

2012

Ethnic group affiliation and social exclusion in Cornwall; analysis, adjustment and extension of the 2001 England and Wales Census data

Husk, Kerry Michael

<http://hdl.handle.net/10026.1/906>

<http://dx.doi.org/10.24382/4746>

University of Plymouth

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**Ethnic group affiliation and social exclusion in Cornwall;
analysis, adjustment and extension of the
2001 England and Wales Census data.**

By

Kerryn Michael Husk

A thesis submitted to the University of Plymouth
In partial fulfilment for the degree of

Doctor of Philosophy

School of Social Science and Social Work
Faculty of Health,
Education and Society

January 2012

Abstract

This thesis provides a critical understanding of the size and relative position of the Cornish in Cornwall, a county in the south-west of the UK. Cornwall is a region which has experienced increased levels of disadvantage for a prolonged period of time. The indigenous people, whilst seeing a rise in their inclusion in ethnicity variables in the region, have remained under-researched in terms of their socio-economic position relative to the non-Cornish in the same geographic area. This thesis addresses this gap in the literature and represents the first in-depth examination of the group.

The 2001 Census included an option to 'write-in' a Cornish ethnic identity, however whilst accurate in the responses it recorded the result was almost certainly an under-enumeration due to the lack of a dedicated tick-box selection. This thesis is a rigorous examination of the Cornish, starting with these data, estimating their size and socio-economic position (in terms of social exclusion) relative to non-Cornish individuals.

Three stages of primary analysis sought to; analyse, adjust and extend the 2001 Census result to broadly estimate the size, links with exclusion and the causal processes behind these links. Firstly, an accurate picture of the size of the Cornish population was estimated using an innovative weighting strategy, developed to collate *all* other data referring to the Cornish and to derive weights for application to the raw Census data. Secondly, a stage of primary survey research examined this group more directly for links with social exclusion factors; and thirdly, a stage of qualitative interviews with knowledgeable individuals in the region lent depth to the findings and provided a more coherent explanatory framework.

The results indicate that the Cornish are certainly more numerous than the 2001 Census had indicated. The proportion of individuals self-identifying as Cornish is likely to be closer to a quarter of the population rather than the 6.7% indicated in the 2001

data. There was some discrepancy in the data between the *belief* amongst the group of social exclusion and the reality. In order to explain the discrepancy, a model was used which explores the difference between personal-level experience and group level discrimination (Taylor *et al* 1990).

The results of this thesis highlight the complex and multi-dimensional processes inherent in, firstly, the methodological and practical process of ethnicity measurement and, secondly, its use as an explanatory variable for social exclusion experience. Overall, this thesis represents the first and most comprehensive examination of the indigenous people of Cornwall and their relative lived experience compared to non-Cornish in the same area.

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Acknowledgements

Firstly I would like to thank my principal supervisor, Alison Green; whose constant support, direction and advice has been invaluable. I would also like to express my gratitude to Carole Sutton and Malcolm Brown, who were on hand throughout the process and offered information and support whenever asked – I could not have asked for a better supervisory team.

I would also like to thank Malcolm Williams, without his help I would not have embarked on the PhD process at all and his input throughout has been central.

This thesis would not have been possible without the financial and administrative support of the University of Plymouth; a number of individuals have guided me through the complex university administration processes.

Finally, I am grateful for the understanding and patience of my partner, Christina.

Author's Declaration

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Committee.

This study was financed with the aid of a studentship from the School of Social Science and Social Work at the University of Plymouth.

A programme of advanced study was undertaken, which included a range of quantitative methodology training and courses. Relevant social scientific seminars and conferences were regularly attended at which work was presented; external institutions were visited for consultation and several papers were prepared for publication.

Publications:

Husk, K. (2011). 'Ethnicity and social exclusion: research and policy implications in the South West.' *Social and Public Policy Review*. 5. 1. 7-25

Husk, K. (2010). *Ethnicity*, by Steve Fenton. Reviewed in: *Sociological Research Online*. 15. 3. [<http://www.socresonline.org.uk/15/3/reviews/5.html>]

Husk, K. (2011) 'Estimating the Cornish from the 2001 England and Wales Census: adjustment and re-analyses.' *Local Population Studies*. 87. 78-83

Conferences presentations:

Husk, K. (2010). 'Ethnicity and Social Exclusion – A contextualised case for a separate Cornish identity; theory and implications'. In British Sociological Association. *Annual Conference 2010 – Inequalities and Social Justice*. Glasgow, UK. 8th April 2010.

Husk, K. (2010). 'Innovations in collation; weighting strategies derived from multiple data set and single-variable Census analysis.' ESRC. *4th ESRC Research Methods Festival*. Oxford, UK. 5th-8th July 2010.

Husk, K. (2009). 'The Celtic whinge: a contextualized case for a separate Cornish ethnic identity and the implications for research.' In University of Plymouth. *2009 Postgraduate Symposium*. Plymouth, UK. 15th May 2009. (Winner: 2009 Poster Award).

Word count of main body of thesis: 74,179

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Introduction

The thesis

This thesis examines the Cornish as a distinct ethnic group in Cornwall, a county in the south-west of the UK and specifically seeks to analyse and extend the 2001 England and Wales Census data which (for the first time) contained an option to write-in a Cornish ethnic identity. Whilst accurate in recording the written responses this data contained no dedicated 'tick-box' option and so the likelihood of an undercount was significant. Coupled with the fact that the Cornish potentially represented an indigenous group at risk of social exclusion, this thesis therefore sets out to address two key issues. Firstly, to rigorously examine all the data in the field and to provide an accurate estimate for levels of self-identified Cornish ethnicity in Cornwall, and, secondly an assessment of the relative socio-economic position the group holds in comparison to non-Cornish individuals in the same geographic area.

Cornish ethnicity and social exclusion

Ethnicity, and more specifically the measurement of ethnicity, is one of the key themes of the thesis. Throughout the literature, data collection and analysis phases the methodological and philosophical problems with ethnic group ascription emerge. However this thesis sets out to examine the Cornish as a group, something impossible without an attempt at clarification and pragmatic resolution of the issues.

Distinct from older concepts of race (and the highly questionable hierarchical 'science' which was popularised in the 19th Century (Mason 1995)), the term 'ethnicity' has its etymological roots in the Greek works of Homer, is literally a 'band of friends' (Tonkin

et al 1989). Despite many and repeated calls for group ascription to be linked to the genetics of an individual (see Phillips *et al* 2007 for a good summary) there is a distinct lack of scientific evidence and thus the more relevant social indicators are more of sociological concern (Miles 1993).

There are clearly cultural markers which define a group of individuals as distinct from others and these index features embody the fundamental difference between ethnic groups (Nash 1989). However more detailed and specific discussion of the finer grained notions of what defines a group (and the terms for inclusion) split the literature. The first section of this thesis sets out to arrive at a suitable definition (in a pragmatic sense) which captures the current literature on ethnic group membership. Though the theoretical differences are fundamental, in the analysis of group dynamics the model chosen to progress to an examination of the Cornish is that of Smith (1988); who sets out six key identifiers: a collective name, a common myth of descent, a shared history, common culture, a link with a homeland and a sense of solidarity.

Whilst a model was defined, the shifting (and somewhat invalid) nature of the modern concept of ethnicity emerged from the literature; ranging from those who argued almost for its abandonment in academic study (Carter and Fenton 2009), to those debating the subtler issues of survey measurement (Burton, Nandi and Platt 2010). The argument put forward in this thesis is that the major features of this debate can be summarised as those problematising the reasons for examination, and those examining the difficulty of measurement itself. To address the first issue, there are many possible reasons and some of those (largely political) are unwarranted in the social sciences (Ahmad 1999). To the second, there are long running debates and this thesis contributes in a small way to those (see Simpson and Akinwale 2007). Overall the position taken is one of pragmatism, that measurement of such a subtle and moveable concept is fundamentally flawed; though that is not to say pointless, and the claims made should reflect this methodological standpoint.

The application of Smith's (1988) model of an *ethnie* to the Cornish case, in its entirety, provides not just a case for distinct Cornish identity but also as a framework from which to examine the Cornish literature. There has been a distinct rise in the last two decades of all things distinctly Cornish (Payton 1996), which has led logically to a rise in academic and sociological interest (Williams 2002). The increase in local nationalistic political movements (though not complete) has been stark (Deacon, Cole and Tregidga 2003), and despite the conceptual difficulties it is hard to argue against at least some level of 'ethnically orientated action' (Fenton 2010) in Cornwall.

This has far reaching implications, and a targeted examination of the group becomes both timely and relevant. The size and relative position of the group are two of the central themes of this thesis; however, in order to assess the latter, issues around conceptualising social exclusion must be approached. Whilst economic factors are certainly interrelated with the modern concept, social exclusion is distinct from poverty (Walker 1995). This notion was first developing from the work of Townsend (1962), who argued for a more relative form of assessment in terms of deprivation, and the subsequent work which challenged the previously held beliefs around declining poverty in the UK (Abel-Smith and Townsend 1965).

The more commonly accepted and multi-dimensional discussion around social exclusion emerged from the policy developments of the European Union in the 1980s and 1990s (Berghman 1995). Similar to ethnicity debates described in the previous sections, definitions of social exclusion have seen a rise in those problematising specific features, though not to the same conceptual extent (Asthana, Halliday and Gibson 2008). There is certainly a complex interplay between micro and macro causes (and effects) of exclusion, as well as between the upper and lower limits of the process (Barry 2002). Common to almost all conceptualisations is the experiencing of key variables in a distinctly different way by some groups compared to others (Burchardt, Le Grande and Piachaud 2002a). These key variables often include elements of income,

employment, health, education, housing and crime as well as other related lived experiences (Communities and Local Government 2007a). Again this thesis takes a pragmatic approach to this literature and, whilst recognising the imperfections inherent in such a model, the variable identification matrix provided by Levitas *et al* (2007) is deemed sufficient and representative of the literature in the field. The team conducted extensive research and devised the best framework which was possible with the current data in the field; it would be over ambitious to attempt a re-clarification of this model in the current thesis, though it is used with caution.

Whatever the conceptual framework there is significant evidence of certain groups more at-risk of social exclusion than others. The processes underlying the link between ethnic group affiliation and social exclusion emerge as many and complex; ranging from the tendency of western states to exclude (Banton 2008; Ratcliffe 2004) to subtler features of institutional behaviour (Iganski, Payne and Roberts 2001). The fact that ethnicity is related, though perhaps not a causal factor of, social exclusion is well documented in the literature (Ahmad and Bradby 2007; Chin *et al* 2009).

Those specific groups which appear to be most frequently examined and found at-risk of social exclusion are indigenous groups; particularly in South America (Eversole 2005). Many independent studies have demonstrated the links between indigenous affiliation and acute exclusion factors (Garreta-Bochaca 2006; Humpage 2005; Sanchez-Perez *et al* 2005), and the problem is accentuated in areas of disadvantage (Sanchez-Perez *et al* 2005). In the UK there has been significant research into the relative position of a wide range of ethnic groups, particularly the Irish in mainland Britain (Hickman and Walter 1997; Walter 1986).

That Cornwall is an area of some disadvantage is without dispute, there has been a long history of both unemployment and low wages (Deacon *et al* 1988; South West Observatory 2011a). In 2000 the region was awarded Objective One funding with a

GDP below 75% of the national average (Gripaios and McVittie 2003), and even in the most recent statistics the county has 33 LSOAs in the most deprived 20% (South West Observatory 2011b). Thus the indigenous population of such a disadvantaged area are at some risk of social exclusion, and a targeted examination is of sociological importance. A comprehensive review of the literature showed that there had been limited research which sought to either quantify or examine the Cornish as a group; though those using proxy variables had seen hints of disproportionate disadvantage (Griffiths 1989; Thornton 1996; Williams 1995).

Aims

The first aim of the thesis is to examine the Cornish, as a distinct group, and undertake a rigorous estimation of their size:

1. *What are the actual numbers of individuals who self-identify as Cornish in Cornwall?*

This will consist firstly of a re-examination of the largest data set to date, the 2001 England and Wales Census, and a collation of all other data in the field to derive a weighting structure for the Census variable. These weighted data will provide a more accurate estimate of the group than has previously been possible. Subsequently primary survey research will seek to extend the Census result and examine, in a more direct fashion, the levels of self-identified Cornish in the region.

The second research question is far broader and aims to explore the links with social exclusion:

2. *What is the relative (socio-economic) position of the group compared to others in Cornwall?*

This consisted of a three stage, mixed methodology, analysis. Firstly, a re-analysis of 2001 Census data to examine the links between ethnic group affiliation and social exclusion variables, and subsequently the application of the derived weights to provide a simulated (and adjusted) data set for repeat analysis. Secondly, the undertaking of a large scale postal survey specifically designed to report the links between Cornish affiliation and a measure of social exclusion based on the previously mentioned B-SEM matrix. Lastly, a phase of qualitative interviews seeking to give more depth to these data and to explore the underlying causal processes uncovered in the first two phases.

The two research questions, overall, aim to analyse, adjust and extend data collected in the 2001 England and Wales Census in order to give a more accurate estimate of the size and relative position of the Cornish as a distinct group.

Chapter Summary

Chapter one positions the Cornish, as a group, within the ethnicity literature. The history and current debates around the somewhat controversial term are considered and the problematic nature of measurement (particularly in social surveys) is introduced. A pragmatic and representative model of a distinct ethnic group is proposed based on the work of Smith (1988). This model is subsequently applied to the Cornish case as a framework for the large literature in the field. It is argued that the group fulfil all the criteria necessary for description as a distinct *ethnie*. The implications for this finding are discussed, particularly the timeliness of further investigation into the group's relative position.

Chapter two introduces measures of relative position in the form of social exclusion, beginning with a consideration of the historical development from poverty research into the more multi-dimensional conceptions of exclusion utilised today. Though conceptually difficult to operationalise, once again a pragmatic model is proposed

which is representative of the literature in the field – the B-SEM matrix of Levitas *et al* (2007). This matrix enables the identification (and use) of variables which examine each dimension of social exclusion as defined by the authors. Subsequently this chapter will examine groups often identified as being linked with social exclusion, particularly those broken down along ethnic lines. It will be demonstrated that it is often indigenous groups in areas of some deprivation who are most at-risk. The fact that the Cornish are just such a group leads to the natural proposition of research questions which seek to examine the size and lived experience of the population. Literature which addresses these issues is shown to be rare, and thus the questions posed are both timely and sociologically important.

Chapter three outlines the methodology and methods utilised in addressing these issues. The philosophical foundations of the social sciences are briefly examined, with a particular emphasis on the mixed method approach. Each distinct phase of the research is then examined, with the methodology as well as the implications and limitations of the approaches considered. This chapter will also introduce in detail the 2001 England and Wales Census and the write-in Cornish option. The need for a re-examination and extension of this data will be examined, and the weighting methods proposed.

The analysis of secondary data is complex, and the weighting of a single variable as required necessitated methodological innovation, with the development of weighting strategies more usually associated with the physical sciences. Lastly, the primary research phases (a survey stage, as well as the qualitative interview phase) are examined in detail, and the generalisability and validity of these phases are weighed against secondary data limitations. The chapter will argue that the analysis, adjustment and extension of the Census data, to gain a clearer picture of the Cornish, are best approached using the methods outlined.

Chapter four describes the results from the first stage, the secondary analysis of the 2001 Census data, starting with an outline of the data trawl and sources used in the production of the weights. These data were combined using the strategies described in chapter three and the subsequent results indicated a likely Cornish population of closer to a quarter than the 6.7% reported in the Census. The application of these weights to the original census data enabled a re-examination of the data for links with social exclusion. This chapter argues that the group are far larger than previously thought, and that they also appear (at least in the Census data) to experience some key exclusion variables in a different way to other groups in the same area. However the group exhibits characteristics which imply a bias in the 'write-in' variable.

The primary survey results are presented in chapter five, 3,000 postal surveys were administered across two regions in Cornwall and the resulting 824 responses were analysed utilising a range of quantitative techniques. Simple correlation analyses showed that ethnicity and the index of social exclusion were related, however the variance explained was small. By examining linked variables it became clear that there were far more explanatory factors such as income. Regression analysis demonstrated this more clearly, and highlighted the increasing levels of impact which income had at levels distant from the modal wage. To situate the data more robustly, and in keeping with a realist methodology towards the hierarchical nature of data, a multilevel analysis was also employed. These models demonstrated that the income and social exclusion relationship did not vary significantly across the two sub groups. Analysis of the missing data and subsequent imputations of synthesised data did not alter these relationships significantly.

Chapter six presents the results from seven qualitative interviews conducted with 'knowledgeable individuals' (Moustakas 1994) from around the county, with community facing roles. The respondents overwhelmingly confirmed the results from the previous two phases of research, and highlighted the relative discrepancy between

the *belief* of exclusion and the somewhat different reality. Additional data at this stage of analysis highlighted the problematic nature of funding streams in the county which aimed to tackle exclusion. This is a particularly acute problem as there are targeted ethnicity outcomes in some streams which, given the results of this study, are problematic. The final sections of chapter six review the literature surrounding perceived discrimination and rural specifics, to propose a tentative explanatory hypothesis – Taylor *et al's* (1990) personal versus group discrimination discrepancy (PGDD).

The results from all three phases of research are drawn together in chapter seven and the impacts of the results are considered in depth. The literature introduced at the end of the preceding chapter is considered in greater detail and in light of the findings as a whole. The emerging picture of the Cornish as a group is outlined, from the increased size to the relatively small links with exclusion to the perceived discrimination theories. The claims, whilst statistically and methodologically accurate, are necessarily limited by practical and philosophical caveats and these are also outlined. More generally the sociological importance and the impact of the research will be considered alongside the contribution to the substantive literature.

Lastly, chapter seven will summarise the position taken by the thesis overall and examine the complexity of the links between ethnic group affiliation and social exclusion in a wider sense. The contextualisation of the findings are considered and (due to the exploratory nature of the research presented) a case is made for on-going and more in-depth research, which examines not only the Cornish case, but also other small scale groups often under-enumerated in large scale surveys.

1. Ethnicity and Cornish Ethnicity

1.1 Introduction

This chapter examines the literature on the general concept of ethnicity and applies it to the Cornish case. The history of the term, as well as a consideration of its somewhat problematic nature in recent times, is considered and a pragmatic model from which to study the Cornish is proposed. It is beyond the scope of this single chapter to fully explore all the separate notions of ethnicity in great depth as this question represents one of the key academic debates in the social sciences, however, a framework for further development will be provided which best summarises these arguments. The Cornish will be examined in the light of this literature and the case for any concrete definition of an ethnic group discussed.

