)		9	19.0(10.1-32.7)	
Migrant Status			<0.001			<0.001			0.012
Migrant 0-10 years (n=126)	87	68.4(59.5-76.2)		27	23.0(16.1-31.7)		16	13.4(8.1-21.5)	
Migrant 11-20 years	86	77.7(68.6-84.7)		28	27.1(19.3-36.7)		19	19.8(13.0-29.0)	
Migrant >21 years (n=133)	100	75.0(66.3-82.1)		32	26.1(18.8-34.9)		19	16.6(10.8-24.6)	
UK born (n=668)	400	59.7(55.9-63.3)		298	45.1(40.9-49.4)		163	25.5(22.1-29.2)	
First Language			0.003			<0.001			0.127
English (n=839)	524	61.9(58.5-65.2)		350	42.6(38.9-46.3)		184	23.3(20.4-26.5)	

	n	% (CI)	p	n	% (CI)	p	n	% (CI)	p
Other (n213)	156	73.3(66.5-79.2)		40	20.1(15.0-26.5)		35	18.0(13.0-24.4)	
Religion			0.012			<0.001			0.776
None (n=403)	233	57.8(52.8-62.6)		209	51.6(46.3-56.9)		84	22.6(18.6-27.1)	
Christian (n=525)	357	67.9(63.6-71.9)		161	32.0(27.8-36.4)		110	22.3(18.6-26.6)	
Muslim (n=78)	58	72.8(60.2-82.5)		5	7.8(2.6-21.0)		14	18.0(10.5-29.2)	
Other (n=46)	32	66.4(50.3-79.5)		15	35.9(22.5-52.0)		11	26.4(14.8-42.6)	
Sexual Orientation			0.574			0.001			0.183
Heterosexual (n=985)	634	63.9(60.7-66.9)		355	37.0(33.6-40.4)		202	21.9(19.2-24.8)	
Non-heterosexual (n=63)	43	67.5(54.7-78.1)		35	58.1(45.5-69.7)		17	29.2(19.2-41.8)	
SES Indicators									
Educational Attainment			0.197			<0.001			<0.001
GCSE or below (n=260	161	62.2(55.6-68.3)		52	22.9(17.5-29.3)		78	32.4(26.5-39.0)	
A Level/Vocational	182	68.8(62.7-74.3)		78	30.1(24.5-36.4)		62	25.6(20.3-31.7)	
Degree or above (n=530)	337	62.6(58.2-66.7)		260	49.6(44.9-54.3)		79	15.8(12.8-19.5)	
Social occupational class			0.316			<0.001			0.084
Class I & II (n=506)	317	61.9(57.5-66.0)		249	50.3(45.6-55.0)		89	18.8(15.4-22.8)	
Class III (n=286)	182	63.4(57.5-68.9)		95	35.0(29.1-41.3)		71	27.0(21.8-32.8)	
Class IV & V (n=183)	126	68.8(61.0-75.7)		33	19.8(14.3-26.7)		44	25.0(19.2-32.0)	
None assigned (n=77)	55	69.5(57.9-79.1)		13	18.8(11.4-29.5)		15	21.0(12.8-32.6)	
Household Income			0.161			<0.001			0.007
£0-12,097 (n=176)	121	69.3(62.2-75.5)		37	22.4(16.7-29.5)		52	30.7(23.9-38.4)	
£12,098-31,494 (n=240)	152	63.3(56.5-69.7)		56	24.0(18.8-30.2)		56	25.0(19.6-31.3)	
£31,495+ (n=531)	331	61.1(56.9-65.2)		270	51.4(46.7-56.0)		92	18.9(15.5-22.8)	
Benefit Receipt			0.063			<0.001			<0.001
No (n=797)	504	62.6(59.0-65.9)		328	42.4(38.6-46.3)		142	19.4(16.5-22.6)	
Yes (n=255)	176	69.0(62.9-74.5)		62	25.1(19.8-31.3)		77	31.3(25.6-37.7)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
CI=confidence interval

3.3. Latent classes

3.3.1. Model selection

The aim of the first stage of analysis was to determine the number of latent classes that optimally describe advantaged and disadvantaged social identities in this sample. It was decided that all sociodemographic and socioeconomic indicators should be included in the model for two reasons. Firstly, variables that were not associated with discrimination, life events or coping strategies were included in the model as the combination of these variables are theoretically different to the separately considered indicators. Secondly, using more indicators in LCA has been shown to be generally beneficial; increasing class assignment accuracy, improving convergence rates and decreasing boundary parameter estimates (322). Age and gender were also entered into the model as covariates to improve proper class assignment.

Table 3.4 shows the model fit statistics for latent class models with two to eight latent class solutions. The BIC had its lowest value at five classes but the BIC for six classes was also similar. The SSABIC had its lowest value at the seven class solution, although similar SSABIC values were also observed for the six class solution. These three solutions (5-7 classes) had entropy over 0.800 and a low number of bivariate residuals. The Lo-Mendell-Rubin likelihood ratio test showed there was a significant difference between the five and six class solution but that there was no significant difference between the six and seven class solution. As a result of these model fit statistics both the five and six class solutions can be seen as the most stable models.

Table 3-4 Latent class model selection

Number of classes	Model Fit Statistics					
	AIC[a]	BIC[b]	SSABIC[c]	E[d]	BVR[e]	LMR-LRT[f] (p-value)
2 class	15605	15819	15682	0.899	18	1200.44(<0.001)
3 class	15024	15347	15140	0.847	5	614.00(<0.001)
4 class	14803	15234	14958	0.850	3	260.84(<0.001)
5 class	14675	15215	14869	0.866	3	169.44(0.011)
6 class	14611	15261	14845	0.881	3	105.29(<0.001)
7 class	14561	15320	14834	0.896	3	97.97(0.770)
8 class	14530	15398	14843	0.907	3	73.39(0.767)

[a]Akaike's Information Criteria (AIC)
[b]Bayesian Information Criteria (BIC)
[c]Sample Size Adjusted Bayesian Information Criteria (SSABIC)
[d]Entropy
[e]Number of bivariate residuals
[f]Lo-Mendell-Rubin likelihood ratio test (LMR-LRT)

In order to resolve this ambiguity, I inspected the response probability profiles of both the five and six class solutions to see which solution contained the most informative classes. The six class solution contained similar classes to the five class solution with the addition of a predominantly low SES class, predominantly composed of long term migrants from the Caribbean and Ireland. This was an informative addition, considering that it also resulted in greater differentiation between the classes in terms of both SES and migration status indicators. Therefore I chose the six class model as the basis of further analyses (see table 3.5 for the six class solution and appendix A2 for the five class solution).

3.3.2. Description of classes

Table 3.5 displays the classes and provides a description of each class by sociodemographic and socioeconomic indicators. Classes were labelled with a tag of SES, ethnicity and migration status where possible. As all three migrant classes are comprised of ethnic minorities with no one ethnic group predominating the classes, no ethnicity tags were applied to classes 4-6. Similarly, although Class 3 was predominantly White British, an ethnicity tag was not used for this class due to the proportion of Black Caribbean and Mixed ethnicity groups in this class being similar to the proportion seen in the SELCoH 2 sample as a whole. Each class represents a social identity based on the intersection of SES, ethnicity and migration status. In this thesis, social identity is a relational term that defines who we are in terms of similarities or differences with others, which shape individual experience. Each class is described in detail below:

Class 1: High SES White non-migrant

The first latent class is predominantly UK born (96.3%) and identifies as White British (89.2%). Among all the classes, class 1 are the most likely to identify as having no religion (66.3%). This class is also defined by high SES; with a large proportion working in professional or managerial occupations (75.2%), living in a high income household (86.4%) and holding a University degree (80.9%). This class also has low levels of benefit receipt (5.3%).

Class 2: Mixed SES ethnic minority non-migrant

The second latent class is also predominantly UK born (75.7%) but in contrast to Class 1, all identify as an ethnic minority: mostly Black African (42.9%), Black Caribbean (27%) or Non White Other (18.9%). This class is the most likely to be aged between 17 and 29 (56%) and a high proportion (91%) are affiliated with a religion (Christian, Muslim or Other). This class is mixed in terms of social occupational class: 45.8% are in

professional or managerial occupations, 22.9% in skilled occupations while 28.2% had no assigned social occupational class. Within this class, those who had no assigned social occupational class were predominantly in the 17-29 age group and currently in education (data not shown). Educational attainment and annual household income were also mixed.

Class 3: Low SES non-migrant

Similarly to Class 1, the third class is also predominantly UK born and mostly identifies as White British (78.5%). However, 10.7% identify as Black Caribbean and 7.8% identify as Mixed ethnicity in this class. In contrast to Classes 1 and 2, this class is characterised by low SES: low educational attainment, low household income and mainly working in skilled (51.2%) and semi or unskilled occupations (31.9%). Additionally, a high proportion of this class is also in receipt of benefit (51.8%).

Class 4: Low SES migrant

The fourth class is composed of predominantly low SES migrants, with 88% having resided in the UK for more than ten years. 56.2% of these migrants were born in the Caribbean and 16.7% were born in Ireland (data not shown). This class is also the oldest class, with 28.8% being over 65 years of age or older. This class is the most likely to identify as Black Caribbean (54.6%) and all speak English as a first language. This class is also characterised by low SES: low educational attainment, low household income and only 5.3% are in professional or managerial occupations.

Class 5: High SES migrant

The fifth class is predominantly composed of migrants who are most likely to have been residing in the UK for twenty years or less (68.9%). This class is mixed in terms of ethnicity but most likely to identify as White Other (49.3%). This class is the most likely to identify as non-heterosexual (15.8%) and has a high proportion of individuals whose first language is not English (54.2%). In contrast to class 4, this class is characterised by high

SES: high educational attainment, high household income and a high proportion working in professional or managerial occupations (79.4%). They also have low levels of benefit receipt (4.5%).

Class 6: Mixed SES migrant

The final class is predominantly composed of migrants (99.5%) whose first language is not English (91.9%). Within this class, there is a mixture of ethnicities but most are likely to identify as Black African (43.1%). This class also has the highest proportion of individuals identifying as Muslim (27.1%). This class differs to the other two migrant classes in terms of SES, in that it is more mixed. Similar to Class 4, this class is characterised by high levels of benefit receipt (50%) but it is more mixed in terms of both educational attainment and household income, with 22.5% holding a degree and 27.1% in the highest income bracket.

Table 3-5 Describing the demographic and socio-demographic characteristics of the latent classes

Model indicators		Class 1 (n=377)	Class 2 (n=119)	Class 3 (n=232)	Class 4 N=(50)	Class 5 (n=122)	Class 6 (n=152)	*p*
Sex	Male	179(54.1)	46(44.5)	96(47.1)	18(41.2)	47(42.7)	51(39.6)	0.034
	Female	198(45.9)	73(55.5)	136(52.9)	32(58.8)	75(57.3)	101(60.4)	
Age (in years)	17-29	90(30.6)	59(57.9)	46(27.0)	7(20.7)	18(18.2)	26(23.3)	<0.001
	30-44	142(38.6)	32(23.9)	33(16.0)	8(18.0)	67(55.7)	51(34.9)	
	45-64	113(24.4)	27(17.5)	9(39.0)	18(32.4)	32(22.8)	55(30.8)	
	65+	32(6.4)	1(0.7)	54(18.0)	17(28.8)	5(3.3)	20(11.0)	
Ethnicity	White British	341(89.2)	0	188(78.5)	0	3(2.4)	4(2.9)	<0.001
	Black Caribbean	3(0.8)	33(27.0)	21(10.7)	28(54.6)	0	0	
	Black African	0	51(42.9)	0	2(4.7)	18(15.1)	64(43.1)	
	White Other	20(5.8)	5(4.1)	6(3.0)	16(29.5)	62(49.3)	38(24.8)	
	Non White Other	1(0.2)	21(18.9)	0	0	34(28.9)	42(26.5)	
	Mixed	12(4.0)	9(7.1)	16(7.8)	4(11.2)	5(4.3)	4(2.7)	
Migrant status	Born in the UK	356(96.3)	87(75.7)	224(98.9)	0	0	1(0.5)	<0.001
	Migrant (0-10)	0	12(9.3)	0	5(12.0)	65(57.1)	44(31.6)	
	Migrant (11-20)	3(0.9)	11(9.6)	0	14(35.1)	30(23.2)	52(36.8)	
	Migrant (21+)	11(2.8)	8(5.4)	3(1.1)	29(52.9)	27(19.7)	55(31.1)	
First Language	English	376(99.8)	116(97.3)	231(99.6)	50(100)	54(45.8)	12(8.1)	<0.001
	Other	1(0.2)	3(2.7)	1(0.4)	0	68(54.2)	140(91.9)	
Religion	None	240(66.3)	8(6.6)	91(43.4)	7(17.2)	43(34.5)	14(10.9)	<0.001
	Christian	129(31.7)	71(59.9)	131(52.5)	42(80.0)	63(53.0)	89(57.2)	
	Muslim	0	28(23.4)	5(2.2)	1(2.8)	3(2.5)	41(27.1)	
	Other	8(2.0)	12(10.0)	5(1.9)	0	13(9.9)	8(4.9)	
Sexual Orientation	Heterosexual	350(92.1)	112(94.3)	220(96.0)	50(100)	105(84.2)	148(97.9)	<0.001
	Other	27(7.9)	7(5.7)	9(4.0)	0	17(15.8)	3(2.1)	
Social occupational class (SOC)	Class I & II	293(75.2)	58(45.8)	25(9.6)	3(5.3)	98(79.4)	29(18.9)	<0.001
	Class III	57(15.3)	28(22.9)	117(51.2)	26(53.4)	19(16.2)	39(26.5)	
	Class IV & V	15(4.9)	4(3.1)	75(31.9)	21(41.3)	4(3.6)	64(40.0)	
	No SOC assigned	12(4.6)	29(28.2)	15(7.3)	0	1(0.8)	20(14.6)	

Educational attainment	No qualifications/GCSE	10(2.8)	5(5.0)	160(66.6)	38(76.6)	0	47(29.8)	<0.001
	A Level	55(16.4)	59(49.1)	62(28.5)	12(23.4)	5(4.4)	69(47.8)	
	Degree or above	312(80.9)	55(28.5)	10(4.8)	0	117(95.6)	36(22.5)	
Household income	0-£12,097	4(0.9)	14(12.3)	88(43.0)	16(39.0)	5(4.0)	49(39.2)	<0.001
	£12,098-£31,494	47(12.7)	29(27.1)	91(43.1)	19(42.9)	10(8.6)	44(33.7)	
	£31495+	302(86.4)	62(60.6)	26(13.9)	8(18.1)	96(87.4)	37(27.1)	
Any benefits	No	356(94.7)	99(84.1)	117(48.2)	31(60.3)	116(95.5)	78(50.0)	<0.001
	Yes	21(5.3)	20(15.9)	115(51.8)	19(39.7)	6(4.5)	74(50.0)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
Class1=High SES White non-migrant
Class 2=Mixed SES ethnic minority non-migrant
Class 3=Low SES non-migrant
Class 4=Low SES migrants
Class 5=High SES migrant
Class 6=Mixed SES migrant

3.4. Distribution of discrimination, life events and coping strategies by latent classes

3.4.1. Discrimination

The weighted prevalence for each experience of discrimination is reported by each latent class in Table 3.6. In terms of housing discrimination, the low SES migrant class had the highest prevalence of reporting being unfairly not leased a property (8.7%). There was also a higher prevalence of housing discrimination in the mixed SES ethnic minority non-migrant class and mixed SES migrant class in comparison to the high SES White non-migrant class (p=0.001). In contrast, the highest prevalence of employment discrimination was reported by the mixed SES migrant class (20.2%). The prevalence of employment discrimination was also higher in all other latent classes compared to the high SES White non-migrant class (p<0.001). The prevalence of healthcare discrimination was more than double that of the high SES White non-migrant class for all of the latent classes except for the mixed SES migrant class (p=0.017). The highest prevalence of healthcare discrimination was reported by the low SES migrant class (11.7%). Overall, the prevalence of discrimination across any of these three domains was more than double that of the high SES White non-migrant class for all of the latent classes (p<0.001).

Table 3-6 Prevalence estimates of structural discrimination by latent classes of social identity

	Employment			Housing			Health			Any domain		
	N	**% (CI 95%)**	***p***	**N**	**% (CI 95%)**	***p***	**N**	**%(CI 95%)**	***p***	**N**	**%(CI 95%)**	***p***
Total	138	12.9(10.9-15.0)		18	1.7(0.9-2.5)		62	5.6(4.2-6.9)		198	18.3(15.9-20.6)	
Latent classes			<0.001			0.001			0.017			<0.001
High SES White non-migrant	29	6.7(4.7-9.6)		2	0.6(0.1-2.3)		11	2.6(1.4-4.7)		38	9.0(6.6-12.2)	
Mixed SES ethnic minority non-migrant	17	13.1(8.3-20.1)		4	3.0(1.1-7.9)		8	6.6(3.3-12.9)		26	20.6(14.7-28.2)	
Low SES non-migrant	33	14.9(11.0-20.0)		3	1.3(0.4-4.2)		20	8.0(5.2-12.1)		52	22.4(17.5-28.1)	
Low SES migrant	8	19.9(10.1-35.6)		4	8.7(3.2-21.8)		5	11.7(4.7-26.1)		13	29.2(17.4-44.8)	
High SES migrant	22	17.2(11.3-25.2)		0	0		10	8.0(4.3-14.4)		31	24.4(17.4-33.0)	
Mixed SES migrant	29	20.2(14.2-27.8)		5	3.4(1.4-8.0)		8	4.7(2.4-9.2)		38	25.6(19.0-33.6)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
CI=confidence interval

3.4.2. Life events and coping strategies

Table 3.7 and 3.8 show the estimated mean scores for life events and prevalence estimates for coping strategies by latent classes. The mean scores for life events were highest in the low SES non-migrant class and the low SES migrant class ($p<0.001$). In terms of coping strategies, the lowest proportion of active coping was reported in the low SES non-migrant class ($p<0.001$). High proportions of spiritual coping were seen in the mixed SES ethnic minority non-migrant class, low SES migrant class and the mixed SES migrant class ($p<0.001$). The prevalence of spiritual coping in the high SES White non-migrant class was particularly low (12.7%). The highest proportion of avoidance coping was seen in the three different migrant classes and the mixed SES ethnic minority non-migrant class ($p<0.001$). In terms of substance use coping, the prevalence of coping by alcohol was far higher in the high SES White non-migrant class compared to other latent classes ($p<0.001$) while the prevalence of coping with smoking was higher in the low SES non-migrant class compared to the other classes ($p<0.001$).

Table 3-7 Mean scores for stressful life events and prevalence estimates for coping strategies (active coping and spiritual coping) by latent classes of social identities

		Life events		Active coping			Spiritual coping		
	N	**μ (CI 95%)**	***p***	**n**	**% (CI 95%)**	***p***	**n**	**%(CI 95%)**	***p***
Total	1052	3.1(3.0-3.3)		938	89.6(87.8-91.5)		363	33.2(29.7-36.6)	
Latent classes			<0.001			<0.001			<0.001
High SES White non-migrant	377	3.0(2.8-3.2)		358	94.9(92.1-96.7)		54	12.7(9.6-16.6)	
Mixed SES ethnic minority non-migrant	119	2.7(2.4-3.0)		108	90.3(83.1-94.6)		73	59.2(49.5-68.3)	
Low SES non-migrant	232	3.7(3.4-4.0)		180	79.3(73.7-84.1)		55	21.2(16.4-27.0)	
Low SES migrant	50	4.0(3.4-4.5)		44	88.3(75.0-95.0)		37	73.4(58.3-84.5)	
High SES migrant	122	2.8(2.5-3.2)		119	97.8(93.3-99.3)		40	33.5(25.2-43.0)	
Mixed SES migrant	152	2.9(2.6-3.2)		128	84.9(78.2-89.8)		104	68.1(59.6-75.5)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
CI=confidence interval

Table 3-8 Prevalence estimates of coping strategies (avoidance coping, coping with alcohol, coping with smoking) by latent classes of social identities

		Avoidance coping			**Coping (Alcohol)**			**Coping (Smoke)**		
	N	**n**	**% (CI 95%)**	***p***	**n**	**% (CI 95%)**	***p***	**n**	**%(CI 95%)**	***p***
Total	1052	680	64.1(61.1-67.1)		390	38.2(34.9-41.5)		219	22.3(19.5-25.0)	
Latent classes				<0.001			<0.001			<0.001
High SES White non-migrant	377	220	57.9(52.9-62.8)		231	61.4(56.0-6.5)		67	19.3(15.4-24.0)	
Mixed SES ethnic minority non-migrant	119	84	67.5(58.1-75.6)		28	24.2(17.2-33.0)		20	17.4(11.2-26.1)	
Low SES non-migrant	232	136	58.7(51.9-65.2)		59	27.4(21.4-34.4)		83	37.5(30.9-44.7)	
Low SES migrant	50	34	69.5(55.6-80.5)		11	23.1(13.2-37.0)		5	11.9(4.9-26.2)	
High SES migrant	122	88	70.6(61.2-78.6)		45	39.2(30.9-48.1)		19	17.4(11.2-26.2)	
Mixed SES migrant	152	118	78.6(70.8-84.7)		16	11.1(6.8-17.8)		25	18.2(12.5-25.8)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
CI=confidence interval

3.5. Prevalence of health outcomes by latent classes, age and gender

3.5.1. Cross-tabulation

The weighted prevalence for each health outcome by each latent class is reported in Table 3.9. Overall, the prevalence of symptoms of CMD was 22.1%, the prevalence of poor self-rated health was 17.4% and the mean wellbeing score for the sample was 25.1 (SD ±4.55; range 7-35). However, there were considerable differences in patterning of poor self-rated health, CMD and mental wellbeing by the latent classes. The high SES White non-migrant class had the lowest prevalence of symptoms of CMD (13.6%) while the low SES non-migrant and low SES migrant class had the highest prevalence of symptoms of CMD (both 31.3%; $p<0.001$). Similarly the high SES White non-migrant class also had the lowest prevalence of poor self-rated health (7.9%) while the low SES non-migrant and low SES migrant class also had the highest prevalence of poor self-rated health, at 33.1% and 32.2% respectively ($p<0.001$). As expected, prevalence of poor self-rated health was highest in the 65 years old and older age group ($p<0.001$). In contrast the prevalence of CMD was lowest in the over 65 age group ($p=0.030$). There was also a higher prevalence of both CMD symptoms ($p=0.002$) and poor self-rated health ($p=0.039$) in females compared to males. In terms of mental wellbeing, the low SES non-migrant class had the lowest SWEMWBS mean score, indicating poorer mental wellbeing, whilst the high SES migrant class had the highest score ($p=0.001$). In terms of age and gender, the over 65 year old age group had the highest mean mental wellbeing score ($p=0.001$) and males had higher mean scores than females ($p=0.007$).

Table 3-9 Prevalence estimates of common mental disorder, poor self-rated health and mean scores for mental wellbeing by latent classes

	Common Mental Disorder			Self-Rated Health (Poor)			Mental Well Being (Mean score)		
	N	**% (CI 95%)**	***p***	**N**	**% (CI 95%)**	***p***	**µ**	**(CI 95%)**	***p***
Total	231	22.1 (19.4-24.7)		198	17.4(15.0-19.7)		25.1	(24.8-25.4)	
Latent classes									
High SES White non-migrant	51	13.6(10.3-17.8)	<0.001	31	7.9(5.5-11.2)	<0.001	25.6	(25.2-26.0)	0.001
Mixed SES ethnic minority non-migrant	28	22.6(15.7-31.4)		19	14.6(9.1-22.6)		24.9	(24.0-25.9)	
Low SES non-migrant	72	32.0(26.2-38.4)		81	33.1(27.3-39.5)		23.9	(23.2-24.6)	
Low SES migrant	15	32.0(19.8-47.3)		17	32.2(20.5-46.8)		25.3	(23.8-26.8)	
High SES migrant	25	21.1(14.4-29.9)		11	9.3(5.2-16.1)		25.8	(25.1-26.5)	
Mixed SES migrant	40	26.0(19.3-34.1)		37	22.4(16.6-29.5)		25.1	(24.3-26.0)	
Age			0.030			<0.001			0.001
17-29	53	20.8(16.2-26.3)		23	8.8(5.9-12.8)		24.8	(24.3-25.4)	
30-44	71	21.6(17.3-26.6)		35	10.8(7.8-14.8)		25.5	(25.0-26.0)	
45-64	91	27.1(22.4-32.4)		96	29.1(24.2-34.5)		24.5	(23.9-25.0)	
65+	16	12.9(7.9-20.4)		42	33.3(25.4-42.2)		26.3	(25.4-27.2)	
Gender			0.002			0.039			0.007
Male	77	17.7(14.3-21.6)		71	14.8(11.8-18.4)		25.5	(25.0-26.0)	
Female	154	26.0(22.5-29.8)		125	19.7(16.6-23.1)		24.7	(24.4-25.1)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from X2 tests with Rao & Scott corrections
CI=confidence interval

3.5.2. Regression Analysis

In the second stage of analysis, a series of logistic and linear regressions were performed to establish the association between each latent class with each health outcome. Table 3.10 present the results for common mental disorder, poor self-rated health and mental wellbeing. In comparison to the high SES White non-migrant class, all classes were associated with increased odds of reporting CMD symptoms and poor self-rated health, except for the high SES migrant class in unadjusted models. Most significantly, in adjusted models, both the low SES non-migrant and low SES migrant class were associated with three times the odds or more of reporting both CMD symptoms and poor self-rated health. In contrast, only the low SES non-migrant class had decreased mental wellbeing in comparison to the high SES White non-migrant class in both unadjusted and adjusted models. There were no differences between the three migrant classes and the high SES White non-migrant class in terms of mental wellbeing.

Table 3-10 Odds ratios and coefficients for health outcomes by latent classes

	Common Mental Disorder			**Poor Self-Rated Health**			**Mental Well Being (Mean score)**		
	OR	**(CI 95%)**	***p***	**OR**	**(CI 95%)**	***p***	**b**	**(CI 95%)**	***p***
Unadjusted									
Latent classes									
High SES White non-migrant	1.00			1.00			0.00		
Mixed SES ethnic minority non-migrant	1.85	(1.07-3.21)	0.029	1.99	(1.03-3.85)	0.040	-0.65	(-1.67,0.37)	0.210
Low SES non-migrant	2.98	(1.94-4.58)	<0.001	5.76	(3.60-9.22)	<0.001	-1.70	(-2.47, -0.92)	<0.001
Low SES migrant	2.98	(1.44-6.15)	0.003	5.54	(2.68-11.43)	<0.001	-0.29	(-1.87,1.30)	0.724
High SES migrant	1.70	(0.96-2.99)	0.066	1.19	(0.57-2.49)	0.650	0.23	(-0.59,1.05)	0.585
Mixed SES migrant	2.23	(1.35-3.67)	0.002	3.37	(1.97-5.76)	<0.001	-0.46	(-1.38,0.47)	0.335
Age (continuous)	1.00	(0.99-1.01)	0.788	1.04	(1.03-1.05)	<0.001	0.00	(-0.01,0.02)	0.623
Gender (Female)	1.63	(1.20-2.23)	0.002	1.41	(1.02-1.95)	0.040	-0.78	(-1.35, -0.21)	0.007
Adjusted									
Latent classes									
High SES White non-migrant	1.00			1.00			0.00		
Mixed SES ethnic minority non-migrant	1.72	(0.98-3.00)	0.057	2.72	(1.36-5.43)	0.005	-0.49	(-1.53,0.54)	0.355
Low SES non-migrant	3.01	(1.96-4.62)	<0.001	4.56	(2.81-7.40)	<0.001	-1.74	(-2.54, -0.94)	<0.001
Low SES migrant	2.99	(1.43-6.21)	0.004	3.62	(1.73-7.59)	0.001	-0.34	(-1.92,1.23)	0.669
High SES migrant	1.62	(0.92-2.85)	0.097	1.24	(0.58-2.67)	0.584	0.31	(-0.52,1.14)	0.465
Mixed SES migrant	2.14	(1.29-3.55)	0.003	2.95	(1.72-5.05)	<0.001	-0.39	(-1.33,0.55)	0.412
Age	1.00	(0.99-1.01)	0.387	1.04	(1.02-1.05)	<0.001	0.01	(-0.01,0.03)	0.216
Gender (Female)	1.56	(1.13-2.14)	0.006	1.38	(0.97-1.95)	0.075	-0.76	(-1.32, -0.18)	0.010

Adjusted=adjusted for age (continuous) and gender
OR=odds ratio; b=unstandardized coefficient; CI=confidence interval

3.6. Summary of results

The first part of this chapter aimed to describe the distribution of discrimination, life events and coping strategies by single social statuses. There was a higher prevalence of reporting any discrimination in those who identified as an ethnic minority, migrant, those whose first language was not English and those in low income households or in receipt of benefit. Although those with low SES reported a higher mean score of life events, those who identified as an ethnic minority or a migrant did not report more life events than the White British or UK born group, respectively. There was a higher proportion of using active coping and coping by alcohol in those with high SES, a higher proportion of coping by smoking in those with low SES and a higher proportion of spiritual coping in ethnic minority and migrant groups. There was also a higher proportion of avoidance coping in those who identified as an ethnic minority, in migrants and those whose first language was not English.

Once the sociodemographic and SES data were reduced in latent class analysis, more nuanced differences in the distribution of discrimination, life events and coping strategies emerged. While all latent classes representing different social identities reported more discrimination in comparison to the high SES White non-migrant class, the greatest prevalence of discrimination was reported by the low SES migrant group. This class is characterized by being of multiple disadvantaged identity; low SES, being an ethnic minority and being a migrant. In terms of discrimination by specific domain, the long term migrant class was at most risk of reporting both housing and healthcare discrimination, while the mixed SES migrant class (almost exclusively consisting of those whose first language is not English) was at the most risk of reporting employment discrimination. While there were important differences in life events mean scores by both SES and migration status when using single social statuses, only differences in SES continued to be notable when using an intersectional approach. The two classes characterized by low

SES reported the highest life events mean score. Interesting difference also emerged in the distribution of coping strategies. The proportion of those using active coping strategies was much lower in the low SES non-migrant class compared to the other classes, while the highest proportions of spiritual coping was seen in the low SES migrant and mixed SES migrant classes. The high SES White non-migrant class reported the most coping by alcohol use while the low SES non-migrant class reported the most coping by smoking. In terms of health inequalities, the largest odds ratios and coefficients were reported for the low SES non-migrant class for all three health outcomes in analyses adjusting for age and gender.

Latent class analysis produced six intersectional social identities that optimally described the diverse inner city sample under investigation in terms of SES, ethnicity and migration status. Given the unique differences in the distribution of discrimination, life events and coping strategies that emerged from taking such an intersectional approach, the following chapters incorporate these social identities to investigate the relationship between more comprehensive measures of employment adversity (Chapter 4), housing adversity (Chapter 5) and healthcare adversity (Chapter 6) with health outcomes, whilst taking into account the role of both life events and coping strategies. Differences in these experiences by social identities may also explain the observed health inequalities between these groups and will be investigated at the end of Chapter 6.

Chapter 4 Structural discrimination in employment

4.1 Introduction

4.1.1 Rationale

Structural adversity in employment, such as job insecurity and unemployment, are linked to poor health outcomes (208, 210, 211, 343) and their distribution by both SES and sociodemographics are also well documented (212-214). Employment markets are arguably a principal source of social inequality, with adversity such as unemployment and job insecurity also acting as primary stressors and contributing to poor health outcomes. However, few studies have integrated structural (macro), institutional and individual (micro) level determinants of employment related health inequalities within the same study (210, 223). Moreover, these primary stressors have not been investigated alongside secondary stressors, such as experienced and anticipated discrimination, within the same study in the UK (222). Using mixed methods to investigate experiences of employment adversity at these different levels is likely to highlight mechanisms through which macro level inequalities are enacted in institutional interactions and how they may have disproportional effects on health by differing social identity.

4.1.2 Aims and hypotheses

4.1.2.1 Aims

This chapter aims to investigate the relationship between employment adversity and poor health outcomes in the study sample using both quantitative and qualitative data. The specific aims of the chapter include:

A4.1 (*Quantitative*) To estimate the prevalence of indicators of employment adversity (experienced discrimination, anticipated discrimination, experienced unemployment and job insecurity) and the distribution by latent classes of social identity, age and gender.

A4.2 (*Qualitative*) To describe why certain groups are at more risk of employment adversity and how it is enacted at the institutional level.

A4.3 (*Quantitative*) To test associations between employment adversity and health outcomes.

A4.4 (*Quantitative*) To test the mediating effects of different coping strategies in the associations between indicators of employment adversity and health outcomes and the role of potential confounders; age, gender and life events.

A4.5 (*Qualitative*) To describe both psychological responses and coping strategies used in relation to employment adversity from multiple perspectives.

4.1.2.2 Hypotheses

H4.1 Social identities characterised by low SES and migrant or ethnic minority status will experience more employment adversity.

H4.2 Employment adversity indicators will be associated with poorer health outcomes.

H4.3 Coping strategies will mediate the relationship between employment adversity and poor health such that they partially attenuate the association. In particular, coping by smoking and coping by alcohol will partially attenuate the association between employment adversity and common mental disorder and active coping will mediate the association between employment adversity and self-rated health.

H4.4 After adjusting for potential confounders, employment adversity will remain associated with poor health.

The methods used in this chapter are described in detail in Section 2.4.2.

4.2 Results

4.2.1 Aim 4.1 Who experiences employment adversity?

Table 4.1 describes the prevalence of employment adversity in the sample. 12.9% of the sample reported experiencing employment discrimination and 3.0% had experienced discrimination in the past year (n=29; data not shown). 14.2% of the sample reported anticipated discrimination, with 9.5% reporting anticipated discrimination without experiencing discrimination. 10.3% of the sample were currently unemployed (analyses excluded those who were permanently sick) and 25.2% reported job insecurity in their current or most recent employment.

Table 4-1 Prevalence of employment adversity in total sample

Employment adversity	**n**	**%**	**95% CI**
Experienced discrimination	138	12.9	(11.0-15.1)
Anticipated discrimination	147	14.2	(12.1-16.5)
No discrimination	*814*	*77.6*	*(74.8-80.1)*
Experienced discrimination only	*89*	*8.2*	*(6.7-10.1)*
Anticipate discrimination only	*98*	*9.5*	*(7.8-11.5)*
Experienced and anticipated discrimination	*49*	*4.7*	*(3.5-6.2)*
Unemployment*	96	10.3	(8.4-12.6)
Job insecurity	259	25.2	(22.5-28.0)

**Permanently sick excluded from analyses*
Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
CI=confidence interval.

Table 4.2 and 4.3 describe the distribution of employment adversity by latent classes, age and gender. Participants in the 45-64 years old age group reported more experienced ($p<0.001$) and anticipated discrimination ($p<0.001$) than other age groups. Experienced discrimination was also reported by a greater proportion of those in the three migrant classes compared to the three UK born classes ($p<0.001$). In contrast, anticipated discrimination was most likely to be reported by the mixed SES ethnic minority non-migrant class. Almost a quarter of this class reported that they had stopped themselves applying for work because they felt that they may be treated unfairly ($p<0.001$). In terms of unemployment, a greater proportion of those in the low SES non-migrant and low SES migrant class reported being currently unemployed ($p<0.001$) than those in the other latent classes. By age category, being unemployed was most common in the 17-29 year old age group ($p=0.002$) while job insecurity was most common in the 45-64 years old age group (marginally significant; $p=0.053$). There were no differences in job insecurity by the latent classes or gender. Furthermore, there were no differences by gender across all types of employment adversity.

Table 4-2 Distribution of employment adversity: experienced and anticipated discrimination by latent classes, gender and age

	Experienced discrimination					**Anticipated discrimination**				
	N	**n**	**%**	**95% CI**	***p***	**N**	**n**	**%**	**95% CI**	***p***
Latent class					<0.001					<0.001
High SES White non-migrant	377	29	6.7	(4.7-9.6)		377	29	7.4	(5.2-10.5)	
Mixed SES ethnic minority non-migrant	118	17	13.1	(8.3-20.1)		119	29	23.5	(16.7-32.0)	
Low SES non-migrant	232	33	14.9	(11.0-20.0)		232	33	14.9	(10.8-20.2)	
Low SES migrant	50	8	19.9	(10.0-35.6)		50	8	19.3	(9.7-34.8)	
High SES migrant	122	22	17.2	(11.3-25.2)		122	16	12.7	(7.9-19.8)	
Mixed SES migrant	152	29	20.2	(14.2-27.8)		151	32	21.7	(15.5-29.6)	
Gender					0.436					0.477
Male	437	62	13.8	(10.8-17.4)		436	59	13.4	(10.4-17.0)	
Female	614	76	12.1	(9.7-15.0)		615	88	14.9	(12.2-18.1)	
Age					<0.001					<0.001
17-29	246	22	9.0	(6.0-13.3)		246	30	11.7	(8.0-16.6)	
30-44	333	40	12.2	(8.9-16.4)		333	54	16.7	(13.0-21.2)	
45-64	343	68	20.2	(16.3-24.8)		344	59	17.6	(13.8-22.1)	
65+	129	8	6.7	(3.4-12.8)		128	4	3.6	(1.3-9.1)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from χ^2 tests with Rao & Scott corrections
CI=confidence interval.

Table 4-3 Distribution of employment adversity: experienced unemployment and job insecurity by latent classes, gender and age

		Unemployment				Job insecurity				
	N	**n**	**%**	**95% CI**	***p***	**N**	**n**	**%**	**95% CI**	***p***
Latent class					<0.001					0.519
High SES White non-migrant	374	19	5.3	(3.3-8.3)		359	89	24.5	(20.6-29.9)	
Mixed SES ethnic minority non-migrant	116	10	9.2	(5.0-16.3)		115	30	24.4	(21.9-39.4)	
Low SES non-migrant	208	38	20.7	(15.0-27.9)		232	65	27.8	(25.0-37.8)	
Low SES migrant	49	6	16.1	(7.4-31.8)		49	10	23.3	(8.6-32.0)	
High SES migrant	122	10	8.0	(4.3-14.4)		117	22	19.0	(15.8-29.8)	
Mixed SES migrant	141	13	10.4	(6.0-17.4)		151	43	28.7	(22.8-39.5)	
Gender					0.930					0.734
Male	422	40	10.2	(7.6-13.8)		424	111	25.7	(21.7-30.1)	
Female	588	56	10.4	(8.0-13.4)		599	148	24.7	(21.3-28.4)	
Age					0.002					0.053
17-29	244	33	13.4	(9.7-18.3)		239	55	23.0	(18.2-28.6)	
30-44	326	26	8.7	(5.8-12.7)		319	77	24.4	(19.8-29.7)	
45-64	312	36	12.3	(8.8-17.0)		337	103	30.6	(25.9-35.8)	
65+	128	1	0.7	(0.1-5.1)		128	24	18.6	(12.7-26.5)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from χ^2 tests with Rao & Scott corrections
CI=confidence interval.

Results from logistic regression are presented in Table 4.4 in unadjusted and adjusted models (adjusted for age and gender only). In both unadjusted and adjusted analyses, all latent classes were associated with increased odds of reporting experienced discrimination in comparison to the high SES White non-migrant class. In adjusted analyses, the largest effect sizes were observed for the three migrant classes which were associated with approximately three times the odds or more in comparison to the high SES White non-migrant class. Similarly, all latent classes except for the high SES migrant class had increased odds of reporting anticipated discrimination in both unadjusted and adjusted analyses. Most notably, the mixed SES ethnic minority non-migrant, long-term migrant and mixed SES migrant classes were all associated with three times the odds or more of reporting anticipated discrimination in adjusted analyses. In both unadjusted and adjusted models, both the low SES non-migrant and low SES migrant class were associated with increased odds of experiencing unemployment compared to the non-migrant advantaged class. After adjusting for age and gender, the effect size was particularly high for low SES non-migrant class, with more than five times the odds of experiencing unemployment. Additionally, in adjusted models, the mixed SES migrant class was also associated with unemployment due to age acting as a negative confounder. There were no associations between the latent classes with job insecurity. However, being in the 45-64 years old age group was associated with job insecurity in unadjusted models.

Table 4-4 Odds ratios for employment adversity by latent classes, age and gender

	Experienced discrimination			**Anticipated discrimination**			**Experienced unemployment**			**Job insecurity**		
	OR	**95% CI**	***p***	**OR**	**95% CI**	***p***	***OR***	***95% CI***	***p***	***OR***	***95% CI***	***p***
Unadjusted												
Latent class												
High SES White non-migrant	1.00			1.00			1.00			1.00		
Mixed SES ethnic minority non-migrant	2.09	(1.11-3.96)	0.023	3.84	(2.16-6.82)	<0.001	1.81	(0.80-4.09)	0.154	0.99	(0.61-1.60)	0.978
Low SES non-migrant	2.44	(1.44-4.12)	0.001	2.19	(1.27-3.75)	0.005	4.68	(2.51-8.76)	<0.001	1.19	(0.81-1.75)	0.385
Low SES migrant	3.45	(1.42-8.38)	0.006	2.98	(1.26-7.06)	0.013	3.45	(1.26-9.46)	0.016	0.93	(0.43-2.04)	0.864
High SES migrant	2.88	(1.54-5.37)	0.001	1.82	(0.94-3.51)	0.075	1.56	(0.69-3.53)	0.286	0.72	(0.43-1.21)	0.215
Mixed SES migrant	3.51	(1.99-6.17)	<0.001	3.47	(1.97-6.11)	<0.001	2.08	(0.97-4.49)	0.061	1.24	(0.80-1.92)	0.329
Age												
17-29	1.00			1.00			1.00			1.00		
30-44	1.39	(0.80-2.45)	0.244	1.52	(0.91-2.53)	0.106	0.61	(0.35-1.07)	0.085	1.08	(0.73-1.61)	0.695
45-64	2.56	(1.53-4.28)	<0.001	1.62	(0.98-2.66)	0.060	0.91	(0.54-1.53)	0.718	1.48	(1.01-2.16)	0.043
65+	0.72	(0.31-1.68)	0.451	0.28	(0.10-0.82)	0.021	0.05	(0.01-0.36)	0.003	0.77	(0.45-1.31)	0.335
Gender (female)	0.86	(0.59-1.26)	0.437	1.14	(0.79-1.63)	0.477	1.02	(0.67-1.55)	0.930	0.95	(0.71-1.27)	0.734
Adjusted												
Latent class												
High SES White non-migrant	1.00			1.00			1.00			1.00		
Mixed SES ethnic minority non-migrant	2.28	(1.21-4.28)	0.011	3.67	(2.06-6.53)	<0.001	1.49	(0.66-3.40)	0.338	1.03	(0.63-1.67)	0.920
Low SES non-migrant	2.35	(1.34-4.11)	0.003	2.27	(1.30-3.96)	0.004	5.57	(2.91-10.67)	<0.001	1.16	(0.78-1.72)	0.459
Low SES migrant	3.28	(1.26-8.50)	0.015	3.16	(1.29-7.73)	0.012	4.59	(1.64-12.80)	0.004	0.90	(0.40-2.02)	0.804
High SES migrant	2.98	(1.59-5.56)	0.001	1.81	(0.93-3.51)	0.080	1.59	(0.70-3.59)	0.266	0.73	(0.43-1.22)	0.228
Mixed SES migrant	3.56	(1.98-6.41)	<0.001	3.51	(1.98-6.25)	<0.001	2.27	(1.03-5.02)	0.043	1.24	(0.80-1.92)	0.346
Age (continuous)	1.01	(1.00-1.02)	0.218	0.99	(0.98-1.00)	0.356	0.97	(0.96-0.99)	<0.001	1.00	(0.99-1.01)	0.471
Gender (female)	0.78	(0.53-1.15)	0.201	1.04	(0.71-1.50)	0.854	0.97	(0.63-1.50)	0.896	0.95	(0.71-1.27)	0.718

Adjusted=adjusted for age (continuous) and gender
OR=odds ratio; CI=confidence interval.