The chapter will begin with a discussion of the etymology of the term ethnicity, and an outline of the 'race versus ethnicity' debates. The inherent implications for identity, some top-level approaches, and Smith's (1988) pragmatic model will be presented. The second half of the chapter will then use the model as a framework from which to examine the Cornish, as well as the implications should the group be defined as distinct.

1.2 Ethnicity

The term 'ethnicity' can be traced as far back as the ancient Greeks, with the earliest uses by Homer, who referred to an 'ethnos hetarion' (literally band of friends (Tonkin, McDonald and Chapman 1989)), and refers literally to people – 'ethnos' (Sollors 1996). These early uses did not imply groups with similar characteristics in any way, but rather to undifferentiated bands of warriors (Tonkin, McDonald, & Chapman 1989).

However even at this early stage, there was a dualism between notions of inclusion and exclusion; 'ethnos' being used in conjunction with the term 'genos' to differentiate between non-Christian and non-Jewish (Tonkin, McDonald, & Chapman 1989).

The term developed through a number of etymological stages and came to mean a variety of different things; from castes of peoples to the so-called gentile people in the New Testament. All uses had in common the biological or cultural characteristics which a group of individuals may share (Hutchinson and Smith 1996). Central to the understanding of any conceptualisation of ethnicity, is the recurrent theme of inclusive and exclusive criteria; something demonstrated acutely in the debates around race and ethnicity.

1.2.1 Race vs. ethnicity

Mason (1995) argues that both terms are relatively modern concepts which originate in the global expansion of European societies, from rural to urban. This expansion was a function of the exploration of the globe and, as such, the first hints of race and ethnicity come in the form of the most acute visual differences. Value judgements were commonplace and it is no coincidence, Mason argues, that black skin colour was associated with negative traits whilst white skin was associated with purity and piety.

During the middle of the 18th Century and the beginning of the 19th, this 'race science' developed into the now infamous hierarchical social study it became (Mason 1995). Said's seminal work 'Orientalism' describes the way pseudo-scientific differences between cultures was used to legitimise an entire doctrine of discrimination (Said 1978). The legitimisation of prejudice and hatred which utilised science are embodied by the work of Carl Jung. According to this work the peculiarities of the American people should be attributed to living alongside alternative races, being alongside such 'inferior' and 'primitive' life such as the Negro affected the white American, and gave

them a type of 'Negro complex' (Jung 1930:195). This position was extrapolated further to assert that '...such racial infection is a very serious mental and moral problem wherever a primitive race outnumbers the white man' (Jung 1930:196).

This treatment of now sensitive topics demonstrates 'higher order discrimination' (Draeger 2008), that, rather than a failure to act in the face of discriminative behaviour, is a firmly held belief that one race is inferior to another, merely on the basis of physical attributes:

"Now the blindness in human beings...is the blindness with which we are all afflicted in regard to the feelings of creatures and people different to ourselves"
(James 1900:34)

Such simplistic racial categorising has largely been replaced in the academic literature by more developed theories of ethnic group membership and affiliation; however measurements based on physical difference are still utilised in some cases. A small scale qualitative study (N=22) in the US, examined public perceptions of genetics and, whilst the Human Genome Project found no direct links between genetic variation and racial groupings, there were indications of a correlation between genetic base and geographic area (Phillips *et al* (2007)). The 22 individuals interviewed did not link race and genetics directly, but rather linked ancestry and genetics as well as ancestry and race.

Though not common, research exploring links between genetic differences amongst groups often lends weight to more politically questionable arguments concerning racial difference. The scientific debate around genetics and race is certainly not closed and there are continuing attempts to link genetics and ancestry (Jimenez 2010); however its dissemination often leads to a confused public perception.

These arguments around biological difference are not entirely without merit; and Toomer (1929) neatly summarises this position by arguing a case for analysing the subdivision of species, a process which highlights the purely sociological aspects for

further analysis. Subdivision of species is often problematic even for zoology professionals and humans represent a more complex case, with distinct cultural markers such as dress colour or beard length to include (Toomer 1929). Such complexity serves to highlight the over-simplistic position of the 'naturalistic' and 'visual difference' centred approaches which, arguably, one should dispense with altogether and concentrate instead on other (more relevant) social differences (Miles 1993).

Subtler indicators (as distinct from visual identifiers), embody the fundamental difference between notions of race and those of ethnicity. Every social group has what Nash (1989) terms index features, which may take the form of biological kinship but also include any other group associated features (thus race becomes subsumed and included in conceptions of 'ethnicity' (Sollors 1996)). From this starting point most theories of ethnic groups, and individual affiliation to such groups, extends. However, before the specifics of these are considered the term should be examined in a historical context. It is the work of Max Weber and his understanding of its use, as well as the complex definition of the concept by Devereaux which is relevant to later discussions.

1.2.2 Ethnicity and its meaning for group definition

Weber amends the concept of race, as previously outlined, and instead argues that group membership only occurs when it is subjectively perceived as a common trait, as opposed to objective features (Weber 1922). Objectivity is normally claimed (certainly in political action) usually against another group and is therefore negative; ethnicity for Weber is based on positive action. This is not an argument against the existence of social circles but, rather, their basis on physical characteristics; instead they "may be linked to the most superficial features" (Weber 1922:54). Such a process creates a positive collective consciousness based on shared attributes, as opposed to negative

connotations of the 'other'. The shared consciousness eventually becomes removed from the initial conditions which created it, and becomes an object of social reality in itself. Key features of this process include a shared language (*Massenkulturgut*), which enables the mutual understanding of individuals (*verstehen*) (Weber 1922). Thus Weber defines ethnic groups:

"We shall call 'ethnic groups' those human groups that entertain a subjective belief in their common descent because of similarities of physical type or of customs or both, or because of memories of colonization and migration; this belief must be important for the propagation of group formation; conversely, it does not matter whether or not an objective blood relationship exists."
(Weber 1922:56)

Weber died before he could complete his rigorous study of ethnic group formation; however Banton (2008) extended the same position through an argument which explores the core commonality between studies of ethnicity. In all groups collective action is a defining notion, if an individual values their membership then he or she will show preference for their co-ethnics. Thus, for Banton (2008), the elements of sociological interest are the identifiers which enable shared common identity between individuals (a name, dress, or opposition to other groups). Other writers (such as Handelman 1977) have argued that these identifiers form a typological hierarchy, with outward recognition and territory at the peak. However central to Weber and Banton, is the subjective *belief* in group membership defining inclusion, rather than an objective categorisation imposed by race science; a position echoed and developed by Devereux (1975).

Devereux first posits a mathematical certainty, that each human is unique and that it is *identity* which is the basis of such uniqueness. The fact that an actor is uniquely human (and therefore an individual) is central to the concept of ethnicity, as it is this which allows the maintenance of a stable identity under changing conditions. This individual can assign themselves to a group; however a degree of imprecision is necessary to align their own behaviour with that of the ideal typical group member. Devereux (1975)

posits that every English Queen is fundamentally different, *yet all* are connected through a common sense of 'Queen-ness'. Thus there is a natural dichotomy between *ethnic personality* and *ethnic identity*, due to this sense of imprecision. An ethnic personality is built up using visual and verbal data about a group which is directly observed, then collated into largely positive statements. For example, the Spartan ethnic personality revolved around traits such as strength, honesty and frugality.

In contrast, ethnic personality is inductive and effectively a "sorting device" (Devereux 1975:390). To return to ancient Greece, the statement 'all Cretans are liars' displays both characteristics, with 'liar' an ethnic personality (observed behaviour) and 'Cretan' an ethnic identity. Simply '...we can consider here only the postulation of the existence of Cretans' independently of any quality that we may attribute to Cretans' (1975:390).

Two key features of the theory of ethnicity emerge, firstly that the *ethnic personality* is inductive (and so based on certain behaviour) and can be used to model aspects of any member of the group. Any predictable activity can be seen as a natural manifestation of group membership. Secondly, and conversely ethnic identity is *not* inductive and therefore cannot be used to model basic aspects of a member of a particular group. There are therefore only two types of observable action with regard to ethnic membership, an inevitable manifestation of personality or an intentional expression of ethnic identity. It is this inherent dichotomy that leads to a complex and multi-dimensional interplay between the personal and the social aspects of ethnicity. Indeed this should be seen as the root of the problematic measurement issues which will be considered later in this chapter.

1.3 Theories of ethnicity and ethnic group affiliation

Whilst there is clearly a complex interplay between ethnic personality and ethnic identity, what is more frequently of sociological interest is an individual's willingness

to affiliate to a particular group – whatever the psychological motivation. The interdisciplinary literature on the construction of identity is extensive and beyond the scope of the current chapter, however for a reasonable overview Giddens (1990) and Swingewood (1984) are invaluable. Broadly, ‘identity’ originates from a Latin root ‘idem’ which translates as ‘the same’ (Gleason 1983); however during the 1950s the term became commonplace in the social sciences as a way of linking the individual to the collective (Tonkin, McDonald and Chapman 1989). Whilst a simplistic form of the term it provides a baseline from which to examine the approaches to ethnically affiliated action, from the more boundary orientated transactionalist approach of Barth (1969) through to the pragmatic notions of Smith (1988).

1.3.1 Transactionalist approach

The transactionalist approach to ethnicity is embodied by the work of Barth (1969) and argues that it is the group boundaries which are of sociological interest. These are not boundaries in the sense of being impermeable, however the behaviour which delineates and occasionally crosses the boundaries does form the basis of analysis.

The definition of an ethnic group in this tradition does not concentrate on the isolated culture which develops within the boundaries; such definitions would be intrinsically definitive and localised. To avoid this over-simplification, Barth (1969) argues that the cultural markers, which are often seen as the primacy for grouping, are actually the result of it. Though the importance of cultural material is not negated, the study of any group must begin with the intrinsic differences which occur at the boundaries. To argue that culture itself defines a group is problematic for two key reasons:

- i. Classification of actors would therefore be dependent on those actors displaying objectively the particular traits of culture, meaning that ‘ethnic group’ and ‘culture’ become conflated.

- ii. The overt cultural forms exhibited show traits of ecology; that is they reflect the external circumstances in which the actors must accommodate themselves. Therefore it should be expected that differing groups (often far apart) will exhibit differing characteristics. It must also be expected that ethnic groups spread over a large distance will exhibit internal inconsistencies.

(Source: Hutchinson and Smith 1996)

Barth (1969) addresses these dual inconsistencies by thinking of organisational types, where the critical characteristics are self-ascription and ascription by others. The categorisation of actors has a dual purpose, for themselves and for the purposes of interaction; the nature of the ethnic unit becomes clearer and social factors become diagnostic for membership (Hutchinson and Smith 1996). When defined as ascriptive the nature of an ethnic unit is somewhat clearer; whilst cultural symbols may change (as will the individual actors) it is the dichotomy between members and non-members which delineates clear boundaries. Factors which become diagnostic for membership are not the objective factors which are open to external influence, but internalised behaviour. If an individual is willing to identify as a member of a group then other group members will treat them as such.

Therefore, for Barth (1969) and the transactionalist approach as a whole, it is not the cultural material composing the group psychology which is the foci of analysis but the boundary of the ethnic group in question. The interdependent relationships which occur between groups only serve to strengthen such boundaries and are therefore specific points of sociological interest. Particular focus should examine the so-called 'border guards' of group identification, usually language or dress, as well as the ascriptive processes which go into membership. This process of ascription, as defined at this stage, is not *necessarily* linked to ancestry. Jimenez (2010:1757) argues that

though the two may well be closely linked, ancestry is not a sufficient explanatory factor; rather an individual may show an “affiliative ethnic identity”, without ancestry.

1.3.2 Instrumentalist approach

An instrumentalist approach to ethnic group affiliation holds that the ascriptive process is an objective and observable phenomenon; and as such should be the foci of study (Hutchinson and Smith 1996). This materialistic approach necessarily focuses on the ability of actors to (easily) shift between groups, often for their own benefit.

In this instance a definition of ethnicity cannot be concrete but should instead be formulated as ‘[not]...which definition is the most valid, but which is the most helpful in the analysis of certain theoretical problems’ (Cohen 1974:370). However an actor internalises the cultural material it is their outward behaviour which constrains action and cultural symbols are therefore objective (thus not accountable to the collective identity (Cohen 1974)). Once again groups cannot be seen to evolve and exist in isolation; however the instrumentalist would argue that this is due to tribal differences persisting into the modern world. All groups are at their root politically orientated entities (Cohen 1974), and use customs and traditions as mechanisms for power and political competition.

The nuances which separate the transactionalist and instrumentalist approaches are subtle; however they do serve to demonstrate the scale of action involved in ethnic groupings, running from subjective cultural ascription to objective social fact. A middle ground exists between these polarised viewpoints in the work of Robert Merton (1972).

1.3.3. Robert Merton's middle range approach

For Merton (1972), the structural approach to ethnicity represents an example of the sociology of knowledge having distinct real world application. Any knowledge is taken on trust and, as any single individual is unable to access all available truths, the truths of others become central to the development of academic knowledge. However the truths of others are subject to natural social cleavages, or "group-based truth" (Merton 1972: 26), and so emerge the insider and outsider claims to knowledge.

Insider and outsider doctrines are central to the middle range approach; the limited access to truth, and the privileged knowledge of a few give insider access to, and outsider exclusion to, certain elements of group information. The somewhat inconsistent logical extension of this insider view are clear – only women could advance feminism, sociologist's sociology or black history through black scholars – one would have to '...be one to understand one' (Merton 1972:30). Additionally the outsider is necessarily excluded from knowledge of the social (and cultural) truth of a group, though not necessarily as exclusionary as it may appear. Merton also holds that individuals are members of multiple, frequently cross-cutting, groups (involving, according to Simmel's (1908) seminal work, inherent competition between members).

The opposing view described by Merton (1972) is the outsider doctrine, only knowledge obtained *without* membership of the group of study is unprejudiced – one must *not* be one to understand one. Whilst it is not necessary to revert to a strong outsider position, a large proportion of modern history would have to be re-written if the insider doctrine holds true, as it was often not compiled by group members. Groups should, in theory, be able to learn cultural truths about themselves using information from a stranger.

What Merton is arguing is not that an analysis should be conducted from either the insider or outsider doctrinal perspectives, but rather an analysis should consider the

interactive roles that opposing doctrines have. Boundaries of these two spheres of knowledge, for Merton (1972), are permeable and ever changing. The perspectives are self-serving, however the interchange leads to the development of social understanding, and to (mis) quote Marx:

“Insiders and Outsiders in the domain of knowledge, unite. You have nothing to lose but your claims. You have a world of understanding to win.” (Merton 1972:44)

The modern turn in ethnicity research (examined in greater depth on page 22) has resulted in an extension of Merton’s ideas and the somewhat middle range approach to ethnicity, with most authors examining *ethnically aligned action* rather than strict group affiliation (Fenton 2010). The conceptually problematic dualism of subjective and objective ascription is negated somewhat by the membership of multiple groups and the complex spheres of action which individuals exhibit (Fenton 2010).

1.3.4 Pragmatic model

Competing conceptual models of what constitutes an ethnic group, and therefore affiliative action, are largely based around objective and subjective action. The middle ground proposed by Merton (1972), includes elements of both positions and therefore the focus becomes an individual’s willingness to affiliate with a particular group. The acceptance by both insiders and outsiders are sufficient but not necessary conditions for group identification, thus it is *self-ascription* which is important in the identification of groups and subsequent analysis: “...self-reported ethnicity may in fact reflect both structural and identity components of ethnicity” (Clucas 2009:557).

In ‘The Ethnic Origins of Nations’, Smith (1988), adheres to the notion that an *ethnie* is not solely concerned with objective social facts but the

'...meanings conferred by a number of men and women over some generations on certain cultural, spatial and temporal properties of their interaction and shared experience.' (Smith 1988:22)

Smith's position fits the emergent (and somewhat esoteric) themes from the literature, whilst remaining concrete enough for a pragmatic analysis of the Cornish as a group.

Smith (1988) defines six key features of an ethnies:

1. A collective name - central for definition, as a name marks a group out in the historical record. Although recognising that some groups have gone un-named Smith argues that there is a mystical quality to a collective name which is more than just a label.
2. A common myth of descent - underlying the very essence of what it means to be an ethnic group. Not necessarily *genetic* descent (though often linked) but a common understanding of shared ancestry and origins. This myth bridges the gap between the notions of living together and sharing values.
3. A shared history - not necessarily rooted in concrete fact but, rather, shared memories of a common past which can include heroes, events and commentators.
4. One or more elements of common culture - for Smith this normally includes religion, customs and a shared language.
5. Link with a homeland - not necessarily a physical occupation of a territory but merely a symbolic attachment.
6. Sense of solidarity - this is probably Smith's vaguest concept however the implication is that there is a sense of group solidarity on the part of at least some sections of the population.

(Source: Smith 1988)

This forms the basis of an *ethnie* as distinct, and whilst fulfilling these criteria is not an indication of ethnic group status it is indicative of ethnically aligned action on the part of a large number of individuals. The link with a nation is not without significance, and certainly links with territory will become apparent in the Cornish context (see page 34). Whilst the nation as an entity has been traditionally a cultural rather than territorial unit, the operation of processes requiring support (and loyalty) of a collective imply that it is merely a tool for action (Brubaker 2004). As such the nation operates at the same level as ethnically orientated action, following the modern turn away from concrete measures in the tradition of Fenton (2010) and Banton (2011).

Smith's model will, however, provide a framework for the analysis of the Cornish, though even if the group are tangible the measurement of such an *ethnie* is problematic to say the least. Before examining the Cornish case explicitly it is worth considering the measurement issues which are prevalent in recent years. This model has been applied previously (Payton 1997), however not in its entirety; though it was argued in that case that the Cornish must be treated as a distinct group.

1.3.5 A problematic concept

The lengthy conceptual discussions around the meaning of ethnic identity are often largely set aside in the process of measurement, especially in social surveys, and use of a pragmatic model such as Smith's common. At least that had historically been the case, however there is now a move in the social sciences to question the validity of *any* ethnicity measure – ranging from the subtle (Burton, Nandi and Platt 2010), to those calling largely for its abolishment (Carter and Fenton 2009).