4.2.1.1 Qualitative findings

The distribution of employment adversity by social identities presented in Tables 4.2 and 4.3 was reflected in the qualitative data. Both community support workers and employment advisors identified low SES groups, young people, ethnic minorities and migrants as more likely to experience employment adversity. Employment advisors predominantly talked about those with low SES being at most risk of employment adversity but many also reported that being young, an ethnic minority or a migrant sometimes added an additional burden to being of low SES in terms of finding secure employment. Notably, both community support workers and employment advisors often described young black males as the most vulnerable to such adversity.

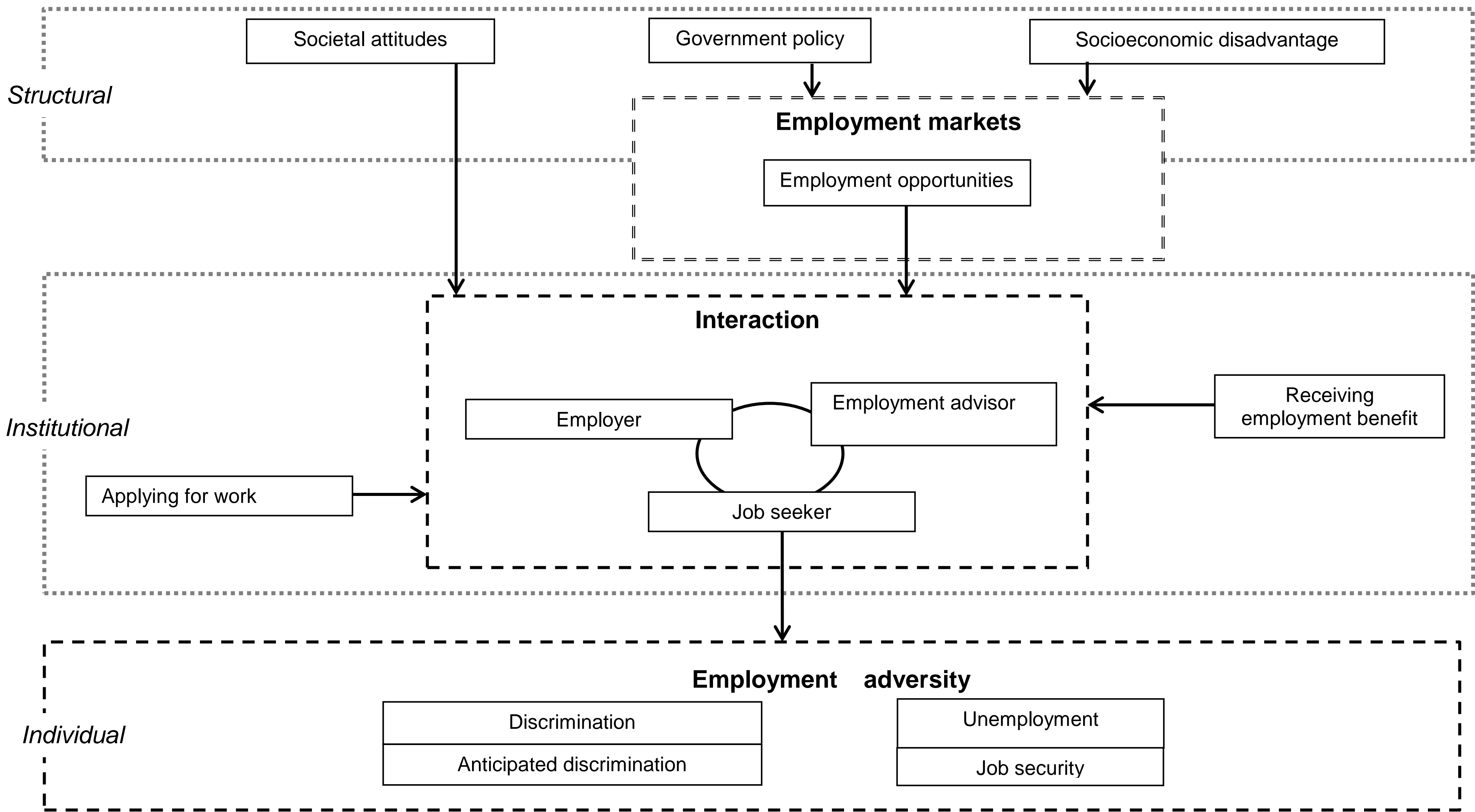
> *'I feel there is a lot of discrimination against people on benefits. [Employers] don't see them as individuals and they just see everything that is associated with that word and the reputation people on benefits have. They are very wary of hiring them.'* [Employment advisor, JCP2]

> *''I get quite a few people complain that that they are treated unfairly because of their age. They feel either they are too young or they are too old and that's why they haven't got the job. [With the younger age group] I've had more males say it if I am honest, more Black males if I am honest with you. In some cases it may be true, in the world that we are in there is no point pretending that things aren't like the way they are.'* [Employment advisor, JCP1]

4.2.2 Aim 4.2 How is employment adversity experienced?

The nature of employment adversity experienced by these identified groups was described in numerous ways in the qualitative phase of the study by the multiple stakeholders; SELCoH participants, community support workers and employment advisors. During ethnographic fieldwork and interviews, both community support workers and employment advisors were asked questions about their experiences of working with residents experiencing employment adversity (see topic guide in appendix B5). This included questions regarding their role ('Could you tell me more about your specific role in the organisation?'); the problems that their clients faced ('What kind of problems are your clients dealing with?'); unfair treatment experienced by their clients (What kind of unfair treatment do clients complain about?); societal attitudes ('Do you think that some groups have more difficulty finding employment because of negative perceptions of group?'); government policy ('Can you describe how government policy is affecting your ability to help people back into employment?'); and institutional practice ('In what ways are you under pressure to meet organisational targets?'). SELCoH participants were asked to describe their own experiences of employment adversity. This included questions on the experience ('Could you tell me about when you were unfairly not hired for a job?'); and perceived reason for the experience ('For what reason do you feel that you were treated in this way?'). In addition, prompts and probes were used to elicit more detailed information where necessary. Themes that emerged from the data included societal attitudes and government policy at the structural level and company size at the institutional level. Figure 4.1 visualises the thematic framework for employment adversity. This section will describe these themes, how they relate to each other and how they are experienced by community members.

Figure 4-1 Thematic framework of employment adversity at the structural and institutional level



4.2.2.1 Structural level themes

Structural determinants of employment opportunities and conditions provide the frame through which institutional processes and practices are enacted. Themes include societal attitudes towards marginalised groups, government policy, employment markets and socioeconomic disadvantage.

Societal attitudes

Negative societal attitudes were reported towards benefit recipients and those with certain social identities. These were seen to have adverse effects on interactions within the domain of employment. Negative societal attitudes were reported by all three stakeholder types and can be divided into the following sub-themes: dependency culture, being classed as ‘non-deserving’ and stereotyping of marginalised groups.

Dependency culture

There were often contradictory statements about the nature of the working age population in South East London from both community support workers and employment advisors, with those of low SES often stigmatised as dependent on benefits. Employment advisors divided the clients they worked with into those who were able to be competitive in the employment market and those for whom claiming benefits was seen as part of the area’s culture. One employment advisor reported that two thirds of the working population were on benefits in a particular area of South East London and that there was too much of a dependency culture that was passed on from one generation to the next.

> *‘[This area] is quite a deprived area and there is a culture of benefit claiming, especially in here in [area]. It’s a generational thing, where children learn from their parents. Their parents are on benefits and they don’t know any different.’ [Employment advisor]*

'I think there is this view that young people in this area want everything for nothing, that it's just this young person trying to get a flat, not working, they just want to live off the government and be on benefits.' [Community support worker]

Non-deserving claimants

There was a general consensus from both employment advisors and community support workers that benefit claimants were characterised as 'non deserving' and 'at fault for being out of work' by the media. They described how the media stereotyped benefit claimants as lazy individuals making fraudulent claims. They also reported feeling that the government did nothing to counter media stereotyping as it provided them with the public support they needed for austerity policies and increased use of benefit sanctions.

'I think that because of, again, the media, that has always been the case. People who are out of work, signing on, are looked upon as jobless scum and all that kind of stuff and I feel that this recent government, again, my own personal opinions, haven't helped to dissuade that. They are still making people point the finger at people, it's your fault. When actually when you look at the figures, the largest amount of benefit money that is paid out is to pensioners. The amount of money that is paid out to [job seekers] is a very, very small slice. But the government don't want to tell you that because they want, in my opinion, they want people to vilify those who have not worked to make you feel like you are not part of society, so therefore you must go back to work and that is it. You are only a good part of society if you are contributing and paying taxes. It's not fair.' [Employment advisor]

One SELCoH participant described how they felt that they were seen as non-deserving because they were a migrant.

'The haves make us fight each other, we have-nots here, you know, the people who haven't got anything, like in [this area], you know, the ones who live there. They are the ones who see us, they are "this is not your effing country". It's not their fault. It's because of the government that they feel we are taking their money, their houses, but I have worked here my whole life.' [SELCoH participant]

Stereotyping

Negative societal attitudes of both young people and older people were also seen as affecting employment opportunities for these groups. Young people were not seen as model employees not only because of lack of experience but also being seen as lazy and unreliable. In contrast, older people were seen as having less to offer and not being adaptable to new working conditions.

> *'Some organisations, jobs or you know, they just have that assumption that if that young person comes here that they are going to come in late, they are going to steal, they just have this warped perception of what society says on the news about what young people are about really.' [Community support worker]*

> *'Because sometimes an employer will feel that they are at this age so there is no point in going to invest in them because they are going to retire' [Employment advisor]*

> *'Employers are quite wary of taking on older clients because they think that they won't be able to perform certain tasks or they might be slower than a younger employee' [Employment advisor]*

Although respondents were able to give numerous examples of negative stereotyping of benefit claimants, young people and older groups, examples of negative stereotyping of other social statuses were scarce. There was an acknowledgement that attitudes towards ethnic minorities may have been negative in the past but that these had changed. There was almost a reluctance to give an opinion on this matter. Notable exceptions were specific stereotyping of young black men and female Muslims.

> *'[When applying for a job in a café] one of my clients was told that it would be difficult for her to work there because a lot of men came to the café, she thought that they meant as a Muslim woman she would not feel comfortable' [Community support worker]*

> *'If it's a young black boy in a hoodie, they have that perception that they are going to cause trouble, there are all these negative perceptions, but say it was a young presentable white guy, they may give him more of a chance, sort of thing.' [Community support worker]*

4.2.2.1.1 Employment markets and government policy

Three themes that were often spoken about in interrelated ways were the economic crisis, employment markets and government policy on welfare reform. Both the current economic climate and government policy were seen as important drivers of change across these themes.

Economic crisis

Workers talked about the detrimental effect the economic crisis of 2008 was still having on the UK economy and employment market, leading to an increase in unemployment and an increase in competition in the jobs market. Employment advisors saw an increase in the diversity of unemployment benefit claimants and were finding it much more difficult to find opportunities for claimants with limited qualifications.

> *'I noticed a big change when the banks went bust because we were now getting a whole different type of clientele through the door.' [Employment advisor]*
>
> *'There are still a limited number of jobs, public sector jobs still being cut and the competition for jobs is high. This often means that people with less qualifications lose out.' [Community support worker]*

Employment markets

As described above, increased competition in the employment market was seen to affect those with few qualifications most. Employment advisors felt that these claimants were more likely to find themselves in more precarious employment situations that offered little security, such as casual or zero-hour contract work. Support workers indicated that young people, who had less work experience, were particularly vulnerable to such job insecurities.

'You do get [employers] exploiting work experience, oh I can have somebody work for me for 4 weeks for free? Yeah I'll take one, oh I might take them on at the end, oh I will just take another one and another one and another one. Yes, you are able to do that but if I feel that you are just exploiting, I'm not...oh it is alright they haven't got any work experience, they will do it.' [Employment advisor]

'I mean getting jobs in the borough for young people it's just really difficult. Because you know if they don't want to do apprenticeships, which is what is available, you know they struggle because maybe they haven't got the academic levels that are required. Many of the young people we work with have temporary or unstable jobs because they can't get anything else' [Community support worker]

Welfare reform

Both employment advisors and support workers linked government welfare reform to reduce spending with increasing benefit sanctions and organisational funding cuts. Although both stakeholders described organisation funding cuts as unhelpful, there were mixed reactions to benefit sanctioning to reduce the number of claimants. Some employment advisors and community support workers welcomed stricter rules, citing that many people were claiming employment related benefits for prolonged periods of time without being challenged. However, many of the same workers also felt that the stricter framework also meant that many claimants who were not ready to go back into work were unfairly affected.

'A lot of clients whose Employment Support Allowance re-application fails are put on to Job Seekers Allowance, but they are not ready for employment and this is causing a lot of problems' [Employment advisor]

'[The Job Centre] are so concentrated on the targets [to reduce the number of people claiming unemployment benefits], they don't spend time with the people to find out why. Like, they are so quick to put sanctions on people now, the new rules. But they don't realise the effects the sanctions are going to cause on the person' [Community support worker]

'Um, I'm actually quite a fan of some of these changes that have come in because I think that it shouldn't be right that you can sit and do nothing, if you are able to work, and earn more money than you do if you are going working. That should never be right, because where is the incentive to work? So I agree with the changes that they are bringing in to do with making people that are physically able to work, work. You know we have all started off in jobs that we didn't like doing, but we were able to see beyond that and know that these are the important steps we have to take to get to a higher position and be where we want to be and earn more money. I think it has been too easy for people to sit at home and not do these things.' [Community support worker]

4.2.2.1.2 Socioeconomic disadvantage

Socioeconomic disadvantage was discussed as a structural factor in employment adversity in three ways: lack of experience, lack of skills and cumulative disadvantage.

Lack of experience

Community support workers reported that young people from low SES backgrounds were often disadvantaged due to a lack of knowledge of how employment markets operate. They were often not prepared for the competitive nature of the market and were not able to take up work placement or volunteering opportunities due to a lack of economic resources.

'I mean getting jobs in the borough for young people it's just really difficult. Because you know if they don't want to do apprenticeships, which is what is available, you know they struggle because maybe they haven't got the academic levels that are required. They may struggle because they are unable to communicate in the way that is needed to get a result. They struggle because they may not understand that, you know, having a particular attitude in certain situations may not necessarily get you the result that you need. So again, I do think it's the society, it's the environment, it's that stereotyping, it's young people feeling as though they have to follow that role, they really don't have a choice in the matter and they can't go down the other road' [Community support worker]

'A lot of our young people can't take on volunteering or internships that maybe a young person from a more affluent background could take on. They just can't afford to do something like that for three months, six months, whatever it is'. [Community support worker]

One SELCoH participant discussed how she felt her lack of experience and lack of guidance affected her employment opportunities.

'Yeah and I think that it is unfair that being taught how to navigate [employment opportunities] is not something that has been happening in my family for generations and my parents didn't teach me the fantastic ways of negotiating the system and all of that but again, it is what it is.' [SELCoH participant]

Lack of skills

Employment advisors and community support organisations both cited lack of skills as the predominant reason for their clients facing employment adversity. This was often described in different ways for different age groups. Lack of skills across all ages also meant that many clients were only able to gain employment in low wage jobs that were often insecure i.e. temporary contracts with no guarantee on minimum number of hours per week (zero hour contracts).

'If they have not engaged in their education then sometimes when they have got to me, it is harder for them because they can't apply for apprenticeships because they still need to have five A to C's. They have not gone to Uni so they don't have a degree so they can't apply for graduate jobs. So all you've got now is a small pool of things that are often zero hour or casual contracts, and you still need to have qualifications for a lot of that. So they are having to repeat bits of education and no one wants to do that once they've come out of school, you don't want to come out and do maths, 'but I got my Maths GCSE', 'yeah, but you got a D and you need to go back and get a C'. 'Oh I am not doing it again'. 'Yeah, but you need to do it again to get a better job.' If you've managed to slip between the cracks at school as a young person it gets very difficult.' [Employment advisor]

'You get a lot of people who haven't worked for quite a long while and who haven't got a lot of qualifications or a particular skill and the salary that they feel they need and the salary they command, you wouldn't warrant that with an employer. And it is having to bridge that gap to show that is not realistic but also to work with them to see what other benefits they can get to support them back into work.' [Employment advisor]

Cumulative disadvantage

Adversity across other domains was also seen as a barrier to employment. Workers gave numerous examples of clients with housing problems that took priority over seeking employment. Chronic socioeconomic disadvantage was also seen as a barrier to obtaining employment as the costs of being in work were often too high to take on opportunities, especially for those who had childcare costs.

'You have to put yourself in their shoes, I am human. You want them to be doing their job searches but if they have other things on, especially housing issues, it must be stressful. They need to sort out these issues first.' [Employment advisor]

'When [I first starting looking for work] there was a big barrier in terms of gathering money for child care deposits to begin with and I had to fight tooth and nail. And actually, a local charity to this area came up trumps and really helped with that to ease that barrier to work, but that was a big issue' [SELCoH participant]

4.2.2.2 Institutional level themes

The structural factors outlined above affect the interactions of community members with both employers and employment advisors to reinforce macro-level inequalities in employment adversity. These interactions are presented in two different institutional contexts: applying for work and receiving unemployment benefit.

4.2.2.2.1 Applying for work

Adversity in the process of applying for work encompassed the following sub-themes; hiring practices, closing off opportunities to outsiders and experiences of discrimination.

Hiring practices

Employment advisors worked with a number of companies in order to find employment for their job-seeking clients. A number of advisors remarked that hiring policies differed from company to company. In particular, employment advisors articulated that smaller companies were often more prescribed in terms of what type of person they were looking for.

> *'Maybe it's because [employers in smaller companies] have got to be in close proximity to somebody and they want someone that they feel they will be able to get on with. But if you don't try to get on with people from different backgrounds then how do you know? Bigger companies they don't necessarily engage with everybody at such a low level. Like if you are the Chief Exec of Tesco, you are not going to know the names of people that work here. And so you may not care too much about the general makeup if you are just going to take one person. But if you are taking on 10 people then I suppose it would look good if you take on a mixture of people but if you are only going to take one then you are going to take the one that you want, it's your company and it's your rules. So yeah, small businesses do tend to be a bit more prescribed about who they want [Employment advisor]*

Closing off opportunities

Both employment advisors and SELCoH participants felt that smaller companies closed off opportunities for certain groups of people because they had a pre-conceived idea of what type of person would fit into their workforce or they were worried about the work performance of certain groups of people. Employment advisors also felt that employers sometimes asked for educational qualifications that were not necessary for the job which excluded people from low SES backgrounds entering the employment market.

> *'And again I noticed to be honest I am fairly sure [the company] works on a friend policy, I am fairly sure they are all mates there because they always seem like it when I go there. So maybe they just didn't feel like hiring me because they didn't really know me. I think the boss just thought I wouldn't fit in to the team because I was younger' [SELCoH participant]*

> *'You get some job descriptions where they are asking for all these qualifications and you just think, really? Do they really need to have a degree to do this job? I understand that an employer wants the best candidates that they can but sometimes they ask for qualifications that are just unnecessary and I don't think this is fair' [Employment advisor]*

Experiences of discrimination

SELCoH participants, employment advisors and community support workers all gave examples of discrimination experiences. These were classified as either explicit or implicit discrimination experiences.

Explicit discrimination

Workers were able to give numerous examples of the negative attitudes some employers held in regard to age, gender and those from low SES backgrounds in receipt of benefits that affected hiring practices.

‘Some organisations, jobs or you know, they just have that assumption that if that young person comes here that they are going to come in late, they are going to steal, they just have this warped perception of what society says on the news about what young people are about really’ [Community support worker]

‘There are a lot of employers that won't take 50 pluses. It is very difficult, we have got apprenticeships for younger ones and things there, but when you are 50 plus it is very difficult because some employers don't want to take you on. They wonder how many years they are going to get out of you when actually you are 50, you have still got at least another 15 or 20 years probably, so why write people off?’ [Employment advisor]

‘Some employers are very hesitant to work with us and our clients. There is a lot of discrimination against people on benefits. [Employers] don’t see them as individuals and they just see everything that is associated with that word and the reputation people on benefits have.’ [Employment advisor]

‘I’ve often had employers say that they won’t take a woman for a job because it requires heavy lifting or something like that and I would challenge it, saying that I have worked in factories which involves heavy lifting or using heavy machinery and I could do it so there is no reason why any other woman can’t do it.’ [Employment advisor]

SELCoH participants were able to give historical examples of discrimination attributable to their migration status and ethnicity. One participant described her experience of applying for teaching positions after she had retrained as a teacher after arriving in the UK. She explained how she was sent to many schools for interviews by employment advisors in the 1970s only to be told by the head teacher that the position had been filled or there was some kind of mistake. She knew that it was because they did not want a Black teacher. However, both workers and SELCoH participants were unable to give current examples of explicit discrimination which was attributed to migration status or ethnicity when asked.

‘And when I finished [the training], the hard work started. Going to school, oh so they've found somebody? Oh no they said I had to come here? Oh really, oh I'm sorry, there is no

position available. Oh that was the best thing ever and I go back to tell [the employment advisor], you say you want Black teachers, you don't….There weren't a lot of black teachers so to see a really Black me from Africa, I don't know what they think. Also…my accent and my surname, yes I think that was that too.' (SELCoH participant]

Implicit discrimination

All stakeholders were able to give examples of employment adversity where the role of discrimination was ambiguous. SELCoH participants often pointed out the frustration of being certain they were discriminated against while being given reasons that they could not challenge. Both employment advisors and support workers often empathised with their clients and agreed that many of these situations may have involved implicit discrimination. Yet, some SELCoH participants also acknowledged that there were often more tangible reasons for these experiences and suggested attributing adversity to discrimination was sometimes used as an excuse.

> *'I really thought that was the worst excuse they could have used [where the employer stated that they had booked too many people for the job]. I would rather them say yeah, a Black guy, we don't want you. I would rather that because it is like well at least you are being honest. Telling me there is no space is like you are insulting my intelligence to the highest level now' [SELCoH participant]*

> *'We live in such a cultured place that it has to be something else. I understand that there are still racist people but because of the laws and freedoms that we have, I don't think people are allowed to [discriminate] in professional places like work and stuff like that. In business places I don't think it is allowed. It still does happen, but fortunately it hasn't really happened to me and I just feel we have moved forward from that, we have evolved. So 9 times out of 10 I do feel that it is an excuse.' [SELCoH participant]*

Both employment advisors and community support workers felt that the most common reason for perceiving discrimination in applying for work was unrealistic expectations. This was particularly salient for young people. Support workers described how young peoples' lack of experience in the employment market meant that they often

underestimated the amount of experience that was needed for certain positions or the amount of preparation that was needed for job interviews.

> *'Most of the time I don't think it's discrimination. Sometimes their expectations are actually very high of what they want to do in life, to what is actually a reality on the ground as well. So we might get, you know, we have had young people in here who think they can zoom into a job and they don't have to do, well I'm not going to do the washing up or sweep the floor or any of that because I have never done that at home so why should I have to do it in a job? But that's the reality of life. You know most people don't go into a £50,000-a-year job straight away.' [Community support worker]*

4.2.2.2.2 Receiving unemployment benefit

Institutional spaces acted as a place where employers, employees and employment advisors interacted and where processes of employment adversity were ethnographically observed. Two main sub-themes were identified as important for understanding this process from the perspective of employment advisors and support workers: challenging clients and challenging employers.

Challenging clients

Client and staff expectations often led to difficult interactions, mistrust and misinformation. SELCoH participants perceived the employment advisors' role as a form of surveillance or monitoring rather than helping them find work. To some extent this view was also shared by community support workers who felt that employment advisors were more interested in reducing the number of benefit claimants than supporting community members back into work. However, most of the employment advisors who participated detailed how they had joined the organisation because they wanted to help people. At the same time they did acknowledge that the pressure they were under to see all of their clients and reach certain targets meant that they sometimes had to 'shut down' their emotions and limit the time they spent listening to clients.

‘A lot of people do feel like they are being monitored. With new clients there is often a barrier that we have to overcome to gain their trust.’ [Employment advisor]

‘I tried quite hard to not come across as a [state] robot, I want to try and connect with somebody but when you have got a lot of stuff you have to get through sometimes people want to talk to you and you want to listen but, you know, you've only got a certain amount of time and you can see your queue building up so you kind of have to shut your emotions off a little bit.’ [Employment advisor]

‘I can see it in [the employment advisor’s] face you think I am full of crap and I am not full of crap. But the fact that you are thinking that and I can feel that in their nonchalant attitude towards my plight and I am like you have money, I get it, I am the one who is broke and I am not begging for money because I love to do it, it was like one of the most demeaning things in the world for me, going to sign on for this little bit of money and then have them barrage you with all these questions, are you looking for a job? Why haven't you got a job? Have you tried this? This is going to get cut off, do you understand? I was clumped in with all the rest of the guys at the time that were doing that.’ [SELCoH participant]

A main part of the role for both employment advisors and community support workers is to challenge their clients to take on as much personal responsibility as possible in finding employment. The most common way of dealing with situations where clients felt that they were unfairly treated was for workers to concentrate on encouraging clients to put the situation behind them and continue to apply for work. Workers would listen to their clients’ stories and be sympathetic, but would refocus the problem back on to the client and personal responsibility.

‘So even with the whole thing with migrants and with ethnic minorities sometimes you are told that you are going to be treated unfairly so you take it on as if it is. It could be that you just weren't good enough for that job and it is easy sometimes for you to turn around and play the race card.’ [Community support worker]

‘But [discrimination] does exist, so when people come and say to me you can tell they didn't want a Black person. It is also that they might not say that to [a white advisor] so I

have to give them sympathy because they have obviously had a knock back. It could be but I wasn't there so I don't know, so I say it could be but let's not focus on that, there are going to be people and you can't change people's minds but I can give you pointers on things you can do. So for example on your CV, don't put your nationality down you don't need to, why are you putting your nationality down? When you are putting down what qualifications you've got, put down what is the equivalent UK qualification.' [Employment advisor]

'My thing is I try to tell customers that you can't change what colour you are and you can't change what age you are but what you can do is you can change your approach to things.' [Employment advisor]

Challenging employers

Challenging employers about unfair treatment was seen as more difficult. Most employment advisors were too focused on helping clients into work or persuading employers to work with their client group to challenge employers' hiring practices. For example, although advisors would challenge stereotypical views of employers and make them aware of equal opportunities where possible they were not always able to ensure that employers adhered to such policies. Furthermore, advisors felt that they had to continue to work with such employers so that they would not lose jobs for the overall client group.

'Yeah, if somebody says something to me that I believe is truly, truly unfair or even prejudice, I will say something but I am very careful about it. I don't want to lose business but I have not worked with people because I didn't get a good feeling from them. They might have said they want this type of person or that type of person and I just didn't. You know I would keep going at first and if I sent a person for interview and they keep sending them back like no I don't want that type of person. What type of person? That type of person.' [Employment advisor]

4.2.3 Aim 4.3: What impact does employment adversity have on health?

Table 4.5 describes the prevalence of common mental disorder, poor self-rated health and mean mental wellbeing scores by indicators of employment adversity and presents unadjusted models for the associations between employment adversity and health outcomes. There was a greater proportion of reporting CMD symptoms in those who experienced any of the four types of employment adversity. Similarly, those who reported unemployment, job insecurity and anticipated discrimination also had mental wellbeing scores lower than the sample mean score (25.1) and were more likely to report poor self-rated health. There were no differences in mean mental wellbeing scores and the proportion of those reporting poor self-rated health by experienced discrimination.

Results from logistic regressions show that all four types of adversity are associated with increased odds of CMD. Notably, both anticipated discrimination and unemployment were associated with 2-3 fold greater odds of CMD. All types of adversity except experienced discrimination were associated with increased odds of poor self-rated health. In particular, unemployment was associated with twice the odds of poor self-rated health. Additionally, results from linear regression show that anticipated discrimination, unemployment and job insecurity are all associated with reduced mental wellbeing scores.

Table 4-5 Prevalence of common mental disorder and poor self-rated health, and mean mental wellbeing scores by employment adversity

		Common mental disorder				Poor self-rated health				Mental wellbeing		
Employment adversity	**N**	**n**	**%**	**95% CI**	***p***	**n**	**%**	**95% CI**	***p***	***μ***	***95%CI***	***p***
Experienced discrimination												
No	913	190	20.6	(18.0-23.5)	0.004	167	16.9	(14.5-19.5)	0.273	25.2	(24.8-25.5)	0.183
Yes	138	41	32.2	(24.5-41.1)		29	20.7	(14.7-28.4)		24.6	(23.8-25.4)	
Anticipated discrimination												
No	904	177	19.5	(17.0-22.4)	<0.001	163	16.4	(14.1-19.0)	0.045	25.4	(25.0-25.7)	<0.001
Yes	147	54	37.4	(29.8-45.8)		33	23.3	(17.0-31.1)		23.5	(22.7-24.3)	
Unemployment												
No	914	168	18.3	(15.8-21.1)	<0.001	136	13.4	(11.3-15.8)	0.003	25.5	(25.2-25.8)	<0.001
Yes	96	36	36.7	(27.2-47.3)		25	25.0	(17.3-34.8)		23.4	(22.5-24.3)	
Job insecurity												
No	764	147	19.0	(16.2-22.2)	<0.001	130	15.7	(13.3-18.6)	0.004	25.5	(25.2-25.8)	<0.001
Yes	259	77	31.1	(25.6-37.1)		65	23.9	(19.0-29.7)		23.9	(23.3-24.4)	
Unadjusted models			**OR**	**95% CI**	***p***		**OR**	**95% CI**	***p***	**b**	**95% CI**	***p***
Experienced discrimination			1.84	(1.21-2.78)	0.004		1.29	(0.82-2.02)	0.274	-0.57	(-1.42,0.27)	0.183
Anticipated discrimination			2.46	(1.68-3.62)	<0.001		1.55	(1.01-2.39)	0.046	-1.84	(-2.65, -1.03)	<0.001
Unemployment			2.59	(1.61-4.16)	<0.001		2.15	(1.29-3.59)	0.003	-2.13	(-3.06, -1.20)	<0.001
Job insecurity			1.92	(1.38-2.68)	<0.001		1.68	(1.17-2.41)	0.005	-1.65	(-2.29, -1.01)	<0.001

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from χ^2 tests with Rao & Scott corrections
OR=odds ratio; CI=confidence interval; b=regression coefficient

4.2.3.1 Aim 4.4 Possible mediators and confounders

4.2.3.1.1 Mediation

As described in section 2.2.3.3, coping strategies are conceptualised as possible mediators and each individual coping strategy was tested in a three step process as described in 2.3.2.4. The first steps of mediation testing, establishing an association between employment adversity and health outcomes, were performed in analyses in section 4.2.3. Results from the next two steps of mediation testing are presented in Table 4.6.

In unadjusted ordinal regression models, those who experienced employment discrimination had increased odds of engaging in spiritual coping but there were no associations with other coping strategies. Similarly, those who anticipated discrimination in employment also had increased odds of using spiritual coping. However, anticipated discrimination was also associated with both increased odds of avoidance coping and decreased odds of active coping. In contrast, unemployment and job insecurity were only associated with increased odds of coping by smoking. However, the association between job insecurity and increased odds of coping by smoking was only marginally significant (p=0.054).

There were a number of associations between the various coping strategies and health outcomes. Notably, only health behaviour coping strategies were associated with CMD and represented additional risk factors for this outcome. Those who coped with stress by using alcohol or smoking most of the time had two to three fold greater odds of CMD compared to those who never used these coping strategies while coping by smoking sometimes was also associated with twice the odds of CMD. Other coping strategies tested were not associated with CMD.

Active coping appeared to be a protective factor in terms of poor self-rated health. Compared to those who never used active coping (e.g., do something about the stressful

situation), those who engaged in active coping sometimes or most of the time had decreased odds of reporting poor self-rated health. Conversely, those who used spiritual coping most of the time had increased odds of reporting poor self-rated health compared to those who never coped with prayer. Those who reported using avoidance coping rarely had decreased odds of poor self-rated health compared to those who never used avoidance coping. Coping by alcohol rarely or sometimes was associated with decreased odds of reporting poor self-rated health compared to those who never coped by alcohol. Coping by smoking most of the time was associated with increased odds of poor self-rated health compared to those who never coped by smoking, suggesting coping by smoking to be a risk factor for poor self-rated health.

In terms of mental wellbeing, those who engaged in active coping rarely or sometimes had decreased mental wellbeing scores compared to those who never used active coping. Those who used spiritual coping most of the time had increased mental wellbeing scores compared to those who never used spiritual coping, suggestive of a protective role for spiritual coping, while those using avoidance coping sometimes had reduced mental wellbeing compared to those who never used avoidance coping. Coping by alcohol at any frequency was associated with decreased mental wellbeing scores compared to those who never coped by using alcohol. Similarly, coping by smoking sometimes and most of the time was also associated with decreased mental wellbeing scores. These results suggest health behaviour coping to be a risk factor for reduced mental wellbeing.

Table 4-6 Ordinal logistical regression for coping strategies (4 levels) by employment adversity and logistic and linear regression for health outcomes by coping strategy

	Active		**Spiritual**		**Avoid**		**Alcohol**		**Smoke**	
	OR (CI 95%)	***p***	**OR (CI 95%)**	***p***	**OR(CI 95%)**	***p***	**OR(CI 95%)**	***p***	**OR(CI 95%)**	***p***
Employment adversity										
Experienced discrimination	0.96(0.66-1.39)	0.831	1.63(1.13-2.34)	0.009	1.33(0.91-1.94)	0.139	0.83(0.59-1.17)	0.276	1.36(0.91-2.02)	0.132
Anticipated discrimination	0.69(0.50-0.95)	0.022	2.40(1.71-3.37)	<0.001	2.33(1.67-3.24)	<0.001	0.93(0.67-1.29)	0.650	1.35(0.92-1.97)	0.123
Unemployment	0.77(0.49-1.23)	0.277	1.07(0.71-1.60)	0.757	1.02(0.67-1.56)	0.913	0.87(0.56-1.33)	0.514	1.97(1.25-3.09)	0.003
Job insecurity	0.80(0.60-1.08)	0.144	0.89(0.68-1.17)	0.415	1.03(0.80-1.34)	0.801	1.03(0.78-1.35)	0.853	1.37(0.99-1.88)	0.054

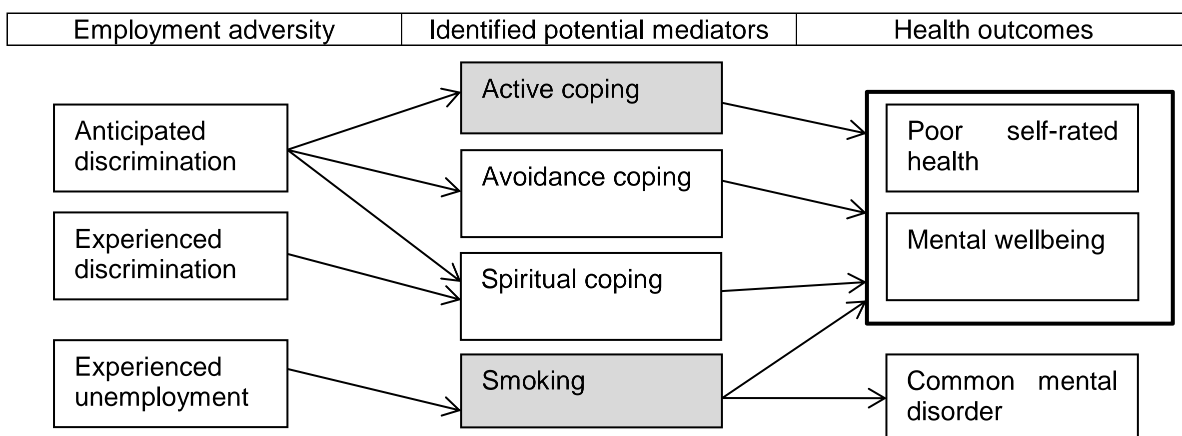
	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	***p***	**OR(95% CI)**	***p***	**b(95% CI)**	***p***
Coping strategy						
Active						
Never	1.00		1.00		0.00	
Rarely	1.18(0.47-2.97)	0.728	0.70(0.31-1.60)	0.399	-2.51(-4.36, -0.66)	0.008
Sometimes	1.77(0.91-3.42)	0.091	0.48(0.26-0.87)	0.017	-1.89(-3.33, -0.46)	0.010
Most of the time	0.76(0.38-1.52)	0.433	0.30(0.16-0.57)	<0.001	0.38(-1.08,1.84)	0.607
Spiritual						
Never	1.00		1.00		0.00	
Rarely	1.02(0.61-1.70)	0.945	0.85(0.47-1.55)	0.601	-0.41(-1.25,0.43)	0.337
Sometimes	1.40(0.93-2.09)	0.107	1.46(0.94-2.24)	0.088	-0.75(-1.60, -0.10)	0.083
Most of the time	1.38(0.93-2.05)	0.112	1.66(1.11-2.50)	0.014	0.87(0.04,1.70)	0.039
Avoid						
Never	1.00		1.00		0.00	
Rarely	0.88(0.52-1.48)	0.627	0.40(0.22-0.71)	0.002	-0.81(-1.77,0.14)	0.095
Sometimes	1.38(0.91-2.09)	0.128	0.68(0.45-1.02)	0.065	-1.41(-2.27, -0.54)	0.001
Most of the time	1.06(0.61-1.83)	0.838	0.96(0.57-1.61)	0.874	0.41(-0.67,1.49)	0.457
Drink						
Never	1.00		1.00		0.00	
Rarely	0.69(0.43-1.11)	0.123	0.58(0.37-0.92)	0.020	-1.17(-1.98, -0.36)	0.005
Sometimes	1.05(0.73-1.50)	0.806	0.45(0.30-0.68)	<0.001	-0.78(-1.41, -0.16)	0.014
Most of the time	2.07(1.13-3.79)	0.018	0.62(0.29-1.33)	0.219	-2.10(-3.46, -0.75)	0.002
Smoke						
Never	1.00		1.00		0.00	

Rarely	0.68(0.30-1.54)	0.360	0.56(0.21-1.46)	0.236	-0.18(-1.26,0.90)	0.740
Sometimes	2.38(1.53-3.71)	<0.001	0.99(0.56-1.75)	0.982	-1.70(-2.63, -0.77)	<0.001
Most of the time	3.23(2.11-4.95)	<0.001	3.37(2.23-5.11)	<0.001	-2.93(-3.86, -2.00)	<0.001

OR, odds ratio; CI, confidence interval; b=regression coefficient.

In order to be considered a mediator a coping strategy variable needed to show a significant association with both a health outcome and an indicator of employment adversity. Associations were considered significant at a conventional p-value of 0.05. Figure 4.2 shows the coping strategies identified that could still be potential mediators after these first two mediation steps. As coping by alcohol was not associated with any employment adversity it was not considered in further analyses. The remaining coping strategies were then entered into the final mediation step which is shown in Table 4.7.

Figure 4-2 Identified possible mediators from mediation testing (after steps 1 and 2)



After adding all potential mediators into models testing the association between individual indicators of employment adversity and health outcomes two coping strategies were identified as having a mediating effect, as shown in table 4.7. A coping variable was considered to have a mediating effect where there was a substantial attenuation in the association between an indicator of adversity and a health outcome, and the mediator was significantly associated with the outcome in the model. A 10% change in an unadjusted coefficient or odds ratio was considered as a substantial attenuation. Active coping demonstrated a mediating effect in the association between anticipated discrimination and decreased mental wellbeing by attenuating the association by 16%. Smoking as a coping strategy also demonstrated a mediating effect in the association between unemployment and all three health outcomes. It attenuated the association between unemployment and CMD, poor self-rated health and decreased mental wellbeing by 11%, 10% and 15%, respectively.

Table 4-7 Odds ratios for health outcomes by employment adversity and possible mediators

	Health Outcome								
	Common Mental Disorder			**Poor self-rated health**			**Mental wellbeing**		
	OR	**(95% CI)**	***p***	**OR**	***(95% CI)***	***p***	**b**	***(95% CI)***	***p***
Anticipated discrimination									
Unadjusted	-			1.55	(1.01-2.39)	0.046	-1.84	(-2.65, -1.03)	<0.001
+active coping	-			1.50	(0.97-2.33)	0.070	-1.54[a]	(-2.33, -0.75)	<0.001
+spiritual coping	-			1.43	(0.91-2.23)	0.122	-2.00	(-2.82, -1.19)	<0.001
+avoidant coping	-			1.52	(0.98-2.36)	0.061	-1.90	(-2.70, -1.09)	<0.001
Experienced unemployment									
Unadjusted	2.59	(1.61-4.16)	<0.001	2.15	(1.29-3.59)	0.003	-2.13	(-3.06, -1.20)	<0.001
+coping with smoking	2.31[a]	(1.41-3.77)	0.001	1.93[a]	(1.15-3.26)	0.013	-1.80[a]	(-2.70, -0.90)	<0.001

OR= odds ratio; b=regression coefficient; CI= confidence interval.

[a.] *Attenuation >10% from unadjusted coefficient or odds ratio*

4.2.3.1.2 Potential confounders

Table 4.8 presents odds ratios and coefficients for health outcomes by experienced discrimination. Four separate block adjusted models are presented in this table; an unadjusted model, a model adjusting for latent classes, a model adjusting for age and gender and a model adjusting for life events. In the unadjusted model, experienced discrimination was only associated with increased odds of CMD. It was not associated with poor self-rated health or mental wellbeing. Adjusting for the latent classes attenuated the association with CMD by 12% while adjusting for life events attenuated this association by 16%. No attenuation of the association between experienced discrimination and CMD was seen in the age and gender model. Table 4.9 presents results from the fully adjusted model (also adjusting for CMD and poor self-rated health at SELCoH 1 for CMD and poor self-rated health outcomes, respectively). Adjusting for all potential confounders and mediators simultaneously results in a full attenuation of the association between experienced discrimination and increased odds of CMD. This attenuation was driven by adjusting for the latent classes and life events. Adjusting for coping strategies and health outcomes at SELCoH 1 did not attenuate this association further.