This movement broadened, with a questioning of the stability of ethnic groups (Simpson and Akinwale 2007), as, historically, data was collected using pre-assigned categories. Through an examination of multiple Census rounds Simpson and Akinwale

(2007) showed that there was evidence of changing group concepts over an individual's lifetime, as well as tensions between the measures and the changing demographic. Indeed the historical race debates are echoed in the political arguments against the measurement of ethnicity using pre-determined categories (which are often defined using visual characteristics). Arguably ethnicity is such a complex and multi-dimensional concept that attempting to measure using single variables is over ambitious (Burton, Nandi and Platt 2010), rather, surveys should include tests of the strength of affiliation (as described by Ong, Fuller-Rowell and Phinney (2010)). Though even these, the authors state, "...are a long way from a comprehensive theory of ethnic identity" (2010:48).

In order to expand on such a problematic concept, Banton (2011) argues that the terms (ethnicity, race and nationalism) are neither fit for abolition nor completely immeasurable but rather are three features of a broader set of characteristics. Sixteen are proposed in total, ranging from the familiar (humans have distinctive characteristics), to the levels of ascription (attribution of significance by outsiders). This typology for Banton is multi-dimensional and often shared, agreeing broadly with the arguments forwarded by Fenton (2010) which put at the centre ethnically orientated action.

The logical extreme of this argument is, in general, that ethnicity is essentially a concept so abstract and moveable that it will remain beyond the scope of measurement. Carter and Fenton (2009) explored this position and argued that ethnicity has become as pervasive in the social sciences as class was in previous decades. The authors called for resurgence in the analytics of human agency, as the concept was becoming detached from the world it sought to describe. Whilst this position is extreme there is certainly logic in the treatment of survey data with caution. Research designed to avoid such problems as those summarised by Smith, Woo and Austin: "I didn't feel like any of those things were me [referring to ethnic categories]" (2010:628).

Indeed the so-called 'post-race' debates have been raging within the discipline for over a decade, Gilroy's (1998) seminal paper 'Race ends here' arguing that older notions of race are no longer useful and that injustice and inequality are better countered without the categorical clumping. Gilroy's argument focuses on the rise of biological developments such as medical imaging which serve to blur the boundary between inner and outer being:

"Let me be blunt: scientific and biological, historical and cultural, rational and irrational, skin bone and even blood are no longer primary referents of racial discourse" (Gilroy 1998:845)

Whilst there are certainly significant advantages to such critiques of race they leave relatively open the pragmatic notions of *how* to research groups (Nayak 2006). Though the social constructivist arguments against concrete racial categories are convincing, the difficulties, both methodological and substantive, which emerge are significant (see further discussion in Chapter 7.6.3). Indeed empirical studies have sought to redress the balance by demonstrating that society is certainly not 'post-race' yet, and that (in the USA at least) there are significant differences between racial categories independent of other variables (Craemer 2011). Perhaps indicative of the whole modern turn in ethnicity research is the somewhat utilitarian approach adopted by Nayak (2006), who argues that 'post-race' should be used as a sociological tool in the phenomenological tradition, to aid the separation of biological difference from other more complex debates.

Despite the significant measurement issues associated with ethnicity, which neatly summarise the conceptual issues which have plagued the term, there remains clear sociological interest in group affiliation whatever form it may take. The argument forwarded throughout this thesis is that the measurement of ethnicity, whilst clearly methodologically problematic, has two significantly positive features which should be highlighted. Firstly, the use of such data in order to make a group visible (see Graham

and Waterman 2005) and, secondly, to explore the group relative to others (see Howard 2006) are uses certainly of sociological interest. As Fenton (2010) argues, it is unlikely that a coherent model or consistent theory of ethnicity exists; but rather a study should examine the expression of ethnic identities.

Conceptual difficulties aside, some broad model of identification is needed and it is with this pragmatic argument in mind that the nature of the Cornish question will be considered: putting aside complex measurement issues, is there such a thing as Cornish ethnicity, does 'Cornish' exist as a distinct ethnic identity?

1.4 The Cornish question

Cornwall has historically experienced a so-called 'persistent sense of difference' (Payton 1992) from the rest of England; and as such it should not be examined in isolation. The often troubled relationship with the rest of the country remains poignant, for Payton:

'Cornwall is a natural and self-contained geographic unit, bounded on three sides by the sea and on the fourth almost entirely cut off by the River Tamar, and this has facilitated - indeed, almost predisposed Cornwall towards - the creation within these bounds of distinct territorial and cultural units.'
(1992:44)

Cornwall as a county (or Duchy) has long experienced peripheralism which was tolerated by the political centre, largely cemented by the rise of key industries (Payton 1992). Though historically there have been shifts in the types of difference felt by those in the region, from the rise of industry to the later revival, there has been a consistent assertion of peripheralism by a group of individuals. The area is certainly a poor one by national standards (Williams 2003b), and even recent multiple growth factors such as tourism and the creative industries have done little to raise the county above 75% of the GDP of Britain (South West Observatory 2008a). It is difficult to assess the impact of the 2008 (and on-going) economic downturn in Cornwall relative to other areas as

the data is still emerging, however the 2011 barometer (South West Observatory 2011a) certainly shows no indication of significant improvement in the county compared to the region as a whole (for a more detailed discussion of the economic differences of the region see chapter 2, page 78).

A more complete understanding of the nature of the peripheralism and the ethnic status of the indigenous people of Cornwall is crucial to arguing the case for such uniqueness in a UK context (Ivey and Payton 1994). More importantly, the group is potentially an at-risk one similar to other indigenous peoples across the globe (see chapter 2, page 70). Philosophically the Cornish can be said to have a 'cultural identity theory', fitting the distinct phases outlined in Plato's *Republic* (Ivey and Payton 1994).

In Platonic terms, from a naïve non-awareness of ethnic difference the people of Cornwall came to accept distinctness apart from Englishness, despite the popular conception that 'Cornish' is often presented in a negative way (Bosworth and Willett 2010; Ivey and Payton 1994). Cornish individuals display belief, and internalisation of thought, about being Cornish as well as arguing for heritage and links to other Celtic nations. The final stage for Plato, the Dialectic, is arguably represented by the malleability of the Cornish case; the consistent disconnectedness and shifting nature of a distinct ethnicity displays the need for a Cornish identity.

There has been in the last decade a surge of research which examines the Cornish as a distinct group in the region (see Williams 2002), with policy implications including the inclusion of a write-in category in the 2001 Census (and the unsuccessful attempt to include a category in the 2011 Census (Office for National Statistics 2009b)). The application of Smith's (1988) model of an ethnies to the group gives structure to the large literature which has emerged – and lends weight to the further study of the population in Cornwall. Whilst a distinct name emerged many centuries ago, the legitimacy and distinctiveness of that term is still hotly debated; the UK government

does not officially recognise the Cornish as an ethnic group in law (Deacon and German 1999). Though the legal definition relies heavily on old racial categorisations and previous attempts to recognise the Cornish have been unsuccessful, lobby groups such as the Cornish National Minority Group (Deacon and German 1999; Saltern 2011) continue to debate the policy.

1.4.1 An application of Smith's model

The six features of Smith's (1998) model of a distinct ethnic group were described previously (page 20-21), and will be used here to structure a description and analysis of the separateness of a Cornish identity. It is not within the scope of this chapter to provide a meta-analysis of the research, but rather to explore the key themes within the literature. The six criteria set out by Smith (1988) are not definitive, nor are they exhaustive; they merely serve to give structure to an examination of the group.

1.4.1.1 A collective name

Simply and logically, for Smith (1988), there are no unnamed ethnic groups and this is the definitive criteria which marks groups in the historical record. The earliest account of the people of Cornwall, by Carew (1602), describes the possible origins for the south-west peninsula of Britain's label. The mythological hero Corineus defeated the beast Gogmagog, at Plymouth and subsequently lent his name to the region. More probably, 'Cornwall' is a derivation of the French term for horn (Cornu Walliae (Carew 1602)) referring to the shape of the county. The alternative name of the region, Kernow, was also likely named in this fashion; another corruption of the same root 'Kerne'. The inherent dualism in the derivations, from mysticism and Celtic derivation, are indicative of the later debates around genealogy and descent.

1.4.1.2 A common myth of descent

Whilst Smith (1988) does not make the case for an actual lineage of descent what is crucial to the composition of an ethnies is the *myth* of such a descent. The people of Cornwall have long allied themselves with a Celtic ancestry and such descent is recognised by both insiders and outsiders; though the actual genetic arguments for these claims are ambiguous.

A sample of 250 Cornish people in 1984 examined the physical and genetic composition of the people and subsequently compared the results to similar studies in the UK and EU (Harvey *et al* 1986). Characteristics such as body size, head size, hair and eye colour were found to be correlated strongly to other areas of Celtic descent, rather than the Anglo-Saxon English. The blood evidence similarly displayed characteristics of a middle ground between the Celts and other groups (Harvey *et al* 1986). Studies such as this are far from definitive and the reluctance to define ideal typical types of the groups in question led many to question the results (Cole 1997). Indeed it would be philosophically and methodologically flawed to interpret the results as an indicator of actual descent. The fact that the study was commissioned and undertaken in the first place is more illuminating than the evidence of difference within the group.

Though the genealogy is questionable there are undeniably cultural similarities between the people of Cornwall and other Celtic peoples across Europe, notably language and nationalist political movements (McDonald *et al* 1986). The links between Celtic Galicia, for example, and Cornwall have been well researched, with the two regions sharing trade for many centuries (Alberro 2001). The so-called Atlantic Area (a distinct European commercial zone) formed the proto-Celtic precursors for cultural development (Alberro 2001). Many traditions and folklore stories across the two regions share the same root; ravens as harbingers of death; shoe remedies for the

barking of a dog and oscillating stone myths are still common in Cornish culture. The iconography of the region as well as the distribution of memorials shows distinct similarities to the same features in Ireland and Brittany, though once again with a particular distinctness (Cockerham 2001).

This Celtic image is manipulated into the modern Cornish tourist trade; with Cornwall still actively portraying a Celtic ancestry as an image with which to draw tourists to the region (Tresidder 2010). This rich text and imagery aims to engage the visitor into a Celtic 'story' of the region and its links with similar areas across Europe. The modern form is still largely incoherent however, and cannot be argued definitively, with the older and newer version being largely incompatible (Hale 2001). The rise of Celtic imagery and attachment is a central feature of the Cornish Revival, discussed on page 33.

1.4.1.3 A shared history

The factual basis of the 'Arthurian' legends in Cornwall is largely irrelevant; it is the impact and bearing on the image portrayed by the region and its people which is significant (Hale 2000). These legends represent one of the earliest forms of shared history which survive in the region, and centre on the Celtic Arthur attempting to merge into a proto-English culture something echoed as '...Cornwall was at once different, separate and Celtic, yet simultaneously administered as an English county' (Hale 2001:21). The Arthurian legends today are often portrayed as symbolic of the persistent sense of resistance to English culture in Cornwall, and can found in the frequently seen form of blackbirds (thought to hold the soul of Arthur).

The seminal work of Hamilton-Jenkin (1934) describes in some detail the history of the Cornish people as far back as the early Celts; and whilst the historical accuracy of such a document may be questionable the cultural value is significant. According to this

history, many more Celtic tools and customs are to be found in the region than anywhere else in the UK. However it is the frequent cultural clash with the neighbouring English where shared historical markers are most prevalent.

Writers during the 16th Century were already highlighting the differences between the two cultures (Kent 1996), and integration of the two is famously documented in Shakespeare's *Henry V*. The battle of Agincourt scene features dialogue between the Cornish 'Pistol' and the King Henry, "Le Roy! A Cornish name: art thou of Cornish crew?" (cited in Kent 1996:11). The position of such an exchange mirrors the similar Welsh and Scottish contextual difference which was commonplace at the time. The citing of this exchange in violence was also relevant, as the Cornish rebellions are at the very heart of the shared sense of history of the people.

A complete retelling of the two major uprisings which saw the Cornish pitched against the English is beyond the scope of this chapter; however the stories have great historical and cultural significance in the region and so an overview is necessary.

'Cornwall lay...dormant throughout most of the Middle Ages, a small conquered country on the remotest outskirts of Europe...its own inner life locked away in the secret of its now forgotten native language.' (Rowse 1941:101)

Such was the setting as Cornwall emerged out of the late 1400s, and the first of the Cornish uprisings was certainly indicative of this view. The nobility in Britain at the time formed a close ring around the royal court and new taxation laws to fund the war in Scotland resulted in many years of bitterness (Rowse 1941). The impact in Cornwall was strong and leaders such as Thomas Flamank rallied the population, who marched from Cornwall to Kent. Their defeat at Blackheath only served to strengthen resolve against the political centre (Rowse 1941).

The cultural change which started in Cornwall after the 1497 rebellion led to a number of smaller uprisings in following years culminating in the so-called 'prayer book

rebellion' (Stoyle 2002). The Reformation in Britain saw the introduction of the Common Book of Prayer which, amongst other changes, forbade the services to deviate from the new format. A now famous quote in a prayer book in Cornwall at the time stated "...we the Cornyshe men...utterly refuse thys newe Englysh" (Stoyle 2002: xviii). This later rebellion argued for a return to the Latin services which had existed previously; though, as before, it was essentially unsuccessful.

These rebellions form the basis of a shared sense of history and difference amongst the people of Cornwall; a theme which is recurrent in Cornish tellings of the civil war (Stoyle 1996) – where the far south-west of the county became more distinct still. Parliamentary supporters found distinct resistance in 1642 and the region remained strictly Royalist until the defeat of the king in 1646. All of the violent uprisings and subsequent battles in the region form the basis of the cultural historical traditions which are found today; the singing of the 'Trelawny' song particularly indicates the intensity of feeling towards an indifferent England (Deacon 2007). Coupled with these notions are the individuals which the people of Cornwall hold as bastions of difference; people such as Humphrey Davy and Richard Trevithick, who are culturally entwined in the violent difference to Englishness which remains to this day (Hamilton-Jenkin 1934).

1.4.1.4 One or more elements of common culture

Using the framework given by Smith (1988) a common culture may include (but is not limited to) elements of religion; customs and language serving to bind the group together. The overall Cornish culture is well documented as a phenomenon in its own right, and the first elements emerged with the rise in tin and copper mining during the 1700s (Deacon and Payton 1993).

Prestige in the mining world combined with an early form of brand marketing gave the Cornish people a confidence in their industrial identity which developed into religious

separatism; a new form of Methodism. Religion and industry went on to form the substantial basis for the shared culture of the people of Cornwall. The 1800s saw the inclusion of other, tangential, elements of cultural distinctiveness such as sport (rugby) and targeted migration (tourism); the 1900s, and the associated work pressures led to class divisions becoming pronounced in the region and with the 1950s came a resurgence in Cornish pride, the 'Revival' and Celtic history (Deacon and Payton 1993).

Distinct features of this chronology stand out as markers of Cornish culture in modern times; the Cornish language is regarded as one of the oldest forms of Celtic and certainly has common ties with many other Celtic languages (Gilbert 1817). There were many stories of the Cornish and Welsh conversing fluently in their respective tongues, and whilst the Cornish language is now dead (the last native speaker dying in 1768) the significance in the revival movement is dramatic (Payton and Deacon 1993). The symbology now associated with the Cornish language (bumper stickers and other merchandise) are important parts of the modern culture (Penglase 1994), with classes frequently teaching rudimentary Cornish using the seminal works of Jenner (1904).

Sport in the region has a particularly strong significance; with hurling being the most commonly associated Celtic game, a particularly brutal game involving a wooden ball encased in silver (Hamilton-Jenkin 1934). Culturally greater significance is placed on Rugby and the game has a 400 year history in the area, arguably now an 'enduring symbol of Cornishness' and the County's 'national game' (Seward 1997:174).

Whilst religion is on the decline in many western countries, the symbology and cultural attachment to Methodism in Cornwall is stark (Milden 2004). This branch of Christianity came to the fore in Cornwall during the 19th Century and, in 1851, accounted for over half the religious worship in the region. The branch of Methodism employed in Cornwall had close ties to industry and also had subtle differences from the central theology, which arose out of the harshness of life for many industrial

workers. It would be incorrect to argue that the impact Methodism had on the southwest was limited to Cornwall, however the links with industry and the working life meant that the impact was particularly acute (Payton 1992).

An industrial culture is one of the cornerstones of Cornish identity; the tin and copper from the region has always had a large impact on the people and their way of life (Hamilton-Jenkin 1934). Though the miners frequently lived harsh lives with little or no reward they earned worldwide status as leaders in their field. Fishing also has a strong heritage in Cornwall; to the present day the decline in both led to the chanting of the slogan:

‘Cornish lads are fisherman and Cornish lads are miners too. But when the fish and the tin are gone, what are the Cornish boys to do?’ (Graffiti in Camborne, Cornwall)

All of these elements, whilst historically distinct, became part of what is now called the Cornish Revival; which can be traced back to the mid-1800s when local writers and artists publicised romanticised images of a Celtic ancestry and culture. The movement gained momentum and began to encompass a distinct way of life associated with Cornwall (Payton 1996). This resurgence of Celtic identity was accompanied by increased frequency of the Cornish tartan alongside St. Piran’s flag.

In recent years there has also been a rise in the local and largely Cornish food trade, and whilst this is part of a national trend it has been argued that this process serves to strengthen the regional identity of the area (Everett and Aitchison 2008). For Payton (1996), the importance of the Revival was not the actual things that it produced, but rather the impact that it had on modern identity; in a declining industrial era an identity was created which allowed an ever present feeling of difference to persist into the 20th Century. However, it is certainly worth noting that the revival in general produced a ‘cultural elite’ who maintain control of a branded identity (Burton 1997; Burton 2000); therefore creating Merton’s (1972) ‘outsiders’.

The numerous waves of cultural elements shared by those claiming a Cornish heritage are strong identifiers and have developed through history into the modern symbology seen in the area today (Deacon 1993). Similarities are drawn between Cornwall and the remote mining villages in rural Wales; both areas strongly linked to industry, the decline in industry, as well as tourism (Deacon 1993).

1.4.1.5 Link with a homeland

Whilst Smith (1988) referred only to a *symbolic* homeland the people of Cornwall have quite distinct ties to a very real landmass, and this link to place potentially provides a catalyst for identity formation and maintenance (Sumartojo 2009). Though Cornish identity is certainly malleable as well as being multi-dimensional the core value has been argued to be that of territory (Payton 1993b; Thomas 1994). Through every major stage of Cornish history the land that makes up the county has been central. It formed one of the oldest administrative districts of Britain, traceable as far back as the Romans (Hamilton-Jenkin 1934) and is largely defined by the northern river, the Tamar. Such distinct boundaries have not diminished, in the UK electoral boundary reforms a constituency was suggested including elements of Cornwall and Devon – the plan for ‘Devonwall’ was strongly opposed by both sides (BBC News [Online] 2010), and is indicative of the separateness ascribed by both insiders and outsiders.