Table 4-8 Block adjusted models of associations of employment discrimination and health outcomes, adjusting for latent classes, age and gender, and life events

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Employment adversity						
Experienced discrimination	1.84(1.21-2.78)	0.004	1.29(0.82-2.02)	0.274	-0.57(-1.42,0.27)	0.183
Block adjusted latent classes model						
Experienced discrimination	1.61(1.07-2.44)	0.023	1.06(0.65-1.73)	0.815	-0.48(-1.33,0.37)	0.265
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.80(1.04-3.13)	0.035	2.00(1.03-3.87)	0.040	-0.63(-1.65,0.39)	0.227
Low SES non-migrant	2.87(1.87-4.40)	<0.001	5.74(3.56-9.23)	<0.001	-1.66(-2.43, -0.87)	<0.001
Low SES migrant	2.80(1.37-5.73)	0.005	5.49(2.66-11.35)	<0.001	-0.22(-1.80,1.36)	0.785
High SES migrant	1.61(0.91-2.85)	0.103	1.18(0.56-2.49)	0.665	0.28(-0.55,1.11)	0.504
Mixed SES migrant	2.09(1.26-3.45)	0.004	3.34(1.92-5.80)	<0.001	-0.39(-1.33,0.55)	0.414
Block adjusted age and gender model						
Experienced discrimination	1.88(1.23-2.87)	0.003	1.25(0.79-1.97)	0.350	-0.63(-1.47,0.22)	0.145
Age (continuous)	1.00(0.99-1.01)	0.915	1.04(1.03-1.05)	<0.001	0.00(-0.01,0.02)	0.578
Gender (female)	1.66(1.22-2.27)	0.001	1.47(1.05-2.06)	0.025	-0.80(-1.37, -0.23)	0.006
Block adjusted life events model						
Experienced discrimination	1.54(0.98-2.41)	0.060	0.88(0.54-1.43)	0.600	-0.27(-1.16,0.62)	0.556
Life events	1.22(1.12-1.33)	<0.001	1.40(1.27-1.53)	<0.001	-0.33(-0.49, -0.16)	<0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

Table 4-9 Fully adjusted model of associations of employment discrimination and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		Poor self-rated health		Mental wellbeing	
	OR(95% CI)[a]	**p**	**OR(95% CI)[b]**	**p**	**b (95% CI)**	**p**
Fully adjusted model						
Experienced discrimination	1.39(0.84-2.30)	0.199	0.75(0.40-1.40)	0.361	-0.16(-0.99,0.68)	0.716
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	2.46(1.24-4.88)	0.010	1.38(0.63-3.03)	0.416	-0.98(-1.99,0.02)	0.055
Low SES non-migrant	2.32(1.29-3.87)	0.004	1.32(0.72-2.41)	0.367	-1.43(-2.26, -0.59)	0.001
Low SES migrant	2.67(1.14(6.24)	0.023	1.86(0.73-4.75)	0.192	-0.63(-2.16,0.89)	0.413
High SES migrant	2.01(0.98-4.16)	0.058	0.93(0.38-2.30)	0.878	-0.17(-1.04,0.70)	0.697
Mixed SES migrant	2.45(1.31-4.57)	0.005	1.34(0.63-2.86)	0.442	-1.15(-2.17, -0.13)	0.027
Age (continuous)	0.99(0.98-1.01)	0.292	1.03(1.01-1.04)	<0.001	0.01(-0.01,0.03)	0.374
Gender (female)	1.52(1.04-2.22)	0.029	1.66(1.05-2.61)	0.030	-0.88(-1.42, -0.38)	0.001
Life events	1.15(1.04-1.28)	0.009	1.30(1.15-1.47)	<0.001	-0.28(-0.43, -0.12)	0.001
Active coping						
Never	1.00		1.00		0.00	
Rarely	0.67(0.21-2.14)	0.498	1.21(0.42-3.53)	0.726	-2.13(-4.04, -0.21)	0.030
Sometimes	1.32(0.52-3.33)	0.561	0.85(0.40-1.83)	0.678	-1.25(-2.78, -0.27)	0.107
Most of the time	0.54(0.20-1.41)	0.207	0.55(0.24-1.29)	0.168	0.58(-0.97,2.14)	0.462
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.91(0.48-1.71)	0.763	1.21(0.58-2.54)	0.609	-0.14(-0.95,0.66)	0.729
Sometimes	1.12(0.69-1.83)	0.641	1.06(0.56-2.01)	0.857	-0.42(-1.26,0.41)	0.320
Most of the time	1.52(0.89-2.62)	0.128	1.35(0.76-2.40)	0.309	0.34(-0.54,1.23)	0.448
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.86(0.44-1.71)	0.668	0.55(0.25-1.21)	0.135	-0.42(-1.42,0.58)	0.410
Sometimes	1.07(0.62-1.84)	0.806	0.70(0.37-1.31)	0.261	-0.97(-1.89, -0.04)	0.041
Most of the time	1.16(0.59-2.27)	0.669	1.15(0.55-2.40)	0.703	-0.10(-1.20,1.00)	0.861
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.67(0.29-1.59)	0.365	0.57(0.20-1.61)	0.289	0.01(-1.04,1.05)	0.989
Sometimes	2.18(1.21-3.96)	0.010	1.14(0.52-2.49)	0.751	-1.11(-2.01, -0.21)	0.016
Most of the time	1.95(1.13-3.38)	0.016	3.30(1.79-6.07)	<0.001	-1.93(-2.80, -1.05)	<0.001
Coping (alcohol)						

Never	1.00		1.00		0.00	
Rarely	0.90(0.50-1.63)	0.726	0.99(0.50-1.94)	0.975	-1.15(-1.98, -0.32)	0.007
Sometimes	1.41(0.87-2.28)	0.162	0.84(0.48-1.46)	0.536	-0.74(-1.46, -0.03)	0.042
Most of the time	2.14(0.94-4.85)	0.069	0.33(0.12-0.87)	0.024	-1.60(-2.90, -0.29)	0.017
CMD (at S1)	7.36(5.00-10.81)	<0.001	-			
Poor self-rated health (at s1)	-		12.32(7.76-19.58)	<0.001		

OR=odds ratio; b=regression coefficient; CI=confidence interval.
[a] *adjusting for CMD at SELCoH I.* [b] *adjusting for poor self-rated health at SELCoH I*

Table 4.10 presents odds ratios and coefficients for health outcomes by anticipated discrimination in four separate models (as described above) and the fully adjusted model is presented in table 4.11. In unadjusted models, anticipated discrimination was associated with all three health outcomes. The association between anticipated discrimination and increased odds of CMD was not substantially attenuated in any of the block adjusted models. However, after adjusting for all potential confounders and mediators simultaneously in the fully adjusted model, anticipated discrimination was associated with less than twice the odds of reporting CMD. This attenuation was predominantly driven by adjusting for latent classes, life events and CMD at SELCoH 1.

The association between anticipated discrimination and poor self-rated health was substantially attenuated in the separate models adjusting for the latent classes and life events by 14% and 23%, respectively. Interestingly, there was also an increase in the odds of reporting poor self-rated health in the model adjusting for age and gender due to age acting as a negative confounder. Adjusting for all of these variables in the fully adjusted model fully attenuated the association. Adjusting for poor self-rated health at SELCoH 1 did not attenuate the association further. Life events also attenuated the association between anticipated discrimination and mental wellbeing by 12% in the block adjusted models. In the fully adjusted model, adjusting for life events attenuated the association by 16% while adjusting for coping strategies attenuated the association by a further 22%. Active coping, which is identified as a mediator in table 4.7, was the coping strategy driving this attenuation (data not shown).

Table 4-10 Block adjusted models of associations of anticipated discrimination and health outcomes, adjusting for latent classes, age and gender, and life events.

	Common Mental Disorder		Poor self-rated health		Mental wellbeing	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Employment adversity						
Anticipated discrimination	2.46(1.68-3.62)	<0.001	1.55(1.01-2.39)	0.046	-1.84(-2.65, -1.03)	<0.001
Block adjusted latent classes model						
Anticipated discrimination	2.24(1.53-3.28)	<0.001	1.33(0.85-2.09)	0.212	-1.76(-2.57, -0.95)	<0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.60(0.91-2.81)	0.101	1.90(0.98-3.67)	0.058	-0.36(-1.37,0.65)	0.488
Low SES non-migrant	2.82(1.84-4.34)	<0.001	5.65(3.53-9.04)	<0.001	-1.57(-2.33, -0.81)	<0.001
Low SES migrant	2.71(1.31-5.62)	0.007	5.35(2.61-10.99)	<0.001	-0.07(-1.64,1.49)	0.926
High SES migrant	1.62(0.91-2.88)	0.098	1.17(0.55-2.46)	0.683	0.30(-0.54,1.13)	0.486
Mixed SES migrant	1.99(1.21-3.26)	0.006	3.25(1.89-5.60)	<0.001	-0.20(-1.14,0.73)	0.668
Block adjusted age and gender model						
Anticipated discrimination	2.46(1.67-3.63)	<0.001	1.78(1.13-2.81)	0.013	-1.81(-2.63, -1.00)	<0.001
Age (continuous)	1.00(0.99-1.01)	0.003	1.04(1.03-1.05)	<0.001	0.00(-0.01,0.02)	0.738
Gender (female)	1.62(1.18-2.22)	0.641	1.45(1.04-2.04)	0.030	-0.75(-1.31, -0.19)	0.009
Block adjusted life events model						
Anticipated discrimination	2.28(1.55-3.36)	<0.001	1.20(0.77-1.85)	0.418	-1.62(-2.44, -0.81)	<0.001
Life events	1.22(1.12-1.32)	<0.001	1.38(1.26-1.52)	<0.001	-0.30(-0.46, -0.14)	<0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

Table 4-11 Fully adjusted model of associations of anticipated discrimination and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)[a]	**p**	**OR(95% CI)[b]**	**p**	**b (95% CI)**	**p**
Fully adjusted model						
Anticipated discrimination	1.66(1.03-2.66)	0.037	1.02(0.58-1.78)	0.950	-1.14(-1.90, -0.39)	0.003
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	2.32(1.16-4.63)	0.017	1.36(0.62-2.97)	0.437	-0.86(-1.86,0.14)	0.093
Low SES non-migrant	2.18(1.26-3.78)	0.005	1.31(0.72-2.38)	0.376	-1.37(-2.20, -0.55)	0.001
Low SES migrant	2.67(1.15-6.19)	0.022	1.84(0.73-4.62)	0.196	-0.59(-2.10,0.93)	0.448
High SES migrant	2.13(1.06-4.28)	0.033	0.90(0.37-2.22)	0.825	-0.17(-1.03,0.69)	0.697
Mixed SES migrant	2.38(1.28-4.42)	0.006	1.30(0.62-2.75)	0.484	-1.05(-2.07, -0.04)	0.041
Age (continuous)	0.99(0.98-1.01)	0.364	1.03(1.01-1.04)	<0.001	0.01(-0.01,0.02)	0.499
Gender (female)	1.54(1.05-2.25)	0.028	1.67(1.06-2.63)	0.027	-0.86(-1.40, -0.33)	0.002
Life events	1.15(1.03-1.28)	0.011	1.29(1.13-1.46)	<0.001	-0.25(-0.40, -0.09)	0.002
Active coping						
Never	1.00		1.00		0.00	
Rarely	0.69(0.21-2.27)	0.540	1.15(0.39-3.43)	0.798	-2.15(-4.04, -0.26)	0.026
Sometimes	1.32(0.50-3.44)	0.574	0.84(0.39-1.80)	0.648	-1.25(-2.77, -0.26)	0.104
Most of the time	0.56(0.21-1.54)	0.263	0.54(0.23-1.28)	0.164	0.48(-1.07,2.03)	0.545
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.88(0.46-1.68)	0.707	1.23(0.59-2.55)	0.586	-0.10(-0.91,0.71)	0.812
Sometimes	1.09(0.67-1.78)	0.715	1.05(0.55-2.00)	0.873	-0.38(-1.21,0.45)	0.370
Most of the time	1.45(0.84-2.50)	0.182	1.33(0.75-2.37)	0.333	0.46(-0.42,1.35)	0.306
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.83(0.41-1.65)	0.591	0.57(0.26-1.24)	0.156	-0.39(-1.38,0.61)	0.446
Sometimes	1.02(0.58-1.78)	0.950	0.71(0.38-1.32)	0.276	-0.87(-1.79,0.05)	0.063
Most of the time	1.07(0.54-2.11)	0.855	1.15(0.56-2.39)	0.699	-0.07(-1.03,1.16)	0.903
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.65(0.27-1.56)	0.338	0.56(0.20-1.54)	0.260	0.08(-0.97,1.13)	0.883
Sometimes	2.18(1.20-3.96)	0.011	0.71(0.38-1.32)	0.743	-1.08(-1.96, -0.18)	0.018
Most of the time	2.00(1.15-3.46)	0.014	1.15(0.56-2.39)	<0.001	-1.94(-2.81, -1.06)	<0.001
Coping (alcohol)						

Never	1.00		1.00		0.00	
Rarely	0.89(0.49-1.63)	0.710	0.96(0.49-1.89)	0.914	-1.09(-1.92, -0.26)	0.010
Sometimes	1.39(0.86-2.25)	0.175	0.82(0.47-1.42)	0.474	-0.71(-1.42,0.01)	0.055
Most of the time	2.16(0.94-4.93)	0.068	0.32(0.12-0.86)	0.024	-1.57(-2.85, -0.30)	0.016
CMD (at S1)	7.26(0.94-4.93)	<0.001	-			
Poor self-rated health (at s1)	-		12.27(7.72-19.51)	<0.001		

OR=odds ratio; b=coefficient; CI=confidence interval.
[a] *adjusting for CMD at SELCoH I.* [b] *adjusting for poor self-rated health at SELCoH I*

Table 4.12 and 4.13 presents odds ratios and coefficients for health outcomes by experience of unemployment. Unemployment was associated with CMD, poor self-rated health and decreased mental wellbeing in unadjusted models. Adjusting for the latent classes in the block-adjusted model attenuated the association between unemployment and CMD by 14% and also drives the 13% attenuation in the fully adjusted model. Although, coping by smoking was identified as a mediator in table 4.7, it did not further attenuate the association in the fully adjusted model.

After adjusting for latent classes, unemployment was associated with less than twice the odds of poor self-rated health. Conversely, adjusting for age and gender led to an increase in odds for this association. No attenuation was observed in the fully adjusted model due to age acting as a negative confounder. The association between unemployment and mental wellbeing was attenuated by 10% after adjusting for the latent classes. In the fully adjusted model, the association between unemployment and decreased mental wellbeing was attenuated by 22%. However, although coping by smoking was identified as a mediator in table 4.7, adjusting for coping by smoking only accounted for an attenuation of 8% in fully adjusted models.

Table 4-12 Block adjusted models of associations of unemployment and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Employment adversity						
Experienced unemployment	2.59(1.61-4.16)	<0.001	2.15(1.29-3.59)	0.003	-2.13(-3.06, -1.20)	<0.001
Block adjusted latent classes model						
Experienced unemployment	2.24(1.39-3.62)	<0.001	1.59(0.92-2.75)	0.096	-1.91(-2.83, -0.99)	<0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.59(0.88-2.85)	0.124	1.81(0.91-3.60)	0.089	-0.50(-1.54,0.55)	0.352
Low SES non-migrant	2.02(1.26-3.22)	0.003	3.97(2.38-6.61)	<0.001	-0.99(-1.79, -0.19)	0.015
Low SES migrant	2.78(1.40-5.53)	0.004	5.07(2.43-10.58)	<0.001	-0.02(-1.58,1.54)	0.980
High SES migrant	1.64(0.93-2.91)	0.087	1.20(0.57-2.53)	0.635	0.24(-0.57,1.05)	0.559
Mixed SES migrant	1.79(1.05-3.04)	0.033	2.38(1.34-4.25)	0.003	-0.04(-1.00,0.91)	0.932
Block adjusted age and gender model						
Experienced unemployment	2.61(1.61-4.25)	<0.001	2.87(1.67-4.94)	<0.001	-2.09(-3.02, -1.16)	<0.001
Age (continuous)	1.00(0.99-1.01)	0.924	1.04(1.03-1.05)	<0.001	0.01(-0.01,0.03)	0.275
Gender (female)	1.61(1.15-2.24)	0.005	1.39(0.96-2.01)	0.079	-0.72(-1.29, -0.15)	0.013
Block adjusted life events model						
Experienced unemployment	2.59(160-4.21)	<0.001	1.98(1.18-3.33)	0.009	-2.13(-3.05, -1.20)	<0.001
Life events	1.20(1.10-1.31)	<0.001	1.34(1.22-1.48)	<0.001	-0.21(-0.37, -0.05)	0.011

OR=odds ratio; b=coefficient; CI=confidence interval.

Table 4-13 Fully adjusted model of associations of experienced unemployment and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Fully adjusted model						
Experienced unemployment	2.26(1.34-3.81)	0.002	2.18(1.17-4.06)	0.014	-1.66(-2.54, -0.79)	<0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.96(0.99-3.88)	0.053	2.24(1.02-4.94)	0.046	-0.89(-1.92,0.13)	0.087
Low SES non-migrant	1.93(1.11-3.34)	0.019	1.54(0.83-2.88)	0.170	-0.89(-1.75, -0.04)	0.040
Low SES migrant	2.59(1.14-5.87)	0.023	2.21(0.98-4.97)	0.055	-0.54(-2.04,0.97)	0.483
High SES migrant	2.21(1.14-4.28)	0.019	0.99(0.41-2.39)	0.975	-0.17(-1.03,0.69)	0.705
Mixed SES migrant	2.30(1.20-4.38)	0.012	1.58(0.80-3.13)	0.190	-0.80(-1.85,0.24)	0.132
Age (continuous)	0.99(0.98-1.01)	0.326	1.04(1.02-1.05)	<0.001	0.01(-0.01,0.03)	0.465
Gender (female)	1.79(1.23-2.60)	0.002	1.58(1.03-2.42)	0.036	-0.76(-1.30, -0.23)	0.006
Life events	1.21(1.09-1.34)	<0.001	1.27(1.13-1.43)	<0.001	-0.19(-0.34, -0.04)	0.013
Active coping						
Never	1.00		1.00		0.00	
Rarely	1.52(0.51-4.55)	0.452	1.80(0.60-5.39)	0.296	-2.12(-4.14, -0.10)	0.040
Sometimes	1.81(0.78-4.19)	0.167	1.01(0.46-2.26)	0.971	-1.11(-2.74,0.52)	0.182
Most of the time	0.75(0.32-1.77)	0.509	0.68(0.28-1.65)	0.397	0.67(-0.99,2.33)	0.428
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.84(0.45-1.58)	0.596	1.12(0.57-2.21)	0.733	-0.03(-0.82,0.75)	0.930
Sometimes	0.91(0.56-1.48)	0.695	1.09(0.60-1.98)	0.786	-0.27(-1.10,0.56)	0.527
Most of the time	1.44(0.84-2.45)	0.184	1.08(0.61-1.90)	0.794	-0.31(-0.61,1.23)	0.510
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.75(0.39-1.42)	0.375	0.57(0.27-1.21)	0.142	-0.39(-1.39,0.61)	0.446
Sometimes	0.93(0.55-1.57)	0.777	0.70(0.38-1.28)	0.243	-0.92(-1.87,0.02)	0.055
Most of the time	0.98(0.52-1.86)	0.951	1.13(0.54-2.35)	0.745	-0.07(-1.17,1.02)	0.893
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.84(0.37-1.93)	0.688	0.78(0.23-2.59)	0.683	0.02(-1.03,1.07)	0.975
Sometimes	2.42(1.41-4.17)	0.001	1.21(0.59-2.48)	0.605	-1.15(-2.09, -0.21)	0.017
Most of the time	2.16(1.30-3.60)	0.003	3.82(2.25-6.48)	<0.001	-1.95(-2.84, -1.06)	<0.001
Coping (alcohol)						

Never	1.00		1.00		0.00	
Rarely	0.83(0.47-1.46)	0.510	1.11(0.62-2.01)	0.721	-1.11(-1.93, -0.28)	0.009
Sometimes	1.32(0.82-2.11)	0.247	0.79(0.45-1.40)	0.419	-0.69(-1.41,0.03)	0.059
Most of the time	2.58(1.16-5.74)	0.021	0.54(0.22-1.33)	0.178	-1.44(-2.74, -0.14)	0.030

OR=odds ratio; b=regression coefficient; CI=confidence interval.

Table 4.14 and 4.15 presents odds ratios and coefficients for the association between job insecurity and health outcomes. Job insecurity is associated with increased odds of reporting CMD in unadjusted models. There were no notable sources of attenuation in any of the block adjusted models or the fully adjusted model. Despite no attenuations being observed in the block adjusted models for the association between job insecurity and both poor self-rated health and reduced mental wellbeing, notable attenuations were observed in fully adjusted models. A 13% attenuation of the odds was observed in the association between job insecurity and poor self-rated health and there was a 24% reduction in the association between job insecurity and decreased mental wellbeing scores. These attenuations in fully adjusted models were a result of small attenuations from each variable.

Table 4-14 Block adjusted models of associations of job insecurity and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Employment adversity						
Job insecurity	1.60(1.30-1.96)	<0.001	1.50(1.20-1.89)	<0.001	-1.16(-1.59, -0.73)	<0.001
Block adjusted latent classes model						
Job insecurity	1.56(1.27-1.93)	<0.001	1.44(1.14-1.83)	0.003	-1.09(-1.52, -0.67)	<0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.88(1.06-3.31)	0.030	1.93(1.00-3.73)	0.052	-0.61(-1.63,0.41)	0.242
Low SES non-migrant	2.99(1.93-4.63)	<0.001	5.30(3.29-8.53)	<0.001	-1.58(-2.34, -0.82)	<0.001
Low SES migrant	3.02(1.44-6.34)	0.003	5.48(2.61-11.53)	<0.001	-0.31(-1.84,1.22)	0.693
High SES migrant	1.85(1.04-3.27)	0.036	1.10(0.51-2.36)	0.810	0.16(-0.65,0.96)	0.700
Mixed SES migrant	2.25(1.35-3.74)	0.002	3.11(1.81-5.33)	<0.001	-0.34(-1.25,0.57)	0.463
Block adjusted age and gender model						
Job insecurity	1.62(1.32-1.98)	<0001	1.54(1.21-1.95)	<0.001	-1.17(-1.61, -0.74)	<0.001
Age (continuous)	1.00(0.99-1.01)	0.900	1.04(1.03-1.05)	0.023	0.01(-0.01,0.02)	0.496
Gender (female)	1.66(1.21-2.29)	0.002	1.49(1.06-2.09)	<0.001	-0.81(-1.37, -0.25)	0.005
Block adjusted life events model						
Job insecurity	1.52(1.23-1.87)	<0.001	1.39(1.10-1.75)	0.005	-1.08(-1.51, -0.64)	<0.001
Life events	1.22(1.12-1.32)	<0.001	1.37(1.25-1.50)	<0.001	-0.28(-0.44, -0.12)	0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

Table 4-15 Fully adjusted models of associations of job insecurity and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		Poor self-rated health		Mental wellbeing	
	OR (95% CI)	**p**	**OR (95% CI)**	**p**	**b (95% CI)**	**p**
Fully adjusted model						
Job insecurity	1.50(1.20-1.88)	<0.001	1.31(1.02-1.70)	0.037	-0.86(-1.27, -0.45)	<0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	2.08(1.09-3.98)	0.027	2.17(1.02-4.61)	0.044	-0.95(-1.94,0.04)	0.061
Low SES non-migrant	2.84(1.70-4.76)	<0.001	2.50(1.41-4.44)	0.002	-1.43(-2.24, -0.61)	0.001
Low SES migrant	3.02(1.37-6.66)	0.006	2.40(1.07-5.37)	0.033	-0.68(-2.17,0.80)	0.368
High SES migrant	2.36(1.23-4.54)	0.010	1.03(0.43-2.47)	0.943	-0.23(-1.07,0.62)	0.598
Mixed SES migrant	2.63(1.42-4.86)	0.002	2.17(1.11-4.21)	0.023	-1.10(-2.08, -0.12)	0.028
Age (continuous)	0.99(0.98-1.00)	0.108	1.03(1.02-1.04)	<0.001	0.01(-0.01,0.03)	0.380
Gender (female)	1.88(1.32-2.69)	<0.001	1.68(1.13-2.49)	0.010	-0.88(-1.41, -0.34)	0.001
Life events	1.22(1.11-1.35)	<0.001	1.30(1.17-1.45)	<0.001	-0.24(-0.40, -0.09)	0.002
Active						
Never	1.00		1.00		0.00	
Rarely	1.20(0.38-3.77)	0.755	1.66(0.60-4.61)	0.329	-2.32(-4.25, -0.40)	0.018
Sometimes	1.92(0.84-4.39)	0.124	1.11(0.51-2.41)	0.795	-1.48(-3.05,0.09)	0.065
Most of the time	0.79(0.34-1.88)	0.598	0.73(0.31-1.72)	0.475	0.33(-1.28,1.93)	0.690
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.85(0.46-1.59)	0.620	1.09(0.58-2.08)	0.785	-0.16(-0.95,0.64)	0.698
Sometimes	1.05(0.67-2.52)	0.842	1.12(0.65-1.93)	0.673	-0.43(-1.26,0.39)	0.303
Most of the time	1.54(0.94-2.52)	0.086	1.21(0.72-2.05)	0.469	0.28(-0.59,1.16)	0.528
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.86(0.45-1.65)	0.653	0.63(0.31-1.29)	0.205	-0.32(-1.32,0.67)	0.524
Sometimes	1.07(0.64-1.80)	0.790	0.75(0.43-1.31)	0.311	-0.85(-1.76,0.06)	0.067

Most of the time	1.03(0.54-1.94)	0.938	1.07(0.54-2.12)	0.842	-0.02(-1.09,1.06)	0.977
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.76(0.33-1.74)	0.517	0.74(0.28-1.95)	0.537	-0.08(-1.14,0.99)	0.887
Sometimes	2.22(1.32-3.74)	0.003	1.27(0.67-2.40)	0.464	-1.09(-1.98, -0.21)	0.016
Most of the time	2.02(1.26-3.25)	0.004	3.18(1.93-5.25)	<0.001	-1.74(-2.61, -0.87)	<0.001
Coping (alcohol)						
Never	1.00		1.00		0.00	
Rarely	0.74(0.42-1.30)	0.293	1.01(0.58-1.75)	0.971	-1.15(-1.98, -0.33)	0.006
Sometimes	1.29(0.82-2.03)	0.264	0.78(0.46-1.32)	0.353	-0.79(-1.50, -0.08)	0.029
Most of the time	2.66(1.28-5.53)	0.009	0.60(0.26-1.37)	0.221	-1.55(-2.81, -0.29)	0.016

OR=odds ratio; b=regression coefficient; CI=confidence interval.

4.2.3.2 Aim 4.5 How does employment adversity affect health?

The impact of employment adversity on health was also explored in the qualitative component of the study. The data collected is described and analysed within the framework of the stress process model (24) as described in section 2.4.2.4. Employment adversity acts as the source of stress and coping strategies are explored as behavioural responses to this stress.

4.2.3.2.1 Psychological responses

Community support workers talked about the effects that unemployment and employment adversity have on self-esteem and how this can lead to feelings of depression and substance use. SELCoH participants also talked about the anger they felt or how they tried to numb psychological responses to employment adversity.

> *'Before they reached this place they may have been a confident person, applying for jobs, doing this and that and because of their age, ethnicity or disability, they have been rejected, rejected so it's really hitting their self-esteem, so they just really have that view now that I'm not really worth much. I'm not getting this job, I'm not getting what society says I should get so I just really feel like I have nothing' [Community support worker]*

> *'And also because they can't get a job it's like they feel quite worthless. So all they do they just go back and maybe start taking, a lot of them take drugs, a lot of them. Usually cannabis and drink unscrupulously. So yeah, I haven't had anybody like freak out on me but I've people that have come and said 'I'm really stressed, I'm really depressed, I've got no moods, I don't know what to do with myself' [Community support worker]*

> *'You kill yourself inside. Hard to explain. Well, my grandmother used to say kill yourself inside. You suppress some of the feeling like feeling happy, feeling sad, feeling hurt. You suppress those things, feeling happy, you can just live from day to day as long as God is within you and God hasn't taken you, so these are man-made things to feel the way you do.' [SELCoH participant]*

'It made you feel unhuman because you are as good as the next person in there or even better and their getting the job because of the colour of their skin. I was so angry' [SELCoH participant]

4.2.3.2.2 Behavioural responses

Behavioural responses to employment adversity were classified into two sub-themes: active and avoidant/acceptance coping strategies.

Active coping

A few of the SELCoH participants and employment advisors described experiences of complaining about employment discrimination. These experiences were described as having a negative impact on health due to the stressful nature of the complaints process. Other ways that people actively coped with employment adversity included praying and getting emotional support from friends and family. For people who reported that they were made to feel that they were not good enough, some of them felt that they had to work harder to prove they are just as good as anyone else.

'[Taking it to court] affected him a lot because he became quite depressed and he didn't want to do anything in the end. So I found that quite draining and we hung in there and like I say, he is working and he has got a 6 month contract from April up until October so hopefully after that it will lead him onto something else. But it did take us over a year to really get him anywhere or really move him at all.' [Employment advisor]

'I would chant about the situation and eradicate it because I don't want it inside because if you keep it inside they make you sick' [SELCoH participant]

'I just made jokes [with friends], it might not have solved the problem but it took away pressure and the annoyance from it and then it became funnier, so rather than think about the problem I thought about the joke' [SELCoH participant]

'Sometimes because like I said, everyone has got that stereotype and I don't want to fall into that stereotype so I might try and go the extra mile' [SELCoH participant]

Avoidant and acceptance coping

For many, the complaints system was too complicated or they felt that it would be too stressful and would not produce a good outcome and so would often use avoidant or passive coping strategies. Many respondents felt that it would be better to focus their energy on looking for a different position or, as there were limited opportunities, accept the unfair treatment because they needed the job.

> *'So you have got to be quite confident to stand up for yourself in an interview and I think people, particularly if you have been out of work for some time, will do anything to get that job and even sit there and answer inappropriate questions or deal with people being snide.' [Employment advisor]*

> *'If I am the first one to pull out the race card then I am the one in the wrong. It is just like the classic thing, Black guy doesn't get something, calls the race card, that type of whole big, blaze thing so yeah. I know if I escalated [the situation], I am tall, I am male, I am black, my accent you could call is very aggressive, I could be seen as the one escalating the situation and once I am seen in that particular role then no one is going to want to hear my side of the story.' [SELCoH participant]*

4.3 Summary of results

This chapter contained five aims and tested four hypotheses. The first aim of the chapter was to estimate the prevalence and distribution of employment adversity. 12.9% of the sample reported experienced discrimination; 14.2% reported anticipated discrimination; 10.3% were currently unemployed; and 25.2% reported job insecurity in their current or most recent employment. The hypothesis that latent classes characterised by low SES and migrant or ethnic minority status e.g. the mixed SES ethnic minority non-migrant, low SES migrant class and mixed SES migrant classes would experience more employment adversity (H4.1) was only partially supported. These three groups were associated with the largest odds of reporting anticipated discrimination. However, the three latent classes consisting of migrants had the largest odds of reporting experienced discrimination. Likewise, the largest odds for unemployment were seen in the low SES non-migrant class. There were also no differences for job insecurity by the latent classes.

Aim 4.2 explored how employment adversity is experienced in the first qualitative enquiry of the chapter. At the structural level, negative societal attitudes, the economic crisis, employment market and welfare changes led to increased employment adversity for disadvantaged groups. Negative societal attitudes were reported to influence interactions at the institutional level while the economic crisis and changes in the employment market restricted unemployment opportunities in disproportionate ways. At the institutional level, smaller companies were reported to be more prescribed in terms of hiring with both explicit and implicit discrimination in hiring practices reported. Employment advisors found it difficult to challenge employers who were being discriminatory because of the current economic climate and advised clients not to focus on discriminatory experiences.

The third aim of the chapter tested the hypothesis that experiencing more employment adversity would be associated with poorer health outcomes (H4.2). This hypothesis was supported. Experience of discrimination was associated with increased odds of reporting

symptoms of CMD only. In contrast, the other forms of employment adversity were all associated with increased odds of CMD, poor self-rated health and decreased mental wellbeing.

The fourth aim of the chapter tested hypotheses H4.3 and H4.4. The hypothesis that coping strategies will mediate the relationship between employment adversity and poor health (H4.3) was only partially supported. Active coping was identified as mediating the association between anticipated discrimination and mental wellbeing while coping by smoking was identified as mediating the association between experience of unemployment and all three health outcomes. The hypothesis that the associations between indicators of employment adversity and health outcomes would still remain after controlling for potential mediators and confounders was also partially supported. The associations between both unemployment and job insecurity with all health outcomes remained despite partial attenuations. However, the association between experienced discrimination and common mental disorder was fully attenuated after adjusting for potential mediators and confounders. Likewise, the association between anticipated discrimination and poor self-rated health was also fully attenuated. At the same time, the association between anticipated discrimination and both CMD and mental wellbeing remained despite partial attenuations.

The final aim explored how employment adversity affects health in the second qualitative enquiry of the chapter. Psychological responses to employment adversity included anger, frustration, lowered self-esteem and feelings of numbness. Behavioural responses to employment adversity were classified into either active coping or avoidance coping strategies. Active coping was seen to be positive if this involved seeking social support, praying or continuing to look for employment but complaining about employment discrimination was seen as having negative consequences. Avoidance coping such as drug or alcohol use was seen as largely negative if it was a prolonged behavioural response.

The distribution of employment adversity has been shown to vary by the intersectional identities of the generated latent classes and their effects on health to be stark. The following chapter investigates the distribution of housing adversity in this sample and its effect on health.

Chapter 5 Housing adversity and health

5.1 Introduction

5.1.1 Rationale

The link between adverse housing experiences, such as discrimination (164, 233) or homelessness (16, 235), and poor housing conditions, such as damp conditions or self-reported dissatisfaction with housing quality (18, 236, 237), with poor self-rated health are well established. A recent report using data from the English Housing Survey (EHS) also highlighted the negative impact of both housing insecurity and poor housing conditions on mental health (238). However, the focus of adverse housing experiences in health research is narrow; for example, street homelessness is considered rather than the wider experience of homelessness that are inclusive of more temporary forms of accommodation (239). As in the previous chapter, mixed methods are used to investigate the association between housing adversity and health.

5.1.2 Aims and hypotheses

5.1.2.1 Aims

This chapter aims to investigate the relationship between housing adversity and poor health outcomes in the study sample using both quantitative and qualitative data. The specific aims of the chapter include:

A5.1 *(Quantitative)* To estimate the prevalence of (i) adverse housing experiences: unfairly not being leased a property and homelessness and; (ii) poor housing conditions by latent classes, age, gender, marital status and tenure.

A5.2. *(Qualitative)* To describe why certain groups are at more risk of housing adversity and how structural discrimination is enacted within housing at the institutional level.

A5.3. *(Quantitative)* To test associations between adverse housing experiences, poor housing conditions and health outcomes.

A5.4. *(Quantitative)* To test the mediating effects of different coping strategies in the associations between housing adversity and health outcomes and the role of potential confounders; age, gender, marital status and life events.

A5.5 *(Qualitative)* To describe the different ways in which housing adversity affects health.

5.1.2.2 Hypotheses

H5.1 In comparison to the high SES non-migrant class the other latent classes of social status will experience more housing adversity. Social identities characterised by low SES and being a migrant will experience the most housing adversity.

H5.2 Those who rent their homes will experience more housing adversity than homeowners.

H5.3 Those reporting their relationship status as single or previously in a relationship will experience more housing adversity compared to those who are in a relationship.

H5.4 Experiencing housing adversity will be associated with poorer health outcomes.

H5.5 Both coping by alcohol and smoking will mediate the relationship between housing adversity and poor health such that they will partially attenuate the association. Other coping strategies will have limited impact on associations between adversity and health.

H5.6 After adjusting for potential mediators and confounders, housing adversity will remain associated with poor health.

5.2 Results

5.2.1 Aim 5.1: Who experiences housing adversity?

Table 5.1 describes the prevalence of housing adversity in the sample. 11.6% of the sample reported adverse housing experiences. In comparison, 21.4% of the sample reported current poor housing conditions.

Table 5-1 Prevalence of housing adversity in total sample

	n	%	95% CI
Adverse housing experiences			
Experienced discrimination	18	1.7	(0.9-2.5)
Experienced homelessness	107	10.6	(8.6-12.6)
Cumulative adverse experience			
0	906	88.3	(86.2-90.5)
1	111	11.0	(9.0-13.0)
2	7	0.7	(0.2-1.3)
Any adverse experience	118	11.7	(9.6-13.8)
Poor housing conditions			
Dissatisfaction with current accommodation	109	10.5	(8.5-12.6)
Current accommodation in disrepair	132	13.7	(11.2-16.2)
Cumulative adverse conditions			
0	782	78.9	(76.0-81.7)
1	177	18.1	(15.4-20.8)
2	30	3.1	(1.9-4.2)
Any adverse conditions	207	21.1	(18.3-24.0)

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
CI=confidence interval.

Table 5.2 shows the distribution of housing adversity by latent classes, sociodemographics and housing tenure. Adverse housing experiences were most common in the low SES migrant, low SES non-migrant and mixed SES migrant classes ($p<0.001$). Reporting of adverse housing experiences was highest in the 45-64 year old age group at 17.6% ($p=0.003$). There was a higher proportion of reporting adverse housing experiences in those who were not in a relationship compared to those who were married or cohabiting ($p<0.001$). Additionally, there was a higher proportion of adverse housing experiences in those living in social housing in comparison to those who owned or mortgaged their home ($p<0.001$). There were no differences by gender. Poor housing conditions were most common in the low SES migrant class (40.6%; $p<0.001$) and for those living in social housing (32.6 %; $p<0.001$). There were also differences by relationship status but this was only marginally significant ($p=0.066$). There were no differences by age or gender.

Table 5-2 Adverse housing experience and poor housing conditions by latent classes, sociodemographics and tenure

		Adverse housing experience					Poor housing conditions			
	N	**n**	**%**	**95% CI**	***p***	**N**	**n**	**%**	**95% CI**	***p***
Typology					<0.001					<0.001
High SES White non-migrant	359	13	3.8	(2.2-6.5)		348	41	11.9	(8.6-16.2)	
Mixed SES ethnic minority non-migrant	115	9	6.7	(3.5-12.8)		110	30	25.7	(18.3-34.8)	
Low SES non-migrant	232	47	21.2	(16.1-27.5)		226	60	27.7	(21.7-34.6)	
Low SES migrant	50	14	30.8	(18.7-46.4)		47	18	40.6	(27.1-55.6)	
High SES migrant	117	9	7.3	(3.8-13.6)		111	17	14.9	(9.5-22.6)	
Mixed SES migrant	151	26	18.7	(12.9-26.3)		147	41	28.8	(21.8-37.0)	
Gender					0.167					0.135
Male	424	56	13.2	(10.2-16.9)		407	75	19.1	(15.3-23.5)	
Female	600	62	10.4	(8.1-13.2)		582	132	23.0	(19.6-26.8)	
Age					0.003					0.982
16-29	239	20	8.3	(5.4-12.7)		229	49	21.3	(16.1-27.6)	
30-44	319	33	10.9	(7.8-15.0)		308	63	20.8	(16.4-25.9)	
45-64	338	55	17.6	(13.7-22.3)		324	69	21.8	(17.2-27.3)	
65+	128	10	7.8	(4.2-14.0)		128	26	20.1	(13.9-28.1)	
Marital status					<0.001					0.066
Single	267	44	16.3	(12.2-21.5)		254	62	24.6	(19.3-30.8)	
Married/ cohabit	669	57	8.7	(6.7-11.2)		648	120	18.8	(15.6-22.4)	
Separated/divorced/ widowed	85	15	18.4	(11.4-28.4)		84	23	27.2	(18.7-37.8)	
Tenure					<0.001					<0.001
Owned/mortgaged	405	18	4.8	(3.0-7.5)		391	44	11.1	(8.0-15.0)	
Private rented	222	22	10.3	(6.8-15.3)		211	44	21.4	(15.9-28.2)	
Social housing	348	73	21.0	(16.8-25.9)		342	111	32.6	(27.3-38.5)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from χ^2 tests with Rao & Scott corrections
CI=confidence interval.

Results from logistic regression are presented in Table 5.3. In unadjusted models, the low SES non-migrant, low SES migrant and mixed SES migrant classes were all associated with increased odds of reporting adverse housing experiences. Being in the 45-64 years old age group, not being in a relationship and renting a home were also associated with increased odds of reporting adverse housing experiences. In models adjusting for age and gender, the same three latent classes were associated with increased odds of adverse housing experiences. The largest effect size was seen in the low SES migrant class (a class predominantly consisting of long term migrants from the Caribbean and Republic of Ireland), which had an eleven fold increase in odds of reporting these experiences compared to the White British, high SES class. In this model, female gender was associated with decreased odds of adverse housing experiences. After adjusting for age and gender, being divorced, separated or widowed was no longer associated with adverse housing experiences.

In both unadjusted and adjusted models, all latent classes were associated with increased odds of poor housing conditions, except for the high SES migrant class, in comparison to the high SES White non-migrant class. Again, the largest effect size in the adjusted model was seen for the low SES migrant class, which was associated with five times the odds of poor housing conditions. Age, gender and marital status were not associated with poor housing conditions in either unadjusted or adjusted models. However, renting a home was associated with increased odds of poor housing conditions. In particular, renting from a social landlord was associated with almost four times the odds of poor housing conditions in the adjusted model.

Table 5-3 Odds ratios for any adverse housing experience and poor housing conditions by typologies of (dis)advantage

	Adverse housing experience			**Poor housing conditions**		
	OR	**95% CI**	***p***	**OR**	**95% CI**	***p***
Unadjusted						
Typology						
High SES White non-migrant	1.00			1.00		
Mixed SES ethnic minority non-migrant	1.84	(0.75-4.53)	0.184	2.57	(1.46-4.51)	0.001
Low SES non-migrant	6.86	(3.55-13.22)	<0.001	2.84	(1.77-4.56)	<0.001
Low SES migrant	11.35	(4.75-27.15)	<0.001	5.06	(2.53-10.12)	<0.001
High SES migrant	2.00	(0.81-4.91)	0.132	1.30	(0.69-2.43)	0.412
Mixed SES migrant	5.86	(2.86-11.98)	<0.001	3.01	(1.80-5.01)	<0.001
Age						
17-29	1.00			1.00		
30-44	1.35	(0.74-2.46)	0.332	0.97	(0.62-1.51)	0.887
45-64	2.35	(1.36-4.07)	0.002	1.03	(0.67-1.60)	0.892
65+	0.93	(0.42-2.08)	0.863	0.93	(0.53-1.63)	0.800
Gender **(**female)	0.76	(0.51-1.12)	0.168	1.27	(0.93-1.73)	0.135
Marital status						
Married/cohabiting	1.00			1.00		
Single	2.05	(1.33-3.18)	0.001	1.42	(0.97-2.06)	0.070
Divorced/separated/ widowed	2.38	(1.27-4.47)	0.007	1.62	(0.95-2.76)	0.076
Tenure						
Owned/mortgage	1.00			1.00		
Private rent	2.29	(1.19-4.44)	0.014	2.19	(1.31-3.65)	0.003
Social Housing	5.31	(3.04-9.25)	<0.001	3.90	(2.52-6.03)	<0.001
Adjusted (age and gender)						
Typology						
High SES White non-migrant	1.00			1.00		
Mixed SES ethnic minority non-migrant	1.93	(0.77-4.80)	0.159	2.40	(1.36-4.26)	0.003
Low SES non-migrant	7.02	(3.61-13.64)	<0.001	2.96	(1.84-4.74)	<0.001
Low SES migrant	11.90	(4.82-29.34)	<0.001	5.39	(2.69-10.79)	<0.001
High SES migrant	2.08	(0.85-5.10)	0.109	1.28	(0.68-2.38)	0.443
Mixed SES migrant	6.20	(3.03-12.68)	<0.001	3.02	(1.82-5.03)	<0.001
Age **(**continuous)	1.00	(0.99-1.01)	0.841	0.99	(0.98-1.00)	0.213
Gender **(**female)	0.66	(0.45-0.99)	0.045	1.19	(0.86-1.63)	0.289

Marital status						
Married/cohabiting	1.00			1.00		
Single	2.35	(1.50-3.70)	<0.001	1.39	(0.95-2.05)	0.094
Divorced/separated/ widowed	1.81	(0.90-3.67)	0.098	1.61	(0.90-2.85)	0.106
Age (continuous)	1.02	(1.01-1.03)	0.005	1.00	(0.99-1.01)	0.785
Gender (female)	0.69	(0.46-1.03)	0.070	1.21	(0.88-1.66)	0.232
Tenure						
Owned/mortgage	1.00			1.00		
Private rent	2.55	(1.28-5.07)	0.008	2.16	(1.28-3.64)	0.004
Social housing	5.48	(3.16-9.50)	<0.001	3.87	(2.50-5.99)	<0.001
Age (continuous)	1.01	(1.00-1.02)	0.054	1.00	(0.99-1.01)	0.774
Gender (female)	0.65	(0.43-0.98)	0.040	1.14	(0.82-1.58)	0.426

Adjusted=adjusted for age (continuous) and gender
OR=odds ratio; CI=confidence interval.

5.2.1.1 Qualitative findings

Consistent with some of these quantitative findings (presented above), community support workers and housing officers consistently identified those on low incomes as those who were most vulnerable to housing adversity. Social identities that intersected with low income to increase vulnerability to these experiences were also identified by these stakeholders. These included both being single and being a migrant. Community support workers also identified young single men as a particularly at risk group. Due to the intersectional identity of this at risk group, this was not corroborated in the quantitative data.

> *'In housing, for people on low income, there are not many pathways for them to take. They can't afford private housing and it's getting worse, the (local authority) have no houses'* [Community support worker]

> *'I think generally in the housing market place, really like young, single, I don't want to use the words Black men, but it's mainly young, single, Black as a majority. But overall, its young, single young men, you know, they've got no help at all, no help whatsoever'* [Community support worker]

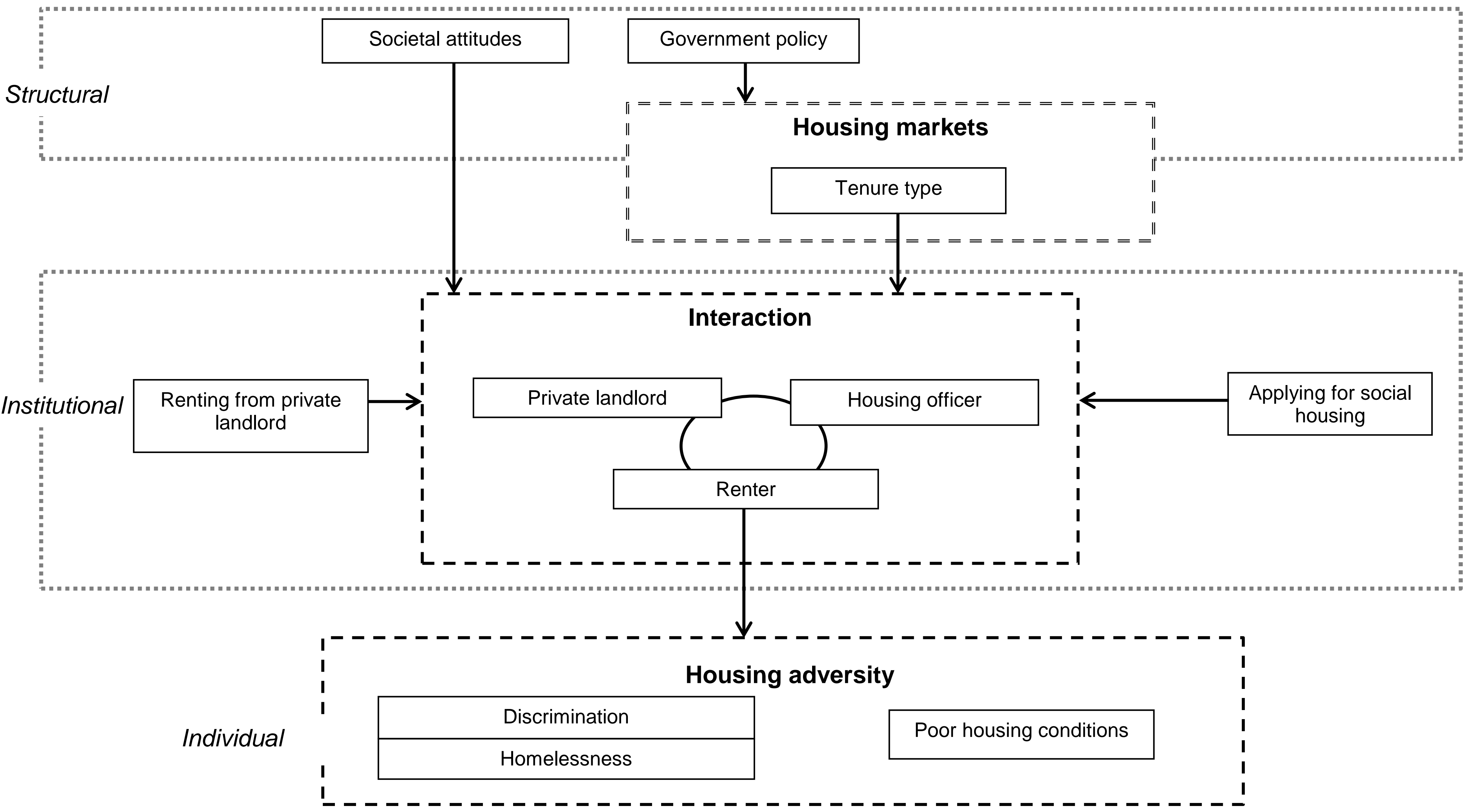
> *'She didn't have a stay here, she was illegal here. And she was living, where she was living was just horrendous, so many people sharing one room. She just had a corner to herself, you know, her bed and it was just horrible.'* [Community support worker]

5.2.2 Aim 5.2 How is structural discrimination enacted?

This section describes the nature of housing adversity experienced by these identified groups using qualitative data. During ethnographic fieldwork and interviews, both community support workers and housing officers were asked questions about their experiences of working with residents experiencing housing adversity (see appendix B5). A topic guide similar to that described in section 4.2.2 was used. This included questions regarding their role in housing; the problems that their clients faced in both finding and maintaining properties; barriers to renting and unfair treatment experienced; negative societal attitudes that affected certain groups ability to gain tenancies; structural problems in the housing market ('Can you describe why the current housing market makes it difficult for your clients to find accommodation?'); and institutional practice ('What problems do clients face in accessing help from housing services?'). SELCoH participants were asked to describe their own experiences of housing adversity. This included questions on the experience ('Could you tell me about when you were unfairly not leased a property?'); perceived reason for the experience ('For what reason do you feel that you were treated in this way?') and expectations of service ('What kind of help did you expect from the government/service providers?'). Prompts and probes were used to elicit more detailed information where necessary.

The qualitative data surrounding housing adversity is described and analysed within a conceptual framework which considers the sources of housing adversity at a structural and institutional level. At the structural level, themes included societal attitudes, government policy and housing markets. At the institutional level they included tenant selection, landlord regulation, institutional practice, unrealistic expectations and not knowing housing rights. Figure 5.1 visualises the thematic framework for housing adversity.

Figure 5-1 Thematic framework of housing adversity at the structural and institutional level



5.2.2.1 Structural level themes

Structural level themes were described as shaping people's opportunities to gain secure good quality homes. These included societal attitudes, government policy and the structure of the housing market.

5.2.2.1.1 Societal attitudes

All three stakeholder types interviewed described negative attitudes towards benefit recipients, ethnic minorities and migrants that added to barriers to renting a property.

Benefit recipients

Housing officer and community support workers both agreed that benefit recipients were negatively portrayed in the media. Stereotyping of benefit recipients included being seen as 'scroungers', 'lazy', 'untrustworthy cheats' and 'anti-social'. Community support workers perceived that private landlords were much less likely to rent to people on benefits due to such stereotypes.

> *'DSS [Department of Social Security] clients have had the short straw with private landlords and letting agents; they just don't let properties to them. I think a lot of it is to do with how they are portrayed in the media, landlords think they are not gonna get their rent and that they are more likely to cause damage to the property or engage in anti-social behaviour'* [Housing officer]

> Community support worker- *'A lot of agencies won't accept council deposits because they don't want unemployed people and those on benefits living in their properties.* Community member- *'You can understand they don't want people wrecking the place but that private landlords are a law unto their own, they can do what they want'* [Ethnographic observation]

Ethnic minorities and migrants

Community support workers reported that they did not think that community members were unfairly treated in the housing market because of race, ethnicity or migration status. However, there were numerous examples where community support workers would contradict these statements and describe negative attitudes towards both ethnic minorities and migrants that they felt could affect housing opportunities.

> *'This is not a made up thing and this is not a fallacy, I have seen friends who have rented to Afro-Caribbean and when they ask them to leave, they smash up the flat before they go. So that's what's been echoed across the private sector and the estate agents and they are learning of it because they have had the experience too and hence, sadly they say the good suffers for the bad. So these are not just make up things, they are a reality and I am aware of them and perhaps yes I will challenge estate agents if they said they would not and ask them what's your reason, type of thing. But from where I am sitting I do understand that.'* [Community support worker]

In addition, all stakeholders types commented on the belief that migrants are given preferential treatment in housing services which is indicative of wider negative attitudes towards migrants and their portrayal as benefit tourists.

> *'There is a written belief that people from other ethnic backgrounds coming into the country and they get a council place and we have been here working all our lives and we are not getting it. Our systems are fair, they're transparent, they are open to scrutiny and we don't do that. But that perception is always there, oh I just saw somebody move in next door. And I guess as long as the properties are not enough and unavailable we will always have that'* [Housing officer]

5.2.2.1.2 Government policy

Government policy was cited as both driving and exacerbating the inequality in the housing markets. Four themes, in particular emerged: gentrification, homeowner incentives, welfare reform and migrant policies.

Gentrification

Respondents felt that gentrification processes in South East London were having a negative impact on local communities. One community support worker talked about the government's New Opportunity areas and the demolition of large estates all around the area. Both community support workers and SELCoH respondents felt that the communities they lived in were changing and that people on low incomes were being forced out of inner London.

> *'I can't believe they are demolishing all those flats [in the local estate]. They were telling people that they would be building more affordable flats but no-one I know will be able to afford them. They are just getting rid of the people who have lived there for years for rich people to move in. It's not regeneration. It's about making money. It's just getting rid of people.' [Community support worker]*

> *'I said to ya, go down Brixton after half 8, go in a pub, just walk around there after half 8 Friday, Saturday or Sunday and I can guarantee you you're not gonna find many black people up there. They are getting rid of everyone. Once you're poor, that's it, you are out of this area.' [SELCoH participant]*

> *'She got kicked out of her place, they said that she can't afford to run the house no more which is a load of garbage. They've kicked her out, they've had her in a hostel for a year. The council they are saying to her that there is nowhere in London for you to live. They are saying that the only place we have got for you is Nottingham [SELCoH participant]*

Homeowner incentives

All respondents felt that government housing policies, such as Help to Buy, and policies that support buy to let mortgages were only benefiting homeowners or potential homeowners, further pushing up house prices and private rents, and excluding those on low incomes. Buy to let mortgages were introduced in 1996 and allow investors to borrow money to purchase properties in the private rented sector in order to let it out to tenants. Help to buy is another homeowner incentive which allows first time buyers to

purchase a property. Buyers contribute a 5% deposit and the government provides an equity loan for up to 20% of the property value.

> *'Well my personal point of view is that it is out of control in London it is just obscene. The housing market is not even a market at the moment. It is designed by and for the landlord class.' [Housing officer]*

> *'This government just does anything to keep house prices rising. It's just not sustainable. They are just not building enough houses so demand is really high. Like these buy to let mortgages. Landlords just pass on the cost of their mortgage to their tenants who have to pay extortionate amounts rent.' [Community support worker]*

The Government's right to buy policy and reluctance to build new social housing was also seen as limiting the options that were available to community members on low incomes. Right to buy allows council tenants to buy their council home at a discount. In 2012, the discount in London was increased to £103,900 and the current government is committed to extending right to buy to all social housing, including housing associations. Housing officers, in particular, found the right to buy policy to be completely counter-intuitive for the housing needs of their community as the number of homeless households on their waiting lists continued to rise.

> *'Even the [households] that we have some duty towards because of the shortage of social housing, through right to buy, we assess people as a full housing duty towards people but they have to wait 5 years or so as well, and not going anywhere. And some people are in temporary accommodation which is not necessarily ideal for the household's position but it is temporary accommodation that they have to occupy for a long time before they get somewhere settled.' [Housing officer]*

> *'Yeah I think the whole housing system is unfair. My opinion, without getting too political, is that I don't think Council accommodation should be sold at all under Right To Buy because in my opinion most people who have bought their property come back in 3 years' time as homeless, fifty percent.'* [Housing officer]

Welfare reform

Recent welfare reforms related to austerity were seen to have a large impact on low income households. Housing benefit cuts were seen as particularly harmful as those in receipt of housing benefit were unable to find properties that they could afford to rent or were no longer able to pay the full rent of their current accommodation. Consequently, community support organisations saw a dramatic increase in homelessness due to benefit changes in the last 12 months.

> *'Her rent has been raised from £1300 to £1700 a month and housing benefit won't pay all of it with the new caps. She has been to housing as she will be evicted soon and they have offered to pay deposit for new private rented but she is having problems finding a place where the rate of housing benefit will cover the rent'* [Community support worker]

> *'They have capped the housing benefit and it's putting a lot of hardship for people that we are coming across in [our drop in service] as well as our regular service users. That creates a lot of extra work for ourselves, as you see just sitting there phoning around it was a very frustrating experience, [letting agents] just keep saying no and at the same time this service user is still left out there with their family and I think what happens next? Where do they go next?'* [Community support worker]

There was some evidence of conflicting opinions on welfare reform from housing officers and community support workers. Although workers cited that they had a negative impact on many of their clients, they also suggested that they were necessary in order to curb the excessive rents that landlords were able to charge. Many workers hoped that capping housing benefit would mean that landlords would be forced to reduce rental prices and create a fairer housing market.

> *'Private landlords have been able to take the mickey out of the system, overcharging rent, but now, don't want to take on people on benefits because of all the changes'* [Community support worker]

> *'Most local authorities are housing homeless people in the private sector as they just don't have the housing stock. Landlords also have the power to charge high rents because there's a shortage of properties in general and housing benefits rates mean they*

can charge a large amount of money. Who knows what is going to happen with these [extra] benefit changes coming in but something has to change. They can't keep charging these huge rents' [Community support worker]

Migrant policies

One housing officer pointed out that immigration policies were also having an adverse effect on migrant groups. Although, the legislation had not been introduced at the time of the research, the housing officer said that even the talk of changes was having a noticeable effect on the number of migrants that were having difficulty finding a property. The new legislation (introduced as a pilot in December 2014 in the West Midlands, and to be rolled out in 2015) will mean private landlords will have to check the right of the prospective tenants to be in the country (344).

'I go back to the same government who don't help our cause, saying that they want to introduce this regulation that landlords should establish the applicant's immigration status before they rent a property to them. So if someone presents like me and speaks like me, the landlord doesn't want to get involved. You understand? So straight away if a landlord thinks that if this is going to happen at some stage, if that is the case then the landlord will identify who they feel fall into that group and make sure that they don't rent a property to anybody who is likely to be an immigrant, so that has not helped the situation whatsoever.' [Housing officer]

5.2.2.1.3 Housing markets

Such government policies as right to buy and help to buy were seen as contributing factors for the continual inflation busting increases in house prices in London and the wider housing crisis in the UK. Both housing officers and community support workers described how the distorted house prices in the housing market were particularly acute in London and cited both house and rental prices as the dominant reason why people on low incomes felt marginalised in housing markets. The theme encompassed the following sub themes: access and affordability, housing security and residential entrapment.

Access and affordability

All stakeholders felt that low income substantially limited the number of housing options available to people living in South East London. Homeownership was seen as unattainable and many felt unfairly excluded from the homeownership process because of their income levels. In addition to being excluded from homeownership, all stakeholders felt that the private rented market was also increasingly difficult to access for people on low incomes. SELCoH respondents were finding it increasingly difficult to find properties that were affordable. Social housing was the preferred tenure for many who were unable to afford private rent. However, limited social housing stock meant that this option was also unavailable to the vast majority living in South East London.

> *'In housing, for people on low income, there are not many pathways for them to take. They can't afford private housing and it's getting worse, the (local authority) have no houses'* [Community support worker]

> *'When we got together we had to save for 5 years, we had to borrow money, we were living in a place that was a dump and we are not the lower end of the scale you know, we are high in certain terms of capital, so it is a nightmare. If you don't have money and support there is no way you are going to own your own home.'* [Housing officer]

> *'I was there 3 years, so after one year the rent did not go up. After another year it went up with 10-15 percent and after another year it went up with 25 percent and then I had to leave. With my income I couldn't do it anymore. And it's like, how can the government allow that kind of greedy, I think it's greed. I don't know, I don't understand enough about economics but something is pushing up those rents and people just want to get the most out of it without even wondering how other people can afford it. But then again, people are willing to pay it so I don't understand that.'* [SELCoH participant]

Housing security

Community support workers felt that those renting from private landlords faced the most housing insecurity. Both workers and residents stated that landlords often terminated tenancies at very short notice or tenants had been forced to move due to rent increases.

> *'Thank you Thatcher for the eighties, so learning on the job the changes in tenancy law that happened both to council and private tenancies during the late 70's and 80's have just destroyed securing tenure. So you have people who can't raise a family in a situation where the landlord can give you notice to leave and then 3 months later you are on your arse.'* [Housing officer]

> *'Landlords in the rent initiative scheme [a scheme where homeless people are placed in private accommodation] are already evicting tenants for no reason. They only have short tenancies so they can evict them if they want. Landlords are also worried about the benefits changes and want to now get working tenants.* [Community support worker]

Residential entrapment

In contrast to those in the private rented sector, those in social housing have secure tenancies. However, some social housing tenants reported living in very poor housing conditions. Due to the high cost of private renting and limited options for moving within the social housing system, some social housing tenants felt trapped in their current tenancies.

> *'I can't afford a private place. The council, the only option they have for me is to swap. Now, no-one wants to swap with my shithole, I can assure you. It is disgusting, there is no garden, it is on the third floor. I have been on so many, hundreds of websites. I used to pay for them but I have stopped now because it's wasting my bloody money.'* [SELCoH participant]

> *'We do have clients who are desperate to move out of their flats because they are either very small, in run-down blocks, in very bad condition but there is very little that we can do.*

They usually can't get a transfer and have to enrol on swap schemes. Those in the worst properties are rarely able to move.' [Community support worker]

5.2.2.2 Institutional level themes

Themes arising at the institutional level appeared to be heavily influenced by the structural factors that limited housing options for residents and restricted the ability of housing officers and community support workers to facilitate access to suitable housing. Themes are presented in two different institutional contexts; renting from a private landlord and applying for social housing.

5.2.2.2.1 Renting from a private landlord

Selecting tenants

Letting agents were seen as particularly difficult gatekeepers to navigate in accessing private rented accommodation. Both SELCoH respondents and housing officers reported that, in most cases, benefit recipients were often dismissed by letting agents without being able to apply directly to the landlord. They were also notified not to apply with ‘No DSS’ (no Department of Social Security) signs on letting agent windows and advertisements for accommodation. Many felt that these types of notices were discriminatory.

> *‘It is disgraceful this no DSS thing on Gumtree, if you said no Blacks, Whites or working class people it would be illegal but for some reason saying no DSS is ok’* [Housing officer]

> *‘To be honest they see it on the advert, no DSS, and they just don't apply so the problem is there but it is not something they have to address because it is not an option that they even consider. The letting agent putting no DSS there everyone thinks it is their right to do that and so the problem remains as is.’* [Housing officer]

> *‘Well first of all I go to the agencies and they are already very discouraging. They say our landlords don't rent out to people with housing benefits so don't even try’* [SELCoH participant]

Local councils offer a rent deposit scheme for those who cannot afford the deposit required to rent from a private landlord. The scheme providers lend the money in advance which is paid back over a period of time through wages or benefits. However, community support workers found it difficult to find letting agents that worked with this scheme.

> *'You see, most letting agencies don't work with landlords that accept the council's rent deposit scheme. There is one letting agent I know that does but there are no properties available right now and a lot of my clients are on the waiting list. Every now and then we call around the letting agents but they all say they won't work with the scheme'.* [Community support worker]

In addition, housing officers described how landlords also did not think that people on benefits or low incomes would be reliable tenants.

> *'Landlords don't like people who claim housing benefit to pay their rent, they prefer to have young professionals who are able to pay the rent from their income and feel that they are better off and they are guaranteed to get their rent on a regular basis if they have someone who is a working professional. And also the guarantee that people who are working are less likely to cause damage to the property or engage in anti-social behaviour.'* [Housing officer]

Landlord regulation

Respondents also felt that landlord regulation in the private sector did not provide enough protection for tenants. Concerns included uncontrolled rent increases, lack of long term leases, and lack of landlord responsibility in conducting repairs. This lack of regulation created insecurity for renters, and often meant that they lived in poor housing conditions.

> *'In terms of how they treat their tenants once they move in, I think we need regulation for that and I also think until the government highly subsidises the private rental*

accommodation and brings it to a level where the rent there is cheaper or at the same level as social housing, we are not going to solve this housing crisis' [Housing officer]

'Someone needs to oversee this scheme as landlords can get away with anything. They charge extortionate amount of rent and don't look after the properties. These schemes trap people in these properties. They can't afford to pay the rent if they work so they stay on benefits and can't get into work or move to properties where they would be able to afford to work'. [Community support worker]

'I mean private rented is, I know this is being recorded, but private rented sector some of it is so horrible. You just wonder how anyone could put someone to live there and yet, you know, rent is being paid.' [Community support worker]

Experiences of discrimination

As described above, discrimination towards benefit recipients was explicit and widespread. Despite giving examples of negative societal attitudes towards ethnic minorities and migrants, many of the community support workers and housing officers felt that discrimination on these grounds was a problem of the past. Workers often explained that there were rules that protected people from such actions. However, a few respondents admitted that discrimination based on social identities other than being on benefits was still likely to happen in the private rented sector but that it was hard to prove due to its implicit nature.

*'I could sit here for hours and talk about the last 30 years of housing policy but now there is no discrimination within housing. It is all structural problems.' [*Community support officer]

'I think because here we do have an equality and diversity policy, we try to discourage open comments you know in relation to race, sex, gender and those sorts of things. So for me personally, yeah no one has said you know they are doing this because you know of this and that, no but these things happen you know, you don't hear about it, you don't see it but I believe that they do happen' [Community support worker]

'Mainstream landlords, estate agents they might [discriminate], yeah, they might have. This is quite common, asking for extra things, it's not only in this country, even I've got family in the States and when they go to estate agents they will say differently if you say African American, oh ok, then they check and they need that extra reference. I'm sure that happens here too.' [Community support worker]

5.2.2.2.2 Applying for social housing

A severe shortage of social housing in South East London meant that there was a high threshold for local councils to accept a duty to house local residents. Only those with the most complex health needs were current meeting this threshold. This led many residents to feel unfairly treated in the application process. Additionally, community support workers reported considerable problems with the institutional practices of service providers that could lead residents to feel that their application was not assessed fairly. Other sub themes include unrealistic expectations and residents not knowing their housing rights.

Institutional practice

Community support workers acknowledged that housing officers were burdened by time restrictions and lack of resources but, at the same time, they also reported problems with housing officer's conduct, citing lack of information sharing and lack of empathy as central issues. When local residents were seen by housing officers they were often given incorrect or conflicting information and sometimes were not given any information at all. Community support workers themselves also struggled to gain precise information from housing officers and even with years of experience found it difficult to navigate institutional systems due to lack of clear information and changing institutional structure and practice. Although support workers did not feel this applied to every housing officer, they described numerous problematic interactions between housing officers and local residents.

'It's like a conveyor belt of people, they don't spend time with people because they are all trying to meet targets. Sometimes they just send them to us without even doing an initial [homeless] assessment' [Community support worker]

'Instead of giving them information and sending them to the right place they just say we can't help you...next! Even for us it is difficult, you can call a service provider and get 4 or 5 different sets of information from one place, it's so confusing' [Community support worker]

'Service users feel that they are not listened to, no respect is given to them. I've been at the housing [office] and as one of their customers is speaking, the worker just cuts them off. The advice they give is that it's not my problem' [Community support worker]

Unrealistic expectations

Conversely, housing officers pointed out local residents would often bring unrealistic expectations to appointments. This was also acknowledged by community support workers. Both support workers and housing officers stated that many residents felt that they were entitled to social housing because it had historically been an accessible resource for the community. However, the diminishing housing stock meant that the local authority often had to offer private rented solutions as an alternative. The threshold for social housing eligibility has continued to rise and residents who may have been eligible ten years ago would no longer meet the criteria for social housing.

'We have got more and more people coming into London, so for example, if a single, white person comes in and sees another family from another ethnic minority with children come in and he sees at the end of the day that person gets temporary accommodation and he is being told you are not priority and you need to get private rental accommodation but you are not getting a place today he feels that it is unfair' [Housing officer]

'Parents would write letters of estrangement saying I don't want my son living here anymore, when they were actually talking but they wanted to get them a flat, then [the new] flat would be rented out and the child would go back home and there would be

money coming into the family. So now, if it is a case of mum asked me to leave, they want to mediate. We want to speak to mum, they want to speak to excluders and tell them the realities of social housing. People expect a lot from the council but things have changed' [Community support worker]

'The threshold for [social] housing is now very high, you need to have recurrent mental health problems, they want to know if a health problem is chronic. If you don't have a serious ongoing health problem you are not going to get housed' [Community support worker]

Not knowing your rights

Community support workers perceived that non-English speakers and young people were being treated unfairly as they may be less able to negotiate their housing rights. Although workers often reiterated the strict procedures social housing providers had in place, which should protect people from discrimination, they also pointed out that housing officers often varied in their adherence to these policies and may treat people differentially.

'With clients whose first language is not English, when they speak to [the housing office] on the phone, when they can't understand them, they just cut them off. I've been there when it happens' [Community support worker]

'A lot of our young people just don't know about their rights and how that discriminates and affects them' [Community support worker]

'It was just they would try and just get them out of the door, they don't know their rights, they don't know any better, we can't do anything, get out, you're rude. And they'd see the tears and they'd know they just can't empathise with the young person in any sort of context.' [Community support worker]

Community support workers also described how the combination of poor institutional practice of housing officers and some clients' lack of knowledge about housing rights created a power imbalance whereby some clients were left feeling disempowered. This

power dynamic would often change once the community support worker became involved.

> *'They are lost, they give up after...they might have approached it once, been turned away and if they do get a response they are still not sure what the persons been telling them and they just give up on the first hurdle. The process is just really disempowering'* [Community support worker, FF5]

> *'Well, I guess because I [was with him as an advocate], they showed him the respect that he had been yearning for. So they didn't just shoo him away and say we can't help you, they actually listened to what he had to say. I told him to explain the situation and they actually listened to him but prior to that they wouldn't even give him the chance. It just shows...'* [Community support worker]

> *'When we are with [the client] it's totally different. I can see that the [housing officer's] behaviour is more approachable'* [Community support worker]

5.2.3 Aim 5.3: What impact does housing adversity have on health?

Table 5.4 describes the prevalence of common mental disorder and poor self-rated health, and mean mental wellbeing scores by both adverse housing experiences and poor housing conditions. The table also presents unadjusted models for the associations between housing adversity and health outcomes. Those who had reported adverse housing experiences or poor housing conditions were more likely to report symptoms of CMD, poor self-rated health and have lower mental wellbeing scores (all significant at $p<0.001$). Results from logistic regression show that adverse housing experiences are associated with a three to four fold increase in odds of both CMD and poor self-rated health, while poor housing conditions are associated with approximately two times the odds of reporting both CMD and poor self-rated health. In linear regression models, both types of housing adversity were associated with reduced mental wellbeing. However, a larger decrease in mental wellbeing scores was observed for adverse housing experiences.

Table 5-4 Housing adversity by latent classes, sociodemographics and type of tenure

		Common mental disorder				Poor self-rated health				Mental wellbeing		
	N	**n**	**%**	**95% CI**	***p***	**n**	**%**	**95% CI**	***p***	***μ***	***95%CI***	***p***
Adverse Experiences					<0.001				<0.001			<0.001
No	906	173	19.2	(16.6-22.1)		149	15.1	(12.9-17.6)		25.4	(25.1-25.7)	
Yes	118	52	43.9	(35.0-53.3)		46	38.3	(29.7-47.6)		22.9	(22.0-23.8)	
Poor Conditions					<0.001				<0.001			<0.001
No	782	149	19.0	(16.3-22.0)		129	15.4	(13.1-18.1)		25.4	(25.1-25.7)	
Yes	207	63	30.7	(24.6-37.6)		60	26.7	(20.9-33.4)		23.9	(23.2-24.7)	
Unadjusted models			**OR**	**95% CI**	***p***		**OR**	**95% CI**	***p***	**b**	**95% CI**	***p***
Adverse Experiences												
No			1.00				1.00			0.00		
Yes			3.30	(2.18-4.99)	<0.001		3.50	(2.29-5.33)	<0.001	-2.43	(-3.38, -1.49)	<0.001
Poor Conditions												
No			1.00				1.00			0.00		
Yes			1.89	(1.33-2.70)	<0.001		2.00	(1.39-2.88)	<0.001	-1.49	(-2.27, -0.70)	<0.001

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from χ^2 tests with Rao & Scott corrections
OR=odds ratio; CI=confidence interval; b=regression coefficient

5.2.3.1 Aim 5.4 : Possible mediators and confounders

5.2.3.1.1 Mediation

As described in section 2.2.3.3 and 4.2.3.1.1 previously, coping strategies are conceptualised as possible mediators and tested in a three step process. The first part of this process was tested in previous sections. Firstly, an association between both forms of housing adversity with all three health outcomes was established as part of Aim 5.3. Secondly, associations were established between the different coping strategies and health outcomes in table 4.6 (section 4.2.3.1.1). The next step of this process, establishing associations between indicators of housing adversity and coping strategies are presented in Table 5.5. Results from ordinal regression analyses show that adverse housing experiences were associated with increased odds of spiritual coping, avoidance coping and coping by smoking while poor housing conditions were associated with increased odds of only spiritual coping and coping by smoking. Interestingly, poor housing conditions were also associated with decreased odds of coping by alcohol.

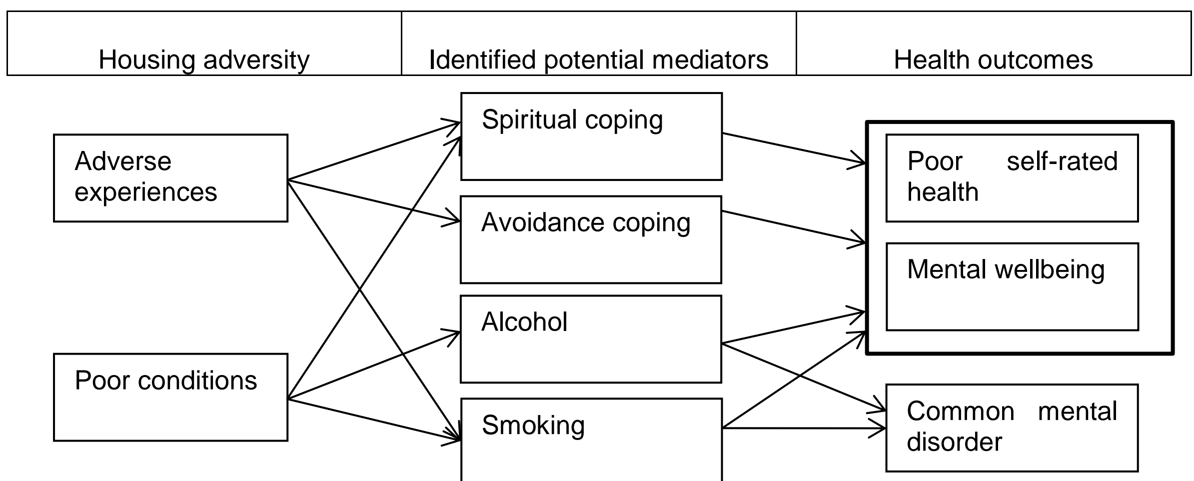
Table 5-5 Ordinal logistical regression for coping strategies (4 levels) by housing adversity

	Active		**Spiritual**		**Avoid**		**Alcohol**		**Smoke**	
	OR (CI 95%)	***p***	**OR (CI 95%)**	***p***	**OR (CI 95%)**	***p***	**OR (CI 95%)**	***p***	**OR (CI 95%)**	***p***
Housing adversity										
Adverse experiences	0.83(0.56-1.23)	0.347	1.64(1.12-2.40)	0.011	1.62(1.13-2.32)	0.009	0.90(0.58-1.39)	0.626	1.96(1.30-2.94)	0.001
Poor conditions	1.05(0.77-1.45)	0.744	1.95(1.40-2.73)	<0.001	1.31(0.96-1.79)	0.090	0.69(0.50-0.95)	0.024	1.89(1.34-2.67)	<0.001

OR=odds ratio; CI=confidence interval.

Figure 5.2 shows the coping strategies identified as potential mediators after these first two mediation steps. For a coping strategy to be considered as a mediator, it needed to be significantly associated with both an indicator of housing adversity and one of the health outcomes. Additionally, it needed to attenuate the association between the indicator of housing adversity and health outcome by at least 10%.

Figure 5-2 Identified possible mediators from mediation testing (after steps 1 and 2)



The four identified possible mediators were entered into the final mediation step which is shown in Table 5.6. Adding coping by smoking into logistical regression models attenuated the association between both adverse housing experiences and poor housing conditions with CMD by 12%. However, coping by smoking did not attenuate the association between either indicator of housing adversity and poor self-rated health. Additionally, adding coping by smoking into linear regression models attenuated the association between both adverse housing experiences and poor housing conditions with reduced mental wellbeing by 15% and 20%, respectively. Interestingly, spiritual coping increased the association between poor housing conditions and reduced mental wellbeing scores by 12%. The other potential mediators did not attenuate any associations between indicators of housing adversity and health outcomes.

Table 5-6 Odds ratios for health outcomes by housing adversity and possible mediators

	Health Outcome					
	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR (95% CI)	**p**	**OR (95% CI)**	**p**	**b (95% CI)**	**p**
Adverse experiences						
Unadjusted	3.30(2.18-4.99)	<0.001	3.50(2.29-5.33)	<0.001	-2.43(-3.38, -1.49)	<0.001
+possible mediators						
Coping-spiritual	-		3.35(2.16-5.18)	<0.001	-2.50(-3.44, -1.56)	<0.001
Coping-avoid	-		3.41(2.20-5.27)	<0.001	-2.45(-3.37, -1.52)	<0.001
Coping smoking	2.92(1.90-4.48)[a]	<0.001	3.17(2.07-4.87)	<0.001	-2.07(-2.97, -1.16)[a]	<0.001
Poor conditions						
Unadjusted	1.89(1.33-2.70)	<0.001	2.00(1.39-2.88)	<0.001	-1.49(-2.27, -0.70)	<0.001
+possible mediators						
Coping-spiritual	-		1.87(1.27-2.75)	0.002	-1.68(-2.48, -0.89)[a]	<0.001
Coping-alcohol	1.90(1.33-2.72)	<0.001	1.89(1.31-2.73)	0.001	-1.58(-2.35, -0.81)	<0.001
Coping-smoking	1.67(1.16-2.41)[a]	0.006	1.82(1.26-2.63)	0.002	-1.19(-1.94, -0.44)[a]	0.002

OR= odds ratio; b=regression coefficient; CI= confidence interval.
[a.] *Attenuation >10% from unadjusted coefficient or odds ratio*

5.1.1.1.1 Potential confounders

Table 5.7 presents results from both logistic and linear regression models testing the association between adverse housing experiences and health outcomes. Four separate block adjusted models are presented: unadjusted, adjusted for latent classes, adjusted for age and gender and adjusted for life events. As described in Table 5.4, adverse housing experiences were associated with all three health outcomes. Adjusting for only latent classes attenuated the association with both CMD and poor self-rated health below a three-fold difference in odds. However, the effect size for both of these associations remained approximately 2.5 fold greater for those reporting such experiences. In addition, adjusting for the latent classes also attenuated the association with reduced mental wellbeing by 10%. Adjusting for age and gender did not attenuate the association between adverse housing experiences and CMD but did attenuate the association between these experiences and both poor self-rated health and reduced mental wellbeing by 11% and 10%, respectively. The odds of both CMD and poor self-rated health were also reduced for those reporting adverse housing experiences after adjusting for life events. However, the effect size for these associations remained two or more times greater. The association between adverse housing experiences and reduced mental wellbeing was also attenuated by 16%.

Table 5-7 Block adjusted models of associations of adverse housing experience and health outcomes, adjusting for latent classes, age and gender, and life events.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Housing adversity						
Adverse housing experience	3.30(2.18-4.99)	<0.001	3.50(2.29-5.33)	<0.001	-2.43(-3.38, -1.49)	<0.001
Block adjusted typologies model						
Adverse housing experience	2.63(1.74-3.97)	<0.001	2.36(1.52-3.66)	<0.001	-2.19(-3.13, -1.26)	<0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.85(1.05-3.27)	0.034	1.90(0.98-3.69)	0.057	-0.59(-1.60,0.43)	0.257
Low SES non-migrant	2.59(1.66-4.03)	<0.001	4.67(2.90-7.51)	<0.001	-1.31(-2.07, -0.56)	0.001
Low SES migrant	2.34(1.14-4.81)	0.021	4.09(1.92-8.75)	<0.001	0.28(-1.31,1.88)	0.727
High SES migrant	1.71(0.95-3.09)	0.074	1.03(0.47-2.22)	0.945	0.30(-0.52,1.13)	0.467
Mixed SES migrant	1.99(1.19-3.34)	0.009	2.78(1.61-4.80)	<0.001	-0.13(-1.05,0.80)	0.791
Block adjusted age and gender model						
Adverse housing experience	3.16(2.08-4.83)	<0.001	3.13(1.98-4.96)	<0.001	-2.19(-3.12, -1.26)	<0.001
Age **(**continuous)	1.00(0.99-1.01)	0.943	1.04(1.03-1.05)	<0.001	0.01(-0.01,0.03)	0.482
Gender **(**female)	1.66(1.19-2.30)	0.003	1.44(1.01-2.04)	0.044	-0.74(-1.31, -0.17)	0.011
Marital status						
Single	1.45(1.02-2.07)	0.039	1.29(0.85-1.94)	0.229	-1.03(-1.64, -0.42)	0.001
In a relationship	1.00		1.00		0.00	
Divorced/separated/widowed	1.47(0.81-2.68)	0.205	1.70(0.97-2.98)	0.065	-1.33(-2.73,0.07)	0.062
Block adjusted life events model						
Adverse housing experience	2.53(1.64-3.89)	<0.001	2.18(1.37-3.47)	0.001	-2.04(-3.01, -1.07)	<0.001
Life events	1.17(1.08-1.28)	<0.001	1.32(1.20-1.46)	<0.001	-0.22(-0.38, -0.06)	0.007

OR=odds ratio; b=regression coefficient; CI=confidence interval.

In fully adjusted models (table 5.8), the association between adverse housing experience and CMD, poor self-rated health and mental wellbeing were all attenuated, by 48%, 52% and 39% respectively. Notably, the effect sizes for reporting CMD and poor self-rated health were both reduced below a two-fold difference. These attenuations were driven by adjusting for latent classes and life events. Adjusting for coping strategies after controlling for both latent classes and life events did not attenuate the associations further.

Table 5-8 Fully adjusted models of associations of adverse housing experience and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Fully adjusted model						
Adverse housing experience	1.71(1.05-2.77)	0.030	1.68(0.96-2.93)	0.067	-1.49(-2.37, -0.60)	0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.79(0.93-3.46)	0.081	2.04(0.94-4.45)	0.071	-0.80(-1.81,0.20)	0.117
Low SES non-migrant	2.43(1.44-4.10)	0.001	2.22(1.26-3.92)	0.006	-1.04(-1.88, -0.19)	0.016
Low SES migrant	2.39(1.08-5.30)	0.031	2.03(0.91-4.51)	0.083	-0.18(-1.70,1.34)	0.814
High SES migrant	2.19(1.13-4.25)	0.020	0.94(0.39-2.26)	0.894	-0.13(-0.99,0.72)	0.761
Mixed SES migrant	2.33(1.25-4.37)	0.008	1.99(1.03-3.86)	0.040	-0.89(-1.91,0.13)	0.088
Age **(**continuous)	0.99(0.98-1.01)	0.254	1.03(1.02-1.05)	<0.001	0.00(-0.02,0.02)	0.752
Gender **(**female)	1.82(1.27-2.62)	0.001	1.60(1.07-2.37)	0.021	-0.82(-1.37, -0.27)	0.003
Marital status						
Single	1.24(0.85-1.80)	0.263	1.00(0.64-1.56)	0.995	-0.76(-1.35, -0.17)	0.012
In a relationship	1.00		1.00		0.00	
Divorced/separated/widowed	1.07(0.57-2.03)	0.824	1.25(0.70-2.25)	0.452	-0.73(-2.08,0.63)	0.292
Life events	1.20(1.08-1.32)	<0.001	1.26(1.12-1.42)	<0.001	-0.18(-0.33, -0.02)	0.024
Active coping						
Never	1.00		1.00		0.00	
Rarely	1.08(0.36-3.26)	0.886	1.57(0.57-4.34)	0.385	-2.09(-4.02, -0.16)	0.033
Sometimes	1.65(0.75-3.63)	0.215	1.00(0.47-2.14)	0.994	-1.19(-2.73,0.35)	0.129
Most of the time	0.70(0.31-1.61)	0.401	0.69(0.30-1.60)	0.388	0.57(-1.01,2.15)	0.479
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.88(0.48-1.63)	0.689	1.10(0.57-4.34)	0.776	-0.14(-0.94,0.65)	0.724
Sometimes	1.06(0.68-1.67)	0.785	1.13(0.66-1.95)	0.657	-0.43(-1.26,0.40)	0.307
Most of the time	1.53(0.92-2.53)	0.098	1.20(0.70-2.05)	0.502	0.37(-0.52,1.27)	0.415
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.87(0.45-1.65)	0.664	0.64(0.31-1.31)	0.218	-0.41(-1.39,0.58)	0.418
Sometimes	1.07(0.64-1.81)	0.785	0.78(0.46-1.33)	0.332	-0.88(-1.79,0.04)	0.061
Most of the time	1.03(0.55-1.96)	0.920	0.52(0.22-1.24)	0.139	-0.04(-1.13,1.05)	0.947
Coping (alcohol)						
Never	1.00		1.00		0.00	

Rarely	0.80(0.46-1.40)	0.434	1.08(0.62-1.87)	0.795	-1.23(-2.06, -0.41)	0.003
Sometimes	1.29(0.82-2.04)	0.277	0.78(0.46-1.33)	0.366	-0.79(-1.50, -0.08)	0.029
Most of the time	2.58(1.22-5.49)	0.014	0.52(0.22-1.24)	0.139	-1.43(-2.77, -0.10)	0.036
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.78(0.35-1.77)	0.556	0.76(0.28-2.07)	0.598	0.02(-1.05,1.09)	0.976
Sometimes	2.17(1.27-3.70)	0.004	1.24(0.65-2.37)	0.521	-1.06(-1.94, -0.18)	0.018
Most of the time	2.20(1.38-3.52)	0.001	3.32(2.01-5.49)	<0.001	-1.82(-2.71, -0.93)	<0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

Table 5.9 presents odds ratios and coefficients for health outcomes by poor housing conditions in four models (as above). Adjusting for latent classes attenuated the association between poor housing conditions and CMD, poor self-rated health and reduced mental wellbeing by 14%, 18% and 10% respectively. Adjusting for age, gender and marital status also attenuated the association between poor housing conditions and reduced mental wellbeing. By adding in each demographic variable into the model separately, marital status was revealed to be driving the attenuation (data not shown). The association between poor housing conditions and poor self-rated health was also substantially attenuated after controlling for life events. A reduction of effect size under a two-fold difference was observed.