The devolved nature of the area of Cornwall has played a large part in the identity links to the landmass as a homeland and whilst full devolution remains elusive the unitary authority in the area certainly represents the first steps for many (see later in the chapter, page 38 and, Cornish Constitutional Convention (2002)). However it is worth noting that the move to a single administrative authority was not seen by all as a positive step towards a devolved Cornwall, and there were certainly strong detractors. The calls for a Cornish Assembly have been historically strong (Cornish Constitutional

Convention 2009; Saltern 2011) and have had a significant impact; with the local media in particular often covering stories around these issues. Often a political, rather than practical call for a proto-Cornish assembly the support for these notions in the County appear to be both strong and increasing.

The link between a devolved political region and identity are taken to the extreme by the Stannary movement. According to ancient laws the Duchy of Cornwall had its own administrative government through the Stannary Parliament and some have argued that this notionally still has power in the county (Payton 1993b). Though not a serious threat to central government the movement did lead to a brief resurgence when the Stannary met in 1974; though it was disbanded shortly afterwards. Popular writers such as John Angarrack (1999) have been prolific in the campaigning for the inclusion in surveys of Cornish categories; as well as support for the Stannary movement as a whole.

Cornwall's place in the UK is centred on the territory which it occupies, though regionalism in Britain has led to the county becoming merely the poorer element of the South West region as a whole (South West Observatory 2008b) Of course it is worth noting that the present coalition government has engaged in a process of dismantling such regional institutions. The utilisation of regional statistics and policy research leads to the area often being largely invisible (Williams 1992). An innovative application of feminist theory to the territory of Cornwall argues that Cornwall is to England what women are to men (Hayden 2001). This occupation of a somewhat feminine political space leads to Cornwall becoming marginalised by a more masculine England – the 'slippers, supper and sex' of weekend leisure (Hayden 2001:209). Cornwall is therefore seen in this perspective as subjugated by the rest of the UK and not as culturally distinct as it may otherwise have been.

The tangible link to a homeland is unarguably strong in Cornwall, though there is an additional level of association by ex-inhabitants which make up the 'Cornish Diaspora'. The migration of a large number of workers from Cornwall has been repeated across a number of decades; both push and pull factors having a large influence (Burke 1984). These groups consisted largely of single male miners and whilst there have been significant attempts to collate information relating to their numbers (James-Korany 1993), the actual levels remain unknown. These mass migrations have had a large impact, the Australian encyclopaedia recognised in 1988 that the Cornish people were as much a feature of the ethnic landscape as Greeks or Chinese (Payton 1993a). There is a residual identity which is kept by those who relocate, often strengthened by other, older migrants in the same areas (Payton 2005). Even individuals who were at no point residents of Cornwall identify strongly with the cultural identifiers and the landmass of the region through a process of identity formation linked with the American mining diaspora (colloquially the 'Cousin Jacks' Payton (2005)). This amalgamation of many groups leads to the seemingly massive 15,000 Australians who identify as of Cornish descent; alongside a similar number of Americans (Crowther and Carter 2001).

Migration more generally is important to the development of a Cornish link with a homeland in another sense, and high levels of migration and counter-urbanization (Perry, Dean and Brown 1986; Perry 1993) have had profound impacts on both the people and the economy (Burley 2007; Jaksina 2010). The rise in tourism detailed in the next chapter (page 82) was inextricably linked to in-migration; as individuals informed themselves of the region through holiday experiences rather than economic information (Mitchell 1993). These counter-urbanization processes, much recorded all over the UK (Perry 1993), were prolific in attracting people both away from urban and towards rural areas. In Cornwall there were arguably more 'pull' than 'push' factors (Burley 2007; Jaksina 2010; Perry 1993). However jobs were not created at the appropriate rate and, whilst the Cornish became more attached to a territory (Payton

1993b), the increased competition led to the low wage prevalence still seen in the region today (South West Observatory 2011a).

1.4.1.6 Sense of solidarity

The vaguest of Smith's (1988) criteria, a sense of solidarity felt by an ethnies, often includes political action, familial ties and *symbology*. The people of Cornwall have had an, albeit weak, nationalist movement for many decades. Arguably the movement never really gained momentum politically and whilst this may be true it is only valid if the region is posited as on a level footing with other Celtic nations (Deacon 2003). Conversely, Cornwall could be argued to have a larger nationalist movement than would be expected for a mere sub-region of the UK. This Cornish paradox is based on the strong Celtic ties felt by some of the populace, similar to other fringe areas of the UK, and out of the revivalist movement of the early 1900s the nationalist Mebyon Kernow (MK) political party emerged. The express interests of the MK party in 1951 were:

1. To study local conditions and attempt to remedy any that may be prejudicial to the best interests of Cornwall by the creation of public opinion or other appropriate means.
2. To foster the Cornish language and literature.
3. To encourage the study of Cornish history from a Cornish point of view.
4. By self-knowledge, to further the acceptance of the idea of the Celtic character of Cornwall, one of the six Celtic nations.
5. To publish pamphlets, broadsheets, articles and letters in the Press whenever possible, putting forward the foregoing aims.
6. To arrange concerts and entertainments with a Celtic flavour through which these aims can be further advanced.
7. To co-operate with all societies concerned with preserving the character of Cornwall.

(Source: Deacon *et al.* 2003:32)

These aims reflected the growing sense of solidarity which the people adhered to politically, and the movement continues to have modest success at a local level despite in-fighting and splits which have dented election figures. Though gaining little general election success, MK are by no means the sole expression of 'Cornishness' politically and indeed the Liberal Democrat party in the region has often utilised anti-London sentiments to boost support.

For most however it is European policy which has been a key issue for Cornish nationalist political debate; Mebyon Kernow saw a small rise in voting numbers after the assertion of a separate European region for Cornwall (Deacon, Cole and Tregidga 2003). This culminated in the petition, submitted to the EU parliament, expressly requesting a further analysis of the area with a view to the protection of identity and culture (Vink 1993). Whilst not within the scope of this project to examine the processes behind the political solidarity in Cornwall (see for that Conversi 2008 and Payton 1997), the central issue remains the existence of the movement at all; and the fact that there is continued support for solidarity.

Related to this nationalist movement, although definitely not directly connected, was the successful 2007 bid to gain unitary status for the county council. This was an important step for the local authority in Cornwall, and stated that the:

'...proposals will take forward 'double-devolution'. We look forward to working with national Government to ensure that Cornwall is able to make more decisions about local public services.' (Cornwall County Council 2007:7)

The move to a unitary authority is part of the wider process of English regionalism (Sandford 2006) however Cornwall is often cited as a particularly distinct case. The cuts made by central political parties, coupled with a strong sense of difference, make a particularly strong case for further devolution. Indeed there are strong movements in the county which call for a completely devolved assembly in Cornwall (Cornish Constitutional Convention 2002; Cornish Constitutional Convention 2004); and the

move to unitary was seen by those as simply the first step (Cornish Constitutional Convention 2009). However others such as the MK party remain concerned about the level of realistic devolution available. Tied closely to such notions of political solidarity are the on-going legitimisation debates for the Cornish as a national minority (Saltern 2011) and, whilst they remain unsuccessful in terms of recognition, as of 2011 the movements are growing in popularity and media coverage.

Familial ties are one of the key elements of group solidarity, and whilst ancestry is not required for group membership (Jimenez 2010) a shared identity can be maintained and strengthened by the family unit. Cornwall is often cited as a differential case for family units (Bryant 1993), and by examining comparator data from the industrial periods in the area, two main differences emerge. Households in the region extended beyond familial units and often included the skilled tradesmen which came to represent a large proportion of the internal migrant population. Secondly, women played a larger role in Cornish households than in other areas; the nature of industry in the county meant that there were a high proportion of widows (health problems amongst men were common throughout the industrial era (Sheaff 1996)), and therefore groups of female kin members were frequent (Bryant 1993).

The symbology of Cornwall cuts through many of Smith's (1988) categories and often represents key cultural and political events. However the meanings ascribed to such symbols create great solidarity in a group and with the revival in Cornwall many old symbols resurfaced to gain new significance (Payton 1996). The white cross on a black background, which is the flag of St. Piran, is now ubiquitous across the county and according to legend the patron saint of tanners is depicted in the white 'tin' and black 'ore' (Endean-Ivall 1988). Almost as recognisable are the 15 dots arranged into a shield, which forms the Duchy coat of arms depicting the Byzantine bezants carried by the Earl of Cornwall on a shield in 1272.

1.4.2 Problematic acceptance

The emergence and subsequent categorisation of the Cornish as a distinct group has been problematic, despite the fulfilling of Smith's (1988) criteria. Why is it that the group experiences a problematic emergence into the mainstream ethnicity literature, when the Cornish are both culturally distinct and numerically significant in the region? The group (as mentioned) still have no legal standing in current UK or European legislation on ethnic minorities, despite the concerted efforts of the Cornish Constitutional Convention (2009) and the Cornish National Minority Report (Deacon and German 1999, Saltern 2011).

Without official recognition the Cornish are in a sociological limbo between a 'cornish' local identity, and a 'Cornish' ethnic group. The increased acceptance of regional identities in a more globalised and developed world (Terlouw 2009) creates more competition between identities at a local level and thus there are processes of emergence and re-emergence.

Arguably the Cornish represent an illustrative case of one of two complex underlying processes well documented in the literature; either complex boundary formation (Wimmer 2008) or ethnic re/organisation (Popkin 1999; Popkin 2005). The importance of such legitimisation is reflected in the difference in lived experience, noted by Bertrand (2011), between groups recognised by the state and those remaining hidden (see Chapter 2, page 73)

Wimmer (2008) examined the formation typologies of ethnic boundary formation, specifically the subjugation or assimilation of groups into nation states (ethnic identification as against a dominant majority (Schermerhorn 1970)). During processes of nation building the state has limited options; either include minority groups into an existing ethnic group or create a newer 'catch-all' group. Ethnic development in France is a particularly good example of the former, Mexico, and the policy of *mestizaje*

(2008:1032), the latter. A third variant of the same phenomenon, and more closely allied to the present case, is the emphasis (by the state) of pre-existing ethnic differences; the positioned national identity is often challenged however (the colonial independence movements are another good example (Wimmer 2008)).

Broadly the typological discussion of this boundary formation for Wimmer (2008) falls into two categories; processes of expansion and ethnogenesis, or contraction. The creation of national majorities shifts the boundaries significantly, and clearly includes the defining and creation of an ethnic *minority*. These minority categories expand and are modified and adapted by the individuals themselves. More relevant to the Cornish context is the notion of ethnicity development and ethnogenesis, led by 'minority political entrepreneurs' (Wimmer 2008:1035).

The defining of an ethnic minority by the state can take numerous forms however language is a central feature (Mowbray 2006). The impact on the protection of ethnic minorities, which the recognition of a distinct language has, is significant; however international law frequently perpetuates the existing power structures within a state, thereby cementing a status quo (Mowbray 2006). The Cornish language is currently undergoing a transition, from unrecognised to a feature on some educational syllabuses and so coincides with the emergence of the more coherent identity described in this chapter.

Another typology, a process of contraction, sees ethnicities split into finer and finer grained units, which is

'...an especially attractive strategy for individuals and groups that do not have access to the political arena' (Wimmer 2008:1036)

These processes are usually spatially limited and into pre-existing categories. In terms of the Cornish, it is possible to argue for a process of typological contraction as opposed to expansive ethnogenesis.

The second explanatory process relevant in the Cornish case is the notion of ethnic re/organisation described by Popkin (1999; 2005). Arguably, the higher levels of adverse conditions experienced by minority groups (particularly those groups of migrants) leads to a strengthening of ethnic ties (Popkin 1999). The actors within these groups forge new ethnic relationships and a process of expansion follows, restrictive policy does not lead to the abandonment of cultural markers.

There are continuous feedback mechanisms which serve to strengthen and widen these ethnic ties (Popkin 2005); the integration of movements into other indigenous groups forms new waves of organisational behaviour. In the Cornish context the integration with other, largely Celtic, movements is well documented (Alberro 2001). In this way a combination of ethnic identities acts as a 'social glue' (Popkin 2005: 702), only mitigated by the state and attempts to control the development of such organisation.

In both of these underlying processes push/pull mechanisms operate below the level of consciousness and therefore macro-level mechanisms between minority groups within a single state become evident. Regional ties, across an entire nation state are in a process of constant emergence and re-emergence (Terlouw 2009), therefore the communication of that identity is fundamental to the propagation of the group.

Competition between all these groups leads to kinship ties weakening into wider scale ethnic ties (Terlouw 2009); the increase seen in Cornish ethnic identity across all young people (Aldous and Williams 2001) may well be indicative of the widening (outside traditional familial groups) ethnic identity. The central question for the Cornish therefore becomes not the emergence of the group in general but the communication of that identity to the wider nation state.

1.4.3 Implications

Despite their problematic acceptance there is certainly a case for the Cornish as a distinct ethnicity using the criteria set out in Smith's (1988) model. Using the model as a framework to examine the large literature on Cornish difference illuminates the strong feeling which the people of Cornwall have regarding a shared identity. The treatment of the group as distinct from others in the same area has numerous implications; both for academic research and policy in the region. Though there have been small scale attempts to study the group (as will be discussed subsequently, see page 87) there has been no direct examination of their relative position and size.

In recent years there has however been a rise in business and local government agencies seeking to measure the Cornish, and the inclusion of the category in ethnic monitoring has risen – as well as becoming a write-in option in the last England and Wales Census (2001). Academic research has also developed, and there have been narrow studies conducted on the group in small areas (Williams 2002). If there is an argument for the definition as a distinct ethnic category then research should examine the size and relative position of the Cornish. Does such a group suffer disproportionately to others in the same region? Before exploring these notions though it is necessary to examine the nature of relative deprivation, and subsequently social exclusion, and to review the previous attempts to measure and examine the Cornish.

1.5 Summary

This chapter has demonstrated the lengthy debates around the complex nature of ethnicity, from historical meaning and visual characterisation through to the modern methodological difficulties of measurement. A pragmatic model was proposed through which to explore the literature on the Cornish as a group, and Smith's (1988) model was shown to be applicable in this case. The group are clearly distinct in the region and

as such are worthy of further study; particularly an examination of their relative position in the area. The next chapter will therefore examine the nature of deprivation, social exclusion and what it entails for those particularly at risk.

2. Social Exclusion, Ethnicity and the Cornish

2.1 Introduction

This chapter examines the concept of social exclusion as distinct from notions of poverty and relative deprivation through an examination of the theory and current research, a definition will be proposed in the form of the B-SEM matrix (Levitas 2007). Secondly, the linkage between ethnic group affiliation and social exclusion experience will be discussed, the underlying processes examined and the most at-risk (often indigenous) groups outlined. This research shows that areas of disadvantage are particularly acute in terms of disproportionate experience by ethnic groups; and so the relative position of Cornwall will be outlined. It is clear that the Cornish as a distinct and indigenous group in an area of some disadvantage are a group at particular risk of increased levels of social exclusion. Previous research has failed to directly examine this problem and the gaps in this literature will form the basis of the two research questions posed at the end of the chapter.

2.2 Social exclusion

The term 'social exclusion' is both complex and historically loaded and therefore any discussion of it must first make reference to that history as well as the preceding notions of poverty. The *sociological* concept of poverty grew out of the Elizabethan Poor Laws in the UK; a government attempt to intervene in the widening divide between the richest and poorest in society (Walker 1995). It is beyond the scope of this chapter to expand and critique the significant literature on poverty and the

interventionist policies across two centuries; however it is important to outline these arguments briefly, as it is here that the seeds of social exclusion research are to be found.

Poverty, in its simplest sense, is 'a state in which resources, usually material...are lacking' (Marshall 1998:516). Such a lack of material resources forces the management of individuals and dependents up to a point of crisis at which stage decision making abilities become cyclical, and only a change in circumstance (or policy) can intervene (Walker 1995). The most significant turning point in the academic literature in modern times was the work of Townsend (1962), and Abel-Smith and Townsend (1965), who challenged the post-war belief of diminishing poverty. At that time the UK was seen to be narrowing the gap between rich and poor through a developing welfare state; however, the authors considered the evidence misplaced and argued that a new approach was required. Searching specifically for inequality, Abel-Smith and Townsend (1965) examined Ministry of Labour statistics and found that the concept of poverty was largely inadequate – a monetary increase in income from the mid-1950s to 1960 had run alongside an increase in those experiencing poverty:

'There is...a difference between defining poverty in any objective or partly objective sense and defining it subjectively – as felt by the individual or by particular social groups. In any objective sense the word has no absolute meaning which can be applied in all societies at all times. *Poverty is a relative concept*. Saying who is in poverty is to make a relative statement...It also refers to a variety of conditions involving differences in home environment, material possessions and educational and occupational resources – most of which are measurable, at least in principle.'

(Abel-Smith and Townsend 1965:63 Italics added)

Townsend's work was so influential that his 1962 paper 'The meaning of poverty' was republished in the 60th Anniversary edition of the British Journal of Sociology. It was the first real attempt to move past simplistic definitions of poverty and towards a more relative approach, and can be seen as the immediate pre-cursor to an effort combating

all these dimensions. In that seminal work the example of the problematic nature of relative deprivation was shown through the drinking of tea. Whilst tea has no nutritional value, and thus no real previous inclusion in poverty measures of health, it has strong cultural value in Britain (Townsend 1962). The absence of tea in a household displayed the dynamic social implications of a relative poverty. Indeed each generation can be said to be more 'prosperous' than the last, yet this is certainly not an indicator of the eradication of poverty. In an international sense the UK certainly remains low on poverty scales, and whilst this does not negate the following debates it is worth noting the scale of the UK problem relative to others.

Though the expansion of the concept of poverty will form the basis for the rest of the chapter, it is worth iterating again that poverty is certainly not a concept which has disappeared, indeed social exclusion and poverty are not "two sides of the same coin" (Devicienti and Poggi 2010), but distinct phenomena linked through complex and mutually supportive feedback mechanisms. A large amount of research continues to address poverty and the policy intervention required to combat it; a step away from such research focus in the 1990s arguably left a large number of children facing pronounced poverty (Bradshaw 2002).