Table 5-9 Block adjusted models of associations of poor housing conditions and health outcomes, adjusting for latent classes, age and gender, and life events.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Housing adversity	1.89(1.33-2.70)	<0.001	2.00(1.39-2.88)	<0.001	-1.49(-2.27, -0.70)	<0.001
Poor housing conditions						
Block adjusted typologies model						
Poor housing conditions	1.62(1.13-2.31)	0.009	1.56(1.08-2.26)	0.018	-1.34(-2.12, -0.56)	0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.82(1.02-3.23)	0.043	1.65(0.82-3.31)	0.161	-0.51(-1.50,0.47)	0.307
Low SES non-migrant	2.78(1.78-4.34)	<0.001	5.13(3.17-8.29)	<0.001	-1.34(-2.10, -0.57)	0.001
Low SES migrant	2.48(1.17-5.26)	0.018	4.50(2.13-9.54)	<0.001	0.24(-1.38,1.86)	0.771
High SES migrant	1.65(0.90-2.99)	0.103	1.11(0.51-2.42)	0.783	0.21(-0.63,1.05)	0.624
Mixed SES migrant	2.07(1.24-3.45)	0.005	2.96(1.70-5.15)	<0.001	-0.22(-1.18,0.73)	0.650
Block adjusted age and gender model						
Poor housing conditions	1.75(1.21-2.53)	0.003	1.96(1.32-2.89)	0.001	-1.25(-2.03, -0.48)	0.002
Age **(**continuous)	1.00(0.99-1.01)	0.666	1.04(1.03-1.05)	<0.001	0.01(-0.01,0.03)	0.431
Gender **(**female)	1.72(1.23-2.41)	0.002	1.42(1.00-2.02)	0.054	-0.64(-1.21, -0.07)	0.027
Marital status						
Single	1.63(1.14-2.33)	0.008	1.51(1.00-2.28)	0.051	-1.29(-1.90, -0.67)	<0.001
In a relationship	1.00		1.00		0.00	
Divorced/separated/widowed	1.49(0.82-2.71)	0.188	1.84(1.04-3.23)	0.035	-1.36(-2.72, -0.01)	0.049
Block adjusted SLE model						
Poor housing conditions	1.72(1.19-2.47)	0.004	1.76(1.22-2.54)	0.002	-1.38(-2.16, -0.61)	<0.001
Life events	1.21(1.11-1.32)	<0.001	1.35(1.23-1.47)	<0.001	-0.28(-0.44, -0.12)	0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

In fully adjusted models (table 5.10), the association between poor housing conditions and both CMD and poor self-rated health were fully attenuated. Adjusting for the identified mediator (table 5.6), coping by smoking, after adjusting for all other covariates did not attenuate the association between poor housing conditions and both CMD and poor self-rated health further. The association between poor housing conditions and reduced mental wellbeing was also attenuated by 28% in the fully adjusted model. Notably, adjusting for coping by smoking further attenuated the association between poor housing conditions and decreased mental wellbeing scores by 13% after adjusting for all other potential mediators and confounders. In contrast, although spiritual coping was identified as a mediator in table 5.6, it did not attenuate the association in the fully adjusted model.

Table 5-10 Fully adjusted models of associations of poor housing conditions and health outcomes, adjusting for latent classes, age and gender, stressful life events and coping strategies.

	Common Mental Disorder		Poor self-rated health		Mental wellbeing	
	OR(95% CI)	p	OR(95% CI)	p	b (95% CI)	p
Fully adjusted model						
Poor housing conditions	1.33(0.90-1.95)	0.148	1.40(0.96-2.05)	0.085	-1.08(-1.78, -0.38)	0.003
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.82(0.93-3.57)	0.084	1.75(0.78-3.91)	0.172	-0.85(-1.83,0.14)	0.093
Low SES non-migrant	2.38(1.39-4.05)	0.002	2.25(1.26-3.99)	0.006	-0.97(-1.83, -0.13)	0.024
Low SES migrant	2.48(1.09-5.68)	0.031	1.97(0.86-4.52)	0.110	-0.21(-1.74,1.31)	0.782
High SES migrant	2.14(1.08-4.23)	0.029	1.00(0.42-2.39)	0.997	-0.33(-1.17,0.52)	0.449
Mixed SES migrant	2.35(1.25-4.41)	0.008	2.01(1.03-3.94)	0.042	-1.05(-2.06, -0.04)	0.042
Age **(**continuous)	0.99(0.98-1.01)	0.325	1.03(1.02-1.05)	<0.001	0.01(-0.01,0.03)	0.592
Gender **(**female)	2.04(1.40-2.97)	<0.001	1.67(1.11-2.50)	0.013	-0.80(-1.35, -0.26)	0.004
Marital status						
Single	1.29(0.89-1.87)	0.183	1.14(0.73-1.78)	0.560	-0.92(-1.52, -0.32)	0.003
In a relationship	1.00		1.00		0.00	
Divorced/separated/widowed	1.05(0.55-1.98)	0.891	1.35(0.75-2.44)	0.312	-0.74(-2.06,0.57)	0.267
Life events	1.21(1.10-1.34)	<0.001	1.25(1.12-1.40)	<0.001	-0.21(-0.36, -0.06)	0.007
Active coping						
Never	1.00		1.00		0.00	
Rarely	1.25(0.40-3.88)	0.699	1.31(0.47-3.66)	0.607	-2.25(-4.20, -0.30)	0.024
Sometimes	1.67(0.73-3.80)	0.224	0.90(0.421.96)	0.795	-1.13(-2.67,0.41)	0.149
Most of the time	0.70(0.29-1.67)	0.420	0.63(0.27-1.47)	0.286	0.60(-0.96,2.16)	0.452
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.88(0.48-1.65)	0.699	1.12(0.57-2.20)	0.737	0.07(-0.71,0.85)	0.861
Sometimes	1.06(0.67-1.68)	0.798	1.12(0.65-1.95)	0.678	-0.32(-1.17,0.53)	0.463
Most of the time	1.47(0.88-2.46)	0.141	1.18(0.68-2.02)	0.559	0.61(-0.28,1.50)	0.180
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.88(0.45-1.71)	0.699	0.56(0.26-1.17)	0.121	-0.30(-1.31,0.70)	0.552
Sometimes	1.07(0.63-1.82)	0.798	0.77(0.44-1.35)	0.368	-0.83(-1.75,0.08)	0.075
Most of the time	0.97(0.51-1.85)	0.141	1.13(0.57-2.27)	0.723	0.08(-1.02,1.17)	0.890
Coping (alcohol)						

Never	1.00		1.00		0.00	
Rarely	0.77(0.44-1.36)	0.369	1.11(0.64-1.92)	0.707	-1.14(-1.97, -0.31)	0.007
Sometimes	1.24(0.78-1.98)	0.371	0.81(0.47-1.39)	0.448	-0.85(-1.57, -0.14)	0.019
Most of the time	2.74(1.26-5.98)	0.011	0.51(0.21-1.26)	0.145	-1.53(-2.83, -0.23)	0.022
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.78(0.34-1.80)	0.566	0.74(0.26-2.05)	0.558	0.22(-0.89,1.33)	0.698
Sometimes	2.18(1.27-3.73)	0.004	1.34(0.71-2.53)	0.369	-0.95(-1.84, -0.06)	0.037
Most of the time	2.24(1.38-3.62)	0.001	3.28(1.99-5.41)	<0.001	-1.73(-2.61, -0.84)	<0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

5.2.3.2 Aim 5.5: How does housing adversity affect health?

This section describes the multiple perspectives of how housing adversity affects health using qualitative data. During both ethnographic fieldwork and interviews, both community support workers and housing officers were asked questions about the effects of housing adversity on their client's health. This included questions regarding both the client's psychological and behavioural responses to such adversity. SELCoH participants were asked to describe their own experiences of housing adversity, how such adversity had affected their health and what strategies they had used to cope with these situations. The data collected is described and analysed within the framework of the stress process model (24) where housing adversity acts as the source of stress.

5.2.3.2.1 Psychological responses

All stakeholders agreed that the stress of housing adversity produced negative psychological responses, such as anger, frustration, anxiety and hopelessness. Some SELCoH participants also described how their housing problems had become a chronic source of stress that they continually worried about.

> *'People do get angry that they live in a society where they are facing homelessness and there aren't any options*' [Housing officer]

> *'I think going through a situation of homelessness is probably the most difficult experience someone might go through so people come here anxious and frustrated not knowing what is going to happen'* [Housing officer]

> *'I have one client who is feeling under so much pressure that she shuts down, she shuts off, goes into her own world for days, disengaged from society'* [Community support worker]

> *'I mean it's just never ending. This has been going on for months, worrying about what I'm gonna do when the rent goes up. Now, [the landlord] has and my housing benefit won't cover it. I just don't know what to do, I can't find anything. Me and my family are gonna end up in a hostel and then what? I just don't see an end to this at the moment.'* [Resident, ethnographic fieldnotes]

5.2.3.2.2 Coping strategies

Coping strategies were classified into three sub-themes: acceptance and active coping, avoidance coping, and community level coping. These were inter-related and dependent on the type of housing adversity.

Acceptance and active coping

As many respondents described housing adversity in terms of structural factors, most individuals felt that there was very little that they could do at the individual level to tackle

the adversity directly. This meant that the most common behavioural response to housing adversity was to accept it. In terms of discrimination and homelessness, this often entailed accepting the experience and continuing to search for a home.

> *'I was angry with some of these landlords [for the discrimination] you know, but no, I never tried to do something about it, not really. You just have to keep looking.'* [SELCoH participant]

> *'They understand that what they are dealing with is bureaucracy but when that fails them then they're going to get upset. That is the main thing, people were just upset because they were going away without any help and probably not knowing where the hell next to turn. I mean you would get an earful on the phone but very rarely would it go any further than that, they would usually accept the decision so no I don't remember getting any complaints personally.'* [Housing officer]

Active coping most commonly incorporated seeking social support from friends or family, praying or trying to do something about the situation. However, complaints that were received by the housing office rarely changed the outcome for an applicant.

> *'I have friends that I talk to which is a help and I have a little prayer circle so I sent out prayer requests and I think that I will get the emotional support that is needed also.'* [SELCoH participant]

> *'I mean it does affect people differently because we do have some people who come here in that situation, but they still have someone or a friend and family to live with. But some people, well from what they tell us, they don't know anybody. Some of them are living on the streets, some just pick up a stranger out of desperation.'* [Community support worker]

> *'We do get some complaints, especially through councillors making enquiries and writing in saying why did my constituent get turned away, why didn't you provide them with temporary accommodation? But the law says if they are not vulnerable we can only provide them temporary accommodation and there is a shortage of temporary accommodation so it doesn't change anything'.* [Housing officer]

Accessing institutional support was often problematic (as outlined in section 5.3.2.2). Anger and frustration due to the limited options available in housing through institutional pathways led to more confrontational behaviour that was seen as detrimental to both solving housing problems and to individuals' health. From the perspective of support workers, people seeking housing advice would often enter new interactions with a negative attitude which would invariably affect the outcome of such encounters with housing officers. More practical problem focused coping was seen as helpful but limited by the small number of solutions on offer.

> *'Coping with that unease about not actually being listened to, the acting out, becoming quite hard and presenting a sort of attitude of I don't need anyone and I don't need support. They've had to but it's not always helpful when dealing with services'* [Community support worker]

> *'With my experience [of being a homeless applicant] I just felt so rubbish I was literally flabbergasted and if I was anyone else I would probably have started shouting, I would be screaming, they would have kicked me out and that would have literally ended nowhere. But I thought ok keep calm and with that I was able to get a result from that, rather than kicking off.* [Community support worker]

> *'Personal responsibility is one thing, massive systemic imperatives that mitigate against taking personal responsibility are for me, personally, by far the over-riding feature of our society these days. So, yes, they should be calling landlords and yes, they should be trying to find housing but when they say what is the fucking point I totally understand why they say that'* [Housing officer]

Avoidance coping

Many workers described how clients reacted when they felt that they were being unfairly treated when they were seeking institutional support. The most common reactions were anticipating further unfair treatment and avoidance behaviour, such as alcohol or drug use.

'Either they stop, they are mistrustful of agencies...(they say) I don't want to speak to them, they don't listen' [Community support worker]

'They don't want to call up, it's that fear of actually trying to resolve the situation. From previous experience they felt like they haven't got anywhere, they were probably not given the right information'. [Community support worker]

'Some turn to alcohol or some turn to drugs. Some also find themselves in abusive relationships just to get somewhere to live and we have come across them, they have presented themselves that this is what's going on' [Community support worker]

Community level coping

Community support workers described how their service reached out to the community and tried to constantly adapt in order to solve their problems, particularly housing adversity. Both community support organisations acted as a drop-in point for community members to access resources and advice and workers continually went 'above and beyond' their work duties to try and solve their clients' problems. They supported communities to cope with housing stress in the following ways: listening to community experiences of housing adversity; being a role model or mentor; empowering clients with knowledge of housing rights and navigating institutional pathways; being an advocate; and building community networks. These strategies were built into every interaction support workers had with local residents seeking advice and during group sessions which aimed to bring people experiencing similar problems together.

'It's important to provide these young people with a space, being able to come here and feel heard and feel understood. We all have to follow procedure and protocol, but it's just about a listening ear. If a young person does go to housing or if they phone up and they are not able to find a service, at least listening to them firstly and being compassionate to them, even take that time out to give them advice on what they can do, further steps, not just reject them and label them.' [Community support worker]

'When I'm working with a client, once they have seen me on the phone talking to services, I like them to try and get involved in sorting their own problems as well as

understanding what's going on. I want to give them the skills to deal with their problems and communicate with the authorities. And also, hopefully they pass these skills on to their friends as well' [Community support worker]

'We are just trying to empower our clients with being able to engage within the local community. Because we are a short-term service, two years, and the aim of that is that after the two years, if they do come into situations like that again, they are able to sort out these issues themselves.' [Community support worker]

5.3 Summary of results

This chapter has added to research findings on the relationship between housing adversity and health by exploring a wider definition of adversity that includes discrimination, various forms of homelessness and poor housing conditions within the same study. The quantitative findings have highlighted intersectional identities associated with housing adversity and health, while the qualitative data has complimented these findings by exploring potential underpinning mechanisms of these associations.

The study addressed five aims and tested six hypotheses. The first aim was to estimate the prevalence and distribution of housing adversity. 11.7% of the sample had experienced adverse housing experiences and 21.1% of the sample was currently living in poor housing conditions. The hypothesis that latent classes characterized by both low SES and being a migrant would experience more housing adversity (H5.1) was supported. For both adverse housing experiences and poor housing conditions, the largest effect size was seen for the low SES migrant group, which is characterized by low SES. At the same time, both the low SES non-migrant and mixed SES migrant classes were also associated with a six-fold or more increase in odds of reporting adverse housing conditions and a three-fold increase in odds of poor housing conditions.

The hypothesis that those who reported their tenure as renting would experience more housing adversity (H5.2) was also supported. In models controlling for age and gender, renting from a private landlord was associated with twice the odds or more of both adverse housing experiences and poor housing conditions. Notably, renting from a social landlord was associated with a five to six times increase in odds of reporting adverse housing experiences and approximately a four-fold increase in the odds of poor housing conditions. The hypothesis that those who reported not currently being in a relationship would experience more housing adversity than those who were (H5.3) was also partially

supported. Identifying as single was associated with approximately twice the odds of reporting adverse housing experiences in models adjusting for age and gender. However, being divorced, separated or widowed was not associated with housing adversity.

The second aim of the chapter explored why certain groups are more vulnerable to experiencing housing adversity and how this is enacted within housing institutions. At the structural level, negative societal attitudes towards benefit recipients, ethnic minorities and migrants were suggested to affect both government policy and interactions such groups had with housing institutions and private landlords. Government policy was also seen to exacerbate the problems of access and affordability in the housing market which increased housing insecurity for low income groups and migrants. Although unfair treatment from both private landlords and housing officers was identified, applicants' unrealistic expectations and lack of knowledge regarding housing rights were also seen as key factors in such interactions.

As part of Aim 5.3, the hypothesis (H5.4) that experiencing housing adversity was associated with poor health outcomes was supported. Both indicators of housing adversity were associated with all three health outcomes. As part of aim 5.4, the hypothesis that coping strategies would partially attenuate these associations (H5.5) was not wholly supported. Only two coping strategies were shown to act as mediators. Coping by smoking attenuating the association between both housing adversity indicators and both common mental disorder and mental wellbeing. Conversely, adjusting for spiritual coping increased the association between poor housing conditions and reduced mental wellbeing scores, suggesting that spiritual coping may be a protective factor. The final hypothesis (H5.6), that housing adversity would remain associated with poor health outcomes after adjusting for potential mediators and confounders was partially supported. Once all potential mediators and confounders had been added to the models, adverse housing experiences remained associated with CMD and reduced mental wellbeing. However, the association with poor self-rated health was

fully attenuated. Similarly, the association between poor housing conditions and reduced mental wellbeing remained in the fully adjusted model but the associations with CMD and poor self-rated health were fully attenuated.

The final aim of the chapter explored both the psychological responses and coping strategies used in response to housing adversity using the qualitative data. Psychological responses included feelings of anger, frustration and insecurity while coping strategies included both individual and community level coping. Whilst all stakeholders agreed that the anger and frustration that often led to confrontational interactions between residents and institutional actors almost always had a negative impact on housing outcomes, other coping strategies at both the individual and community level were seen as having limited effectiveness.

These findings compliment the findings in the previous chapter on employment adversity which also identified similar structural and institutional level factors that contribute to adversity. In the following chapter, the association between adversity in healthcare and health outcomes is explored and concludes by testing how adversities across these three key life domains interrelate to affect the health of residents in South East London.

Chapter 6 Structural discrimination in health services

6.1 Introduction

6.1.1 Rationale

Discrimination in health services has been associated with poor health outcomes in previous studies and those with disadvantaged status have been shown to experience more discrimination (345). However, as healthcare through the National Health Service (NHS) is free at the point of access, the mechanisms through which individuals experience adversity in this domain are likely to differ in comparison to in employment or housing. Despite, differences in this domain, ethnic minorities have been shown to receive differential treatments in mental health services in the UK (255) and in this sample migrants have been shown to be less likely to be registered with a general practitioner (GP; (8)). Although mixed, there is evidence that suggests that low SES groups have more problems in both accessing and navigating health services in the UK (251, 252). To the author's knowledge, there are no mixed methods studies on the role of healthcare discrimination in the UK. This study will provide robust statistical evidence of the association of healthcare discrimination and health outcomes whilst also using quantitative data to highlight potential mechanisms at the structural and institutional level.

Interrelation of adversity

Over the last three chapters, data have been presented separately by employment adversity (Chapter 4), housing adversity (Chapter 5) and discrimination in healthcare (Chapter 6). However, the pathways through which individuals experience adversity across the life domains of employment, housing and healthcare are likely to be interrelated and adversity across multiple domains is likely to have an increased impact on health. Adversity across multiple domains may explain health inequalities based on

SES, migration status and ethnicity. There are no studies in the UK that look at the role of adversity across multiple domains in the association between disadvantaged social identities and health outcomes using both quantitative and qualitative data.

6.1.2 Aims and hypotheses

6.1.2.1 Aims

This chapter begins by investigating the relationship between discrimination in health services and poor health outcomes using both quantitative and qualitative data. The chapter concludes by investigating how adversity across employment, housing and health services interrelate to affect health outcomes across the different latent classes. The specific aims of the chapter include:

A6.1 (*Quantitative*) To estimate the prevalence of both experienced and anticipated discrimination in healthcare, and the distribution of these indicators by latent classes of social identity, age and gender.

A6.2 (*Qualitative*) To describe why certain groups are at more risk of discrimination in health service and how it is enacted at the institutional level.

A6.3 (*Quantitative*) To test associations between discrimination in healthcare and health outcomes.

A6.4 (*Quantitative*) To test the mediating effects of different coping strategies in the associations between discrimination in healthcare and health outcomes and the role of potential confounders; age, gender and life events.

A6.5 (*Qualitative*) To describe the psychological and behavioural responses to healthcare discrimination from multiple perspectives.

A6.6 (Quantitative) To test associations between the latent classes of social identity and health outcomes while adjusting for (i) indicators of employment adversity, (ii) indicators of housing adversity, (iii) indicators of healthcare adversity and (iv) for all indicators of adversity.

6.1.2.2 Hypotheses

H6.1 In comparison to the non-migrant advantaged SES class, social identities characterised by low SES and being a migrant will experience more discrimination in health services.

H6.2 Experiencing more healthcare discrimination will be associated with poorer health outcomes.

H6.3 Active coping and avoidance coping will mediate the relationship between healthcare discrimination and poor health such that they partially attenuate the association. Other coping strategies will not markedly attenuated these associations.

H6.4 After adjusting for potential mediators and confounders, healthcare discrimination will remain associated with poor health.

H6.5 The association of increased odds of poor health with latent classes characterised by disadvantage will be partially attenuated after adjusting for all three types of adversity. However, these attenuations will largely be driven by adjusting for employment and housing adversity.

6.2 Methods

6.2.1 Healthcare discrimination

The methods for aims 6.1-6.5 are described in section 2.4.2.

6.2.2 Interrelation of adversity

In order to address Aim 6.5 regression methods were used to test the strength of associations between latent classes of social identity and the three health outcomes. The strength of these associations were also tested after adjusting for (i) employment adversity indicators, (ii) housing adversity indicators and (iii) healthcare adversity indicators separately. In order to see how the combination of adversity across these life domains affected the association between latent classes and health outcomes, all adversity indicators that were significant at a conventional p-value of 0.05 in the previous models were added to a fully adjusted model.

6.3 Results

6.3.1 Aim 6.1 Who experiences healthcare discrimination?

Table 6.1 describes the prevalence of healthcare discrimination in the sample. 5.6% of the sample reported experiencing discrimination in healthcare and 3.9% reported anticipating healthcare discrimination. Only 2.2% of the sample reported both experienced and anticipated discrimination.

Table 6-1 Prevalence of healthcare discrimination in total sample

Health service use experience	n	%	95% CI
Experienced discrimination	62	5.6	4.2-6.9
Anticipated discrimination	43	3.9	2.7-5.0
No discrimination	970	92.8	91.1-94.2
Experienced discrimination only	38	3.3	2.4-4.6
Anticipated discrimination only	19	1.7	1.0-2.6
Experienced and anticipated discrimination	24	2.2	1.5-3.3

CI=confidence interval.

Table 6.2 shows the distribution of healthcare discrimination by latent classes, age and gender. The prevalence of experienced discrimination in all the latent classes was approximately double or more in comparison to the high SES White non-migrant class (p=0.017). The low SES migrant class reported more experienced discrimination than the other latent classes (11.7%). A higher proportion of females experienced discrimination compared to males (p=0.006) but there were no differences by age. Only 1.8% of the high SES White non-migrant class reported anticipated discrimination. The prevalence of anticipated discrimination was higher in all other latent classes but was highest for the low SES non-migrant class. However, these differences were not significant. A higher proportion of females also anticipated discrimination compared to males (p=0.046). There were no significant differences in anticipated discrimination by age.

Table 6-2 Distribution of healthcare discrimination: experienced and anticipated discrimination by latent classes, gender and age

	Experienced discrimination					**Anticipated discrimination**				
	N	**n**	**%**	**95% CI**	***p***	**N**	**n**	**%**	**95% CI**	***p***
Typology					0.017					0.151
High SES White non-migrant	377	11	2.6	(1.4-4.7)		377	7	1.8	(0.8-3.8)	
Mixed SES ethnic minority non-migrant	119	8	6.6	(3.3-12.9)		119	6	4.5	(2.0-10.2)	
Low SES non-migrant	232	20	8.0	(5.2-12.1)		232	15	6.2	(3.7-10.1)	
Low SES migrant	50	5	11.7	(4.7-26.1)		50	2	4.8	(1.1-17.8)	
High SES migrant	122	10	8.0	(4.3-14.4)		122	5	3.8	(1.6-8.8)	
Mixed SES migrant	152	8	4.7	(2.4-9.2)		151	8	5.0	(2.5-9.7)	
Gender					0.006					0.046
Male	437	16	3.4	(2.1-5.6)		436	12	2.6	(1.5-4.6)	
Female	615	46	7.5	(5.6-9.9)		615	31	5.0	(3.5-7.1)	
Age					0.611					0.073
16-29	246	11	4.2	(2.3-7.5)		246	4	1.6	(0.6-4.2)	
30-44	333	20	5.7	(3.7-8.8)		333	15	4.5	(2.7-7.3)	
45-64	344	23	6.6	(4.4-9.7)		344	19	5.7	(3.5-9.0)	
65+	129	8	6.3	(3.2-12.1)		128	5	4.0	(1.7-9.4)	

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from χ^2 tests with Rao & Scott corrections
CI=confidence interval.

Results from logistic regression are presented in Table 6.3. All of the latent classes were associated with increased odds of experiencing discrimination except for the mixed SES migrant class in comparison to the high SES White non-migrant class in both unadjusted and adjusted (for age and gender) models. In the adjusted model, the largest effect size was seen for the low SES migrant class, which was associated with four times the odds of experienced discrimination. Female gender was also associated with twice the odds of experiencing discrimination in both models.

In both unadjusted and adjusted analyses, only the low SES non-migrant class had increased odds of reporting anticipated discrimination in comparison to the high SES White non-migrant class with elevated odds approximately three-fold. In adjusted analyses, the mixed SES ethnic minority non-migrant, high SES migrant and mixed SES migrant classes were all associated with two to three times the odds of anticipated discrimination but these were not statistically significant. Due to small cell sizes for anticipated discrimination, the low SES migrant class was excluded from regression analyses. Female gender was associated with increased odds of anticipated discrimination in comparison to males in unadjusted and adjusted models. In unadjusted models, all age groups were associated with two to four times the odds of reporting anticipated discrimination in comparison to the 17-29 year old age group.

Table 6-3 Odds ratios for healthcare discrimination by latent classes, age and gender

	Experienced discrimination			Anticipated discrimination[a]		
	OR	**95% CI**	***p***	**OR**	**95% CI**	***p***
Unadjusted						
Typology						
High SES White non-migrant	1.00			1.00		
Mixed SES ethnic minority non-migrant	2.69	(1.03-7.04)	0.044	2.59	(0.81-8.24)	0.108
Low SES non-migrant	3.28	(1.51-713)	0.003	3.58	(1.40-9.13)	0.008
Low SES migrant	5.00	(1.57-15.95)	0.007	-	-	-
High SES migrant	3.30	(1.34-8.15)	0.010	2.16	(0.66-7.05)	0.203
Mixed SES migrant	1.87	(0.72-4.84)	0.195	2.85	(0.99-8.17)	0.052
Age						
17-29	1.00			1.00		
30-44	1.37	(0.63-2.98)	0.421	2.87	(0.93-8.83)	0.067
45-64	1.59	(0.75-3.36)	0.225	3.70	(1.21-11.30)	0.022
65+	1.52	(0.59-3.89)	0.386	2.59	(0.68-9.92)	0.165
Gender **(**female)	2.28	(1.25-4.16)	0.007	1.96	(1.00-3.84)	0.050
Fully adjusted						
Typology						
High SES White non-migrant	1.00			1.00		
Mixed SES ethnic minority non-migrant	2.78	(1.07-7.24)	0.036	2.89	(0.86-9.66)	0.085
Low SES non-migrant	2.87	(1.30-6.33)	0.009	2.94	(1.13-7.62)	0.027
Low SES migrant	4.05	(1.13-14.48)	0.032	-	-	-
High SES migrant	3.13	(1.27-7.68)	0.013	2.09	(0.64-6.85)	0.223
Mixed SES migrant	1.62	(0.63-4.18)	0.315	2.43	(0.86-6.82)	0.093
Age **(**continuous)	1.01	(1.00-1.03)	0.168	1.02	(1.00-1.04)	0.030
Gender **(**female)	2.17	(1.19-3.98)	0.012	2.03	(1.03-4.01)	0.042

[a]Low SES migrant class excluded from analysis due to small cell count
Adjusted=adjusted for age (continuous) and gender
OR=odds ratio; CI=confidence interval.

6.3.1.1 Qualitative findings

The qualitative data allowed for more in depth explorations of the associations between social identities and healthcare adversity that were found in the quantitative data. As in the quantitative analysis, GPs and community support workers also identified those on low incomes and migrants in the qualitative interviews as groups who may be more likely to perceive unfair treatment in healthcare. In addition, both stakeholders identified substance users, particularly those with dual diagnoses, and older age groups (specifically those aged over 65 years old) as being among those who may experience more unfair treatment.

> *'No-one has said to me directly I was treated unfairly because of this or that but I do think there will be aspects of that because if you go to the GP and you've found it hard to communicate, be it English is not your first language, your education or background, or some other reason that your communication becomes a barrier and you may take that as unfair treatment on the part of that service.'* [Community support worker]

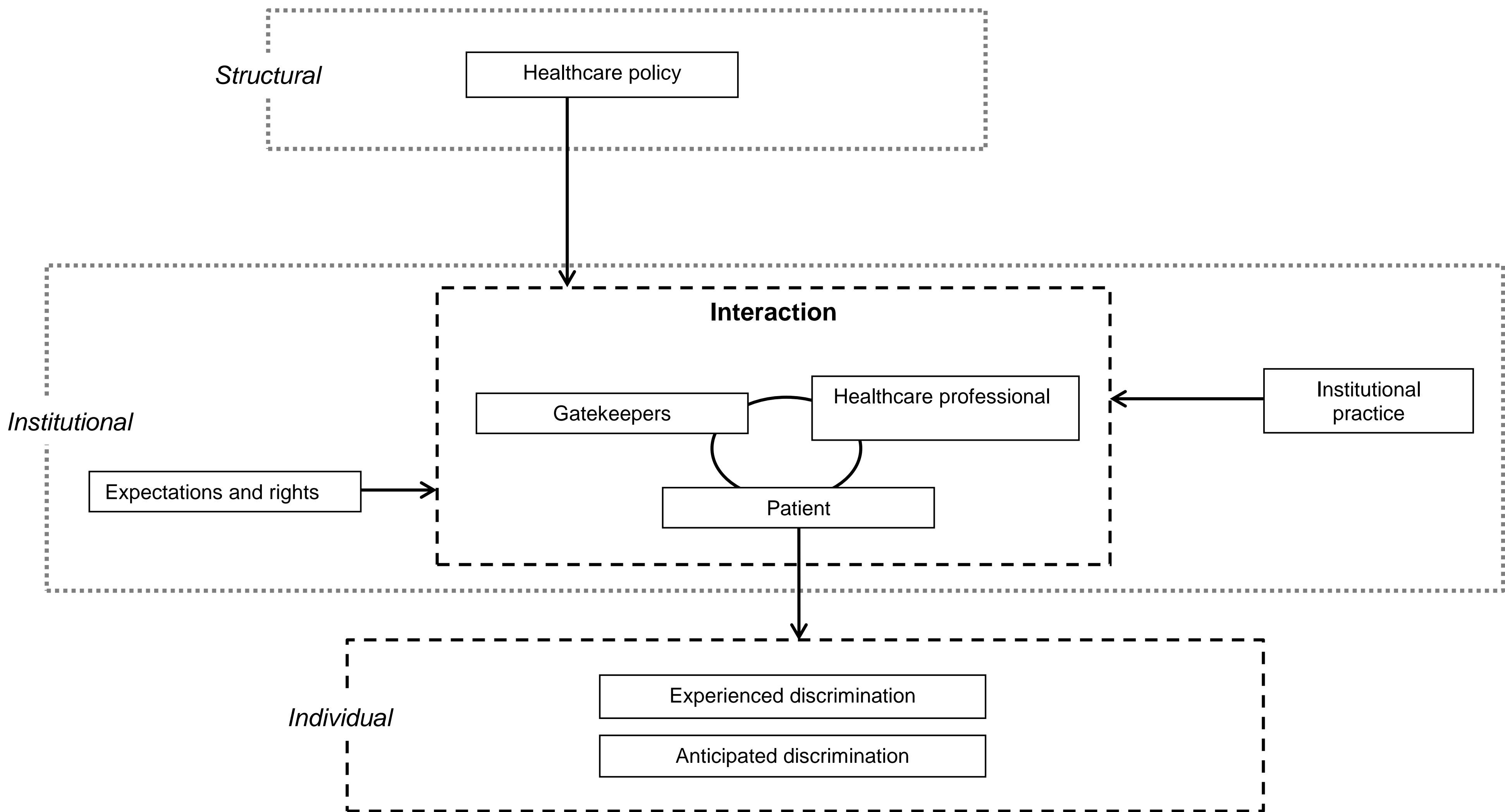
> *'I think where you get a cultural mismatch between the person providing the service and the person receiving the service there is likely to be failure in communication, misunderstanding and all that sort of stuff. Then if the person giving them the information becomes impatient with their ability to understand or is not prepared to explain it in a way that makes it accessible to them then they are going to rightly feel that they are not being treated fairly.'* [GP]

> *'Mental health services won't see him because he has substance issues. He needs to deal with first. That's really unfair because it is a mental health issue which is causing the substance issue. There needs to be some level of support for his mental health needs while he is dealing with his substance use issues'* [Community support worker]

6.3.2 Aim 6.2 How is healthcare discrimination experienced?

This section describes the nature of healthcare discrimination experienced by these identified groups using qualitative data. Both community support workers and GPs were asked questions about their experiences of working with residents in health services. This included questions unfair treatment experienced by their clients in health services ('What kind of unfair treatment do clients complain about?'); NHS policies ('What kind of problems exist within the NHS structure that affect patients access to care?'); institutional practice ('What barriers exist for patients in booking appointments?'); healthcare professional-patient interactions ('In what ways do you think that expectations of treatment affect interactions with healthcare professionals?'); and patient feedback ('Can you tell me about the complaints procedure at your GP practice?'). SELCoH participants were also asked to give details of their personal experiences of healthcare discrimination. This included questions on the experience ('Could you tell me about when you were unfairly treated in healthcare?'); anticipated discrimination ('Do you anticipate being treated unfairly in healthcare? Does it stop you from accessing services?'); and expectations of service ('What kind of service did you expect from the health service?'). In addition, prompts and probes were used to elicit more detailed information where necessary. Themes that emerged from the data included healthcare policy at the structural level and institutional practice and healthcare professional-patient interactions at the institutional level. Figure 6.1 visualises the thematic framework for healthcare discrimination.

Figure 6-1 Thematic framework of adversity in healthcare services at the structural and institutional level



6.3.2.1 Structural level themes

Healthcare policy was described as shaping institutional processes and practices and contributing to perceptions of unfair treatment. Themes related to healthcare policy included access to medical training, funding and costs, and GP treatment approaches.

Access to medical training

There was concern that the GP population was not representative of the populations that they serve in South East London. Community support workers pointed out that there needed to be better access to medical training for low income and minority groups. There was also some suggestion from SELCoH participants that there was a lack of training around communication skills with patients.

> *'I think it's still really hard for young people from disadvantaged backgrounds to get into [medicine]. It's just really competitive. There's so much status attached to it. More needs to be done to make sure more of these kids are getting on to the courses so that we have more doctors from a variety of backgrounds. I think that would help a lot'* [Community support worker]

> *'And again, they don't have people...even as doctors they don't have people handling skills you know. In that job, you need to have people-handling skills. I think they need to do more training on that, how to talk to people, explain things.'* [SELCoH participant]

Targets and costs

Both GPs and community support workers made reference to both NHS targets and budget constraints as factors that affected institutional practice that may lead to people feeling that they are being unfairly treated. Although both stakeholders acknowledged that targets were important to make sure that communities were receiving the best services possible, they described how it sometimes had a negative impact on healthcare professionals' time and ability to perform patient-centred tasks.

Years ago, a much greater proportion of your work was spent with face to face work with patients. Now it seems a lesser proportion because there is so much paperwork and checking results and just gazing at the computer in front of you. [GP]

'But just in terms of generally how services are probably so, cut back at present and the impact on the staff and these different services around stress. As a result I think there's less time, understanding and empathy or the services towards the individual.' [Community support worker]

'Yes we do have to be responsible over the financial resources that are allocated to us, we do. I don't like to think of it as rationing but I do think we have to be responsible because we all know now that the tax payer finding for the health service is not a bottomless pit.' [GP]

More importantly, there was a general consensus that budget constraints were affecting access to services.

'We've had recently, and this may be just a local phenomenon, but we've had in south London, substantial reductions in our GP practice funding budget. And that has meant all of us doing longer sessions and doing more sessions with fewer trainees and if there is one thing that I feel patients do suffer from is lack of access to GPs.' [GP]

GP treatment approaches

Community support workers described how the biomedical approach to treatment by GPs was not always helpful for their service users, stating that a system where you can only address one specific medical problem per appointment was problematic for those with multiple or complex health problems. Support workers also suggested there was an over-reliance of using medication to treat all mental health problems and a need for a more biopsychosocial model in the healthcare system.

'Some of our service users have so many health problems that they just can't be addressed in a single appointment. It can be very frustrating for them. I think there needs

to be a better way for doctors to deal with those kinds of patients. I mean, when you go to the doctors they tell you they can only deal with one health complaint at a time but how can you do that if your health problems are really complicated?' [Community support worker]

'The lack of insight into the illness, it's just medication, medication and I find with a lot of the clients it's not just medication, they want something else. They want help with the problems that are causing their depression and stuff and I think sometimes they go to the the GP and these problems are never addressed. They are just given medication and I don't think it always helps' [Community support worker]

While one GP expressed his reluctance to get involved in social problems citing that there were other agencies that could advise their patients on these issues, the other GP described being an advocate on social issues as part of their role and how their GP surgery actively referred patients to local advice agencies.

'So (when a patient consults about a social problem) I would say that that is nothing to do with me, it is not a health issue and it is nothing I want to influence. So that is a diagnostic problem, is it health or is it not health?' [GP]

'So we used to have a benefits advisor, somebody who worked at the practice who was skilled in benefits and patients having difficulty with benefits agencies would be able to see him and get advice about what they are really entitled to. So now, first of all it comes up less and I think that people who need benefits do have access to information and the benefits system has been simplified quite substantially. For many people their doctor was at one point their only port of call and we probably wrote far too many letters about people really, don't have many now.' [GP]

'[Our GP surgery] is pretty well connected with all the different services in the community, the third sector services and council provided services. We recognise that three-fold tier of all the consultations, the medical, psychological, social, and you're right you start off with a blank sheet and then you go in one direction and you don't know what is going to take pre-eminence' [GP]

At the same time, both GPs were also concerned about their role in legitimising 'sick roles' and being complicit in the surveillance of substance users.

> *'And this person is angry with society but knows that the only way to get the drugs, which he has to treat his substance abuse, is by every 2 weeks or every 4 weeks come in to see me his GP. And what's more it's an incredible form of social control which I have to be very careful of because it is very regimented, I have to be very careful to not come across as a policeman in his life'* [GP]

6.3.2.2 Institutional level themes

The themes outlined above were described as directly affecting the interactions of community members with healthcare professionals. Themes at the institutional level were either related to institutional practice or interactions between healthcare professionals and patients.

6.3.2.2.1.1 Institutional practice

GP appointments

Arranging a GP appointment was seen as a difficult process in some GP surgeries which was often accompanied by little flexibility from reception staff. Those who did not speak English were seen as having particular difficulty. There was also concern that the introduction of online booking could become an additional barrier for some groups.

> *'[My client] has a mental health diagnosis that can impact her sleep, she has Post Traumatic Stress and I suspect she has in the past been a little bit aggressive with the staff in reception. When she is frustrated she can't get an appointment. She can't get one for the same day and she can't get up at 8 o'clock to get there, they have the 8 o'clock system in place. So she can't get her needs met. On one occasion I did make the appointment on her behalf and I felt their response to me wasn't good either. I felt that they were questioning why I was doing this and it gave me an understanding of perhaps how it is for [my client]'* [Community support worker]

> *'Just the other day I was with a client at the GPs, a patient went in to see the GP but came back out 2 minutes later and stood by reception. The receptionist was saying, 'I told him he needs to bring someone who speaks English'. They told him again, but it didn't look like he understood'.* [Community support worker]

> *'But I left that surgery because of the coldness of the secretaries, the doctors were quite nice but the secretaries were just...If you were in a job like that, you need to have a*

people-handling course. You are dealing with people who are vulnerable you know?' [SELCoH participant]

'Online booking could be a great improvement for access but it could also be a barrier for those who can't manage that process.' [GP]

The length of appointments was seen as problematic, especially for patients with complex health issues. Both GPs and SELCoH participants agreed that this sometimes had a negative impact on the consultation.

'We only have 10 minutes, that's the down side you will never minimise consultations unless you get to the root of the real problem. So unless you realise that the real problem is social, you will just have somebody who just keep turning up with one problem after another' [GP]

'Well the majority of the time when I used to go to my GP, the first thing she would let me know that we only have 10 minutes and that you have got too many issues and I can't deal with them all at once. That is the first thing she would say to me.' [SELCoH participant]

Both GPs also stated that some groups of people were more able to navigate the healthcare system than others. They also added that it was part of their role to help groups who were unable to do so.

'The middle classes will always be more skilled somehow at navigating these systems and yup, we do put up a wall of bureaucracy, we have access problems.' [GP]

'I think that is a commonly held viewpoint about primary care that our role is to be the patient's advocate. I am here to help you navigate a complex healthcare system, so I can't cure you but I am going to work a way for you through the system and I will find for you the person who can cure you.' [GP]

6.3.2.2.1.2 Healthcare interactions

Interactions between patients and healthcare professionals were shaped by pre-held perceptions of each other, power dynamics, patient knowledge and expectations of service.

Perceptions

Both the perception of healthcare professionals by patients and the perception of patients by healthcare professions were seen as important in understanding the dynamics of a consultation and any perception of unfair treatment or discrimination. A shared view by both patients and GPs was that GPs were often seen as part of state apparatus, especially by patients who felt oppressed in other areas of their lives.

> *'There I am immediately thinking there's a group of people who feel that life has been unfair and their GP's are all part of their life and GP's are unfair as well. Part of that unfair system that oppresses them'* [GP]

> *'There is the stereotype of the white, male doctor in that group that the white, male doctor wouldn't possibly understand me and my culture and I would prefer to have a doctor of my own culture. I then have to win people round and say, actually, quite the opposite, I am here to be your advocate.'* [GP]

> *'Yeah I felt because of my background being uneducated and being a foreigner to him, he is a doctor maybe born here, I don't know, with my English and maybe he thought this is just someone who just came recently and doesn't know the rules, the way he talked to me he just thought that this one doesn't know anything or maybe she is not that educated or she wouldn't take this any further.'* [SELCoH participant]

Power dynamics

The perceptions outlined above were very closely related to power dynamics between healthcare professionals and patients. SELCoH participants reported feeling disempowered in interactions with doctors because of the doctor's status. Main concerns

included not being listened to and not receiving adequate care. At the same time, GPs described a more balanced but demanding dynamic with 'upper middle class' patients.

> *'And people in the medical profession obviously are in the position of power, so there is that interplay. And the profession is known as having a strong sort of hierarchy of power.'* [Community support worker]

> *'The upper middle classes are the ones who will say I've paid more taxes than everyone else and therefore I expect a better service. That is a commonly expressed view'* [GP]

> *'I'd say if a middle class person approached them and said something to them I think they would listen to them. But someone who's that I regard as their way of thinking below them, what the hell do you know?'* [SELCoH participant]

Patient knowledge

GPs expressed that it was important to gauge the amount of knowledge a patient had about health issues and how much understanding they had in relation to what was being advised in a consultation. If a clear understandable explanation was not given by the GP it could lead to a perception of inadequate service or unfair treatment. GPs also stated that there was an increase in patient knowledge about health concerns which meant that many patients had their own ideas regarding treatment which could also cause a perception of unfair treatment if treatment did not meet their expectations.

> *'So if somebody has got a complex problem and they are given an explanation as to what this problem is and they have difficulty understanding it, then if the person giving them the information becomes impatient with their ability to understand or is not prepared to explain it in a way that makes it accessible to them then they are going to rightly feel that they are not being treated fairly'* [GP]

> *'When I started off, no one would disagree with you…. But one of the things that is better is that people can say I don't want it, I don't like it, it doesn't sound right and increasingly, people are having no difficulty saying that'* [GP]

'It might be that I'm the doctor and I know better. I have studied and you have not. I think people are a little bit more knowledgeable now with the internet and it is easy to do research. So maybe that's an irritation point for doctors, because people might come to the wrong conclusion, which I understand.' [SELCoH participant]

Expectations

It was not only an increase in patient knowledge that was changing the dynamics of interactions and expectations. GPs also expressed that patients were also more comfortable in challenging GPs for other reasons, such as demanding certain medications, brands and benefit related letters.

'More often than not it is about there being a significant difference in expectations of what's reasonable or what can be achieved or what is appropriate' [GP]

'We've got a real conflict between offering patient centred care and giving patients everything that they want and it frequently presents itself with psychotropic medication, particularly the valiums and tamezepams of this world, it expresses itself with antibiotics.' [GP]

'Those people for whom the dependency culture is their lifestyle and that dependency will be shown in the approach to the benefits system. And that's another area which we haven't touched on, the asking for sick certificates on relatively minor grounds and then expecting those sick certificates to carry on long term.' [GP]

'She's saying that she suffers from fatigue so that she can't speak, she can't walk so she finds it very difficult, for example to get a sick note, they'll only sign her off for a couple of weeks, where she feels they should sign her off for more than that.' [Community support worker]

Gatekeeping

Some SELCoH participants also reported that their GPs were unfairly denying them access to secondary services in their gatekeeping roles. Problems included bureaucratic

processes delaying referrals and GPs simply not being willing to make a referral due to the nature of the illness.

> *'I went down to that place and tried to get myself seen and they said "oh no you can't be seen unless you've got a doctor's letter". And I am thinking, hold on a minute, I 've got a problem and you're a hospital and you won't see me unless the doctor says. You see what I mean about power here?'* [SELCoH participant]

> *'So I was at the GP in Kennington at the time because I was living in a flat there and I asked for a referral letter and the guys promised it, he never sent it. I went 3 times, he promised it and he never sent it, so that was really horrible. And then I went again for the fourth time and because he was sick there was a replacement doctor, he wrote it right away.'* [SELCoH participant]

Complex cases

Complex cases that involved multiple health problems or unexplained symptoms were seen as flash points for problematic interactions, unmet expectations and perceived unfair treatment.

> *'That patient crushes every single doctor that they go to see because they've just got such an over-whelming amount of things wrong, none of which can be realistically diagnosed or treated'* [GP]

> *In my mind I thought he would heal me, you know. He did not explain that he was going to teach me to manage [my chronic fatigue]. It is very unfair but if I would just have a listening ear and somebody can say I understand, let's see what we can do, you know? So yeah it is a difficult journey'* [SELCoH participant]

Anticipated discrimination

Due to some of the factors outlined above, SELCoH participants anticipated that they would be treated unfairly or that they would not receive an adequate service at their GP surgery and so would either use emergency services or avoid using services altogether.

'I haven't been back to my doctor for let me see, it must be touching on 6 or 8 months. So it's pointless going there, talking to them' [SELCoH participant]

I'll just take any pain killers and keep my pain to myself. And afterwards I just can't keep then I'll go, cos I also go to Emergency also in King's, I used to go when it's worse all weekend' [SELCoH participant]

'I haven't dialled 999 when I felt that I should have done because I know what will be waiting for me, it won't be a welcome' [SELCoH participant]

6.3.3 Aim 6.3: What impact does healthcare discrimination have on health?

Table 6.4 describes the prevalence of common mental disorder, poor self-rated health and mean mental wellbeing scores by indicators of healthcare discrimination. It also presents odds ratios and regression coefficients for the associations between adversity indicators and health outcomes. Those who had reported experienced discrimination were more likely to report symptoms of CMD ($p<0.001$), poor self-rated health ($p=0.001$) and lower mental wellbeing ($p=0.007$). Those who reported anticipated discrimination were also more likely to report symptoms of CMD, poor self-rated health and lower mental wellbeing (all significant; $p<0.001$). Results from logistic regression show that experienced discrimination was associated with a three-fold increase in odds of both CMD and poor self-rated health. Much larger effect sizes were observed for anticipated discrimination. Anticipated discrimination was associated with eight times the odds of CMD and over five times the odds of poor self-rated health. Results from linear regression also revealed that experienced discrimination was associated with a 1.7 point decrease in wellbeing scores while anticipated discrimination was associated with a 3.1 point decrease in wellbeing scores. All odds ratios and regression coefficients should be interpreted with caution as individuals with poor health may have more contact with health services and so have more chances of being exposed to unfair treatment.

Table 6-4 Prevalence of common mental disorder, poor self-rated health, and mean mental wellbeing scores by healthcare discrimination

		Common mental disorder				Poor self-rated health				Mental wellbeing		
Healthcare	**N**	**n**	**%**	**95% CI**	***p***	**n**	**%**	**95% CI**	***p***	***μ***	***95%CI***	***p***
Experienced discrimination												
No	990	204	20.7	(18.2-23.5)	<0.001	172	16.1	(13.9-18.6)	<0.001	25.2	(24.9-25.5)	0.007
Yes	62	27	45.2	(33.0-58.0)		24	38.8	(27.3-51.7)		23.5	(22.3-24.7)	
Anticipated discrimination												
No	1008	202	20.2	(17.7-23.0)	<0.001	174	16.0	(13.8-18.4)	<0.001	25.2	(24.9-25.5)	<0.001
Yes	43	29	68.0	(52.4-80.4)		22	51.9	(36.6-66.8)		22.1	(20.5-23.6)	
Unadjusted models			**OR**	**95% CI**	***p***		**OR**	**95% CI**	***p***	**b**	**95% CI**	***p***
Experienced discrimination			3.16	(1.84-5.42)	<0.001		3.30	(1.90-5.72)	<0.001	-1.68	-2.90, -0.46	0.007
Anticipated discrimination			8.39	(4.25-16.57)	<0.001		5.67	(2.99-10.75)	<0.001	-3.12	-4.70, -1.55	<0.001

Weighted percentages to account for survey design; frequencies are unweighted and may not add up due to missing values.
p-values indicate significance from χ^2 tests with Rao & Scott corrections
OR=odds ratio; CI=confidence interval; b=regression coefficient.

6.3.3.1 Aim 4.4 Possible mediators and confounders

6.3.3.1.1 Mediation

The first steps of mediation testing were performed in analyses in section 6.3.3 and established an association between healthcare discrimination and health outcomes. The second step of mediation testing was partly performed in section 4.3.3.1.1 where unadjusted associations between coping strategies and health outcomes are also presented in Table 4.6. Unadjusted associations between indicators of healthcare discrimination and coping strategies are presented in Table 6.5. There were no associations between experienced discrimination and coping strategies while anticipated discrimination was only associated with avoidance coping (p=0.011).

As avoidance coping was also associated with increased odds of poor self-rated health and with reduced mental wellbeing, it was entered into the final mediation step, which is shown in Table 6.6. Although avoidance coping was associated with both these outcomes and anticipated discrimination, it demonstrated no mediating effect. It did not substantially attenuate the association between anticipated discrimination with poor self-rated health or reduced mental wellbeing.

Table 6-5 Ordinal logistical regression for coping strategies (4 levels) by healthcare discrimination and logistic regression for health outcomes by coping strategy

	Active		**Spiritual**		**Avoid**		**Alcohol**		**Smoke**	
	OR (CI 95%)	***p***	**OR (CI 95%)**	***p***	**OR(CI 95%)**	***p***	**OR(CI 95%)**	***p***	**OR(CI 95%)**	***p***
Healthcare										
Experienced discrimination	1.24(0.74-2.07)	0.417	1.27(0.75-2.16)	0.376	0.93(0.57-1.54)	0.786	0.73(0.44-1.19)	0.203	1.30(0.75-2.27)	0.347
Anticipated discrimination	0.67(0.39-1.14)	0.139	1.82(0.95-3.50)	0.071	1.93(1.16-3.22)	0.011	0.58(0.33-1.04)	0.066	1.59(0.83-3.04)	0.162

OR=odds ratio; CI= confidence interval.

Table 6-6 Odds ratios for health outcomes by healthcare discrimination and possible mediators

	Health Outcome								
	Common Mental Disorder			**Poor self-rated health**			**Mental wellbeing**		
	OR	**(95% CI)**	***p***	**OR**	***(95% CI)***	***p***	**b**	***(95% CI)***	***p***
Anticipated discrimination									
Unadjusted	-	-	-	5.67	(2.99-10.75)	<0.001	-3.12	(-4.70, -1.55)	<0.001
+avoid	-	-	-	5.73	(3.01-10.93)	<0.001	-3.10	(-4.64, -1.56)	<0.001

OR= odds ratio; b=regression coefficient; CI= confidence interval.

6.3.3.1.2 Potential confounders

Table 6.7 presents odds ratios and regression coefficients for health outcomes by indicators of healthcare discrimination. As in previous chapters, four models are presented: unadjusted, adjusted for latent classes, adjusted for age and gender, and adjusted for life events. Adjusting for latent classes substantially attenuated the association between experienced discrimination and both CMD and poor self-rated health but odds remained elevated at approximately 2.8 and 2.9 fold respectively. Adjusting for latent classes did not attenuate the association between experienced discrimination and reduced mental wellbeing. No attenuations were observed for any of the health outcomes after adjusting for age and gender. Adjusting for life events attenuated the association between experienced discrimination and symptoms of CMD (13%), poor self-rated health (19%) and reduced mental wellbeing (19%).

In fully adjusted models, as presented in Table 6.8, adjusting for CMD at SELCoH 1 attenuated the association between experienced discrimination and CMD by 11% while adjusting for poor self-rated health at SELCoH 1 attenuated the association between experienced discrimination and poor self-rated health by 10%. Overall, the association between experienced discrimination and CMD, poor self-rated health and reduced mental wellbeing were all substantially attenuated by 29%, 29% and 17% respectively after adjusting for all potential confounders and mediators.

Table 6-7 Block adjusted models of associations of healthcare discrimination and health outcomes, adjusting for latent classes, age and gender, and life events.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Healthcare adversity						
Experienced discrimination	3.16(1.84-5.42)	<0.001	3.30(1.90-5.72)	<0.001	-1.68(-2.90, -0.46)	0.007
Block adjusted typologies model						
Experienced discrimination	2.77(1.61-4.75)	<0.001	2.89(1.66-5.02)	<0.001	-1.52(-2.73, -0.30)	0.015
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.76(1.01-3.09)	0.047	1.89(0.97-3.77)	0.063	-0.58(-1.62,0.46)	0.272
Low SES non-migrant	2.82(1.83-4.37)	<0.001	5.47(3.41-8.79)	<0.001	-1.61(-2.39, -0.83)	<0.001
Low SES migrant	2.71(1.32-5.55)	0.007	5.03(2.47-10.25)	<0.001	-0.14(-1.73,1.46)	0.866
High SES migrant	1.59(0.91-2.78)	0.104	1.09(0.53-2.27)	0.811	0.32(-0.49,1.14)	0.436
Mixed SES migrant	2.19(1.32-3.61)	0.002	3.30(1.91-5.71)	<0.001	-0.41(-1.34, -0.51)	0.379
Block adjusted age and gender model						
Experienced discrimination	2.93(1.69-5.09)	<0.001	3.00(1.65-5.46)	<0.001	-1.57(-2.80, -0.34)	0.012
Age (continuous)	1.00(0.99-1.01)	0.005	1.04(1.03-1.05)	<0.001	0.01(-0.01,0.02)	0.556
Gender (female)	1.56(1.14-2.13)	0.952	1.38(0.98-1.94)	0.066	-0.72(-1.29, -0.15)	0.013
Block adjusted life events model						
Experienced discrimination	2.74(1.55-4.86)	0.001	2.68(1.52-4.74)	0.001	-1.46(-2.67, -0.24)	0.019
Life events	1.22(1.12-1.32)	<0.001	1.37(1.25-1.50)	<0.001	-0.31(-0.47, -0.15)	<0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

Table 6-8 Fully adjusted model of associations of healthcare discrimination and health outcomes, adjusting for latent classes, age and gender, life events and coping strategies.

	Common Mental Disorder		Poor self-rated health		Mental wellbeing	
	OR(95% CI)[a]	p	OR(95% CI)[b]	p	b (95% CI)	p
Fully adjusted model						
Experienced discrimination	2.24(1.27-3.95)	0.006	2.33(1.14-4.77)	0.020	-1.39(-2.51, -0.28)	0.015
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	2.41(1.21-4.79)	0.012	1.30(0.59-2.86)	0.521	-0.92(-1.93,0.09)	0.075
Low SES non-migrant	2.19(1.26-3.80)	0.005	1.25(0.68-2.27)	0.474	-1.37(-2.20, -0.54)	0.001
Low SES migrant	2.54(1.08-5.97)	0.033	1.71(0.67-4.35)	0.259	-0.52(-2.06,1.01)	0.502
High SES migrant	1.98(0.97-4.04)	0.062	0.81(0.33-1.99)	0.647	-0.10(-0.96,0.75)	0.814
Mixed SES migrant	2.48(1.33-4.64)	0.005	1.28(0.59-2.75)	0.534	-1.13(-2.13, -0.12)	0.028
Age (continuous)	0.99(0.98-1.01)	0.280	1.03(1.01-1.04)	<0.001	0.01(-0.01,0.03)	0.364
Gender (female)	1.45(0.99-2.12)	0.056	1.59(1.00-2.52)	0.049	-0.81(-1.35, -0.03)	0.003
Life events	1.15(1.03-1.27)	0.012	1.27(1.11-1.44)	<0.001	-0.25(-0.41, -0.10)	0.001
Active coping						
Never	1.00		1.00		0.00	
Rarely	0.67(0.21-2.17)	0.502	1.11(0.38-3.29)	0.845	-2.12(-4.03, -0.21)	0.029
Sometimes	1.30(0.51-3.29)	0.586	0.81(0.38-1.74)	0.587	-1.23(-2.76,0.31)	0.117
Most of the time	0.52(0.19-1.38)	0.190	0.51(0.22-1.18)	0.114	0.63(-0.94,2.20)	0.429
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.92(0.49-1.73)	0.793	1.24(0.59-2.60)	0.563	-0.17(-0.97,0.63)	0.681
Sometimes	1.15(0.71-1.86)	0.571	1.05(0.55-1.99)	0.890	-0.43(-1.26,0.40)	0.306
Most of the time	1.53(0.89-2.64)	0.122	1.34(0.75-2.39)	0.320	0.33(-0.56,1.21)	0.469
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.82(0.41-1.63)	0.573	0.55(0.35-1.21)	0.138	-0.36(-1.37,0.64)	0.475
Sometimes	1.08(0.62-1.87)	0.795	0.71(0.38-1.31)	0.275	-0.96(-1.89, -0.04)	0.040
Most of the time	1.17(0.60-2.31)	0.647	1.17(0.57-2.40)	0.675	-0.11(-1.20,0.99)	0.846
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.66(0.28-1.55)	0.342	0.54(0.20-1.50)	0.138	0.03(-0.99,1.05)	0.953
Sometimes	2.22(1.22-4.02)	0.009	1.14(0.52-2.47)	0.275	-1.10(-2.01, -0.19)	0.018
Most of the time	1.99(1.15-3.43)	0.014	3.25(1.76-6.02)	0.675	-1.93(-2.81, -1.05)	<0.001

Coping (alcohol)						
Never	1.00		1.00		0.00	
Rarely	0.95(0.52-1.72)	0.856	0.98(0.50-1.93)	0.963	-1.18(-2.01, -0.36)	0.005
Sometimes	1.42(0.88-2.31)	0.150	0.82(0.47-1.42)	0.475	-0.75(-1.46, -0.03)	0.039
Most of the time	2.24(0.99-5.06)	0.053	0.34(0.13-0.91)	0.032	-1.65(-2.94, -0.35)	0.013
CMD (at S1)	7.26(4.93-10.68)	<0.001	-			
Poor self-rated health (at s1)	-		12.09(7.64-19.14)	<0.001		

OR=odds ratio; b=regression coefficient; CI=confidence interval.

[a] *adjusting for CMD at SELCoH I.* [b] *adjusting for poor self-rated health at SELCoH I*

Table 6.9 presents odds ratios and coefficients for health outcomes by anticipated discrimination in four models (as above). Adjusting for latent classes substantially attenuated the association between anticipated discrimination and both symptoms of CMD and poor self-rated health, by 11% and 10%, respectively. However, effect sizes remained large for both health outcomes at a 7.5 fold increase for CMD and a 5 fold increase for poor self-rated health. Adjusting for latent classes did not attenuate the association between anticipated discrimination and reduced mental wellbeing. In the block adjusted age and gender model, no substantial attenuations were observed across the three health outcomes. Adjusting for life events attenuated the association between anticipated discrimination and poor self-rated health by 20%. However, adjusting for life events did not attenuate associations between anticipated discrimination with either poor self-rated health or reduced mental wellbeing.

In fully adjusted models (table 6.10), the association between anticipated discrimination and CMD, poor self-rated health and mental wellbeing were all substantially attenuated by 43%, 31% and 24%, respectively. Notably, adjusting for CMD at SELCoH 1 attenuated the association between anticipated discrimination and CMD by a further 29% after adjusting for all other potential confounders and mediators so that the odds ratio was reduced to under a five-fold difference. Adjusting for poor self-rated health did not attenuate the association between anticipated discrimination and poor self-rated health any further after adjusting for other potential confounders and mediators.

Table 6-9 Block adjusted models of associations of anticipated discrimination and health outcomes, adjusting for latent classes, age and gender and life events.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)	**p**	**OR(95% CI)**	**p**	**b (95% CI)**	**p**
Healthcare adversity						
Anticipated discrimination	8.39(4.25-16.57)	<0.001	5.67(2.99-10.75)	<0.001	-3.12(-4.70, -1.55)	<0.001
Block adjusted latent classes model						
Anticipated discrimination	7.49(3.79-14.82)	<0.001	4.99(2.59-9.62)	<0.001	-2.89(-4.42, -1.35)	<0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	1.74(1.01-2.99)	0.044	1.88(0.96-3.67)	0.066	-0.57(-1.57,0.44)	0.272
Low SES non-migrant	2.77(1.78-4.31)	<0.001	5.46(3.39-8.80)	<0.001	-1.57(-2.33, -0.80)	<0.001
Low SES migrant	2.86(1.39-5.89)	0.004	5.37(2.53-11.42)	<0.001	-0.19(-1.74,1.35)	0.805
High SES migrant	1.63(0.91-2.90)	0.098	1.12(0.53-2.37)	0.759	0.29(-0.53,1.12)	0.481
Mixed SES migrant	2.12(1.27-3.54)	0.004	3.22(1.86-5.59)	<0.001	-0.36(-1.30,0.58)	0.453
Block adjusted age and gender model						
Anticipated discrimination	8.01(4.03-15.93)	<0.001	5.20(2..64-10.27)	<0.001	-3.04(-4.63, -1.47)	<0.001
Age (continuous)	1.00(0.99-1.01)	0.894	1.04(1.03-1.05)	<0.001	0.01(-0.01,0.02)	0.460
Gender (female)	1.56(1.14-2.14)	0.006	1.37(0.98-1.93)	0.068	-0.71(-1.27, -0.15)	0.014
Block adjusted life events model						
Anticipated discrimination	8.15(3.85-17.26)	<0.001	4.63(2.24-9.57)	<0.001	-2.97(-4.51, -1.43)	<0.001
Life events	1.21(1.11-1.32)	<0.001	1.37(1.25-1.50)	<0.001	-0.30(-0.46, -0.14)	<0.001

OR=odds ratio; b=regression coefficient; CI=confidence interval.

Table 6-10 Fully adjusted model of associations of anticipated discrimination and health outcomes, adjusting for latent classes, age and gender, life events and coping strategies.

	Common Mental Disorder		**Poor self-rated health**		**Mental wellbeing**	
	OR(95% CI)[a]	**p**	**OR(95% CI)[b]**	**p**	**b (95% CI)**	**p**
Fully adjusted model						
Anticipated discrimination	4.77(2.41-9.45)	<0.001	3.91(1.87-8.19)	<0.001	-2.38(-3.84, -0.92)	0.001
Latent classes						
High SES White non-migrant	1.00		1.00		0.00	
Mixed SES ethnic minority non-migrant	2.37(1.19-4.72)	0.014	1.30(0.58-2.91)	0.526	-0.94(-1.94,0.06)	0.065
Low SES non-migrant	2.21(1.26-3.85)	0.005	1.29(0.70-2.35)	0.412	-1.39(-2.22, -0.56)	0.001
Low SES migrant	2.75(1.17-6.47)	0.021	1.83(0.72-4.62)	0.201	-0.64(-2.12,0.83)	0.392
High SES migrant	2.06(1.01-4.18)	0.046	0.83(0.33-2.07)	0.685	-0.15(-1.01,0.71)	0.728
Mixed SES migrant	2.49(1.33-4.66)	0.004	1.29(0.60-2.76)	0.517	-1.13(-2.15, -0.12)	0.028
Age **(**continuous)	0.99(0.98-1.00)	0.235	1.03(1.01-1.04)	<0.001	0.01(-0.01,0.03)	0.343
Gender **(**female)	1.46(1.00-2.14)	0.053	1.58(1.00-2.49)	0.049	-0.82(-1.35, -0.28)	0.003
Life events	1.15(1.03-1.27)	0.012	1.27(1.12-1.44)	<0.001	-0.25(-0.40, -0.10)	0.001
Active coping						
Never	1.00		1.00		0.00	
Rarely	0.64(0.20-2.11)	0.464	1.11(0.39-3.16)	0.843	-2.10(-4.00, -0.20)	0.030
Sometimes	1.24(0.48-3.20)	0.654	0.78(0.36-1.69)	0.530	-1.18(-2.69,0.32)	0.124
Most of the time	0.53(0.20-1.44)	0.214	0.52(0.22-1.23)	0.136	0.59(-0.95,2.13)	0.450
Spiritual coping						
Never	1.00		1.00		0.00	
Rarely	0.93(0.48-3.20)	0.818	1.27(0.60-2.68)	0.537	-0.18(-0.98,0.62)	0.656
Sometimes	1.12(0.69-1.82)	0.649	1.05(0.55-2.02)	0.877	-0.43(-1.27,0.41)	0.319
Most of the time	1.50(0.86-2.62)	0.153	1.28(0.71-2.29)	0.416	0.39(-0.49,1.26)	0.383
Avoidance coping						
Never	1.00		1.00		0.00	
Rarely	0.82(0.41-1.64)	0.576	0.56(0.25-1.26)	0.162	-0.38(-1.38,0.62)	0.453
Sometimes	1.03(0.59-1.79)	0.928	0.68(0.36-1.27)	0.229	-0.90(-1.82,0.02)	0.055
Most of the time	1.09(0.55-2.17)	0.798	1.11(0.53-2.33)	0.775	-0.03(-1.11,1.06)	0.961
Coping (smoking)						
Never	1.00		1.00		0.00	
Rarely	0.73(0.31-1.73)	0.477	0.60(0.21-1.69)	0.333	-0.04(-1.09,1.00)	0.938

Sometimes	2.14(1.17-3.93)	0.014	1.04(0.50-2.20)	0.910	-1.06(-1.95, -0.17)	0.020
Most of the time	2.00(1.15-3.48)	0.014	3.25(1.75-6.05)	<0.001	-1.90(-2.78, -1.03)	<0.001
Coping (alcohol)						
Never	1.00		1.00		0.00	
Rarely	0.93(0.50-1.71)	0.810	0.97(0.50-1.91)	0.939	-1.16(-1.97, -0.34)	0.005
Sometimes	1.46(0.90-2.36)	0.127	0.82(0.47-1.43)	0.484	-0.76(-1.47, -0.04)	0.037
Most of the time	2.31(1.03-5.20)	0.043	0.36(0.13-0.94)	0.036	-1.70(-3.01, -0.40)	0.010
CMD (at S1)	6.97(4.74-10.25)	<0.001	-			
Poor self-rated health (at s1)			12.16(7.71-19.18)	<0.001		

OR=odds ratio; b=coefficient; CI=confidence interval.
[a] *adjusting for CMD at SELCoH I.* [b] *adjusting for poor self-rated health at SELCoH I*

6.3.3.2 Aim 6.5 How does healthcare adversity affect health?

The impact of healthcare discrimination on health was also explored in the qualitative component of the study. As in previous chapter, the data collected is described and analysed within the framework of the stress process model (24), concentrating on both the psychological and behavioural responses to healthcare discrimination.

6.3.3.2.1 Psychological responses

SELCoH respondents reported that experiencing discrimination in healthcare negatively affected self-esteem and acted as a source of anxiety and depression. GPs also agreed that a perception of unfair treatment could have a negative impact on a patient's psychological health. They added that any inappropriate treatment resulting from being treated unfairly could also negatively affect health.

> *'It made me feel like shit, you know, it makes you feel unheard, not respected, not believed. It lowers your self-esteem so I actually have lost a lot of faith in the GPs in the NHS because I hear really good stories but I haven't seen it.'* [SELCoH participant]

> *'I feel depressed and even when I sleep it used to be in my head. Me personally I thought they are powerful, they are the doctors so who else would I go and complain to?'* [SELCoH participant]

> *'[The doctors] say it is in your head but it is not. So well, maybe then for a few weeks I really go through it and I feel discouraged and again the depression, a level of depression.'* [SELCoH participant]

> *'There is a range of impacts from somebody being treated ineffectively or inappropriately or badly, then that is going to affect their health. If the treatment being offered is ineffective treatment then that has a bad effect on them. And then some people will feel hurt by getting unfair treatment, psychologically I suppose'* [GP]

6.3.3.2.2 Behavioural responses

As described in section 6.3.2.2.1.2, experienced and anticipated discrimination both led to avoidance coping or accessing health services through unconventional pathways, such as emergency care. Other behavioural responses included praying, using NHS complaint procedures, joining patient participation groups at GP surgeries and obtaining advice and support from community support organisations.

Complaints

Although there is a comprehensive NHS complaints procedure, GPs admitted that that the procedure itself could be a difficult and time consuming process. Further, they reported seeing more complaints from higher SES patients while older patients were less likely to complain and. SELCoH respondents also added that they felt that complaining would not help their situation.

> *'We do get a lot of patient complaint letters, all of which we have to investigate and respond to from people who think that it's been unfair and they are the posher patients.'* [GP]
>
> *'I have often been in a situation with an elderly person pleading with the daughter not to complain and the daughter making a complaint'* [GP]
>
> *'Complaints are very time consuming and they are also distressing but that is the nature of what a complaint is. Well I don't think it is easy for people to complain because it is tedious to complain'* [GP]
>
> *'I don't think complaining will make a difference. I would not actually know where to begin.'* [SELCoH participant]

Patient participation groups

GPs also pointed out that patient participation groups were becoming a new way for patients to have more input into how services are run and a way to raise issues around

unfair treatment. However, GPs also pointed out that they were not always representative of the local population, attracting more patients from higher SES backgrounds and also expressed concern about the focus of the groups.

> *'I would say a lot of them have joined our participation groups because of a sense of unfairness, we don't offer a fair service, it's a good service and maybe they think they can change the system by joining the PPG and I think it is a very constructive' GP2*

> *'[In the patient participation groups] you probably get the articulate, self-assured, middle class people who are able to make the system work for themselves anyway.' [GP2]*

> *'It is interesting I think patients in the [group] soon go over to the management side, once they are participating they start to see things from your perspective and they stop being patients I think.' [GP2]*

Community coping

Community support organisations described that in a few cases they had to intervene into the healthcare of certain service users to make sure they received the treatment they needed. This ranged from helping book appointments to paying for treatments that were denied to their service users. In one community support organisation, a designated worker worked directly with local GP surgeries to identify patients who were frequent attenders to the emergency department to understand why they were avoiding GP services and support them find more sustainable sources of support.

> *'A female client with a heroin addiction. She tells me that she also has a really bad back problem but is not being treated properly by her GP because they though she just wanted the pain killers. They think they are always after one thing. She had a slipped disc and Thames Reach paid for her to go to a back clinic (physio) for treatment.'* [Community support worker]

> *'I try to then have these discussions about 'Have you considered these different supports?' and 'These operate in your area'. And try and have those discussions to see if*

people are keen to take them up and support them in that process.' [Community support worker]

6.4 Latent classes, adversity and health

6.4.1 Quantitative results

Table 6.11 presents odds ratios and regression coefficients for the associations between the latent classes and the three health outcomes. Four separate models are presents: a model adjusting for age (continuous) and gender only, a model adjusting for age, gender and indicators of employment adversity, a model adjusting for age, gender and housing adversity and a model adjusting for age, gender and healthcare adversity. A table presenting the prevalence of both CMD and poor self-rated health, and mean scores for mental wellbeing for each of the latent classes can be found in Table 3.9 in section 3.5.1. Results from the first model (adjusting for age and gender only) are reported in section 3.5.2.

In the second model, which additionally adjusted for all four indicators of employment adversity, the associations between both the low SES non-migrant class and the low SES migrant class with CMD were partially attenuated. These associations were reduced but remained two to 2.5-fold greater than the high SES White non-migrant class. The associations between both the mixed SES ethnic minority non-migrant and mixed SES migrant class with CMD were both fully attenuated. Adjusting for employment adversity also substantially attenuated the associations between all four latent classes with increased odds of poor self-rated health. The largest attenuations were seen for the low SES non-migrant and mixed SES migrant class, where associations were reduced by 41% and 37%, respectively. The association between the low SES non-migrant class and reduced mental wellbeing was also substantially attenuated but the class was still associated with a one point decrease in wellbeing scores.

In the third model, adjusting for indicators of housing adversity fully attenuated the association between the low SES migrant class and CMD. Substantial attenuations were also observed between both the low SES non-migrant class and the mixed SES migrant

class, where associations were reduced by 21%. Adjusting for this adversity also reduced the associations for the four latent classes associated with poor self-rated health. Again, the largest attenuation was observed for the low SES migrant class, where the association was reduced by 34%, but remained at least two times greater than the high SES White non-migrant class. Similarly, the association between the low SES non-migrant class with decreased wellbeing scores was also reduced by 37%.

In contrast to the two models adjusting for employment adversity and housing adversity, there were no substantial attenuations observed between the associations that were observed between the various latent classes and three health outcomes.

Table 6-11 Odds ratios and regression coefficients for health outcomes by latent classes controlling for employment adversity, housing adversity and healthcare discrimination in separate models

	Common Mental Disorder			Poor Self-Rated Health			Mental Well Being		
	OR	**(CI 95%)**		**OR**	**(CI 95%)**		**b**	**(CI 95%)**	
Adjusted (age and gender only)									
High SES White non-migrant	1.00			1.00			0.00		
Mixed SES ethnic minority non-migrant	1.72	(0.98-3.00)	0.057	2.72	(1.36-5.43)	0.005	-0.49	(-1.53,0.55)	0.355
Low SES non-migrant	3.01	(1.96-4.62)	<0.001	4.56	(2.81-7.40)	<0.001	-1.74	(-2.54, -0.94)	<0.001
Low SES migrant	2.99	(1.43-6.22)	0.004	3.62	(1.73-7.59)	0.001	-0.34	(-1.92, -1.23)	0.669
High SES migrant	1.62	(0.92-2.85)	0.097	1.24	(0.58-2.67)	0.584	0.31	(-0.52,1.14)	0.465
Mixed SES migrant	2.14	(1.29-3.55)	0.003	2.95	(1.72-5.05)	<0.001	-0.39	(-1.33,0.55)	0.412
Age	1.00	(0.99-1.01)	0.387	1.04	(1.02-1.05)	<0.001	0.01	(-0.01,0.03)	0.216
Gender (Female)	1.56	(1.13-2.14)	0.006	1.38	(0.97-1.95)	0.075	-0.76	(-1.33, -0.18)	0.010
Adjusted (employment adversity)									
High SES White non-migrant	1.00			1.00			0.00		
Mixed SES ethnic minority non-migrant	1.32	(0.71-2.44)	0.380	2.45	(1.17-5.14)	0.017	-0.08	(-1.12,0.96)	0.885
Low SES non-migrant	1.99	(1.24-3.21)	0.005	2.70	(1.60-4.57)	<0.001	-0.99	(-1.79, -0.19)	0.016
Low SES migrant	2.53	(1.21-5.29)	0.014	3.11	(1.50-6.47)	0.002	-0.06	(-1.58,1.46)	0.938
High SES migrant	1.60	(0.88-2.90)	0.120	1.17	(0.52-2.62)	0.705	0.28	(-0.55,1.11)	0.508
Mixed SES migrant	1.54	(0.90-2.64)	0.115	1.87	(1.05-3.31)	0.033	0.27	(-0.70,1.24)	0.581
Age	1.00	(0.99-1.01)	0.553	1.04	(1.03-1.05)	<0.001	0.01	(-0.00,0.03)	0.125
Gender (Female)	1.60	(1.13-2.27)	0.008	1.36	(0.93-1.99)	0.114	-0.72	(-1.29, -0.16)	0.012
Experienced discrimination	1.38	(0.87-2.18)	0.177	0.90	(0.54-1.51)	0.697	0.27	(-0.59,1.12)	0.541
Anticipated discrimination	1.94	(1.26-2.98)	0.003	1.31	(0.79-2.18)	0.288	-1.58	(-2.44, -0.71)	<0.001
Experienced unemployment	1.86	(1.11-3.14)	0.020	2.07	(1.15-3.73)	0.015	-1.35	(-2.30, -0.39)	0.006
Work insecurity	1.38	(1.10-1.73)	0.006	1.35	(1.04-1.76)	0.027	-0.90	(-1.35, -0.45)	<0.001
Adjusted (housing adversity)									
High SES White non-migrant	1.00			1.00			0.00		
Mixed SES ethnic minority non-migrant	1.64	(0.91-2.97)	0.102	2.15	(1.02-4.54)	0.044	-0.30	(-1.30,0.71)	0.562
Low SES non-migrant	2.38	(1.51-3.75)	<0.001	3.45	(2.12-5.61)	<0.001	-1.10	(-1.88, -0.33)	0.005
Low SES migrant	1.89	(0.88-4.04)	0.101	2.38	(1.14-4.99)	0.022	0.61	(-1.00,2.21)	0.459
High SES migrant	1.50	(0.81-2.79)	0.194	1.11	(0.49-2.50)	0.798	0.34	(-0.50,1.19)	0.425
Mixed SES migrant	1.69	(1.00-2.87)	0.050	2.20	(1.27-3.79)	0.005	0.09	(-0.89,1.07)	0.862

Age	1.00	(0.99-1.01)	0.420	1.04	(1.03-1.05)	<0.001	0.02	(0.00,0.03)	0.100
Gender (Female)	1.86	(1.31-2.62)	<0.001	1.56	(1.08-2.25)	0.018	-0.83	(-1.40, -0.26)	0.004
Adverse experience	2.69	(1.75-4.13)	<0.001	2.49	(1.56-3.97)	<0.001	-2.00	(-2.92, -1.07)	<0.001
Poor conditions	1.44	(1.00-2.09)	0.052	1.57	(1.07-2.32)	0.022	-1.11	(-1.88, -0.35)	0.004
Adjusted (health service adversity)									
High SES White non-migrant	1.00			1.00			1.00		
Mixed SES ethnic minority non-migrant	1.59	(0.92-2.76)	0.099	2.54	(1.25-5.16)	0.010	-0.38	(-1.41,0.65)	0.468
Low SES non-migrant	2.82	(1.82-4.39)	<0.001	4.26	(2.59-6.99)	<0.001	-1.62	(-2.41, -0.82)	<0.001
Low SES migrant	2.86	(1.41-5.90)	0.004	3.45	(1.65-7.21)	0.001	-0.25	(-1.79,1.29)	0.752
High SES migrant	1.54	(0.87-2.73)	0.141	1.15	(0.53-2.47)	0.721	0.39	(-0.44,1.22)	0.354
Mixed SES migrant	2.04	(1.21-3.45)	0.007	2.88	(1.65-5.02)	<0.001	-0.31	(-1.26,0.64)	0.523
Age	0.99	(0.98-1.00)	0.222	1.04	(1.02-1.05)	<0.001	0.01	(0.00,0.03)	0.149
Gender (Female)	1.48	(1.07-2.05)	0.018	1.28	(0.89-1.83)	0.180	-0.69	(-1.25, -0.12)	0.018
Experienced discrimination	1.29	(0.64-2.59)	0.478	1.58	(0.77-3.26)	0.215	-0.43	(-1.87,1.02)	0.561
Anticipated discrimination	6.49	(3.01-14.00)	<0.001	3.61	(1.64-7.94)	0.001	-2.62	(-4.44, -0.80)	0.005

OR=odds ratio; b=regression coefficient; CI=confidence interval.

In the fully adjusted model, which adjusts for age, gender and all indicators of adversity that were significant in the block adjusted models at a conventional p-value of 0.05. As experienced discrimination in employment and healthcare were not significant in models across all three health outcomes, these variables were not added to the final model. After adjusting for all indicators of adversity, the association between the mixed SES ethnic minority non-migrant class and both CMD and poor self-rated health were both attenuated by 23% and 22% respectively. While the attenuation of odds for CMD was largely driven by employment adversity, housing adversity was driving the attenuation for poor self-rated health (data not shown). The largest reduction in effect sizes was observed in the association between the low SES non-migrant class and both CMD and poor self-rated health, where the odds were reduced by 46% and 48% respectively. Both of these attenuations were largely driven by employment adversity (data not shown). Despite these large reductions, associations with CMD and poor self-rated health remained at 1.7 fold and 2.4 fold greater than the high SES White non-migrant class. Notably, the association between the low SES non-migrant class and reduced wellbeing was fully attenuated in this model.

In terms of the migrant classes, the association between the low SES migrant class and both CMD and poor self-rated health were reduced by 31% and 37%, respectively. This was mostly driven by housing adversity. Similarly, the association between the mixed SES migrant class and both CMD and poor self-rated health was fully attenuated after adjusting for all indicators of adversity. However, both employment and housing adversity appeared to be driving these attenuations (data not shown).

Table 6-12 Odds ratios and coefficients for health outcomes by latent classes controlling for employment adversity, housing adversity and healthcare discrimination

	Common Mental Disorder			**Poor Self-Rated Health**			**Mental Well Being**		
	OR	**(CI 95%)**		**OR**	**(CI 95%)**		**b**	**(CI 95%)**	
Fully Adjusted									
High SES White non-migrant	1.00			1.00			0.00		
Mixed SES ethnic minority non-migrant	1.33	(0.73-2.44)	0.350	2.13	(0.98-4.64)	0.056	-0.10	(-1.11,0.91)	0.846
Low SES non-migrant	1.70	(1.03-2.81)	0.038	2.39	(1.41-4.07)	0.001	-0.62	(-1.40,0.16)	0.119
Low SES migrant	2.05	(0.95-4.44)	0.068	2.28	(1.06-4.94)	0.036	0.51	(-1.07,2.08)	0.526
High SES migrant	1.42	(0.76-2.65)	0.270	1.09	(0.48-2.49)	0.828	0.34	(-0.50,1.17)	0.428
Mixed SES migrant	1.32	(0.75-2.34)	0.332	1.59	(0.88-2.85)	0.122	0.50	(-0.52,1.53)	0.333
Age	0.99	(0.98-1.01)	0.379	1.04	(1.03-1.05)	<0.001	0.02	(0.00,0.04)	0.033
Gender (Female)	1.76	(1.21-2.56)	0.003	1.43	(0.96-2.13)	0.076	-0.70	(-1.25, -0.14)	0.014
Employment adversity									
Anticipated discrimination	1.53	(0.99-2.36)	0.054	-	-		-0.99	(-1.83, -0.15)	0.021
Experienced unemployment	2.00	(1.14-3.48)	0.015	2.01	(1.09-3.73)	0.026	-1.08	(-2.04, -0.13)	0.026
Work insecurity	1.33	(1.05-1.70)	0.019	1.20	(0.90-1.59)	0.210	-0.79	(-1.24, -0.35)	0.001
Housing adversity									
Adverse experience	1.79	(1.08-2.98)	0.024	2.00	(1.17-3.42)	0.011	-1.09	(-2.08, -0.11)	0.029
Poor conditions	1.22	(0.81-1.82)	0.341	1.31	(0.86-1.99)	0.208	-0.76	(-1.51, -0.00)	0.050
Health service adversity									
Anticipated discrimination	6.86	(3.06-15.38)	<0.001	3.20	(1.38-7.45)	0.007	-2.48	(-4.13, -0.82)	0.003

OR=odds ratio; b=regression coefficient; CI=confidence interval.