2.2.1 Social exclusion as distinct

The defining of a multi-dimensional approach to poverty has been at best problematic in the academic literature (see Lessof and Jowell (2000)), and this chapter will first consider the conceptual landscape before accepting a tentative, and operationalisable, definition. The term itself can be traced back to Weber (cited in Burchardt, Le Grand and Piachaud 2002b), who identified exclusion as a form of social closure, whereby a group secures a position of privilege at the expense of another. However etymologically

the modern concept is derived from the French 'les exclus', the term given to individuals who fell through a net of social insurance and inclusion (Burchardt, Le Grand and Piachaud 2002b).

Modern western democracies are often built on solidarity within, and to, the state; cohesion and inclusion are integral to the working of society and therefore exclusion is seen to undermine the very fabric of the nation. These notions are particularly acute in the formation and development of the modern European Union – where the term social exclusion came to be distinct from older notions of poverty (Berghman 1995). The social charter of 1990 as well as the resolution to ministers in the same year saw the first use of the term and were included specifically as a replacement for poverty; though it soon developed the multi-dimensional facets distinct from older definitions (Berghman 1995). European projects throughout the 1970s, 80s and 90s saw declining numbers of reports dedicated solely to poverty research (Room 1995), culminating in the version included in the Nice treaty of 2000; the principles of which were:

'...facilitating participation in employment and access by all to resources, rights, goods and services; preventing the risks of exclusion; helping the most vulnerable; and mobilising all relevant bodies in overcoming exclusion.'
(Levitas 2006:124).

The UK, despite problematic acceptance as a member state and the associated policies, was relatively rapid in adopting this new approach to multi-dimensional poverty research. There was some initial conflation in the academic literature between exclusion and the so-called 'underclass' – those individuals who existed in a cycle of deprivation, and consisted largely of 'female-headed households and jobless young males' (Smith 2005:39).

The conflation of these two terms represents the important distinction between structural conditions (largely imposed by state policy) and individual agency;

something discussed in greater depth later in this chapter. However, as Smith (2005) points out, one would not choose in most cases to become excluded and so there must be a 'kernel of truth' to notions of structural deprivation. Adversely, individual agency is unlikely to be unimportant in cyclical processes of material deprivation and, therefore, should not be under-estimated. This complex interplay between structural and individual action forces sets the backdrop for the adoption of the term in the UK, adopting a broad definition so as to encompass both ends of the spectrum. Adoption was different in the USA however; where despite the efforts of researchers to show the interrelatedness of key variables, notions of multi-dimensionality have been, at best, slowly integrated (Wagle 2008).

2.2.2 Definitions of exclusion

The conceptual multi-dimensionality of social exclusion, through the lived experience of individuals past mere material means, does not infer consensus in the literature over a definition. The not inconsiderable challenge in distinguishing poverty from more complex social exclusion factors leads to problematic operationalisation, let alone definition (Levitas 2006) (Issues further problematised due to the non-linearity of the research process; with studies utilising incomplete definitions based on pre-existing data).

A route from concept to definition is most commonly achieved utilising a collectivist approach, starting from the notion that there are significantly more factors at play than mere economic ones, and that exclusion therefore can occur between groups which are economically similar (Barry 2002). Individual factors as well as structural causes are necessarily included in such an approach; a recluse in good health with a steady income might be considered excluded on some scales, however there is clearly a level

of voluntary action. This complex interplay between true choice and excluded forced action through structural constraints is well demonstrated in such an example (Barry 2002). There is a related challenge to traditional approaches, in that such exclusive action may represent an example of *positive* exclusion. Those self-excluded because of high wages, the so-called 'gated communities' in the UK, may experience similar levels of social exclusion as those on extreme low incomes (Barry 2002). However, these groups are logically not necessarily in the minority.

Such conflicts, occurring in most modern western societies (at least those with market driven economies), lead to the assertion of two main thresholds of exclusion. The lower of the two splits those who participate in mainstream institutions from those who do not. The upper splits those in the middle from those at the top who can afford to detach. The two groups (lower and upper) are mirror images of each other in many ways and, for example, both receive little policing but for very different reasons (Barry 2002).

A definition based on these two assertions centres on the violation of social principles; in the first case exclusion violates social justice in the form of equal opportunity. Exclusion leads to unequal education and career opportunities as well as the ability to participate in the political process (Byrne 1999). Secondly, social exclusion violates the principle of social solidarity, where social solidarity is 'the fellow-feeling that extends beyond people with whom one is in personal contact' (Barry 2002:23). Because of the tendency towards the median voter in most liberal democracies the distribution of social bonds becomes important for the distance that groups have from policy development. The weaker social solidarity becomes the further away the excluded are from decision making, again violating the principle of social justice.

A route to definition opposed to a collectivist model is based on notions of capitalist inevitability; in a market driven society social exclusion is ultimately essential. The

Marxist approach is set against notions of 'residuums', 'underclasses' and 'redundant populations'; indeed any 'useless' population as defined by neo-conservative ideology (Byrne 1999). Conceptually flawed, these notions should be replaced by that of an 'industrial reserve army' which can be expanded to fulfil labour market needs at no additional cost as well as serving as a threat (of replacement) to existing workers. Such a "surplus population" or "marginal mass" represent the very definition of economic exploitation (Byrne 1999:46/49). This position is certainly not an interpretation of social exclusion as a positive process, but rather an explanation in Marxist terms:

'...argument is that advanced industrial societies are converging on a norm of social politics organized around a flexible labour market and structural social exclusion.' (Byrne 1999:70)

Taken further such an explanation of exclusionary processes rests on the inherent nature of social structures – that they are essentially empty and not individually specific (Callinicos 2004). Actors are necessarily constrained by the social relations they find themselves in at any given time, there is a natural limitation on social mobility for all social actors and therefore some levels of social exclusion are inevitable.

Collectivist and Marxist interpretations of social exclusion are highly theoretical, providing distinctly different routes from conceptual to measurable phenomena. A workable definition must therefore sit at a philosophically lower level, be based on primary research and influence national policy on inclusion. Such research usually centres on the multi-dimensionality discussed earlier in this chapter, Smith (2005) examined the life chances of individuals faced with adversity in deprived areas of London, and concluded:

'Social exclusion is not expressed primarily as a lack of labour market participation. Instead, it is experienced as an inability to achieve consistency in one's material environment and working life; a lack of control and independence over one's own life; and the sense of incompetence at being able to provide adequately for oneself and family.' (2005:194)

Working definitions such as this, based largely on a single study, lack the comprehensiveness required for the *a priori* identification of variables for further research. A more unbiased and inclusive approach is normally taken by meta-analyses, conducted in the formation of government reviews. The absence of bias is particularly important, as the language of exclusion itself often serves to replicate the process (Endelman 1985), it is the underlying processes which are to be addressed. In 2006 the then Minister of State for Communities and Local Government David Milliband summarised the position on social exclusion taken by the UK government. He stated the three key ways in which social exclusion had been conceptualised in UK policy (Milliband 2006). All start from the assumption that not all excluded individuals are poor and that not all poor individuals are excluded, and as such policy should aim to match resources with needs:

1. A 'Wide' definition – Whereby exclusion occurs through single factors such as absolute poverty, literacy and numeracy, or homelessness. Whilst robust and straightforward such a definition is far from comprehensive.
2. A 'Deep' definition – Exclusion occurs through numerous factors, normally having between 3 and 5 separate causes.
3. A 'Concentrated' definition – this is the somewhat different concentration of social exclusion in specific geographies. For example, excluded individuals grouped into certain neighbourhoods or towns.

These definitions, whilst more rooted in the practical than the abstract, distinctly lack any real applicability for research. The government response in policy and media can reasonably work with loose definitions; however the research which informs such

policy must necessarily be operationalisable. It is this tie between theoretical perspectives and application which is central to the prevention of urban/rural dichotomies of deprivation (Asthana, Halliday and Gibson 2008).

The UK government body responsible for research and policy in this field was the Social Exclusion Task Force (SETF, formerly the Social Exclusion Unit (Social Exclusion Task Force 2007)), however this body was closed in 2010 and the work undertaken by the Office for Civil Society. For the purposes of this chapter however it is the work of the SETF which is relevant. The body consisted of academics specialising in the field of social exclusion, and one of the key tasks of the group was to settle on a comprehensive and inclusive definition of terms. Following a rigorous review of the literature as well as a meta-analysis of previous research the group held panel discussions with key stakeholders; the following definition was published in a seminal paper by the group in 2007:

‘Social exclusion is a complex and multi-dimensional process. It involves the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities, available to the majority of people in society, whether in economic, social, cultural or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole.’ (Levitas *et al.* 2007)

This represents by far the most comprehensive definition and neatly summarises all the current debates whilst leaving enough interpretive room for the research process. The authors argue that it represents a body of primary research as well as the conceptual frameworks outlined previously. It is therefore the most applicable working definition for this thesis and will be taken forward into the consideration of operationalised social exclusion indicators.

2.2.3 Indicators and measurement

If social exclusion is a multi-dimensional process of which poverty can be said to be a key feature, what are the other key indicators? Additionally, how should these indicators be transformed into variables for inclusion in survey research, as well for the identification of variables in secondary data? Social exclusion is a problematic concept to measure and a range of novel methods have been brought to bear on the topic (Conolly 2008). This chapter has so far traced the concept from theoretical background to definition, however in order to reach measurable elements it is necessary to identify the breakdown of dimensions alluded to previously.

A somewhat vague framework is given by Burchardt, Le Grand and Piachaud (2002b) and provides a good starting point for further development:

1. Consumption – the capacity to purchase (including services).
2. Production – participation in economically or socially valuable activities.
3. Political engagement.
4. Social interaction.

(Source: Burchardt, Le Grande and Piachaud 2002a)

Whilst not definitive there are clearly more identifiable characteristics than previously possible using this typology. For example consumption; exclusion factors could be identified through an examination of state intervention and employment policy. Despite this, more concrete measures would certainly aid the identification of specific variables, and so individual long running surveys should be examined.

Prior to an examination of these surveys it is worth briefly visiting the higher level variables which give structure to the operationalisation. The most well documented of these, and one which focuses on the derivation of specific indicators, is the English Indices of Deprivation, published originally in 2007 and updated utilising the same

methodological framework in 2010 (Communities and Local Government 2007b; Communities and Local Government 2010). This index is used as a measure of deprivation at lower super-output level (ONS LSOA level), and, using much of the previously mentioned literature, seven higher level groups were identified as:

1. Income – weighted at 22.5% in the Indices.
2. Employment – weighted at 22.5% in the Indices.
3. Health Deprivation – 13.5% weighting.
4. Education, skills and training – 13.5% weighting.
5. Barriers to housing and services – 9.3% weighting.
6. Crime – 9.3% weighting.
7. Living Environment – 9.3% weighting.

(Communities and Local Government 2007a)

Whilst the weights given above are those reported by the index authors it is worth noting that they were not without contention, clearly any weighting structure affects the resulting areas of deprivation and thus the potential funding which is available. Whilst the specific weights of this index are not relevant here such a weighting problem will emerge later in chapter 3 (see page 113).

Income is a well-established measure of deprivation and the single measure closest to older conceptions of poverty, though cannot be seen (in this context) in isolation. Employment is more complex and it was only during the 1990s that this was included alongside other variables in exclusion measures (Convery 1996). Causes of unemployment vary, from poor international competitiveness; global activity; technological change through to increased inequality. Distinct populations suffer employment related variables disproportionately, significantly those poorly qualified and those at either extreme of the age brackets. Though of course the recent rises in

graduate unemployment highlight the complex (and multi-dimensional processes) linking the two variables.

Certainly those individuals who are better educated suffer unemployment less acutely than those with lower qualifications (Convery 1996). Recent research has also shown that unemployment leads to social exclusion factors only under certain conditions; the processes are stronger in western democracies than other forms of social organisation (Roberts 2001). Concentrated employment, the ordering of employment seekers and the segregation of job seekers are all specific, if not unique, to the USA and northern Europe – where the link is strongest (Roberts 2001).

As far back as the 1980 Black Report there were distinct indications in the academic literature that the UK was experiencing pronounced differences in health; the worse off being significantly more likely to die at an earlier age (cited in Benzeval 1996). Indeed, the 1997 food crisis led to a reduced dietary intake for many individuals and represents the direct health impacts of excluded groups (Lang 1996). This pattern has developed and

‘...it is now indisputable that social and economic circumstances dominate the distribution and overall standards of health in modern populations. People who live in disadvantaged circumstances have more illnesses, greater distress, more disability and shorter lives than those who are more affluent.’ (Benzeval 1996:153)

Once again, however, the pattern of health inequality demonstrates the interconnectedness of social exclusion variables; an individual in poor health is more likely to be out of work and therefore have a lower income. Such cyclical processes produce a downward spiral of deprivation which is difficult to break. Early indications of this cycle are largely found in the educational attainment of individuals; both a symptomatic and causal influence of cyclical deprivation (Hobcraft 2002). Despite

targeted policy to close the 'education gap', the UK still sees a strong association between low test scores, poverty and contact with the police (Hobcraft 2002).

The fifth of the indices covers access to housing and access to public services. The numbers of homeless rose consistently from 1979 to 1991 in the UK, and even conservative estimates put the 1991 figure at 430,000 (Ginsburg 1996). Partly due to government policy, homelessness is certainly linked to unemployment figures and gross earnings. In Cornwall, homelessness has been traditionally a 'hidden' problem however recent research has indicated that the levels of social housing were inadequate, despite this levels remain average for the region (Jaksina 2010).

Additional links connect the final two areas identified by the indices; crime and living environment. Crime prevalence, both those committing and those subject to, are often spatially concentrated in areas with poorer living conditions (Lupton and Power 2002). Arguably three mutually supporting mechanisms ensure that this process continues, firstly, the intrinsic characteristics of certain geographic areas such as location or the economic base. Secondly, residential sorting, whereby the most disadvantaged are concentrated into the least advantaged areas through market forces; and thirdly, cyclical disadvantage in these concentrated areas.

Rural areas are often characterised by distinct and problematic access to services and periphality (Commins 2004). The isolated nature of these areas also introduces transport problems not encountered in more urban areas. The power relations between groups are certainly more acute in rural areas (Richardson 2000), and in Cornwall this is compounded by the discrepancies between a rural idyll and the reality (Phillips, Fish and Agg 2001). Issues of rurality emerge as an important feature in the Cornish case and will be returned to in later sections (see Chapter 6).

Whilst not exhaustive, the English Indices of Deprivation provide a solid baseline from which to deduce measurable variables of social exclusion. Issues such as gender variation should by no means be ignored (see for example Millar 1996); however such demographics are routinely included in survey design in any case. Before examining the model of variable definition to be utilised by this thesis, it is first necessary to examine briefly the operationalisation of the previous model into measurement categories by two of the largest surveys in the UK which address social exclusion directly; 'Monitoring Poverty and Social Exclusion' and the 'Poverty and Social Exclusion Survey'.

Designed and implemented by the Joseph Rowntree Foundation to report on the state of the UK, the 'Monitoring Poverty and Social Exclusion' series uses a uniform set of indicators consisting of 50 variables (increasing to 100 for the 2008 report), grouped into six themes (Palmer *et al* 2005, see Appendix 2.1). These indicators comprise an inclusive and representative set of variables which arise from the literature; ranging from income and education to community services. However the highly specific nature of the secondary data which the indicators were designed for make the model unsuitable for wider use. As a broad overview of the UK wide situation the report is invaluable, and has mapped the recent recession in great detail through comprehensive unemployment figures (Parekh, MacInnes and Kenway 2010).

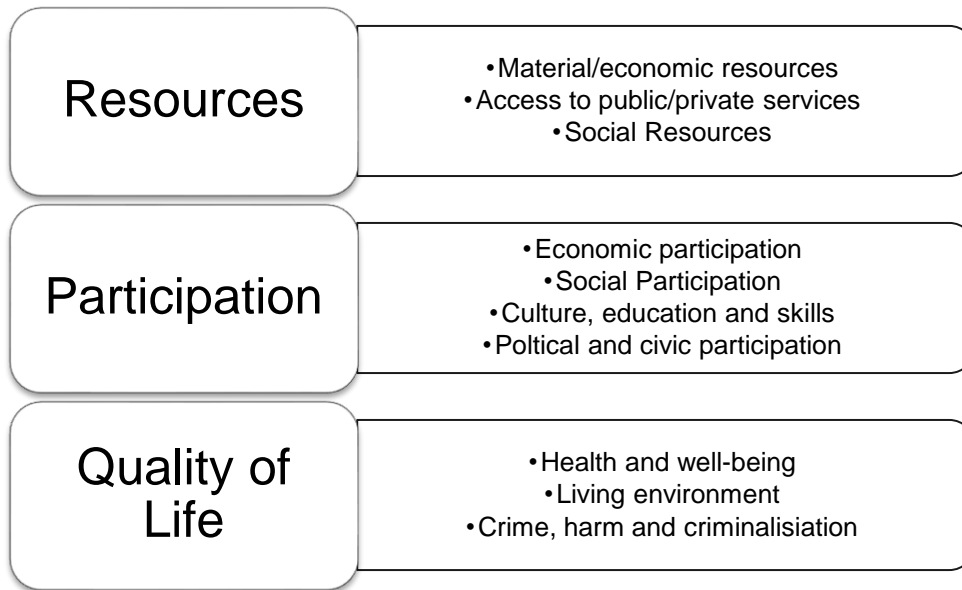
A slightly different approach was employed by the 'Poverty and Social Exclusion Survey', which is carried out on behalf of the ONS using a sub-sample of the General Household Survey (Gordon *et al* 2000). The variables included in this phase of the survey are not static, and move more towards a more widely applicable model for variable identification (see Appendix 2.2). These variables have the advantage of being flexible and are also of a suitable level to be applied to various datasets. The theme which emerges is that variables are often chosen once the data have been identified,

with social exclusion retrospectively defined. What is needed is something which can cut across numerous studies to be used as a variable identification 'framework'.

2.2.4 B-SEM

A framework which fulfils just such criteria was devised by the same group of social exclusion academics which put together the comprehensive definition cited earlier in this chapter; the SETF group. In a project which sought to review existing sources on multi-dimensional disadvantage the authors attempted to devise a framework to review the existing data on social exclusion and to identify gaps. The resulting model is an extremely powerful exploratory tool. Arguing that previous indices were too prescriptive in nature, the authors devised a system for the examination of interacting variables – the B-SEM matrix (Levitas *et al* 2007). This matrix has as its starting point the definition of social exclusion given previously and from this outlines three key dimensions; resources, participation and quality of life. These were subsequently split into domains and further still into specific topic areas (see next page).