6.1.1 Qualitative findings

During both ethnographic fieldwork and interviews with community support workers and staff working across institutions of employment, housing and health, all stakeholders emphasised the interrelation of the three types of adversity. There was a particular emphasis on how employment and housing adversity were related and how an employment problem could often lead to housing problems and vice versa (as described in section 4.2.2.1.3). Community support workers were particularly adamant that such issues needed to be treated holistically, and in order to do this a more collaborative approach across different agencies was needed.

> *'Because what we have discovered over the years, I have been here 10 years now, is sometimes when you just solve the housing problem and you don't solve the other problems the clients have in finding work or underlying health issues and they lose the tenancy again, it breaks down and they are back to square one'* [Community support worker]

> *'Well I think that the advice surgeries, like ourselves, should be based in places like the job centre, so when there's an issue with that person there, straight after they can go and see someone about it and get it dealt with rather than just...a lot of the time service users get frustrated because they can't deal with all the issues.'* [Community support worker]

> '*What is emerging now from all these funding cuts is a much more collaborative approach with all stakeholders seeing how they can align their services to fill gaps. I think we are seeing this a lot in the housing sector'* [Community support worker]

6.5 Summary of results

The final results chapter explored both the relationship between healthcare discrimination and health, and how adversity across three domains interrelated to affect health. The chapter addressed six aims while testing five hypotheses. The first aim was to estimate the prevalence of healthcare adversity. 5.6% of the sample had experienced discrimination and 3.9% had anticipated discrimination. The first hypothesis, that latent classes characterised by both low SES and being a migrant or ethnic minority was not wholly supported. Although the largest effect size was observed for this group in terms of experienced discrimination, this was not the case for anticipated discrimination. Only the low SES non-migrant class was associated with anticipated discrimination. However, this may be due to small cell sizes for these regression analyses. Interestingly, female gender was associated with both experienced and anticipated discrimination in fully adjusted models. Increased age was also associated with increased odds of anticipated discrimination.

The second aim of this chapter was to describe how discrimination is experienced in healthcare. Limited access to medical training for low SES groups, current NHS policy related to targets and cost, as well as the biomedical approach to healthcare appointments were all seen as affecting interactions between healthcare professional and patients. Limited length of appointments, social distance between professionals and patients, unbalanced power dynamics and unmet expectations were all reported to be reasons for perceiving an experience of discrimination or anticipating discrimination in the future.

The hypothesis tested as part of aim 6.3, that healthcare discrimination would be associated with poorer health outcomes was fully supported. Experienced discrimination was associated with approximately three times the odds of both CMD and poor self-rated health, and was also associated with a decrease in wellbeing scores. Much higher effect

sizes were seen for the relationship between anticipated discrimination and these three health outcomes. The hypothesis that both active coping and avoidance coping would mediate the association between healthcare discrimination and poor health was not supported. Although avoidance coping was associated with anticipated discrimination and both poor self-rated health and reduced mental wellbeing, it did not attenuate the association between anticipated discrimination and these health outcomes. As hypothesised (H6.4), both experienced discrimination and anticipated discrimination remained associated with poor health outcomes after adjusting for all potential mediators and confounders.

The fifth aim of the chapter explored responses to healthcare discrimination. Experiencing discrimination was seen to negatively affect mental health and possibly lead to ineffective or inappropriate treatment that could additionally affect physical health. The NHS complaints procedure was seen as inadequate for dealing with such experiences, with the procedure being a stressful experience in itself. Involving community organisations to work more closely with patients who may be avoiding services due to anticipated discrimination was seen as a beneficial intervention strategy.

The final aim of the chapter was to test the associations between latent classes and health outcomes while adjusting for all three types of adversity. It was hypothesised (H6.5) that these associations would be substantially attenuated after adjusting for all three types of adversity. This hypothesis was supported. In the block adjusted models, substantial attenuations were seen after adjusting for employment adversity and housing adversity separately. However, no attenuations were observed in the model adjusting for healthcare discrimination. In the fully adjusted model, the association between both the low SES migrant and mixed SES migrant class with CMD was fully attenuated after adjusting for all types of adversity. Additionally, the association between the low SES non-migrant class and CMD was partially attenuated. Similarly, the associations between the mixed SES ethnic minority class and mixed SES migrant class with poor self-rated health were fully attenuated. Partial attenuations were also observed for the relationship

between both the low SES non-migrant and low SES migrant class with poor self-rated health. Only one latent class was associated with reduced mental wellbeing. However, this association was fully attenuated after controlling for all types of adversity.

Across the four results chapters, latent classes characterised by disadvantaged social status have been shown to be related to poor health outcomes and adversity across the domains of employment, housing and healthcare have been shown to be associated with poor health. The final chapter has also shown that such adversity partially accounts for health inequalities between these different latent classes. The following chapter will discuss these findings in the context of the wider research literature.

Chapter 7 Discussion

7.1 Summary

This thesis utilised a mixed methods approach to understanding the relationship between structural adversity and health in a diverse inner city community sample. The aims of the thesis were:

1. To perform a review of the literature on the relationship between adversity in employment, housing and healthcare with health and health inequalities

2. To estimate the prevalence and distribution of adversity across the domains of employment, housing and healthcare and to examine relationships between such adversity and health and wellbeing

3. To explore the everyday experiences of individuals within employment, housing and health institutions in the UK in order to understand why certain groups experience more adversity within these domains, how this is enacted in institutional settings and how individuals are affected and respond to this adversity.

In chapter 3 I described the prevalence of discrimination, life events and coping strategies by a variety of single social statuses. In a diverse community sample in South East London, important differences emerged by indicators of SES, ethnicity and migration status. For example, there was a higher prevalence of perceived discrimination (across any domain) in low income groups, benefit recipients, those who identified as an ethnic minority and migrants. Given that social identities do not independently influence health but work together to create dynamic processes where adversities and resources combine to affect health interdependently (139), latent classes were generated to explore how such adversities and resources vary at the intersection of SES, ethnicity and migration status.

Six distinct categories of social identities specific to this study sample emerged from latent class analysis that differed in terms of SES, ethnicity, migration status and first language. These distinct social identities informed us of unique differences in adversity and resources that emerged when measured using an intersectional approach compared to when measured by individual measures of social status. For example, although the prevalence of discrimination across any domain varied by SES when measured using individual measures a more complex relationship emerged using an intersectional approach. While there still appeared to be a SES gradient in relation to discrimination this differed by migration status so that even the high SES migrant class was characterised by a higher prevalence of discrimination than the low SES non-migrant class. More nuanced differences in the prevalence of coping strategies were also observed using this intersectional approach. For example, the prevalence of coping by smoking was much higher in the low SES non-migrant class compared to the prevalence of coping by smoking by any single indicator of SES, ethnicity or migration status.

Previous research conducted within the SELCoH sample on health inequalities by single social statuses found that low SES was associated with both CMD and poor self-rated health (299) but found no differences by ethnicity (299) or migration status (8). An intersectional approach using stratification methods in this sample did, however, find that once migration status was intersected with ethnicity Black African migrants had decreased odds for reporting poor self-rated health compared to their non-migrant counterparts (8). Further differences emerged in this study with the use of LCA. For example, the prevalence of CMD in the high SES White non-migrant class was much lower at 13.6% compared to what was previously reported by single social statuses for the White British group (24.3%) (299) and the non-migrant group (24.9%) (8). Similarly, despite previous findings of no differences by ethnicity (299), classes characterised by being predominantly non-White had increased odds of CMD.

In chapters 4-6 I explored the relationship between adversity across the domains of employment, housing and healthcare with health and wellbeing using both quantitative

and qualitative data. Those with multiple disadvantaged social identities, in the low SES migrant class, were associated with the highest odds of housing adversity and anticipated discrimination in employment. However, all three latent classes characterised by being a migrant reported experiencing similar levels of employment discrimination whilst the low SES non-migrant class was associated with the highest odds for both unemployment and anticipated discrimination in healthcare. The market economy and government policy were reported to be the most influential mechanisms of adversity across both employment and housing domains by multiple stakeholders. Service providers, community support workers and SELCoH participants described how these mechanisms had a disproportionately negative impact on low SES groups whilst negative attitudes directed towards migrants, ethnic minorities and benefit recipients were seen to add additional adversity across these domains at the institutional level in the form of discrimination and unfair treatment. In healthcare, unbalanced power dynamics and unmet expectations in services were most commonly reported as reasons for both experienced and anticipated discrimination.

Various indicators of structural adversity across the three domains were associated with increased odds of CMD and poor self-rated health, as well as reduced mental wellbeing. With the exception of experienced discrimination in employment and poor housing conditions, all indicators of structural adversity were associated with CMD in the fully adjusted models. Effect sizes between 1.5 and 2.3 were observed for associations between all other indicators of adversity and CMD, with one exception. Anticipated discrimination in healthcare was associated with almost five times the odds of CMD. Slightly lower effect sizes were observed between indicators of structural adversity and poor self-rated health compared to those observed with CMD. All indicators except for experienced discrimination in employment were associated with reduced wellbeing. Unemployment and anticipated discrimination in healthcare were associated with the largest reductions in mental wellbeing scores.

Few coping strategies were identified to mediate these associations in fully adjusted models. Active coping was shown to have a mediating role in the association between anticipated discrimination in employment and reduced mental wellbeing, as was coping by smoking in the association between poor housing conditions and reduced mental wellbeing. Qualitative findings also reported on the limited effectiveness of active coping in response to adversity in both housing and healthcare adversity whilst highlighting the negative impact of utilising avoidance coping on health. Most notably, coping at the community level was raised as having an important role in tackling structural adversity.

In the final results chapter I explored the association between social identities and health outcomes while adjusting for all three types of adversity. The combination of housing and employment adversity attenuated many of the associations between social identities and poor health outcomes. However, adjusting for healthcare adversity had minimal impact on associations. This suggests that both employment and housing adversity may represent important factors in generating and perpetuating health inequalities. These findings have important implications for understanding how structural adversity affects health and impacts on health inequalities.

7.2 Strengths and limitations

7.2.1 Originality

This thesis adds to health inequalities literature that has a limited intersectional approach to understanding the effects of multiple adversities on health. It provides a novel methodology for measuring health inequalities across intersectional social identities of SES, ethnicity and migration status while the mixed methods framework allows in depth description of the mechanisms through which structural adversity is enacted and differentially impacts health by social identity. While there are studies that have focused on different types of adversity in one domain (e.g, employment) or on one type of adversity (e.g., discrimination) across multiple domains, this study measured different types of structural adversity across three different life domains to understand their combined effects. I am unaware of any other UK study that has taken such a comprehensive approach. The novel use of a triangulated methodology (quantitative analysis, ethnography and in-depth interviews) and incorporation of triangulated perspectives (service providers, community support workers and SELCoH participants) in the study broadened the understanding of the role of structural adversity in generating social and health inequality.

7.2.2 Study design and sample

Using mixed methods was a major strength of the study, as integrating both quantitative and qualitative methods enabled a more comprehensive exploration of the relationship between structural adversity and health. The sequential design of the study was effective in meeting the aims of the thesis. Statistical analysis of quantitative data provided measurable evidence, establishing associations and indicating possible causal pathways. However, such data do not necessarily provide specific examples of the mechanisms behind associations. The subsequent qualitative findings complimented the quantitative findings by provided detailed information about context and setting from differing perspectives, as well as emphasising the voice of the participants.

The study benefited from using SELCoH data, as the sample is representative of the diverse population from which it was drawn and the results provide an insight into the social patterning of structural adversity, coping strategies and health inequalities. 73% of the sample was retained in SELCoH 2 and was very similar to the SELCoH 1 sample in terms of sociodemographic and socioeconomic character (Section 2.2.2.2, Table 2.1) which suggests that systematic loss to follow up and selection bias was limited. However, there was greater loss to follow up among SELCoH participants who were younger, male and unemployed (136), who may represent a group experiencing high levels of adversity given the results from this study. Overall, the dataset constitutes an important source of information for service providers across employment, housing and healthcare, as well as for local policy makers (126). However, it may not be possible to generalise these finding beyond the inner city to a national level given the unique context of South East London in terms of both population and experiences of adversity. This study, with its diverse population may be more a useful comparison for understanding adversity across other urban contexts, which are likely to have diverse population in terms of SES and demographic character.

7.2.3 Cause and effect

One of the main limitations, in respect to the quantitative analysis, is the cross sectional nature of the data. The theoretical framework in this thesis posits that health inequalities are driven by social conditions and differential exposure to adversity. However, health also influences a person's social status (346). Although this thesis emphasises the role of social causation over social selection, social selection processes also accumulate to affect health inequalities over the life course (347). Despite this, longitudinal evidence supports social causation theory playing a greater role in inequalities in health. Data from four phases of the Whitehall II study, collected over a 10 year period, were used to show that social gradients in health could not be primarily explained by social selection, with the study finding a much greater role for the effect of social position on changes in health (348). Further evidence from systematic reviews also supports social causation theory in

terms of both life events (146) and experiences of discrimination (175) impacting on health. Although the main associations in this study were derived from cross sectional data, I was able to account for both prior CMD and poor self-rated health in the association between discrimination and these outcomes in regression models by using SELCoH 1 data. This represents an important strength of the study, as most research on perceived discrimination and health have been cross sectional in design and has not been able to control for prior health outcomes (184). This may have been of greatest importance in the relationship between discrimination in healthcare and poor health, as those accessing health services are likely to have poorer health. Using a life course approach in future studies would allow more in-depth exploration into mechanisms of social causation and social selection.

7.2.4 Use of LCA

To my knowledge, this study is one of the first to generate latent classes based on the intersection of a range of SES indicators as well as demographic indicators including ethnicity and migration status. Measuring SES using single indicators has been criticised and incorporating multiple indicators provides a more robust and comprehensive assessment of SES (349). The addition of demographic indicators generated classes of social identity which are based on the intersection of SES, ethnicity and migration status. In a study where sample size limited stratification methods, LCA provided a method for taking an intersectional approach to this thesis. Such an approach allowed for differential exposure to adversity and health inequalities to be uncovered by intersectional identities that were most pertinent to the study sample, reflecting social identities in South East London. Although, these latent classes are unique to this sample, the methods used to generate may be used to conduct health inequalities research in other diverse populations.

7.2.5 Quantitative data

The thesis addressed a number of hypotheses. Whilst each hypothesis and statistical test was theoretically driven, performing multiple inferential statistical tests can be problematic as the likelihood of observing a statistically significant result by chance increases with each inferential test e.g., a false positive or Type I error. Equally, inadequate sample size could lead to false negatives or Type II errors. However, the sample size in this study meant that most tests were not limited by small cell sizes. Additionally, significant findings were interpreted with caution and greater emphasis on effect sizes rather than p-values.

Strengths of the health measures include the use of validated screens to capture both symptoms of a wide range of CMD with the CIS-R, as well as more positive aspects of mental wellbeing using SWEMWBS. Retrospective reporting of past structural adversity and life events are subject to recall bias and can lead to underreporting while participant's current mental health state may have also influenced reporting. Measurement of structural adversity that involve discrimination may be particularly vulnerable to underreporting as this type of stressor is often hidden due to legal parameters and social acceptability and in ambiguous situations people also tend to maximise perceptions of personal control and minimise the role of discrimination (350). Equally, observer bias may also be a limitation in this study as interviewers' ethnicity has been shown to affect participants' answers in regards to ethnicity (171). Although steps were taken to ensure the characteristics of the research team reflected the study population as much as possible, ethnic differences in individual interactions during data collection may have introduced bias. The variable used for measuring structural discrimination in housing was taken from the Midlife Development in the United States (MIDUS) survey (315). Participants were asked, 'have you ever been unfairly prevented from moving into a neighbourhood because the landlord or a leasing agent refused to sell or rent you a house or apartment?'. In an UK context where inner city neighbourhoods are less segregated than in US inner city contexts, the question may

have been misinterpreted leading to a lower prevalence of housing discrimination than if the question had been more direct, for example, 'have you ever been unfairly prevented from buying or renting a house or apartment?'.

The use of multivariate analysis in this thesis allowed simultaneous adjustment for the effects of several potential confounding variables. Confounders were selected on the basis of their association with health outcomes in previous studies. Although a lack of social support has been established as a risk factor for both poor mental health (351), reduced mental wellbeing (352) and poor self-rated health (353) I was unable to adjust for social support as it was not measured at SELCoH 2, representing a limitation to this study.

7.2.6 Qualitative phase

Obtaining the perspectives of a wide range of stakeholders in the qualitative phase is a major strength of the study. This provided a more balanced view of perceived mechanisms of structural adversity. Gaining access to both community organisations and service providers across the domains of employment, housing and health, which combined both ethnography and in-depth interviews, allowed processes of adversity to be observed at the institutional level and contributed to a greater understanding of the relevant social contexts. The ethnographic component represented a valuable contribution to the study by uncovering social phenomena that would not necessarily be uncovered from formal interviews alone. It also allowed me to understand the rationality and context of actions taken in institutional settings. These observations also gave me an opportunity to see if actions described in in-depth interviews were carried out in the same way in practice. At the same time, the amount of qualitative data that could be collected was restricted by the time constraints of the PhD. Although over 120 hours of ethnography and 30 interviews were conducted the study would have benefited from more qualitative data. The ethnographic observations based at the community organisations only allowed for a partial view of the institutional contexts of employment, housing and healthcare. The study would have benefited from ethnographic observation

with the three service providers as well as a larger sample size of service providers for in-depth interviews, which I would have ideally planned for in a larger study not constrained by the budget and time constraints of this PhD.

My previous experience of working as a community support worker acted a strength for the study. Many of the community support workers accepted me as an 'insider' which helped to build trust and facilitated sharing of information. However, in some ways I was also viewed as an 'outsider' due to my researcher role which particularly affected interactions around uncomfortable topics, such as racism, with all stakeholders. Indeed, my own social identity affected all interactions during both ethnography and in-depth interviews. In certain situations this may have introduced researcher bias and limited my ability to elicit information on certain topics.

Qualitative methods are often criticised for a lack of transparency and rigour (354). To counter this criticism, as stated above, a triangulated approach was taken to collecting data to gain broader views. Although not directly comparable sources, ethnographic observation and interviews provided corroboration of themes. Equally, two independent researchers with experience of qualitative data analysis coded two interview transcripts to ensure reliability of coding. The themes identified by the other research mostly corroborated those already generated, providing assurance of the reliability of the coding and themes. Thematic analysis was used to analyse data as it provides a flexible and useful research tool to give a rich and detailed account of the data. In relation to how participants discussed discrimination during ethnographic observation and in-depth interviews, the qualitative data may have benefited from discourse analysis given the nuanced and contradictory nature of narratives. Future work may benefit from such an analysis. In addition, due to issues of space within the thesis, I was unable to fully draw on all the ethnographic data collected in the way I would have liked to.

7.3 Theoretical implications

7.3.1 Intersectional approaches to health inequality

As outlined above, stratified analysis was previously used in the SELCoH sample to uncover differences in self-rated health by intersecting migration status and ethnicity (8). However, latent class analysis (LCA) has allowed different aspects of a person's social identity to be considered in one multidimensional variable, which can be integrated into further analyses. In a sample where the ability to conduct stratification analysis is limited by its size, LCA represents a methodological framework for understanding multiple layers of advantage and disadvantage relevant to health. The six classes of social identity represent different intersections of migration status, ethnicity and SES which reflect positions of advantaged and disadvantaged social identity. Whereas many previous studies have used LCA to generate classes by SES (68), to our knowledge, this is the first time latent class analysis has been used to generate classes of social identity along the intersection of SES, ethnicity and migration status. Past research on the relationship between multiple disadvantaged identity and health have provided support for the double disadvantage theory, whereby those who hold more than one disadvantaged identity experience poorer health than those with no disadvantaged or one disadvantaged status (9, 190, 355). However, this methodological approach has been criticised as it concentrates on positions of disadvantage over privileged or mixed positions (143). This study provides an example for investigating all of these positions.

Globally, cities continue to attract both national and international migrants and urban populations continue to grow in heterogeneity while becoming increasingly characterised by inequality (28). At the same time, each city will have its own unique population character dependent on geographic and sociohistorical context. The social identities in this study reflect the unique population character of South East London in terms of SES, ethnicity and migration status whilst also echoing past migration patterns (8): the low

SES migrant class predominantly consisting of long term migrants from the Commonwealth and Ireland whose first language is English, the mixed SES class predominantly consisting of a more diverse group of migrants whose first language is not English and a high SES migrant class which includes a large proportion of European migrants. Although latent classes of social identity generated in this study are context specific, using similar LCA methods could be used to generate social identities specific to other urban community samples. These would describe the most pertinent identities to that sample and context which could be used to describe unique differences in experiences of adversity, resilience and both social and health inequality.

In this sample, nuanced differences in the experiences of adversity and use of coping strategies were identified. For example, only 9.0% of the high SES White non-migrant class reported discrimination across any of the three domains. A much lower prevalence than reported by the single social statuses that predominantly characterise this class: White British (13.0%), UK born (18.3%) and those earning more than £31,495 per annum (13.3%). Similarly, the low SES migrant class reported a higher prevalence of discrimination across any of the three domains than the low SES non-migrant class, despite both classes having similar SES profiles. Such differences in the prevalence of structural discrimination by these classes encourage focus on the powers that shapes such privilege or disadvantage. The multiple social identities that all individuals occupy have implications for access to the resources relevant to health, which include employment, housing and healthcare.

The health inequalities findings in this study are a reflection of social inequalities as measured by indicators of structural adversity. As described in fundamental social causes theory, adversity and resources cluster by disadvantaged status (122) so that mental and physical resources are also likely to be depleted (356). It is plausible that the distribution of health outcomes by intersectional social identities in this study represent this process of cumulative disadvantage. The high SES White non-migrant class represent a position of privilege in which all other classes are disadvantaged in

comparison. This disadvantage is reflected in patterns of CMD and poor self-rated health. However, only the low SES non-migrant class was associated with decreased mental wellbeing. The three migrant classes were not associated with reduced mental wellbeing. In particular, the low SES migrant class has a higher mental wellbeing score than expected given that low SES is associated with reduced mental wellbeing in this sample (see appendix A1) and other national (20) and community samples (357, 358). This indicates that there are different mechanisms that interplay at intersection of SES and migration status that are particularly protective for low SES migrants. Both larger social networks and social support have been shown to be protective factors for mental wellbeing (352, 359) and may represent a possible explanation for this finding. Indeed, social support was indicated as having a protective role when facing adversity in the qualitative data. However, I was not able to measure these concepts in the SELCoH 2 dataset.

Documenting health inequalities by social identities is important to highlight the impact of adversity and social inequalities on health. However, describing such inequalities by such broad groupings may serve to reinforce existing notions of the intractability of injustice, while failing to identify intervening mechanisms that might be targeted for potential solutions across the domains of employment, housing and healthcare (360).

7.3.2 Structural adversity and health

As described above, adversity is patterned by inequalities at the intersection of SES, ethnicity and migration status. Risk factors for such inequalities are often documented by distal or proximal causes. Health inequality research and intervention have tended to focus on more proximal causes of health inequalities, as they are seen as more amenable to control or change compared to distal or societal level mechanisms (27). Concentrating research on proximal factors can stigmatise individuals and communities and deflect from the structural level factors, such as ideological norms, social structures and political activities that reinforce dominant patterns of power relations. It is argued that to understand and tackle health inequalities, both distal and proximal factors must be considered within the same study, as individuals and communities embody both (361); this requires a multilevel analysis. This study provides further evidence that structural level factors drive health inequalities and that individual level coping strategies have minimal impact by taking into account the interplay of adversity and responses to adversity at multiple levels. It also highlights accountability and agency at both an institutional and individual level across key life domains. The mixed method approach of this thesis went beyond describing associations between adversity and health and health inequalities to examine the processes and structures that reinforce these inequalities across employment, housing and healthcare.

7.3.2.1 Employment

The observed medium effect size for job insecurity and CMD in this study was consistent with a results from a meta-analysis of job insecurity and health (362). Observed odds ratios for job insecurity and poor self-rated health were slightly lower than those for participants who had moved from a secure to an insecure job position in the prospective Whitehall II study (363). This could be due to the fact that in the current study job insecurity referred to participants' current or most recent job. Increased risk of job insecurity for ethnic minorities, migrant and low SES groups have all been consistently reported and has been considered as an explanatory factor for health inequalities (212).

In contrast, no differences were found in job insecurity by social identity in the quantitative component of the current study. However, employment advisors did suggest that low SES groups were at particular risk of job insecurity and holding temporary contracts in the qualitative study. At the same time, employment advisors also explained that the economic crisis of 2008 had caused greater job insecurity for all, even for those from high SES backgrounds. Findings from the Skills and Employment Survey also found that perceived job insecurity (as measured by asking about chances of losing current job in the next 12 months) had risen from 20% to 30% in London and to effect a wider section of workers, with the largest increases for public sector workers (364). These changes in the social distribution of job insecurity could offer an explanation as to why no differences were seen by social identities in this study.

The relationship between unemployment and increased CMD, self-reported poor health and reduced wellbeing was also consistent with past research (365). Almost identical effect sizes were seen in the relationship between unemployment and CMD in the current study and the national study using data from the Adult Psychiatric Morbidity Survey 2007, both measuring CMD using the CIS-R (216). As expected the distribution of unemployment by social identity was consistent with findings from the UK Census 2011 on unemployment rates by ethnicity, migration status and low SES (305). However, the intersectional approach taken in this thesis suggests that ethnic minorities migrants (low SES migrant and mixed SES migrants) are at more risk of unemployment than their ethnic minority non-migrant counterparts (mixed SES ethnic minority non-migrant class). Employment advisors and community support workers described how the economic crisis destabilised the jobs market, increasing unemployment, job insecurity and temporary contracts. Employment advisors described how lack of skills and experience was related to employment adversity and suggested that education during adolescence was critical for improving employment opportunities. Although recent research on pathways between education and health conducted in the UK found no direct effect of education on health, it did find positive indirect effects on health through greater perception of control and social class in adulthood (366).

Unlike other studies on employment status and health, this study also incorporated experienced and anticipated discrimination as indicators of employment adversity. Experienced discrimination was associated with CMD in unadjusted models. This is consistent with UK national findings from the Ethnic Minority Psychiatric Illness Rates in the Community (EMPIRIC) which also found an independent effect for employment discrimination (232). However, the current study also found that this association was fully attenuated after adjustment for life events. As in previous studies that have explored the role of both discrimination based adversity and general life events in health, these results suggest that both are adversely related to poor mental health and make incremental contributions to explaining poor health (159). Research on the association between anticipated discrimination and poor health is very limited. Despite this, the association found between anticipated discrimination and CMD in this study is consistent with a community health study in Sweden (367) and findings from the EMPIRIC study (232), which found that believing that employers would refuse someone a job was associated with psychological distress. However, the conceptualisation of anticipated discrimination in this study, which includes vigilant behaviour rather than just perception of possible discrimination, is more informative. As with similar studies from the US on employment discrimination and health (62), these European studies reported the prevalence of discrimination by single social statuses only. In contrast this study finds important differences in the distribution of these experiences, particularly at the intersection of ethnicity and migration status, with latent classes characterised by being a migrant having the highest odds of reporting experienced discrimination and latent classes characterised by identifying as an non-white ethnic minority having the highest odds of reporting anticipated discrimination. Most notably, approximately a quarter of the mixed SES ethnic minority non-migrant class reported anticipated discrimination, which may have negative social consequences through limiting employment opportunities.

Societal attitudes towards low SES groups, migrants and ethnic minorities were identified as substantially contributing to institutional discrimination in hiring practices in the qualitative data. Both the media and government were seen to play a role in generating

and perpetuating societal stereotypes of benefit claimants by all stakeholders. A qualitative study in North East England found that increasing stigma of benefit recipients has led to anticipated discrimination in employment, under-claiming benefit and additional financial hardship (368). Community support workers identified young black men as particularly vulnerable to negative stereotyping that could have adverse effects on employment opportunities, providing a plausible explanation for increased prevalence of anticipated discrimination in the mixed SES ethnic minority non-migrant class. Equally, experimental studies have documented employers' negative responses towards applicants based on a number of social statuses including ethnicity (369) and migration status (224). Such discrimination directly results in restriction in employment opportunities for these groups and acts as a fundamental cause of health inequality (55).

Employment adversity accounted for some of the health inequalities between the latent classes. For example, large reductions in effect sizes was observed in the association between the low SES non-migrant class and both CMD and poor self-rated health, where the odds were reduced by 46% and 48%, respectively. These attenuations were mainly driven by adjusting for unemployment. This is consistent with a recent study using which found that experience of unemployment explained over 50% of SES inequalities in poor self-rated health (17). However, in the current study, adjusting for anticipated discrimination also drove the attenuation of odds in the association between the mixed SES ethnic minority non-migrant, low SES migrant and mixed SES migrant classes. Both experienced discrimination and job insecurity had no attenuating effects on any of the associations between social identities and health outcomes, suggesting that unemployment and anticipated discrimination have more direct effects on health inequality. At the structural level, the economic crisis and changes in the employment market restricted employment opportunities and access to welfare in disproportionate ways. The current government's policy on welfare cuts and austerity have targeted low SES groups. In England, people in poverty (21%) have taken 39% of the cuts (370). Such cuts have been shown to increase health inequalities in the US (371) and have also done so in the UK during Thatcherism and related welfare state restriction policies

(108). Indeed, the health inequalities effects of recessions are experienced differently by otherwise similar individuals depending on national policy variation (372). Those with more generous welfare systems protect the most vulnerable in such circumstances (373).

7.3.2.2 Housing

Adverse housing experiences were found to be associated with CMD, poor self-rated health and reduced mental wellbeing. This is consistent with previous research on the relationship between experienced homelessness with poor health (16, 235, 374). Yet, as many of these studies focused on current homelessness no direct comparisons can be made. However, the National Comorbidity Survey, a nationally representative survey in the United States, did measure lifetime experiences of homelessness. Experience of homelessness in this study was associated with three times the odds of CMD (375), similar to the unadjusted odds reported in this study. Poor housing conditions were also associated with all three outcomes in this study, which is consistent with past research cited in two recent reviews which found poor housing was associated with poor physical health (237) and CMD (376). While many of the studies on poor housing conditions used specific physical illnesses as outcomes (237), poor housing conditions have also been found to be associated with poor self-rated health. In a community study in Vancouver, Canada, which asked about satisfaction with household interior, similar odds ratios for this relationship were reported to those observed in unadjusted models in the current study (377).

As in previous studies, renting a home was also associated with poor health in comparison to homeownership (237). It is difficult to understand the impact of these different pathways, as adverse housing experiences are often a result of problems accessing rented accommodation and poorer housing conditions are often associated with renting social housing (378). However, a recent study in West Scotland found that much of the variance in health outcomes by tenure can be explained by differences in housing conditions (379). Given the differences in tenure between latent classes of

social identity (appendix A3), also reflected in the disadvantaged position of ethnic minorities, migrants and low SES groups in South East London tenure patterns (47), it is not surprising that the low SES migrant class reported the greatest proportion of both adverse housing experiences and poor housing conditions. Indeed, housing adversity accounted for 37% and 34% of the inequality in CMD and poor self-rated health, respectively, between this class and the high SES White non-migrant class. Interestingly, community support workers reported that single young Black men were also very vulnerable to experiencing homelessness in this sample. This is consistent with recent research conducted with homeless service providers in a north London borough which reported that young Black men were overrepresented in the current homeless population (380).

Structural factors that contribute to difficulty leasing a property described in the qualitative phase are consistent with those reported by the national Pro-housing alliance (381). The report described how government housing policies, such as Right to Buy and Help to Buy, have led to increased housing adversity in London for low income groups through increasing unaffordability and decreasing social housing stock. Since Right to Buy there has been a steady change in the constituency of the housing stock in South East London. For example, in Southwark, in 1981, 65% of Southwark's housing stock was social housing but by 2011 this had declined to 44% (47). Increasingly limited stock caused by such policies have meant the majority of residents in South East London do not qualify for social housing, forcing many people on low incomes to rent in the private sector, which is poorly regulated and increasingly unaffordable. The combination of decreasing social housing stock, increasing rental prices and housing benefit reform (249) alongside London wide gentrification processes (382) contributes to displacement, marginalisation and long term detrimental effects for low SES households. In this thesis, all stakeholder types expressed anger over the policies that facilitate such processes that privileged those of high SES. Gentrification processes that were displacing people within their communities were particularly salient to SELCoH participants and warrant further investigation.

It is important to note that the disadvantaged position of ethnic minorities in London's labour market is reflected in their position in the housing market, both having their root causes in historical structural discrimination (as outlined in section 1.4.2). Although there are low levels of perceived discrimination in housing, the structural disadvantages of lower status groups that have accumulated over time via housing and employment policy have limited some groups' access to resources. In the current study, all stakeholders reported housing discrimination towards benefit recipients as explicit. Community support workers also stressed the lack of regulation in the private sector market as an important factor leading to discrimination towards benefit recipients. Discrimination based on other social statuses such as ethnicity and migration status was much less visible due to its implicit nature. Both housing advisors and community support workers were hesitant to attribute any perceived unfair treatment to ethnicity. However, a recent experimental study of discrimination in the London rental market found that applicants with African or Arabic names were 15% and 20% less likely to be invited for a viewing, respectively (248). Housing advisors reported that discrimination directed towards migrants was cause for increased concern given that the new Right to Rent checks policy is predicted to exacerbate discrimination for both migrants and ethnic minorities. Research conducted by the Joint Council for the Welfare of Immigrants (JCWI) on the 2014 pilot scheme found evidence of discrimination towards those with complicate immigration status and 25% of landlords reported that they were less likely to rent to someone with a foreign name or foreign accent (383). Evidence of such discrimination at the intersection of ethnicity and migration status and its often implicit nature would be an interesting line of future enquiry.

7.3.2.3 Healthcare

Few studies in the UK have considered the impact of discrimination in healthcare on health inequalities, due to the NHS providing free care at the point of access (76). A review of equity of healthcare services in the UK also found inconsistent evidence on the socioeconomic determinants of health service use due to methodological limitations in measuring variations in need (384). The review was able to highlight that low SES was associated with reduced utilisation of some inpatient services and preventative healthcare (384). Similarly, no differences were found in access to healthcare by ethnicity in the Health Survey for England survey (385). However, evidence of ethnic variations was found in a review of mental health service pathways (255). In particular, Black patients had increased odds of compulsory admission compared to White patients while there was also evidence of ethnic minority patients being less likely to be offered psychological treatments and more likely to be offered medication (255). Indeed, such inequalities have been attributed to institutional racism within the NHS (386).

This study adds to evidence of discrimination within health services, with the low SES migrant class being at particularly increased risk of experiencing discrimination. While programmes on cultural competency to improve mental health for ethnic groups are ongoing, there is limited evidence on their effectiveness (387). Given the current political rhetoric on 'health tourism' (388) and the passing of the Immigration Act 2014, which puts a framework in place for a new NHS charging structure for migrants in the UK (389), it is perhaps surprising that the prevalence of anticipated discrimination is slightly higher in the low SES non-migrant class than the three migrant classes. One possible explanation is that many migrants may be arriving from countries that do not have free healthcare at the point of access so might have a different perception to access and quality of services in comparison to non-migrants.

In the current study, discrimination in healthcare was associated with CMD and poor self-rated health, even after accounting for CMD and poor self-rated health at SELCoH 1, respectively. Most notably, these effect sizes were larger for the association between anticipated discrimination compared to experienced discrimination. This finding was also complimented by the qualitative data where SELCoH participants reported that the anticipation of unfair treatment had stopped them from accessing services even for serious health issues that required immediate medical attention. Given the serious consequences of anticipated discrimination and service avoidance, more attention is needed to plan interventions to tackle this problem.

As described previously, adjusting for healthcare discrimination had little impact on health inequalities by social identity. These findings suggest adversity in employment and housing are more important determinants of health in the UK. However, with increasing marketization and privatization within the NHS, monitoring inequalities in healthcare adversity and service use will continue to be important (390). In addition, a recent study of the effects of institutional changes on societal attitudes in a natural experiment in Germany has suggested that large institutions that embody equality and social justice can help to elicit and sustain such values in wider society (391). Yet, the NHS still suffers from a lack of diversity in its workforce, particularly in medical training. A recent analysis of application data from UK medical schools found that those from less affluent backgrounds were still less likely to apply and less likely to be accepted into medical training (392). Studying and working in more diverse settings has been shown to have positive effects on attitudes towards diversity and may contribute to better care for minority populations (393, 394).

A main criticism of the biomedical approach to patient care is that patients are construed as a biomedical entity, a person with disconnected bodily symptoms (395). Dynamics between practitioner and patient within this framework often mean that patients leave a consultation having not fully voiced their needs. A problem that was particularly pertinent to SELCoH participants in this study. Past qualitative research on such interactions in

GP surgeries in the South East of England found that both parties were hesitant of presentation of wider issues with GPs lacking time and confidence to deal with social issues and patients worried about appropriateness and wasting GPs time (396). Indeed, the role of primary care in tackling social determinants of health have remained largely undeveloped (397). Socially disadvantaged areas have higher consultation rates for psychosocial problems (398) and social prescribing interventions have been shown to have positive impacts on health and wellbeing (399). An evaluation of a welfare benefit advice intervention provided by the Citizens Advice Bureau in GP surgeries in a deprived area of Liverpool found that resulting income increases from welfare advice was associated with improved mental health (399). Data from this study indicates that social prescribing, as collaboration between GP surgeries and community organisations, is helpful. However, as the scheme reported in this study was at pilot stage, further evaluation of this intervention is needed.

7.3.3 Multiple adversity

Adversity across life domains is often interrelated through cumulative disadvantage and adversity. Adversity across employment and housing are particularly interrelated in the current study. However, this study found that the impact of housing and employment adversity had differential effects on health inequality. Employment adversity accounted for more health inequality for the low SES non-migrant class whilst housing adversity accounted for more in the low SES migrant class. A combination of both types of adversities accounted for health inequalities in the other latent classes. From the perspective of both service providers and community support workers in this study these inequalities are influenced by shared structural factors, such as negative societal attitudes and government policy that marginalise low SES and minority groups across multiple domains simultaneously.

These processes of marginalisation can only be understood in light of the sociohistorical and local context which shape exposure to disadvantage and accumulates over time. For example, historical housing discrimination resulting from the combination of government policy and negative societal attitudes towards both Black and Irish migrants, is likely to have had a key role in the increased exposure of housing adversity and health inequality in the low SES migrant class. Similar processes also contribute to increased adversity across employment and housing today. Austerity policies have had a more negative impact on low SES and marginalised groups via welfare reforms (400). They are accompanied by manipulation of the causes of adversity and reframing to personal responsibility with vulnerable groups being labelled as non-deserving (401). Across all domains, such manipulation and negative societal attitudes shape institutional interactions. As described in many of the interactions that community support workers observed, both service provider and service user start the engagement with expectations based on their social status. Stereotypes that serve to justify an existing state of affairs will operate even at the expense of individual or collective self-interest (402).

One of the most interesting themes emerging from the qualitative data was the contradictory narrative surrounding racism. While many participants felt comfortable talking about structural factors that contributed to the marginalisation of low income groups this was not the case for the topic of discrimination based on ethnicity. Participants felt less comfortable to talk about discrimination based on ethnicity, which although is consistent with recent research on race in the workplace (403), may also be a consequence of myself being an 'outsider' which may have had an impact on trust and rapport. Those who engaged on the topic of racism either dismissed its role in adversity in current times due to protection from equality laws and lack of explicit mechanisms or emphasised the importance of personal responsibility to transform adverse situations. This view was expressed by all stakeholder types and by both white and ethnic minority participants. In particular, this may be related to internalised racism in ethnic minorities, which has been shown to be negatively associated with mental health in a review of racism and mental health (404).

Community support workers cited a number of factors related to institutional practice that influence adversity across domains. These included lack of resources and service providers not sharing correct information. They reported that while many service users felt that they were unfairly treated, this was not attributable to discriminatory processes but a lack of resources which meant that they were not always given enough time to share their problems or not offered solutions due to budget constraints. However, community support workers also reported that sometimes service users were not always given correct information about their employment or housing options by service providers. A study commissioned by housing charity Shelter on ethnic minorities experiences of housing adversity highlighted inequalities in understanding rights and entitlements by ethnicity, migration status and language proficiency (405) which may play an important role in perception of discrimination. Additionally, community support workers discussed difficulties service users had in navigating services and interacting with service providers. Community support workers described how both service user and service provider brought their individual expectations and attitudes to interactions which

sometimes altered outcomes. Service providers play a crucial role in ensuring appropriate uptake of services, and where resources are limited gatekeeping decisions may rely on individuals beliefs and implicit attitudes (200). The interface of institutional services is where macro processes, such as societal attitudes directly influence the interactions between individuals and institutional actors and where new inequalities are generated (23) and therefore these interactions and implicit attitudes of actors need careful attention.

7.3.4 Coping strategies

Coping mechanisms have been shown to have important mediating relationships between experiencing unfair treatment and health outcomes (184). Whilst coping strategies were argued to have an impact on health outcomes in the qualitative analysis, there was little evidence of a mediating role for coping strategies in the quantitative findings in this study. One possible reason is that the coping strategies refer to responses to general stress in the quantitative sample rather than to specific instances of adversity related to employment, housing or healthcare. However, in light of ongoing evidence of the larger contribution from structural factors in health inequality, I would agree with Bartley's conceptualisation of coping strategies as symptoms of inequality not cause (406).

There are several other possible explanations for the discrepancy between the quantitative and qualitative results in this study. Firstly, both community support workers and service provider had to work within a framework of limited possibilities and were often not able to provide options for changing material circumstances. This often resulted in reframing structural factors as issues of personal responsibility with their clients, with both types of worker resorting to changing the clients' outlook or trying to improve self-esteem. Both service providers and community organisations, often commissioned by local or central government, have recently been criticised for alleviating the symptoms rather than tackling the root causes of adversity (407). A second possible explanation is the psychologising of poverty (408); the idea that personality and outlook can be abstracted to explain health. However, concepts of optimism and aspiration have not been able to explain health inequalities (409). In a study comparing the health of three UK cities, Glasgow, Liverpool and Manchester, differences in optimism and aspiration, as measured by the Life Orientation Test and Generalised Self-Efficacy scale, respectively, were not associated with any differences in health outcomes between these cities (409). Such concepts reinforce views that those on benefits are undeserving whilst

perpetuating dependency culture as an explanatory factor for disadvantage. It counters resistance, concentrating change on the individual rather than the forces and institutions that cause such inequality. Lastly, both social support and coping at a community level were not able to be measured in the quantitative analysis, both strategies that are suggested to be effective responses to adversity in the qualitative part of this study. Indeed, marginalised groups have historically engaged in community networks to mitigate social and economic adversity (410). Such networks are used to build material resources, enhance social support and identity affirming frameworks. Both social support and community coping measures could be incorporated into future studies. Social support measures were measured in SELCoH 1 where it was found to be a protective factor for mental health (359) and could be incorporated into future waves of SELCoH. Community coping could be measured using the Conjoint Community Resiliency Assessment Measure [393], which was validated for use in communities throughout Israel.