Figure 2.1 B-SEM Matrix of social exclusion



(Source: Levitas *et al* 2007)

This 'top level' matrix is further broken down into specific topic areas (see Appendix 2.3), which can be utilised for variable identification in secondary analysis, as well as variable creation for primary survey research (see for a good discussion Yang (2007)). The matrix can also be utilised to explore the "range of data on social exclusion available in existing data sets" (Levitas *et al* 2007:10). The team initially identified and examined 27 data sources which will be elaborated upon subsequently. Significant at this stage is that the matrix exists as an exploratory and identification tool, as well as the fact that it summarises the literature in the field comprehensively and is an applicable model to take forward.

2.3 Social exclusion and ethnicity theory

Social exclusion having been defined; what groups of individuals are most likely to experience these variables most acutely? Particularly of relevance to the current work are the links between ethnic group affiliation (in a pragmatic sense of identification – see previous chapter, page 20) and social exclusion factors. Prior to an overview and examination of the Cornish specific situation, the theoretical base, as well as previously identified cases of disproportionate exclusion, must be examined and at-risk groups identified.

Many theoretical discussions on the linkage between social exclusion and ethnicity centre on an updated and reformed underclass thesis; though this is more common in the USA than in the UK (Pilkington 2003). Largely based around the fact that a significant element of ethnic groups simply do not assimilate into the wider cultural landscape, ethnicity is not necessarily the driving causal factor. High unemployment rates among the Black population in the USA (particularly among males) and high levels of lone motherhood has been attributed to systematic racism (Feldmayer 2010). The migration patterns of these groups from the south to the large cities meant increased numbers in low-skilled employment and led to the concentration of Black groups in social housing.

The underclass model has not seen as wider acceptance in the UK, though as a theoretical standpoint it still has some credibility, especially regarding the UK labour market (Iganski, Payne and Roberts 2001). Once again, in the UK, there are competing standpoints – both Weberian and Marxist – which explain the underlying processes.

The Weberian perspective holds that class and status are key elements of power and advantage in society; a Capitalist market as well as an individual's access to sections of it are the foundations of class whilst status is the way individuals view certain

attributes. Thus racial disadvantage has its roots in status inequality, which is in turn linked to class inequality (Banton 2008). Marxist theorists, however, would highlight the division between capital and labour in Capitalist societies and note that often racial divisions imply that ethnic minorities occupy either the lower strata of the working class, or a significant element of it (Pilkington 2003). Both viewpoints share the foundation that Capitalism itself generates conditions suitable for market force driven status relations. Racial discrimination prevents ethnic groups competing in this economy fairly, therefore groups become over represented in the lower classes.

The processes behind this level of exclusion are arguably based around the so-called 'othering' of groups (and the opposite – 'connectedness', Taket *et al* (2009)) whereby groups become marginalised through being 'the other'. Such a process serves to distinguish and replicate the boundaries described by Banton (2008): stereotypical cues which mark certain groups, lead to stigma and potentially exclusion through the reproduction of inequality (Taket *et al* 2009). Even within the broader typology proposed by Banton (2011) (discussed in Chapter 1; page 23) one of the central tenets states:

"Proposition eleven therefore holds that the close association of categories can be a means of maintaining social inequalities between sections of the population." Banton (2011:192)

Market driven economies sow the seeds for disproportionate disadvantage, but what groups are most likely to suffer and how does such disadvantage manifest itself? Prior to an examination of specific cases it is first necessary to consider the theoretical manifestations as well as policy specific reactions.

Three distinct spheres of societal processes result in strong links between ethnic group affiliation and social exclusion factors, argues Ratcliffe (2004), spatial segregation and housing; education; and the labour market. Similar arguments have been proposed by

Dorling *et al* (2008), stating that Britain is divided by five central cleavages, geographic; demographic; economic; social; and political.

The first of Ratcliffe's (2004) spheres has, historically, taken some extreme forms, the Jewish ghettos of the 1940s being a particularly acute example. Unfortunately not an isolated case, the older systems of slavery and colonisation also exhibit spatial divides along ethnic lines. Segregation is a multi-faceted process through which groups are subjugated by a dominant force and coerced into isolation through a two stage mechanism. Minority groups can be constrained, or self-segregate, through active choices; regardless of the pushing or pulling elements. It is nevertheless true that those of minority backgrounds are more likely to live in smaller, less affluent areas. Such space, usually inhabited by a numerically smaller group is rarely equal to that occupied by the majority group (Ratcliffe 2004).

Education has been a key indicator of exclusion in all of the models outlined, though it is also a key sphere of ethnic disadvantage. Common to educational difference debates are the biological differences, and bio-behaviourist approaches more common in the 18th Century (Mason 1995). That is not to reject out of hand the notion that educational difference based on visual characteristics still occurs, it almost certainly does. However it seems more likely that spatial segregation contributes directly to educational attainment alongside a multitude of other variables (Ratcliffe 2004).

For Ratcliffe (2004), the labour market is probably the key sphere of disadvantage, and he argues there are four themes:

1. Economic activity status (those that are in work or seeking work) –that overall minority groups are far more likely to be unemployed than the comparable majority group. Additionally, long term illness and associated work impacts are higher amongst minority groups.

2. Occupational distributions by status and type – unsurprisingly minority groups often find themselves over-represented in the lower level occupations and under-represented at higher levels.
3. Self-employment – though relatively high levels of self-employment are to be found in some groups there are higher level of small scale enterprise with low turnover.
4. Income levels – the natural consequence of the above; income levels for minority groups are often significantly less than for those in majority groups.

(Source: Ratcliffe 2004)

In the UK labour market much has been done to target the inequality of opportunity and the NHS as a key government organisation is a good indicator of the relative success had by these policies. There is yet to be a fully working equal opportunities policy in the NHS (Iganski *et al* 2001), despite the significant benefits a diverse workforce would bring to the organisation. The actual operationalisation of diversity within the organisation has been problematic (Johns 2004), and could potentially lead to further marginalisation of ethnic groups. In the wider UK market there is significant evidence that minority ethnic groups are penetrating the traditional and modern professions (Iganski, Payne and Roberts 2001), with younger employees exhibiting less ethnic divide. However, some have argued that the very basic elements of society, social security and aid, are biased in favour of the white working classes and at the expense of other minority groups (Bloch 1996).

To argue that the problem is decreasing is to over-simplify models of ethnically orientated action, as well as labour market forces (Iganski, Payne and Roberts 2001). In order to fully address the policy failures in large scale organisations in the UK, argue

Johns and Green (2009), it would be necessary to move away from the purely economic model of recruitment and give more weight to the HR professionals within each sector.

Ethnic differences in the sphere of health are often more widely publicised, though in the UK this did not become common until the late 1980s (Ahmad and Bradby 2007). Increased research has largely failed to definitively conclude the levels of ethnic division, though there are clear indications of a complex relationship between socio-economic status, ethnicity and health care satisfaction. One key study examined longitudinal data and demonstrated that the life-course as a whole is central to understanding ethnic difference (Walsemann 2009); with early disadvantage setting the scene for later mental ill health. Such early disadvantage is frequently broken down along ethnic boundaries, with, for example, systematic differences in depression rates across groups (Walsemann 2009).

This finding is echoed throughout the literature – ethnicity, whilst certainly linked is not a causal factor but an associated latent variable. Though ethnic groups are often exposed to exclusion through the concentration of disadvantage geographically, it is the socio-economic and familial factors which influence disadvantage the most (Grogan-Kaylor 2010; Chin *et al* 2009). Health risks associated with socio-economic disadvantage (and ethnicity) are broad, and range from convulsive status epilepticus (Chin *et al* 2009), to overall satisfaction with levels of care (Thomas *et al* 2009). In the UK, the policy initiatives utilised were structured around the sensitivity of delivery of healthcare to minority ethnic groups (Iganski and Johns 1998). These sought to combat the specialised language frequently utilised in the medical profession; something arguably limiting for many groups.

2.3.1 Identified groups

The processes and experiences of groups is best demonstrated through specific examples of relative experience and is clearly important for tackling social exclusion more generally (Economic and Social Research Council 2008). The following section will outline relevant cases, starting with a comprehensive look at the position of the Irish Diaspora in the UK and concluding with some examples demonstrating the complexity and diversity of exclusion and self-segregation.

The Irish are a significant minority in Britain numerically and in some geographic areas constitute the largest ethnic minority group. Often ignored as a UK derivative group, the Irish were forced to lobby the Commission for Racial Equality in the 1980s (now the Equality and Human Rights Commission) to be included in the England and Wales Census (Hickman and Walter 1997). The 1991 data provided a fresh view of the demography and economic status of the Irish in Britain, which constituted 1.5% of the total population (or 837,464 individuals).

The Irish population was by no means evenly distributed across the country, and the team found that the population had changed over time to focus mainly on urban centres. Additionally, more Irish headed households contained single individuals, reflecting lower marriage rates (Hickman and Walter 1997). Whilst the research found that the Irish were significantly to be found in higher level occupations (the so-called Irish 'brain drain') the majority of the population was in middle-age and distinctly over-represented in the manual classes. Cluster analysis showed that there were significant pockets of low qualifications coupled with high levels of unemployment (Hickman and Walter 1997). The Irish were also found to be less likely to own a home and to rent more frequently, as well as to suffer more frequently from illness and higher mortality rates (in keeping with findings reported elsewhere, see Clucas (2009)).

Deeper analysis of individual experience found a relatively high level of anti-Irish behaviour, ranging from anti-Irish jokes to systematic racism. The group were found to be more prone to exclusion on a number of levels, although often there was limited response from the individual – and certainly not a formal complaint (Hickman and Walter 1997). The implications of the findings are that most ethnic monitoring in the UK now includes an Irish category and there is on-going monitoring of the relative position of the group. When taken in conjunction with the findings of a study by Walter (1986), who found significant clustering of Irish nationals in the UK based on religion, the study highlights the importance of identifying similar at-risk groups.

Other key groups identified in the UK are the multiple Asian and other non-white ethnic minorities living in (often) urban areas. Despite other cross-cutting variables, Khattab *et al* (2011) demonstrated independent effects on economic activity by ethnic group affiliation and although such effects are moderated by class levels ethno-religious attachment are key variables. Neither is such an impact limited to adults, Modood (2004) reported on the complexity of the seeming over-representation of non-white groups in the UK HE sector, despite the suffering on socio-economic terms. Simply, Modood (2004) argued that groups (both in the UK and outside) exhibit and interact with a form of “ethnic capital” (2004:101), similar to conceptions of cultural capital.

During the mid-1990s it was certainly the case that black ethnic minorities were at a significant disadvantage in the UK labour market (Bloch 1996), having double the number of individuals in unemployment compared to similar white groups. Attitudinally, white individuals were also more likely to ‘definitely enjoy’ living in a particular place (Communities and Local Government 2006), though there is often a distinct lack of dedicated data (Johnson *et al* 2008). Demographic factors are central to disadvantage in the UK, with familial influences on deprivation worse than anywhere

in Europe (Kiernan 2002); primarily due to the amount of children born to single (and/or young) mothers.

Cultural capital, as described by Modood (2004), has an increased impact in the USA, which has a long history of racial tension and the links between ethnic groups and exclusion factors is well researched. Black and Latino groups remain highly isolated in the US and it has therefore been hypothesised that this can lead to multiple social problems, including violent crime (Feldmeyer 2010). Segregation contributes strongly to the murder rate in a number of American cities, largely by concentrating disadvantage into small geographic areas. Certainly there is strong evidence for the link between ethnicity (specifically African-American groups) and alcohol consumption (Smith, Phillips and Brown 2008). This concentration into small geographic areas leads to higher levels of religiosity, and subsequently lower levels of alcohol consumption, than other ethnic groups. Geography compounds the linkage between ethnicity and exclusion in the USA in a more pronounced way; those areas reporting less racial diversity also show a more distinct link between ethnicity and mortality rates (Fontenla, Gonzalez and Quast 2010).

That ethnic group membership can lead to exclusion factors above other groups in an area seems indisputable and the implications of this are serious in terms of quality of life. However one particular case highlights the extreme exclusion of individuals based on ethnic group membership and serves as an indicator of the importance of research and the policy reaction.

Catastrophic events often lead to extreme consequences and the relative position of an ethnic group is no exception. Following the 9/11 attacks in the USA, Brittain (2009) describes the strong sense of Islamophobia amongst officials in the UK. The subsequent arrests were followed by many reported instances of individuals subjected to

interrogation and torture, often with no access to the charges made against them. Though this practice was made illegal in 2004 some of those involved consider themselves still to be targeted by the security services (Brittain 2009). Many have suffered intense mental ill health as a result and arguably the ethnicity dimension was the main driving factor.

Though extreme and infrequent such instances highlight the need for targeted research which examines the relative position of minority groups; and some indigenous groups in particular. Prior to examining these however it is worth outlining the complexity of the issue. Social processes are rarely uni-directional and the linkage between ethnic group affiliation and social exclusion has the complicating factor of self-exclusion (Barry 2002) mentioned previously.

In an examination of this phenomenon in Belgium and Spain, Kalter and Kogan (2006) researched the school to work transitions of young people –specifically the percentage of school leavers employed one year after finishing education. A comparison of native-born individuals and immigrants, using large data sets and event history analysis, show the complex picture of disadvantage rather than simple discrimination in the labour market (Kalter and Kogan 2006). One of the reasons forwarded by the authors posits the notion that non-native individuals cease the employment search sooner than native people in the same area. Such a finding is supported by the fact that many young individuals will self-segregate in schools through a push/pull mechanism (Crozier and Davies 2008). These examples highlight the fact that whilst it is certainly common it is by no means certain that all minority ethnic groups will face exclusion or poverty in the UK, and may in fact experience relative wealth compared to similar British residents.

2.3.2. Indigenous groups

The examples given demonstrate the links between ethnic group affiliation and social exclusion, however those most at-risk have often been identified as indigenous groups (amongst others, Eversole (2005)). It is certainly the case that poverty and social exclusion vary greatly across states, often (but not always) proving to be a more significant variable than demographics or socio-economic factors in areas of disadvantage (Mendola, Busetta and Aassve 2009). Additionally there has been shown to be a significant spatial element to disproportionate disadvantage within states (Tanton *et al* 2010; Asthana, Halliday and Gibson 2008). The socio-geography of place affects children most acutely, with those growing up amongst co-ethnics and limited resources fairs worse than those with high achieving neighbours (Bygren and Szulkin 2010).

In these areas it has been hypothesised that indigenous groups suffer increased exclusion compared to others in the same location, indeed Eversole (2005) posits a *necessary* link between indigenous people and poverty. This socially constructed division is well documented in Latin America, a region with an estimated 40 million indigenous people, and incidents of violence, persecution and racism are rife. The Americas represent a large proportion of the indigenous research that is published, as the clash between an older population and more recent migrants is particularly acute.

Women in an already deprived area of Chiapas, Mexico, experience some of the worst living conditions in the country. High infant mortality and other serious health issues are particularly prevalent and there are significant discrepancies between the health conditions of the indigenous population and the non-indigenous women (Sanchez-Perez *et al* 2005). The age structure for the two groups was largely identical, however almost double the indigenous females had a completed pregnancy within two years of

the research start date, compared to the non-indigenous women (NIW). As mentioned previously, education in this study was a key area of difference – over 50% of the indigenous group had no schooling whatsoever compared to 8% of the NIW. Only 2% of the indigenous women reached high school level compared to 17% of the NIW (Sanchez-Perez *et al* 2005).

The native people of Canada experience racism in almost all aspects of their lives, coming from authoritative figures as well as the government itself (UN Committee on the Elimination of Racial Discrimination 2007). This is in contradiction to the UN CERD mandate yet despite this when individuals have sought to challenge the situation they have been subjected to violations of privacy. In this instance the persecution often takes the form of lack of access to one's own production and as such is a form of economic racism.

Such acute differences in relative position, between indigenous and non-native groups are echoed in New Zealand where the Maori have been shown to experience lower educational attainment, increased health risks and housing problems (Humpage 2005). Representing around 15% of the total New Zealand population, the Maori are a minority (yet significant) group and so policy has sought to close these gaps.

Integrative policy aimed at limiting indigenous disadvantage is more developed in the Catalan region of Spain where there has been a gradual shift towards inclusion (Garreta-Bochaca 2006). Previously excluding groups from the schooling system, a process is underway which devolves education from the state to the local - something which has resulted in the incorporation of more groups in the system (Garreta-Bochaca 2006). Such processes are not un-problematic however, with a greater need for the development of understanding and training in frontline staff (Garreta-Bochaca 2006).

The indigenous groups of European countries also experience significant differences. Mannila and Reuter (2009) examined the difference (in terms of social exclusion) between groups of immigrants based on their country of origin; language and nationality. A survey of over 2,000 individuals in Finland from three groups, Russian speakers; Estonian immigrants and those ethnically Finnish, demonstrated the link between unemployment and poverty in the region (Mannila and Reuter 2009). Whilst clear delineation was difficult to model, the team found that there were a number of social exclusion variables which were broken down along ethnic group lines.

Russian policy towards the many indigenous peoples who consider the country home has been historically controversial (Overland 2005). The limit for recognition as an ethnic group is set, seemingly arbitrarily, at 50,000 individuals. Soviet policy has widely been considered harsh and policy makers felt that the somewhat 'backward' nature of many groups should be combated with a "productive nomadism" (Overland 2005:111), with individuals working towards a collective goal. Any groups which became particularly successful in these goals were subsequently persecuted by the state and, coupled with the fact that the women and children were often taken away to be educated in other geographical locations, had a great impact on the socio-economic status of these groups.

2.3.2.1 Indigenous inevitability?

The relative position of the indigenous people of a wealthy nation is not necessarily any different than those in less affluent states (Eversole 2005). Historically in Europe there are a number of categories of ethnic indigenous groups, dispersed people; immigrants and refugees; and localised minorities (Panayi 2000). The last of these is the most relevant to the current thesis and can be further broken down into those on

the periphery of expanding states (perhaps the Celtic fringe of the UK), and those which have developed in reaction to unification strategies (such as the Catalan or Basque peoples).

A direct link exists between settlement patterns of any of these groups and the subsequent housing which is occupied – those groups with the highest birth rates largely report the worst housing (for example Czechoslovakia in the 1960s, Panayi 2000). It is the localised minorities who are most at-risk and the acute problems suffered in Northern Ireland over the last 30 years are a particularly extreme example. The geographic segregation involved in the forcefully maintained separation of Catholic and Protestant areas of Belfast throughout the troubles is a pertinent reminder of housing differences in such groups. Membership of any of these localised groups is not only linked to housing problems but other (often associated) exclusion variables such as economic status (Panayi 2000).

The pertinent question presents itself, why should this be? Are the foundations for localised and indigenous population exclusion inherent in a modern European state? Panayi (2000) posits that this is exactly the case; by very definition a nation state is an inclusive unit and outsiders are necessarily excluded. Therefore any cultural indicators (for example those in education) will follow the localised history and traditions of that particular place and people. An attempt to be more open has been made in the majority of states and the policies of the UK, Switzerland and Belgium are demonstrably multi-cultural (Panayi 2000). However, any group which experiences lower income or social status for any reason will necessarily experience greater difficulty in reaching the political centre, therefore a mutually supportive cycle begins. Ultimately those in powerful positions in states are almost certainly from the majority ethnic group and inherently minority groups experience social situations differently.

Such power relations are manifest in the legitimisation processes discussed in the previous chapter (page 40), and are therefore particularly pertinent to the Cornish case. In an examination of two indigenous groups, Bertrand (2011) showed that those groups who were officially sanctioned by the state experienced better lived conditions than those remaining seemingly hidden. Claims to nationhood (as opposed to indigenous status) are often more concrete and therefore impact less on lived experience but, nevertheless, power operates at official levels.

Such arguments outlining the inevitability of ethnicity based exclusion in modern western democracies are not universally accepted. However a number of studies have lent some weight to the proposition. The French socio-political system is widely regarded as an integration enhancing advocate, however Koff (2009) examined the violence which erupted in 2005 and found strong links with inherent ethnic tensions. Koff (2009) argued that despite the integrationist system ethnic minorities in France became over-represented in the most deprived neighbourhoods as well as among the unemployed. The riots of 2005 began on a very small scale but escalated quickly, soon spreading into many urban areas. The social stratification along ethnic lines served to perpetuate the situation.

Indeed, for Koff (2009), the question is not why the violence erupted for prolonged instances in the first place but why it did not occur far more often. The complex political structures in France meant that power, domination and police intervention were often racially divided, a tension which caused and perpetuated systematic oppression. Arguably the powerlessness of some sections of society to access the ideals of 'liberté, égalité and fraternité' (Koff 2009:787) inflamed the subsequent violence.

Reactive re-ethnicisation in the face of official adversity has been well documented in migrant behaviour and potentially the same processes operate to counter the exclusion

often imposed by the state (Popkin 1999). Restrictive policy in particular can lead actors to develop new relationships and to cement boundaries rather than to abandon cultural markers – something particularly relevant in the Cornish context.

However, in broad terms there is unquestionably a strong link in many areas between ethnic group affiliation and social exclusion, perhaps more pronounced among indigenous individuals in modern western democracies. The situation in the UK is perhaps not as comprehensively understood as it is in South America; however there has been a concerted effort in recent years to examine the relative position of ethnic minority groups. The Poverty and Social Inclusion Survey is a systematic study of the household income across a wide number of ethnic groups and shows that (when controlling for household size) *all* minority groups are more vulnerable to poverty (Pilkington 2003). Lower income to a household is linked with lower living standards and, though not poverty of the nature found in less developed nations, there is certainly an impact on life chances. Contrarily the survey reported no significant link between ethnic group status and general health (Pilkington 2003).

The survey did however clarify the spatial elements of ethnicity and exclusion in the UK, demonstrating that minority groups were largely concentrated into locales – something associated with higher crime rates in the USA (Feldmeyer 2010). A measure of segregation was devised, nominally labelled the index of dissimilarity (ID), where a score of the maximum 100 would indicate complete segregation. Many areas of the UK scored in the high 40s and 50s (Pilkington 2003). Such segregation was also linked to the housing status of the individuals and many minority groups were under-represented in the owner-occupier category.

Whilst the PSI survey outlined the headline results from the UK and the relative position of the minority groups the conclusions are far from clear cut and are too

coarse grained to examine a single group. The differences between minority groups are often as large as that between majority and minority groups (Pilkington 2003). Additionally, the complicating factor of some groups' relative wealth makes examination inherently more complex. As such, the identification of groups which are likely to be particularly at-risk becomes central to this field of research, with subsequent targeted studies providing the necessary resolution of data.

Research examining the position of indigenous groups in the UK is not common, not least because of the dominant size of the (catch-all) category of 'White-British' included in most social surveys (Office for National Statistics 2009b). The small scale studies which have been conducted (for example, McCrone and Bechofer (2008)) tend towards a concentration on group membership rather than exclusion factors which may be present. A number of key studies have been conducted which examine the relative position of the Cornish in the UK however – and these will be discussed in the following sections.

So far this chapter has set out the meaning of social exclusion in a modern sense, the indicators which can be utilised in measurement, and an applicable model for the current thesis. The theoretical links with ethnicity have been discussed as well as some clear indications from previous research that the linkage is real, if not causal. Lastly, the literature hinted at those indigenous groups in already deprived areas being a particularly at-risk group. The discussion will now turn to the Cornish question more directly.

2.4 Cornish ethnicity and social exclusion

The fact that Cornwall is an area of some disadvantage is well documented and there is a long history of poverty and relative deprivation in the county (South West

Observatory 2008a; South West Observatory 2011a). At the time of the Single Regeneration Budget there was already evidence, in the Census and the Indices of Local Conditions, of significant deprivation in the region (Payne 1995). This funding structure aimed to enhance the employment prospects and improve the housing and general quality of life amongst recipient areas, and was (at the time) the only area of government spend influenced by the Indices of Local Conditions (Payne 1995). Analysis of data from the time shows far more widespread deprivation than the more localised effects seen in the neighbouring county of Devon.

One of the more surprising features of this discussion was the relative disparity between the observed (the very real developments in the area) and the underlying reality that there is mass unemployment, high levels of homelessness and low pay. This dichotomy has its roots in the late 1980s (and before) when property development in Cornwall was reaching new levels of popularity; which continues to the present day (Cornwall Council 2011; Deacon *et al* 1988). The housing boom of the 1980s (which began in the south east of the UK) motivated large numbers of individuals to either relocate or invest in property in the county.

The differences between the local population and some of these incoming (as opposed to resident) developers were seen as large and significant (Deacon *et al* 1988). Social deprivation theory, of the nature employed in research into native aborigines; that “...indigenous violence is a reflection of Indigenous economic and social disadvantage” (Hunter 2008:14), found its way into the Cornish literature. According to some sources the Cornish at that time began a process which removed access to resources as well as other cultural elements (Deacon *et al* 1988).

More recently, and as mentioned previously the rural/urban divide in relative deprivation and social exclusion has been well documented in theory (Tanton *et al*

2010), and in Britain the notion that urban social exclusion is more pronounced is under attack (Smith, Davis and Hirsch 2010). The often high costs of living associated with rural life can lead to so-called 'in-work' deprivation. Using the minimum income standard (a measure based on goods and services deemed necessary), Smith *et al* (2010), showed that overall the rural/urban divide is equal; however there were areas such as transport where more isolated areas suffered disproportionately. Cornwall is an area of some deprivation and also significantly rural, therefore individuals who do not fit the idealised rural construct can become excluded (Yarwood 2010). Specifically, this can involve indigenous people; in-migrants to an area form a dominant typology through local elites and marginalise local groups. Whilst this chapter cannot examine all historical aspects of Cornish deprivation, a relatively detailed overview is necessary to frame the previous arguments around a localised and specific setting.

2.4.1 Cornwall and deprivation

Cornwall remains poor despite large scale in-migration of working age economically active individuals (Williams 2003b). The population has increased from 340,000 in 1961 to over 500,000 in 2001, solely due to the influx of migrants (Jaksina 2010). Earnings remain low despite the rise in tourism, though the large scale decline in the regional industries contributes largely (Williams 2003b). This decline in industry (not specifically in Cornwall but nationally) has been shown to be far more complex than simply putting ethnic groups at risk (Iganski and Payne 1999). Indeed, the rise in tourism may well contribute to the lowering of incomes in Cornwall through the maintenance of low paid, seasonal, employment. Recent figures indicate that Cornwall has 33 LSOAs within the most deprived 20% regionally, which equates to almost 52,000 individuals, the same indices of deprivation from 2010 indicate that 12,500

individuals in Cornwall were located in the most deprived 10% (South West Observatory 2011b).

Recent figures published by Cornwall Council suggest that children are at particular risk of deprivation in the county, indicating that 19% of under-16's live in poverty (under 60% of the median income (Cornwall Council 2011)). This figure equates to 16,650 individuals and, whilst lower than the national average, represents 'pockets' of deprivation far exceeding that average.

By far the most comprehensive report on the region available is the *State of the South West* (South West Observatory 2008b; updated in, South West Observatory 2011a), produced by the South West Observatory. However this annual report describes the region as a whole rather than being Cornwall specific, though sub-regional figures are given for limited variables. Between 2000 and 2005 Cornwall saw unusual levels of economic growth, with a 7% increase compared to the 5.8% for the region collectively. Despite these high levels of investment in the county, in 2005 Cornwall and the Isles of Scilly (CIOS) still reported the lowest GVA per head in the region at £11,510 (South West Observatory 2008b); the highest being £20,295. Unemployment in Cornwall has been slowly increasing since 2001 and, although the South West has the highest proportion of working age people in employment, the percentage in workless households has risen (Cornwall Council 2011; South West Observatory 2008a). The figures which outline the situation in light of the 2010/2011 financial crises are still in production and analyses, however average earnings have rarely been higher than 80% of the national average.

Productivity and skills in the region has been for some years an area targeted for improvement (Cornwall Council 2010), with the EU funding for the region largely going towards development in these areas. There is still a large gap in productivity between

the region as a whole and the national average (South West Observatory 2011a), and pre-16 achievement levels are also well below the national average across all four of the performance indicators (South West Observatory 2008a; 2011a). Basic skill levels in Cornwall hover around 18% and 44% for level 2 in literacy and numeracy respectively (Local Intelligence Network Cornwall 2007), qualifications as a whole are well below regional levels. Despite this there is a large uptake of the provided FE in the county and previous research has hinted at the aspirations of potential students not being limited by the levels of deprivation (Husk 2010).

Such headline figures show that there is certainly deprivation in Cornwall and that there is a case for further examination. More detailed and specific studies have often been linked to the development of policy, yet do hint at the deprivation characteristics of the area. Travel provides a good example; whilst often not seen as significant at a regional level travel is frequently cited in local studies as a key variable. Over 46% of Cornwall's residents live in communities of less than 3,000, and 41% of these rural households are more than 10 minutes away from a regularly serviced bus route (Local Intelligence Network Cornwall 2007). Whilst car ownership is higher than the national average, 79%, the figure is proportional to the larger commuting distances. Car ownership in rural areas is, arguably, not a 'luxury' item but rather a necessity and there has been anecdotal evidence of widespread ownership of older vehicles which supports this notion.

One of the defining (and idiosyncratic) features of Cornish deprivation and, as will be shown later, ethnicity levels, is the observed East to West gradient. Largely, the West of the county is more deprived and reports higher levels of Cornish ethnicity (Cornwall Council 2011; Local Intelligence Network Cornwall 2006). Linked LSOA data from the Census and Local Indices of Deprivation clearly show this gradient, and though not uniform due to localised pockets of deprivation the clear trend is certainly East to West.

Similar to other areas of the UK young people are central to levels of deprivation in the region and policy reactions such as the Every Child Matters campaign raise awareness as well as funds. The body responsible in Cornwall links relevant agencies through a partnership working programme combining the police, social care and health bodies. A report published in 2008 showed that teenage conception rates in the West of the county were significantly higher than the national average, there was also a higher instance of under-18 admissions to healthcare resulting from alcohol use (Cornwall Children and Young People's Partnership 2008).

A more detailed picture of the levels of acute exclusion felt in the area comes from analysis of figures collected by charitable organisations linked to central government. Cornwall Neighbourhoods for Change (CN4C) are representative of the most comprehensive approach to relieving specific deprivation in Cornwall. Using evidence from the 2004 Indices of Multiple Deprivation, CN4C showed that the top 100 most deprived neighbourhoods in Cornwall have much higher than average levels of social housing (Cornwall Neighbourhoods for Change 2007a).

The report also confirmed previous findings by showing that Cornwall has a lower than national average household income. Whilst levels of social housing in the region remain low there was a significant difference between the required and provided levels, as well as the satisfaction reported. At least one neighbourhood in each of the six administrative districts (now superseded by the unitary authority) ranked in the top 25 most deprived in the region; though again there was evidence of clustering around the West of the county. Echoing findings from the Primary Care Trust (South West Public Health Observatory 2008) CN4C reported high levels of alcohol related problems, alongside the now well documented lower qualification levels and access to transport.

More recently, in a collation of all the available data for the county, Cornwall Council (2010) showed that there were high levels of geographic variance in exclusion levels. The report also highlighted the importance of migration and demographic change in the dynamic of the whole region. Deprivation was cited as one of the key features of the Cornish situation and development in the region over the coming years is to be built around renewable energy and environmental strategies – seen as important for building the local economy (Cornwall Council 2010).

However, cross cutting this widespread deprivation in the area is the tourism industry; there is little doubt that tourism is one of the key economic development areas for Cornwall and has been shown in other areas to benefit those already deprived. A ‘pro-poor tourism’ (Goodwin 2007) benefits locals in that, often, indigenous groups have control over the trade and thus it can alleviate poverty. However, the process is far from clear cut, with others arguing that there are conflicting issues, for example, the *non-poor* often benefit also; not *all* of the poor benefit; and not *all tourism is itself* beneficial (Harrison 2008). In the Cornish context the tourist façade is based around a Celtic narrative (Tresidder 2010), however the form this takes is widely disputed (Hale 2001). The prevalence in recent years for localised foodstuffs in developing tourism has significantly bolstered an already booming trade (Everett and Aitchison 2008). Tourism therefore operates as a dual process in Cornwall, with evidence of alleviation as well as acting as a catalyst for social difference.

Cornwall certainly contains intense pockets of deprivation when measured using standard indicators, however this may well not represent the true levels; regional statistics mask sub-regional differences acutely. For Williams (1992), the relationship between Cornwall as a sub-region and the larger South West region is central to understanding the area. Statistics produced regularly for the South West as a whole do not reflect the situation in Cornwall, which in turn may actively be detrimental to

development. Variables such as unemployment; GDP; income and housing show vast differences between the regional and Cornish levels. Particularly of interest is housing, which can actually become 'invisible' (Williams 1992:24) as the region has a surplus of housing and only average levels of homelessness (Jaksina 2010). Some policies borne out of regional statistics are therefore often not applicable to Cornwall, thus:

'There is a vicious circle. Cornwall is part of the South West region. Statistics produced for the South West show it to be prosperous. Thus Cornwall as part of the region is seen as prosperous. Regional policy is aimed at overall prosperity for the region and in this is successful. Cornwall is simply not noticed and policies sensitive to its particular needs are not formulated. Thus statistical invisibility has had indirect but profound consequences for the Cornish.' (Williams 1992:27)

2.4.2 Objective One

The historical and acute deprivation suffered in areas of Cornwall meant that alleviation policies were introduced for a number of reasons, primarily to target training, skills and travel (South West Observatory Skills and Learning (SLIM) 2003). SLIM argued that addressing these key areas in Cornwall would have benefits across many sectors; failure to improve would have far ranging implications:

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Individual costs: <ol style="list-style-type: none"> b. Underachievement in education c. Financial loss d. Poor access to services e. Stress and health problems 2. Social costs: <ol style="list-style-type: none"> a. Reduced social cohesion b. Higher crime c. Reduced mobility | <ol style="list-style-type: none"> 3. Cost to taxpayer <ol style="list-style-type: none"> a. Crime - > £60bn pa b. Social Exclusion - £400m pa c. Teenage mothers - £116m d. Problematic drug use - £3.5m 4. Cost to business: <ol style="list-style-type: none"> a. Lack of skilled workers b. Lack of customers c. Greater tax burden d. Less entrepreneurs |
|--|--|

(Source: SLIM 2003)

As such, the policy response was comprehensive and multi-agency and overall had a significant effect in increasing economic inclusion (South West of England Regional Development Agency (SWRDA) 2006). Though not one of the SWRDA core initiatives, there was a concerted effort across many agencies to raise the consciousness of individual level inclusion; indeed two of the themes of the regional economic strategy were to 'develop people' and 'provide economic inclusion for all' (Cornwall and Isles of Scilly Economic Forum 2007:50; SWRDA 2006). In order to achieve these aims the strategy argued that there was a need to target the high levels of worklessness in the region. Benefit data for the county showed that 13.2% of the working age population in Cornwall were workless; additionally, the majority of those claiming benefits were claiming for ill health (CIOS Economic Forum 2007).

Specifically, the economic strategy for the region aimed to establish Cornwall as a knowledge economy; to ensure environmental sustainability and to remove economic and social disadvantage. A number of measures were implemented based around early intervention, for example, making sure that individuals were not suffering prolonged absence in the first place. A second focus consisted of multiple agencies working together to remove the barriers to employment. Whilst this dual approach formed the main focus it is worth noting that many other subsidiary projects also aimed to address multiple deprivation in the county; for example, the healthcare inequality (Cornwall and Isles of Scilly Primary Care Trust 2008), as well as the 'enterprise for inclusion' packages which funded almost 30 projects in the south-west alone (Enterprise for Inclusion 2007).

The effectiveness of the policy response in recent years has been hotly debated, both in the public media and the academic press. Regeneration projects in particular have had a questionable impact (Cemlyn *et al* 2002). Despite such interventions being prevalent in some form since the 1960s the impact on individuals has been negligible (Cemlyn,

Fahmy and Gordon 2005). The reasons for this ineffectiveness are to be found in the very unique factors which exist in Cornwall, though the introduction of European funding at the end of the 1990s negated the need for more development (Cemlyn *et al* 2002).