7.3.5 Implications for health inequality research

This thesis reiterates the structural causes of social inequality that beget health inequalities. It provides evidence of the combined impact of both housing and employment adversity on health inequalities and the minimal role of individual level coping strategies in causing such inequality. The mixed methods framework have allowed this study to move beyond describing associations between adversity and health to examining processes and structures that focus on the actions of those in power and possible mechanisms, such as structural discrimination, that need to be examined further in health research and be the focus of future intervention. The novel use of LCA for generating classes of social identity has also uncovered nuanced differences in experiences of structural adversity at the intersection of SES, ethnicity and migration status. Such intersectional approaches are becoming increasingly important with the continued growth of urban populations and their increasingly diverse populations. These

methods provide a useful way of monitoring such differences in diverse community samples that can easily be replicated.

Given the recurring narrative and emphasis of the importance of personal responsibility in social inequalities by multiple stakeholders in the qualitative analysis, perhaps future health inequalities research needs a larger public engagement component to promote findings in the general population. Previous research on lay perspectives has found that there is more support in the public for individual level causes of health inequalities (411) despite evidence to the contrary. An exception to this is a qualitative study which explored understanding of the causes of poor health in communities in West Scotland. This study found that participants had highly integrated understandings of the structural factors that impact health. However, there is very little research on lay perspectives on health inequality (397); further research is needed to explore understanding of health inequalities in other context and attitudes to community level coping and political resilience.

7.4 Policy implications and future research

7.4.1 Policy and intervention in the literature

Despite the overwhelming evidence supporting action on social and health inequalities at the structural level, the majority of interventions in the UK focus on the behaviour of individuals and frame interventions in terms of personal responsibility (412). Moreover, policies that aims to intervene downstream, at the individual level, have now been widely criticised, particularly, where mechanisms rely on individual decision making to change behaviours, given that such changes are easier for those with more resources and experiencing less adversity (413). Indeed, there is consensus among researchers that if upstream structural factors persist alternative downstream mechanisms are likely to replace any intervening mechanisms which are successfully mitigated (414-416), as first outlined in fundamental cause theory.

Phelan et al., argue that in light of fundamental cause theory that public health policy should encourage medical and health promoting advances but reduce social inequalities at the structural level and developing interventions that do not advantage those with greater resources (417). Proposals to reduce social inequalities at the structural level include utilising taxation, legislation, regulation and changes in the distribution of power and resources in society (416, 418). Indeed, the Labour government's Programme for Action 2003 review identified the importance of improved social conditions and addressing social inequality (419). These included increasing social housing, educational attainment, improving access to public services, reducing unemployment and improving income. However, only interventions to meet short term targets were introduced. In result, the focus of intervention was on behavioural risk factors, such as reducing smoking and managing obesity, rather than underlying inequalities (419). In Scotland, an innovative city wide framework, the Edinburgh Partnership, was set up to address the upstream determinants of health (420). A pilot initiative 'Total Place' designed by the

Edinburgh Partnership has undertook consultations with local community members, service providers and community organisations to define long term intervention strategies based on a triangulated understanding of how adversity affects health (421). NHS Scotland has also incorporated a framework based on Geronimus' work on addressing structural influences on the health of urban populations, which encompasses the role of social relations between differing social identities and community resilience within disadvantaged groups (410). This structural approach to health inequalities, with its intention to mitigate, resist and undo the structural influences that impact health inequalities is in its early stages and should be monitored (422). In fact, there is little research that evaluates structural level interventions for health inequalities in the wider literature base (423, 424). However, one systematic review of interventions with health effects from 2000-2007 based on wider social determinants of health found evidence that interventions in housing and employment had positive effects on health inequalities (424).

Both unemployment and job insecurity were associated with CMD and reduced mental wellbeing in models adjusting for all types of adversity in this study. As long term unemployment and job insecurity have increased since 2010 (207), so have the proportion of households receiving an income that is insufficient to support health living (425). As the prevalence of unemployment in the two low SES classes was 3-4 times higher than the high SES White non-migrant class, policies that facilitate re-employment into secure jobs that pay a living wage are needed. Both employment advisors and community support workers emphasised the role of government in employment adversity. Currently, government policy enacted through employment advice agencies, filter unemployed people into temporary low paid work, as outlined in this thesis and previously (426) which do not result in a route out of poverty. Equally, implementation of stricter benefit conditionality, as described in this thesis, has increased since 2011. This is associated with increasing numbers of people leaving unemployment benefit for reasons other than work, leaving people to rely on charitable provision (427). A policy shift away from such policies that penalise unemployed people to a 'health first'

approach to worklessness, which tackle root causes first (428), and increased social welfare spending is likely to reduce health inequalities (429). In addition, introducing more legislation to improve job security, particularly for those on low wage zero hour contracts (430), and implementation of living wage policies may be particularly relevant for improving social conditions (428).

Government policy was also seen as the primary mechanism in causes of housing adversity. In the qualitative data, all stakeholders were in agreement that increased social housing building was desperately needed to stem the current housing crisis and improve social conditions for those most vulnerable to housing adversity. In light of housing benefit cuts and increasing unaffordability, community support workers also advocated for more landlord regulation to set standard rental rates and increase length of tenancy agreements in order to improve housing security. Such policies and regulation would only be successful if the government agreed on a strategic plan to reduce the earning to housing cost ratio and rebalance supply and demand in the housing market as outlined by the Pro-housing alliance (381).

Both community support workers and SELCoH participants were concerned about GPs not matching up with their communities, particularly in terms of SES and ethnicity. Difficulty in accessing medical training for those of low SES and ethnic minority background has already been discussed (392). The dominance of more affluent groups in medicine is persistent despite an increasing number of measures intended to widen participation (431). A quota system could be effective to ensure more students form low SES backgrounds are accepted. However, this must be twinned with encouraging and supporting low SES groups in getting ready to apply for medical school through university initiatives, such as widening participation, given so few from low SES backgrounds apply in the first place (392).

To ensure the above policies are effective, policymakers need to consider the needs of particular groups and how negative societal attitudes towards marginalised identities may modify how policies are implemented. An intersectional approach to intervention

may also facilitate shared understanding of the underlying mechanisms of inequality, with shared experiences of dominance and subordination (432). Interventions at the institutional level, where individuals experiences structural discrimination also need to be explored. Challenging discrimination at the institutional level is likely to be most promising. This could involve providing more guidance and training on cultural competence in the workplace, including unconscious bias training (433). Indeed, research on unconscious bias using the Race Attitude Implicit Association Test in the United States found that physicians (except Black physicians) showed an implicit preference for White Americans relative to Black Americans that exceeded self-reported bias (434). In housing and employment, service providers could be given more power to document and challenge discrimination. For example, employment advisors described discriminatory actions by employers they worked with but had no shared framework for documenting or challenging such behaviour. Responses to these encounters were at employment advisors discretion which is dependent on their own beliefs and emotional responses. If unconscious bias training were to be introduced as an intervention, subsequent workshops would need to be conducted in order to discuss how awareness of unconscious bias within institutions can be used to recognise and challenge discriminatory behaviour in a systematic way so that responses are not dependent on individual agents. Other institutional responses could include ensuring all individuals accessing services across employment, housing and health are aware of their rights and how to act on them or seek appropriate advice. This could involve the types of multi-agency work suggested by community support workers; integration of community support services in service provider environments so that individuals can have better access to advice and information regarding their rights and advocacy. This has already been shown to have positive impacts in GP practices in the form of social prescribing projects (435). Such multi-agency work could be better integrated across different domains. However, problems with multi-agency work in addressing adversity across domains have been shown to be problematic in the past and any collaboration would rely on good communication and project management (436).

Cities are not only characterised by their increasing inequality but also their reservoirs of positive and health enhancing properties, which include access to diverse community and politically engaged groups. Many community groups across London are already engaged in a range of political activities to address social determinants of health, such as Focus E15 (437) and Defend Council Housing (438), which both advocate for protection of social housing. Given the failures researchers have experienced in gaining support for policy intervention at the structural level with politicians, alliances between researchers, community organisations and the wider public that in part focus on political activism to change unjust social and economic norms and policy are necessary (96, 439). This will be dependent on researcher allotting more time to public engagement activities to build networks and support for public health issues (440).

7.4.2 Future research

7.4.2.1 Housing security and health

The results from this thesis indicate that housing adversity is associated with poor health. In the qualitative data, housing insecurity was a theme that was particularly pertinent in this sample due to the heightened impact of the housing crisis and processes of gentrification in inner city London. In a recent systematic review gentrification processes have been found to be largely harmful, through household displacement and community conflict (441). A recent qualitative study on gentrification processes in East London outlined how government led regeneration in this area were not benefiting existing low SES communities but incoming high SES groups, and suggested that such processes lead to increasing social inequalities and antagonistic class relations (382). Evidence from a recent systematic review of the impact of urban 'regeneration' on health inequalities is mixed (296). Given the significant amount of gentrification that is currently taking place across South East London and the negative impacts such processes in this study, it represents an interesting area to focus on more closely. A specific research question might be: 'How do gentrification processes differentially impact health by differing social identities?'

A mixed methods approach could be adopted in order to address this question. There are now three waves of SELCoH and it is now possible to measure health outcomes over three different time points (2008-2010, 2011-2012 and 2014-2015) during which time extensive gentrification has taken place in various locales of South East London. Residents in areas receiving urban regeneration could be compared with those living in adjacent areas not receiving urban regeneration. A complementary qualitative phase could involve ethnography of a site experiencing gentrification to observe interactions between existing communities who have not been displaced and incoming households taking up residence in newly built private housing, as well as the effects of such change

and renewal on both household types. Qualitative interviews could triangulate data between residents, local housing providers, government officials and business partners.

7.4.2.2 Social prescribing projects

Given higher consultation rates for psychosocial problems in deprived areas (398) and that social prescribing interventions have been shown to have positive impacts on health and wellbeing (399), it would of interest to evaluate the innovative intervention project described in this thesis. The project, already described in section 6.3, involves a community support worker collaborating with local GP surgeries who identified patients registered at their practice but attend the Emergency department rather than visiting their GP for primary care related matters. This project has not been evaluated and represents a unique intervention that attempts to tackle anticipated discrimination in health care and primary care avoidance which could be replicated if producing positive outcomes for patients. A specific research question might be, 'How effective are social prescribing interventions in preventing overuse of Emergency departments?'

A case study approach could be used to evaluate the project. This could involve semi-structured interviews with clients who have used the intervention, community support workers and GPs involved in the intervention. Purposive sample would be needed to ensure participants reflect the diversity of those who took part in the intervention. Key themes to address in interviews may include: psychosocial problems, anticipated discrimination, multi-agency work, sustainability and the role of primary care in social determinants of health.

7.4.2.3 Implicit discrimination within service providers

Social psychology research has shown that people rely on implicit attitudes to process information and have biases that they do not know they have. Implicit attitudes involve positive or negative attachment to specific social categories but most people do not see their own implicit bias (297). As described in this thesis, there were contradictory narratives regarding discrimination based on ethnicity. Most notably, many of the

community support workers and service providers reported that discrimination was no longer a problem due to protection from equality laws despite evidence of ethnic inequalities in employment, housing and healthcare. Research on unconscious bias using the Race Attitude Implicit Association Test (433) could be useful in uncovering the implicit biases of institutions that could impact on decision making. As this test is available as an online tool, assessing the implicit bias of a workforce could be undertaken using a simple web-based survey which could be administered with permission from the institution. Any results could be used to implement future workshops on implicit bias and institutional decision making.

7.4.2.4 Structural adversity at the national level

The implications of this research have been outlined and their importance is clear. However, this thesis is based on the local context of South East London only. A valuable development for future research would be to replicate part of this study nationally. Using LCA in an appropriate national dataset to generate latent classes of social identities relevant at the national level would highlight both similarities and variations in both privileged and disadvantaged identities compared to the diverse urban context of the current study. These differing social identities and contexts for structural adversity may create different outcomes and opportunities for intervention. A possible research question might be: 'Do associations between structural adversity and health in the UK differ by intersectional social identities?'

The use of a large national dataset with a large sample size to study sub population groups, such as Understanding Society UK Household Longitudinal Study, could provide a suitable research design to address these objectives (442). The Understanding Society study contains a range of socioeconomic and sociodemographic indicators, indicators of employment and housing adversity, and health outcomes. Socioeconomic and sociodemographic indicators could be used in latent class analysis to generate latent classes of social identity and it is therefore possible to quantitatively examine

associations between intersectional social identities and both structural adversity and health outcomes using regression models.

7.5 Conclusion

Taking an intersection approach to exploring the relationship between structural adversity and health has uncovered unique differences in both experiences of adversity and resources by social identities at the intersection of SES, ethnicity and migration status. Increased urbanicity and heterogeneity of cities based on such identities make an intersectional approach increasingly important in order to understanding how structural adversity differentially impacts health by social identities that represent privileged, mixed and disadvantaged positions, reflective of urban contexts. Considering the current political climate and increasing adversity across employment and housing in the UK; both social and health inequalities may continue to widen. Given the potential structural mechanisms highlighted in this thesis interventions at the both the structural and institutional level are needed to address these inequalities. In order to do this, researchers need to communicate more effectively on the importance of such structural factors and form more collaborative relationships with community groups and organisations that have more experience of advocating on such issues to effect change.

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Appendices

Appendix A

A1 Mental wellbeing scores by sociodemographic and socioeconomic indicators

Table A1 Mean mental wellbeing scores by sociodemographic and socioeconomic indicators

Model indicators		Mental wellbeing score	
		μ(95% CI)	p
Total		25.1(24.8-25.4)	
Sex	Male	25.5(25.0-26.0)	0.007
	Female	24.7(24.4-25.1)	
Age (in years)	17-29	24.8(24.3-25.4)	0.001
	30-44	25.5(25.0-26.0)	
	45-64	24.5(23.9-25.0)	
	65+	26.3(25.4-27.2)	
Ethnicity	White British	25.0(24.6-25.4)	0.025
	Black Caribbean	25.4(24.4-26.5)	
	Black African	26.3(25.4-27.1)	
	White Other	24.8(24.0-25.6)	
	Non White Other	24.1(23.3-25.0)	
	Mixed	24.7(23.6-25.9)	
Migrant status	Born in the UK	24.9(24.5-25.2)	0.070
	Migrant (0-10)	25.9(25.2-26.7)	
	Migrant (11-20)	25.4(24.5-26.4)	
	Migrant (21+)	24.8(23.9-25.8)	
First Language	English	25.3(24.6-26.0)	0.496
	Other	25.0(24.7-25.4)	
Religion	None	25.0(24.5-25.4)	0.040
	Christian	25.4(25.0-25.9)	
	Muslim	23.8(22.7-25.0)	
	Other	24.7(23.5-26.0)	
Sexual Orientation	Heterosexual	25.2(24.9-25.5)	0.048
	Other	23.9(22.7-25.2)	
Social occupational class (SOC)	Class I & II	25.4(25.0-25.8)	0.248
	Class III	24.9(24.3-25.5)	
	Class IV & V	24.8(24.1-25.5)	
	No SOC assigned	24.5(23.4-25.7)	
Educational attainment	No qualifications/GCSE	24.4(23.7-25.0)	0.003
	A Level	24.8(24.2-25.4)	
	Degree or above	25.6(25.2-26.0)	
Household income	0-£12,097	23.7(22.9-24.5)	<0.001
	£12,098-£31,494	24.8(24.2-25.4)	
	£31495+	25.9(25.5-26.2)	
Any benefits	No	25.5(25.2-25.9)	<0.001
	Yes	23.7(23.1-24.4)	

A2 Latent class response probabilities for 5 class solution

Table A2 Describing the demographic and socio-demographic characteristics of the latent classes for the 5 class solution

Model indicators		Class 1 (n=391)	Class 2 (n=120)	Class 3 (n=261)	Class 4 N=(126)	Class 5 (n=154)	*p*
Sex	Male	185 (53.7)	47(45.2)	105(45.9)	47(41.6)	53(40.5)	0.034
	Female	206(46.3)	73(54.8)	156(54.1)	79(58.4)	101(59.5)	
Age (in years)	17-29	97(31.7)	57(56.1)	47(25.0)	18(17.8)	27(23.6)	<0.001
	30-44	143(37.4)	32(23.9)	39(16.7)	68(55.0)	51(34.7)	
	45-64	117(24.4)	30(19.3)	107(37.7)	35(24.0)	55(30.4)	
	65+	34(6.5)	1(0.7)	68(20.6)	5(3.2)	21(11.3)	
Ethnicity	White British	354(89.3)	0	175(65.2)	3(2.4)	4(2.8)	<0.001
	Black Caribbean	3(0.8)	33(26.4)	49(19.9)	0	0	
	Black African	0	51(42.9)	0	18(14.7)	66(43.7)	
	White Other	21(5.9)	6(4.7)	16(5.8)	62(48.1)	42(26.8)	
	Non White Other	1(0.2)	21(19.0)	0	38(30.7)	38(24.0)	
	Mixed	12(3.9)	9(7.1)	20(9.1)	5(4.2)	4(2.7)	
Migrant status	Born in the UK	370(96.5)	84(73.3)	213(84.7)	0	1(0.5)	<0.001
	Migrant (0-10)	0	12(9.3)	4(1.9)	66(56.4)	44(30.9)	
	Migrant (11-20)	3(0.8)	13(10.9)	10(4.5)	32(23.9)	52(36.9)	
	Migrant (21+)	11(2.7)	10(6.5)	27(9.0)	28(19.7)	57(31.6)	
First Language	English	390(99.8)	117(97.3)	260(99.6)	54(44.7)	18(11.9)	<0.001
	Other	1(0.2)	3(2.7)	1(0.4)	72(55.3)	136(88.1)	
Religion	None	251(66.8)	8(6.6)	87(37.6)	44(34.3)	13(10.1)	<0.001
	Christian	132(31.3)	72(59.9)	163(58.2)	65(53.0)	93(59.0)	
	Muslim	0	28(23.4)	6(2.5)	3(2.4)	41(26.6)	
	Other	8(1.9)	12(10.0)	5(1.7)	14(26.6)	7(4.3)	
Sexual Orientation	Heterosexual	364(92.4)	113(94.3)	249(96.4)	109(84.6)	150(97.9)	<0.001
	Other	27(7.6)	7(5.7)	9(3.6)	17(15.4)	3(2.1)	
Social occupational class (SOC)	Class I & II	296(73.0)	57(44.8)	26(9.2)	98(77.4)	29(18.5)	<0.001
	Class III	65(16.9)	30(24.2)	129(50.2)	19(15.8)	43(28.4)	
	Class IV & V	17(5.4)	5(3.7)	91(15.8)	7(5.4)	63(39.2)	
	No SOC assigned	13(4.7)	28(27.3)	15(28.4)	2(1.3)	19(13.8)	
Educational	No	17(4.6)	6(5.5)	187(69.2)	0	50(31.7)	<0.001

attainment	qualifications/GCSE						
	A Level	58(16.6)	59(48.5)	68(28.0)	5(4.3)	72(48.3)	
	Degree or above	316(78.8)	55(46.0)	6(2.8)	121(95.7)	32(20.0)	
Household income	0-£12,097	7(1.6)	14(12.3)	98(42.9)	5(3.9)	52(41.5)	<0.001
	£12,098-£31,494	48(12.5)	27(25.2)	110(46.9)	11(9.1)	44(33.0)	
	£31495+	310(85.9)	65(62.5)	22(10.2)	99(87.0)	35(25.5)	
Any benefits	No	367(94.1)	103(86.4)	130(47.4)	120(95.6)	77(48.5)	<0.001
	Yes	24(5.9)	17(13.6)	131(52.6)	6(4.4)	77(51.5)	

A3 Tenure by latent classes

Table A3 Distribution of housing tenure by latent classes of social identities

	Owned	**Private rented**	**Social housing**	
	N(%)	**N(%)**	***N(%)***	***p***
Total	405(39.7)	222(25.4)	348(34.9)	
Latent classes				
High SES White non-migrant	241(66.5)	77(25.4)	30(8.1)	<0.001
Mixed SES ethnic minority non-migrant	31(29.7)	24(23.3)	49(47.1)	
Low SES non-migrant	38(15.6)	26(12.8)	158(71.6)	
Low SES migrant	11(19.2)	9(22.3)	28(58.5)	
High SES migrant	52(43.4)	49(47.6)	10(9.1)	
Mixed SES migrant	32(20.1)	37(30.4)	73(49.5)	

Appendix B

B1 Information sheet for qualitative data collection

The information sheet below is for SELCoH participants only. This is broadly similar to the information sheet given to other stakeholders.

Billy Gazard
Psychological Medicine
Weston Education Centre
King's College London
Cutcombe Rd
SE5 9RJ
Tel: 0207 848 5142
Email:
billy.gazard@kcl.ac.uk

INFORMATION SHEET FOR PARTICIPANTS

REC Protocol Number:
Study title: Unfair Treatment and Health in South East London
YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

You have been asked to participate in this original research project organised by King's College London and funded by the Economic and Social Research Council and King's College London National Institute of Health Research Biomedical Research Centre. If you complete the study we will pay you £10 as a "thank you" for your time.

This research project is a "follow up" to the South East London Community Health (SELCoH) study that you participated in sometime in 2011-2012. Based on answers you gave to questions on unfair treatment, we would now like to ask you follow up questions to gain more in-depth information.

Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you wish to know more.

You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve.

What is the purpose of this study?

* The first aim of the study is to find out how many people in Southwark and Lambeth have experienced unfair treatment in certain areas of their lives, such as housing, employment and healthcare, and how this affects their health and well-being.

* The second aim is to work out the pattern of this unfair treatment, for example, if it is more or less common in certain groups, such as people who struggle financially or people who were born outside the UK

* The third aim is to see how policies and social situations in the UK have shaped peoples' experiences of unfair treatment over time in order to more fully understand the nature of unfair treatment today.

*Lastly, we want to find out more about individuals' experiences of accessing and dealing with organisations in housing, employment and health to further understand the impact of unfair treatment on health and well-being

Why have I been invited?

You already took part in the research project 'South East London Community Health [SELCoH] study'. As part of this you answered some questions on unfair treatment. We would now like to ask you more about these experiences of unfair treatment to gain more in depth information on the answers that you provided.

Do I have to take part?

No. It is entirely up to you to decide whether or not to take part. You can decide not to take part but still continue with the main study. If you decide not to take part, any care you are receiving from the NHS will not change in any way. Even if you decide to take part, you may leave the study at any time, without giving a reason.

What will I be asked if I take part in the study?

If you agree to participate you will be given a copy of this information sheet and asked to sign a consent form. You will then be asked to complete an interview in a location of your choice which will take about 45-60 minutes. You will only have to do this once. We will ask you a series of questions about your experiences of unfair treatment with organisations such as housing, employment and healthcare agencies and how this unfair treatment may have affected your day to day life. Some of these questions may touch on sensitive areas. . **If you feel uncomfortable with any of the questions you do not have to answer them.** If you want to stop the interview you can do so at any time without giving us any reason.

What are the possible benefits of taking part?

As a "thank you" we are paying all those who complete the interview £10. You can also receive a copy of our final report about some of the findings from this research. However, this is optional and you do not have to be sent any additional information regarding this study in the future if you do not want to. There are no other direct benefits, however we believe that by participating and allowing us to conduct this study, you will contribute to the greater good by providing real statistics regarding unfair treatment and its impact upon health and your standard of living. This will aid future policies and improvements to health services that will help people in the community.

What are the possible risks of taking part?

There are no major risks involved – all we want to do is ask you a range of questions regarding any unfair treatment you may have experienced and how this may have affected your day to day life. Some of these questions touch on sensitive areas. **If you feel uncomfortable with any of the questions you do not have to answer them.** If you want to stop the interview you can do so at any time without giving us any reason. In addition to withdrawing yourself from the study, you may also withdraw any information you have already provided it is within one month after

completing the study. If you are worried about any part of this study, or if this study has harmed you in any way, please speak to the research workers who will do their best to answer your questions (contact details below).

Is Confidentiality guaranteed?

As with the main study, we take confidentiality very seriously. All personal information about you is regarded as strictly confidential. Only the researcher asking these questions and the study leader will be able to trace the information you have given us to your personal details. If you consent to participate, an audio-recording of the interview will be made. The interview will then be typed up and all personal details, like specific names of people and places, will be removed making the transcription anonymous. After it has been transcribed, the recording will be deleted. Only the researcher who interviews you and their supervisors will have access to personal information about you, and no other party will have access to information that is identifiable or can be linked back to you. This is to ensure the safety of both you and the researcher. The written transcript of your interview will be given a unique ID number so it will not be linked to your consent form or personal details. All the information about you will be coded; you will not be identifiable in any research outcome (e.g. publication). This ensures that suitable standards of security and confidentiality are applied. All information collected will be securely held in King's College London.

Only in cases where you tell us something which may place you at severe risk (such as suicidal thoughts and ideas) would we consider breaching confidentiality. In those cases you might be contacted by an expert from the study team, or we might contact your GP if we considered your life at risk.

Participation in the study is entirely optional. If you decide to take part you are still free to withdraw at any time and without giving a reason. In order to withdraw, please contact the researcher whose details are listed below.

Additional Information

The study is funded by the Economic and Social Research Council and the National Institute for Health Research Biomedical Research Centre Nucleus. If this study has harmed you in any way you can contact King's College London using the details below

Dr. Stephani Hatch (email: stephani.hatch@kcl.ac.uk tel: 0207 848 5263. Address: Psychological Medicine, Weston Education Centre, King's College London, Cutcombe Rd, SE5 9RJ).

If you would like to contact us for more information, please feel welcome to contact us at the information below.

Billy Gazard (email: billy.gazard@kcl.ac.uk tel: 0207 848 5142. Address: Psychological Medicine, Weston Education Centre, King's College London, Cutcombe Rd, SE5 9RJ).

If you would like more information about our study and findings, please visit our website at http://www.kcl.ac.uk/innovation/groups/selcoh/index.aspx

Thank you for taking the time to read this document and consider participation in this research.

B2 Consent form for qualitative interviews

This consent form was for in-depth interviews only. A similar consent form was used for participant observation.

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study:	Unfair Treatment and Health in South East London
Principal Investigator:	Billy Gazard, King's College London

King's College Research Ethics Committee Ref: **PNM/09/10-97**

Household number: | | | | | | | |

Id_number: | |

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Necessary consents to participate in this study: Please tick boxes

• I have read the information sheet and I have been given a copy. I was given the opportunity to ask questions. I understand why the research has been done and the risks involved	YES	NO
• I understand that if I decide at any time during the research that I no longer wish to participate in this project, I can notify the researchers involved and withdraw from it immediately without giving any reason. Furthermore, I understand that I will be able to withdraw my data up to one month after completing the interview.	YES	NO
• I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998. I understand that confidentiality might be breached only when my life might be considered at risk. This could happen in situation such as ascertainment by the research team of intense suicidal feelings. In these extreme cases the principal investigator might choose to contact me *and/or* make contact with my GP directly.	YES	NO
	YES	NO

• I consent to the audio recording of this interview. The interview will then be typed up and all personal details, like

specific names of people and places, will be removed making the transcription anonymous. After it has been transcribed, the recording will be deleted.

- I understand I will not benefit financially from this research but I will receive £10 as a compensation for the time I will spend to complete the interview. YES NO

- I understand that the information I provide will be published as a report and that confidentiality and anonymity will be maintained and it will not be possible to identify me from any publications. YES NO

- I agree that the anonymised information gathered about me can be archived at the Institute of Psychiatry. I understand that future research may be performed by researchers other than those who conducted the first project. Any future work, for which my information will be used, will be subjected to review by a research ethics committee. YES NO

I would / would not like to receive information on the outcome of the study (delete whichever does not apply).

Participant's Statement:

I ____

agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

………………………… ………………………………… ……………………..

Name of participant Signature Date

Investigator's Statement:

I ____

confirm that I have carefully explained the nature, demands and any foreseeable risks (where applicable) of the proposed research to the volunteer.

B3 Example of ethnographic fieldnotes

a strong urge to interact more or offer help in some way but as it is so quiet right now I'm not sure how I would do that anyway

W is on a PC working, and I can hear two colleagues having a discussion in a office area out back. The room where I'm sat is organised in almost 2 halfs. At the front end of the room by the entrance, is the reception desk and the sofas. The sofas are bright orange. Towards the rest of the office [illegible] consists of desks, chairs and computers. On one side of the room are shelves with folders and leaflets, free condoms sit on one of the shelves on the brick wall, the wall is painted in graffiti style art, while on the other wall there are boards up with photos of the young people and boys focus group.

One of the staff who came in earlier, is now sitting down at a desk. I go up and introduce myself and explain who I am. She said that she roughly knows who I am and what I'm doing and I briefly explain what I'm doing. She talks about her experiences of [illegible] treatment at the [illegible] as she is currently a volunteer here and studying. She said that a lot of the young people have problems with the [illegible] and often feel frustrated about the whole process

11:20 a few more people have entered, and there are now 5 people around the computers as they still don't know why the password has changed, A has worked out that the user has been [illegible]

R answers the call, it is an enquiry about the service, it was a referral who hadn't left a contact number. The buzzer rings again, it is a young person who has an appointment at [illegible], the waits in the waiting room for his appointment, his counsellor is not here

The phone rings again, someone else answers the phone. It is very relaxed, everyone seems to just take responsibility for answering reception i.e. the door + phone. From where I sit, I can just see into the waiting room, there is a young person and an adult waiting. There seems to be some confusion with the appointment. R asks W about it and W goes to speak to them, while R checks with H.

I speak to H (who I think is the manager) about the research and if she wants me to introduce myself to people in a group, or my own. She just said to go up to people and talk to them. She said it's all pretty informal here. She makes me feel more relaxed. She introduces me to D, who is a [illegible] social worker working here. She has a [illegible] so she is very busy. She talks to W, R + H about it in the office space. H suggests to run through with her. D says that [illegible] will be too nervous.

W asks me for petty cash, she will be in charge (in some way) D asks if there is anything W or R will have to do, they all seem set into work now and sit at their desks (other staff members are in other rooms).

B4 Excerpt of ethnographic transcript

Ethnography 1
Researcher: BG
Date 200513 09.30-17:30
Location: Community organisation 1 (CO1)

Notes
First day of ethnography at CO1
Information sheets and consent forms given to team

Ethnographic Transcript

Before I arrive on site, I feel quite anxious having not participated in any ethnographic fieldwork for some time. Sitting on the bus, I consider taking a look at my ethnography textbook but realise this is just my anxiety and decide to leave it and go into the site, relax, observe and see how I feel about it. As I turn into the street where the office is based, I see the office, I have been here several times before but I try to take in the surroundings as if it were the first time I have been here. The office is based on a small street just off a very busy main road. It took me quite a while to cross the road as traffic was heavy in both directions with cars and numerous heavy vehicles. As I enter the side street after crossing the road, I see the office. The building itself is part of a larger red brick council housing block, but as the office lies on the main street, this is not completely obvious. The office has a large banner above the door way with the connexions and CO1 logo. The front of the office is glass window and a glass doorway. The glass is covered in posters and leaflets, so although you can see in, inside looks protected from eyes looking in from the outside but at the same time feels in no way intimidating to go inside.

9.30

It's 9.30 and as I walk towards the doorway there appear to be no lights on in the office. I check the opening times on the office door and they state that the office is not open until 10.30. I look further into the background, the lights are on in the back office and I buzz the buzzer. I can see W coming towards me and he presses a button on the wall to let me in. He welcomes me in to the office warmly and tells me it's pretty quiet and things won't get started until a little bit later on and tells me to make myself comfortable and make a tea if I like. He shows me around the back office which has a kitchen area. The whole office is pretty much open plan. All of the rooms connect with no closed doors, you can hear a few staff members chatting in different areas of the office. The only closed doors seem to be the counselling rooms which are all based on one corridor.

I make my tea and go and sit back down in the main office area and take out my notebook. Sounds from outside seep into the office space; a siren can be heard passing by

and there is an ever present sound of traffic rumbling. Inside the office, an FM radio plays; crackled music quietly plays in the background. I'm sitting on a large orange sofa, leaflets about education and apprenticeships lie on a coffee table in front of me. The leaflets are advertising free workshops and advice at a local University.

As the office approaches opening time it is still very quiet, there are now 4 members of staff in the office, W who is the advice and advocacy manager, A, who is the connexions worker and gives careers advice, D, who is a volunteer receptionist and R who is a volunteer worker doing public engagement work and is studying counselling. They are all very relaxed with each other and seem very relaxed with my presence. Having not done an ethnography for many years I feel slightly awkward being in their space as a researcher. Last time I did ethnography I was also working as a volunteer and was able to rely on my role as volunteer at any time I felt uncomfortable. This time I am researcher only; this option does not exist. W was at the meeting where I introduced my project but A, D and R were not. I introduce myself to all 3 of them separately. I explain my project to them, they knew roughly who I was, as this had already been explained to them in a team meeting. I explained my project in more detail, gave them an information sheet and consent form. R and D were keen to fill it in there and then, but I told them to take their time, read through the information and give me back the consent form in their own time, explaining that it is completely optional.

10.30

A young person comes into the office, he wants to print out a CV, D has problems logging on to reception PC so W prints out CVs for client. The young person stands around reception desk, greeting staff members, they all seem to know each other. Young person doesn't realise he has to pay 10p per page, he says he will bring the money in later. Young person leaves office. I look around the office, at the front of the office, where I'm sat is more open plan with sofas and reception, this area is next to the waiting area which lies right at the front of the office looking over the street. The back of the office where I'm sat is more organised; desks and PCs. Graffiti art takes up the back wall and photos of young people in group activities line the other wall. R is talking to a staff member who has just arrived ; SW is a trainee social worker who is doing her placement at this organisation. R is telling her about the problems she is having with the Job Centre around getting an appointment and the advisor not turning up. R tells me that a lot of young people have problems with the Job Centre and often feel frustrated about the whole process.

A few staff members are standing at reception, D is still not able to log on to the PC, there is some problem with the password, D answers a phone call, it is a query about a referral, he takes a message for a worker and takes down the

contact details. SW is dealing with all referrals and works out that this is a referral who had not left working contact details when they submitted their referral form. She mentions to another staff member that she only got the referral on Thursday and will contact them soon. The buzzer rings again; it is a young person who has an appointment at 11am. They are with an adult who is from another service, X, which works with the youth offending team. They are sitting in the waiting room, from where I am sat I can only catch glimpses of them. There seems to be some confusion regarding the appointment as both X and CO1 are working with the young person. After the appointment is finished, the X worker asks if he can use the room next week as the young person feel comfortable here. H is on reception and agrees they can use the room. She also suggests that they work together on this case to ensure there is no crossover/doubling of workload. The young person leaves the office.

SW asks 'how old is he?' (age seems important here, this is the second time a I hear this question this morning.
SW states, 'he looks lost'
R, 'what do you mean?
SW, 'lost in thought...it's like they put them in there to break them' (she is talking about him being in prison/youth offending)

R and SW continue talking about youth offending...R says that she was working closely with someone who just got out of prison
R, 'I still have the letters, he wrote to here every week. I know you are not supposed to get attached but I'm close to the boys in the group anyway.'....she continued 'I got close to his mother too, probably because we are part of Asian community. She couldn't tell anyone he was in prison so she spoke to me about it. She told people he was at boarding school.'.....'I don't think he thinks about prison, he's working with the family business now, he's really changed'
SW replies, 'it can go either way can't it, it just takes one bad choice'.

B5 Example topic guides

A. Interview Schedule for SELCoH participants

In depth interviews for participants recruited from the SELCoH study will be based on questions they answered in their SELCoH interviews and the researcher will ask participants to expand on their original answers to give more context to this data (the original questions asked in the SELCoH interview are attached, starting p.19). The interviewer will explain that they will be asking participants for more in depth information based on their answers to questions on unfair treatment in their SELCoH interview.

Interviewer: 'When you took part in the South East London Community Health study in [insert date] you answered some questions about unfair treatment. I'd now like to ask you more in depth questions about your experiences of unfair treatment, how it made you feel, how it has affected you and how you responded to these situations. By unfair treatment I mean any situation where you felt that you were treated unfairly compared with other people. People are treated unfairly for many reasons, such as age, gender, ethnicity, sexual orientation, religious beliefs, personal appearance etc. In the following questions please let me know about any situation where you felt you were unfairly treated even if you feel it is not important. I am interested in all experiences of unfair treatment.'

Themes and Prompt questions for interview

Experience of Unfair Treatment

1. In the previous survey you mentioned that you …….[insert situation e.g had been unfairly fired from a job]. Could you tell me what led up to this situation?

When did this happen?
How did this come about?
Could you tell me why you think this happened?

2. Can you tell me more about why you feel this was unfair?

Could you tell me why you think they would treat you unfairly because of your…..e.g age?
Do you think there are any other reasons you were treated unfairly?
Has anything like this happened to you before?

Health

3. Could you tell me how this made you feel?

Could you tell me more about why it made you feel this way?
How did you react at the time?
How do you feel about it now?

4. Could you tell me how this affected your health and wellbeing?

Did you feel that this experience may have affected your emotional health in any way?
For how long did you feel like this? Did this lead to any other problems with your health?

Social Status

5. You said that you were treated unfairly because of…..e.g gender. Do you ever feel you are treated unfairly in any other situations for the same reasons?

Could you tell me about a situation that particularly stands out?

6. Do you think that other people are treated unfairly because of….e.g gender?

Why do you think people are treated unfairly for these reasons?

Coping Mechanisms and Anticipation of Future Unfair Treatment

7. At the time, did you try to do anything about it?

Did you complain about it? Could you tell me the details of what happened?
What was the outcome?

8. Did you do anything else to help you cope with the situation?
Is this how you usually cope with difficult situations?
Did you speak to anyone about it? What advice did they give you?

9. In what ways did this situation stop you from….e.g applying for work or training, accessing services?
Has this situation stopped you from doing anything else?
Do you think this could happen to you again?

10. Have any of your friends or family experienced unfair treatment for the same reasons?
Can you tell me what happened?
What advice would you give to someone who was experiencing this?

Organisations and Processes

11. In the organisation/service that you experienced unfair treatment did any policies or rules help
protect you from any unfair treatment?
Were they made readily available to you?
Do you think that the people who treated you unfairly were aware of them?

12. Why do you think that these policies did not help you in that particular situation?
What do you think should change to stop these situations from happening?
In general, do you think things have changed over time? How so?

***This set of prompts and probes will be adjusted for each situation that the participant said that they experienced unfair treatment in the previous SELCoH interview**

B. Interview Schedule for Community Organisation participants

In depth interviews with participants from collaborating organisations who mediate relationships between individuals in the community and service providers will be formed from observations made during the researcher's time on site. However, questions will revolve around organisational processes, how workers interact with service users, how they facilitate service users access to services and the difficulties they face in this process. These questions will be subject to change depending on observations made during participant observation.

Interviewer: 'As you know, I am trying to understand how unfair treatment affects your clients and how your organisation helps them access services and mediates the relationship between individuals in the community and service providers. In your organisation you play an important role in helping people access services and resources and dealing with any unfair treatment that they encounter. I am going to ask you some questions about your role and the experiences that you have had in your role. By unfair treatment I mean any situation where you felt that one of your clients was treated unfairly compared with other people. People are treated unfairly for many reasons, such as age, gender, ethnicity, sexual orientation, religious beliefs, personal appearance etc. In the following questions please let me know about any situation where you felt that your clients were unfairly treated. I am interested in all experiences of unfair treatment.'

Themes and Prompt questions for interview

Organisational Role

1. How long have you been working at the organisation? Were you working in similar roles before this job?
Could you tell me some of the things that you enjoy about your current role?

2. Could you tell me about the work of your organisation?
Could you go into more detail about how your organisation works with service providers in this area?
In what ways does your organisation mediate relationships between your clients and service providers?
Could you tell me more about your specific role?

Clients and Unfair treatment

3. What kind of clients do you work with? What kind of problems are they dealing with?
Could you give me an example of a typical client and their problems?

4. What are the main service providers that you work with?
Could you tell me a bit more about that service?

5. When mediating the relationship between your clients and service providers have you observed any unfair treatment?
Could you tell me about a situation that you are dealing with at the moment?
Are there any examples of unfair treatment you have observed that particularly stand out?

Advocate Role

6. In what ways do you help clients access services?
What is your relationship like with this service provider?
Can you tell me more about why your clients need help accessing services?

7. What are the different experiences clients have when accessing services on their own compared to when they have help from your organisation?

Could you give me some examples of how your presence as a mediator changed the dynamics of the relationship between service provider and client?
Can you tell me more about why you think these differences exist?

8. What difficulties do you face in mediating these relationships?
What tactics do you use to tackle any barriers you may face in negotiating relationships with service providers?
What skills are needed in order to do this?

9. Why do you think these problems exist and what do you feel needs to change to tackle unfair treatment within service providers?
What are the major problems that your organisation has identified and what work do you do to highlight these issues?

C. Interview schedule for Service Providers (all questions will be adapted depending on the service provider)

In depth interview questions with participants from collaborating service providers will be further formed from observations made during the researcher's time on site. However, questions will revolve around organisational processes, how workers interact with service users, how they facilitate service users access to services and the difficulties they face in this process. These questions will be subject to change depending on observations made during participant observation.

Interviewer: 'As you know, I am trying to understand how unfair treatment effects people's everyday life and how your clients access your services. In your organisation you play an important role in helping people access services and resources. I am going to ask you some questions about your role and the experiences that you have had in your role.'

Organisational Role

1. How long have you been working at the organisation? Were you working in similar roles before this job?
Could you tell me some of the things that you enjoy about your current role?

2. Could you tell me about the work of your organisation?
How does your organisation help clients with their needs?

3. Could you tell me more about your specific role?
Could you tell me about a typical day?
Could you tell me about how you typically work with clients?

Clients, access to services and unfair treatment

4. What kind of clients do you work with? What kind of problems are they dealing with?
Could you tell me about the variety of different clients you work with?
Which clients have the most difficulty accessing the services they need?

5. Could you explain the process in which a client typically accesses services?
Can you talk me through a specific example?
Where do you see the most problems in this process?

6. What barriers do your clients face in accessing services?
Could you give me an example of something that happened recently?
Do clients know how the process of accessing services works?
Why do clients trust/mistrust the work of the organisation?

7. What problems do you face in helping clients access services?
Are there any problems that arise often?
Could you give me an example of something that really stands out?
What do you do when you have problems with helping clients?

8. What kind of unfair treatment may clients face in these types of organisations?

What kind of unfair treatment do clients complain about?
Have you witnessed any unfair treatment while working in this field?

Organisational Processes

9. Are there specific guidelines in place for the process of helping clients access services? How do you use them in your everyday work?
Where do you diverge from these guidelines?
How much freedom do you have to diverge?
Can you give me an example of how you and a colleague carry out work differently?

10. How much teamwork is needed in the process of helping clients access services?
Can you tell me more about how this works?
Do you receive a lot of support in difficult situations from your peers or management?

11. Do you have the opportunity to flag and discuss problems as a team?
Can you tell me more about this process?
Do you feel that team members concerns are taken seriously?
Do you ever discuss unfair treatment of clients as a team?

12. What do you think is the general perception of your service by the public?
What would you agree with or disagree with?