The European Structural Fund, or at least two-thirds of the total, was devoted to the so-called 'objective one' areas of the European Union (Gripaios and McVittie 2003). These areas were designated through strict qualification criteria as areas which reported a GDP per capita of less than 75% of the EU average over a three year period. In the 2000-2006 rounds these regions constituted 22% of the EU total, and four regions in the UK met the criteria – Cornwall, South Yorkshire; Merseyside and West Wales and the Valleys (Gripaios and McVittie 2003). Setting aside the match-funded projects which the UK government co-ran, the total funding available for the areas was in the region of £3bn and subsequently Cornwall qualified for the 2006-2013 rounds of 'Convergence' funding (or so-called "transitional relief" (2003:369)).

Despite the strict criteria Cornwall's entry and acceptance into the funding scheme was not without controversy. There had been some discussion over the selection process which was used, as a large number of regions in the UK were fractionally under the, arguable arbitrary, 75% GDP (Gripaios and McVittie 2003). The process was further complicated by the use of NUTS level 2 areas for the fund; Devon and Cornwall taken together make the region marginally over the entry criteria. Lastly, Gripaios and McVittie (2003) suggest that GDP may well not be the most applicable criteria by which to allocate funds, there were complex mechanisms which affected this figure. Cornwall, for instance, had a net commute export to Plymouth (amongst other factors) which directly reduced the GDP in an arguably artificial way (Gripaios and McVittie 2003).

Once qualifying areas were selected the form that the funding took was often complex; one particular example in the South West was jointly funded by the Structural Fund and Job Centre Plus, and aimed to target individual level exclusion (Objective One Partnership Office 2006). Aiming to further equal opportunities by aiding individuals to move closer to the labour market the implementation and effect were somewhat complicated by the dual running of extraordinarily similar projects (Objective One Partnership Office 2006).

The impact of the objective one funding programme is hard to gauge with any accuracy and will probably remain unclear for many years. However a comprehensive analysis by SLIM examined the impact through interviews with stakeholders and managers as well as a rigorous analysis of the official data (SLIM 2008). The lack of a control group meant that the authors were unable to clearly delineate the ESF impact, and so only non-comparator outcomes were reported. Overall, across the economy, business community and individuals saw major improvements during the time ESF was operating (SLIM 2008). The report also discussed the state of the funding and management for the entry into the Convergence programme, which was designed to add value to the original projects. This funding is already well underway (as of 2011) and recommendations, such as a move towards softer outcomes and the concentration on a knowledge economy are being suggested (South West Observatory Skills and Learning (SLIM) 2008). Valuable lessons have been learnt and can be used to address the next stage of funding. Whilst this is difficult to verify in light of the absence of controls it does seem likely that the projects have had some impact.

On a more individual level the impact of ESF funding is somewhat easier to measure. CN4C argued that (in Cornwall) a large proportion of individuals remain in disadvantaged neighbourhoods for over 6 years, and, need becomes ever more intense (Cornwall Neighbourhoods for Change 2007b). It is this cyclical need that the ESF

funding and associated projects have impacted upon and there have been very real differences in some of the communities (Cornwall Neighbourhoods for Change 2007a).

Recent statistics in Cornwall confirm that the historical disadvantage described is certainly not completely alleviated by the major policy intervention and that there are still many areas of localised deprivation (Cornwall Council 2010). Whilst there has been a concerted response, the successes have been somewhat limited as well as being geographically specific (Cemlyn *et al* 2002). There are many potential reasons for this ineffectiveness, ranging from inadequate strategy to sub-regional difference.

In this area of disadvantage, though, who suffers most? The previous arguments highlighted the experience of the indigenous peoples of deprived geographies; are the Cornish such a group? Before outlining research which has directly addressed these questions, it is first worth re-visiting the notion of the Cornish as a distinct *ethnie*.

2.4.3 Cornish ethnicity revisited

Whilst the previous chapter made the case for the designation of the Cornish as a distinct group through an application of Smith's (1988) model, it is necessary to outline the problem in a more pragmatic sense. Though the group may be conceptually well grounded, as well as demonstrably evident in the region, it would be impossible to gauge the relative position of the Cornish without a concrete idea of their number or composition (it is a lack of data which plagues most ethnic categorisations, Johnson *et al* (2008)). What emerges from such an analysis is that studies which address this question directly frequently do not address notions of inequality and ethnic based exclusion becomes the 'elephant in the room'.

Research which enumerates the Cornish is certainly not common, though the amount of data which exists is considerable. One of the seminal and certainly most responded

to surveys which examined Cornish ethnicity was undertaken by the Cornwall Strategic Partnership in 2007 and consisted of a postal questionnaire with 3,222 respondents (Cornwall Strategic Partnership 2007). Overall, 25.9% of the respondents selected a Cornish ethnic identity ('White-Cornish') with the expected frequency gradient running from east to west. The highest rate of Cornish concentration was in the town of Penzance, furthest from the border with Devon at 39.5%, and the lowest at only 19.1%, with clustering around many localities. Largely the respondents felt satisfied with their area of residence when measured using community cohesion variables, the natural environment playing a large part in that scale (Cornwall Strategic Partnership 2007). Despite the questions posed in this chapter, none of the variables in the analysis of this survey were linked to Cornish ethnicity. Though there were gradients related to the smaller administrative areas, no analyses were conducted which linked the two. It would have been informative to know, for example, whether levels of cohesion varied along the same lines as the east to west ethnicity gradient. In other words, the levels of 'Cornish-ness' increased with distance from the border with Devon and so were other variables related to this demographic shift?

The measurement of ethnicity, at least in broad terms, seems better suited to quantitative methods (despite the rise in affiliation measures, see Ong *et al* 2010); however there have been limited studies which utilised some qualitative approaches. In a small scale ethnographic study, Willett (2008) examined the bases of Cornish identity. The primary objective was to separate the often conflated issues of Cornish and English national identities, and Willett (2008) concluded that there was certainly a feeling of separateness based largely around descent. Relevant here, though, is the assertion by Willett (2008) that if a Cornish identity can be considered a social fact then it can be measured empirically. Whilst severely limited in scope, a sample size of just 150 collected using a snowball sample, Willett (2008) found that almost 60% of

the respondents identified as Cornish, 41% felt more Cornish than English, and 56% stated a Cornish identity instead of English or British. The reasons for this strong identification (sampling error aside) were attributable to a 'love of the county' and the fact that Cornwall was considered to be comparable, in an administrative sense, to Wales or Scotland (Willett 2008).

These two relatively small studies show the Cornish to be a significant group in the region with a strong sense of identity, despite the result being difficult to extrapolate to the County as a whole. By far the largest data set collected which made some effort to collate Cornish responses was the 2001 Census. The England and Wales Census is the largest social survey in the UK, and it is a requirement by law for every resident to complete. In the 2001 round there was a response to the large political movement in Cornwall to include a Cornish option (Office for National Statistics 2009a), thus making it the largest data set of its kind. However it is by no means the most rigorous, as for individuals to identify as Cornish the 'Other' option had to be selected and 'Cornish' written in. The same option was used in the 2011 Census, though the results for that round are currently in processing (Office for National Statistics 2009b). The lack of a dedicated tick-box option forced systematic error into an otherwise invaluable dataset, those who identified as Cornish will be limited by the exposure to the (somewhat limited) publicity that the option gained. Further complicating the results is the well documented fact that those who take time to complete 'write-in' variables will be those with a more developed sense of ethnic identity (as seen with the Irish results, Hickman and Walter 1997). More specifically, the data may well be skewed in favour of those in non-manual classes (Hickman and Walter 1997).

Despite this, the Census statistics for 2001 represent the most comprehensive collation of the Cornish to date, and in that year 33,932 individuals selected a Cornish ethnic identity (Cornwall Council 2009). This represents a total, across CIOs, of 6.8% which

considering the limitations is a quite significant figure. In order to further develop an accurate picture of the Cornish it thus becomes necessary to further interrogate these data and examine possible, methodologically rigorous, ways to improve the accuracy of the result. The inaccuracy is well recognised by users of the data (Cornwall Council 2010) and the improvement, re-analysis and advancement will form one of the main themes of this thesis.

The second theme of this thesis is the relative position of the Cornish, it is not only necessary to examine the scale of the group but their experience of (B-SEM (Levitas *et al* 2007)) exclusion variables. Whilst there has been much written in the popular (Deacon *et al* 1988), and academic (Payton 1993a), press about the position, relative to others in the same area, very little comprehensive research has been carried out which examines the problem directly.

In a large scale analysis of the housing problem in Cornwall, Buck, Williams and Bryant (1993), utilised a number of proxy variables to conclude that the Cornish are over-represented in social housing and amongst the homeless, and this result is echoed throughout the literature on homelessness in other rural areas (see for example Cloke, Millbourne and Widdowfield 2001). Housing problems are most associated with individuals in the manual classes, as well as those on low incomes and the unemployed; all features of the long-term population of Cornwall, argue Buck, Bryant and Williams (1993; Jaksina 2010). Whilst no ethnicity category was included, the authors utilised longitudinal data to show that the housing problem was significantly worse amongst those residents of Cornwall who remained between 1971 and 1981 Censuses.

‘An important factor of housing poverty in Cornwall, then, is that it is more likely to affect Cornish people, whatever definition of Cornish one uses statistically. Given the association between other aspects of housing poverty and housing shortage it therefore seems likely that the long term residents of Cornwall-the Cornish-are the ones more likely to suffer housing shortage.’ (Buck, Williams and Bryant 1993:2)

Such a definitive conclusion remains limited however by the lack of a direct measure of ethnic identity. Long-term residency is not a reliable indicator of ethnicity (Jimenez 2010). Some authors have gone further and suggested that the Cornish were suffering a form of “ethnocide” (Deacon *et al* 1988:157), at the hands of increased development and in-migration. The decline in Cornish heritage and identity led a great many individuals to suffer because of their ethnicity, argue the authors. The remainder of this chapter will now examine the elephant in the room; links between Cornish ethnicity and social exclusion, as the current research indicates. Subsequently two main foci of research will be highlighted which have yet to be addressed, which form the basis of operationalisable research questions for this thesis.

2.4.4. Cornish ethnicity and social exclusion; previous research

Whilst small, the research which has addressed the relative position of the Cornish has seen great media and policy attention; with many utilising the tentative results for political advancement of devolution in the area (see the ‘Cornish National Minority Report’, Deacon and German (1999) and the subsequent update, Saltern (2011)). The levels of deprivation felt in the county make the region an important case of analysis in terms of excluded groups. Public perceptions were strongly linked to the aforementioned migratory patterns; that the in-migrants arrived rich and remain wealthy at the expense of the indigenous population (Williams 2003b). Though the reality is somewhat different – the migrants actually became less economically active after arriving – the process has been detrimental to Cornwall as a whole, “Cornwall got the population without the growth” (Williams 2003b:67).

The migratory characteristics of Cornwall, though complex, indicated that there was a sociologically interesting phenomenon worthy of further investigation (Williams and Champion 1998). Specifically, it has been hypothesised that the migratory characteristics of the county mask the underlying differences in structures, between the migrant and non-migrant populations (Jaksina 2010). Additionally, Jaksina (2010) demonstrated clear links between the housing market and the migrant status of individuals, with in-migrants more likely to be owner-occupier status than the long-term population.

The natural progression was to make comparisons between in-migrants and the long-term population. Williams and Harrison (1995) concluded that out-migrants tended to improve their life chances, compared with those individuals who remained in Cornwall. Additionally, whilst in-migrants tended to have an economic advantage initially, the group came to resemble the long-term population after a number of years. Indications in this specific project were that the long-term residents (whilst not significantly worse off) were experiencing social change in a different manner (Williams and Harrison 1995). Three further studies developed this notion and though all use proxy variables for Cornish ethnic identity all aimed to explore the group for signs of disproportionate exclusion.

Firstly, Williams (1995) surveyed 1500 households in the county and examined the relationship between long term residents and in-migrants, particularly in terms of housing needs. Though no direct examination of Cornish ethnicity was included, almost 40% of the respondents had lived in Cornwall for their entire lives. Williams' (1995) analyses indicated that, contrary to popular opinion at the time, a large proportion of the in-migrants arrived aged between 18 and 24. Confirming previous findings, the long term residents were found to be over-represented in the manual classes and over represented in housing association (and local authority) housing.

Secondly, and using the same long term residency proxy, Thornton (1996) examined the second-home owner population in the region. The 1991 Census result indicated that the majority of these properties were located in north Cornwall, which contained the highest ratio of 'second' to 'first' home owner residences. The scale of the issue was considerable; 24 of the communities which were examined had in excess of 10% of the total housing as second-homes, with average use only 63 nights a year (some as low as 20 nights). Clear differences between these two populations emerged. In terms of occupation, the long-term population was (once again) found to be over-represented in the manual and clerical occupations, and also suffered high levels of unemployment. The second-home owner population was more likely to be employed in the professional or managerial sector, and reported unemployment figures close to zero (Thornton 1996). Some elements of the long term population reported resentment in the community towards the second home owners. Those individuals remained unaware and integration was not an important factor amongst either group. The attitudinal analysis revealed that the second-home owners felt, strongly, that they contributed to the local economy by occupying otherwise empty properties, the long term population was polarised in their agreement (Thornton 1996). That is not to imply that these are uniquely Cornish issues, which they are almost certainly not, but that the case in Cornwall is potentially made more acute by such factors.

Lastly, an analysis was conducted of the tourism sector in a small area of north Cornwall; those born in Cornwall (again no direct indication of ethnic identity, Jimenez (2010)) were found to be under-represented amongst entrepreneurs in the county (Hennessy *et al* 1986). In total, only 13 of the 81 respondents of the survey (which examined hotels; accommodation; restaurants; retail; and industry) were born in Cornwall. Indeed, in the hotels category alone over 90% of the respondents were originally from outside Cornwall. This goes some way to addressing the pro-poor

tourism notion mentioned previously, the complexity of the process is significant – and may, in fact, be a catalyst for social difference.

Thus, proxy variable analysis indicates significant differences between the long-term population and other groups in the same area. Aldous and Williams (2001), and Aldous (2002), get closer to the issues raised in this chapter by seeking to measure the Cornish as a group, and subsequently examining the links with other variables. The starting point of their research was young people and their migration choices in Cornwall and Devon. The numerous problems outlined in the previous chapter concerning the measurement of ethnicity (see page 22) were highlighted by the authors, and despite the fine grain of the variables which were included, some error was expected; however the survey returned a 29% ‘Cornish’ response (Aldous and Williams 2001).

Once again the authors reported a gradient of ethnicity from east to west, suggesting stronger associations to ‘Cornish’ in the west. Aldous (2002) suggests that this may well be because of migratory patterns in the County; with less in-migrants the further one moves from the border with Devon. Other factors may well include the proximity to an urban centre, which necessarily increases the short distance moves into, and out of, the county.

The links made between the Cornish and other variables are complex and whilst no attempt is made to examine the relative position in terms of social exclusion, some relevant conclusions are drawn. Aldous (2002) asserts that there may well be a ‘migratory elite’ at work whereby an educated middle class forms a large part of the professional classes (also see Burley 2007). It is the migratory class issue in which there is likely to be a class dimension when mapping the Cornish as a whole. As has been shown by Williams (1995), there is a relationship between long-term residency and deprivation in Cornwall. As such any exploration of ethnicity in the region must be

cautious of the latent class variable. More specifically, when measuring for associations between ethnicity and others is there a more simplistic relationship between class and exclusion?

Aldous (2002) found no association between Cornish ethnic identity and deprivation in her research and, whilst this may be because of the sensitivity of her measures, she argues that it may well be because self-identification cuts across the class variables. There was however a relationship between residency and parental occupation, with longer term residents over-represented in the manual classes.

The most applicable and relevant results for this thesis come from 'The Change in the Countryside, the Cornish perspective', a report which describes the findings of a survey which aimed to monitor the changes occurring in the Cornish countryside (Griffiths 1989). The project was set up to represent the views of individuals living in rural areas, as opposed to the official view. Importantly, the report broke down the findings by *self-identified* measures of Cornish and non-Cornish.

Interestingly, the report showed little difference between Cornish and non-Cornish employment status, though there were significant relationships when control variables were introduced. The Cornish, for example, were more likely to work in the manufacturing and agricultural industries. The groups were also significantly more likely to work closer to their place of residence (50% of the group worked in their parish of residence, compared to only 33% of the equivalent non-Cornish). The Cornish earned, on average, 15% less than non-Cornish residents in the same area; with the average income for a Cornish household £9,000 and non-Cornish in the same region £10,500 (Griffiths 1989). On average (across 12 parishes), the ratio of Cornish to non-Cornish was somewhere around 2:3. The proportion of non-Cornish households varied

from 53% to 79%. The survey also showed that a significant minority of the Cornish population had lived in the same area for over 15 years.

Employment figures from the report show that higher incomes were found in the tertiary sector, with the Cornish much more likely to work in the primary and secondary sectors. A Cornish home was also only half as likely to be in the top wage bracket. Housing was, again, an area which displayed large disparities. The Cornish were more likely to live in a farmhouse and less likely to be in a detached property; with significantly more non-Cornish in the owner-occupier category (Griffiths 1989). Anecdotal evidence from the report suggested attitudes amongst the Cornish that the incoming migrants were eroding a historical tradition of the indigenous culture, and many reported active discouragement of integration with 'outsiders'; further encouraging attitudes of "us and them" (Griffiths 1989:190).

2.5 Literature gaps and questions posed

This chapter has shown the importance of gaining an understanding of the Cornish, particularly relative to other groups in the same region. The previous section demonstrated the little which is known about the problem, and the lack of research into the links between Cornish ethnic group affiliation and social exclusion. Are the Cornish, as has been publicised, an oppressed minority (Jay 1992)? There are clear indications that the long term population of the county are:

1. More likely to be over-represented in the manual classes.
2. More likely to live in the same area for extended periods of time, with the related limiting factors.
3. More likely to earn significantly less than other groups.

4. More likely to be in housing need, or to be in rented (rather than owner-occupied) accommodation.

Whilst all tentative hypotheses based on research which utilised proxies the results show a tendency for certain variables to be experienced differently, if not significantly worse, than others. The variables which have been linked in these instances to long term residency or birth in Cornwall are present in the B-SEM matrix (Levitas *et al* 2007), and so potentially the group show links to social exclusion.

Therefore two key research questions emerge from literature:

Research Question 1: What are the actual numbers of individuals who self-identify as Cornish in Cornwall?

Research Question 2: What is the relative position of the group compared to others in the same region?

The single tailed hypotheses which can be posed in light of previous, tentative, findings are:

H_0 = There is no association between self-identified Cornish ethnic group affiliation and social exclusion as measured on the B-SEM matrix.

H_1 = There is a positive relationship between self-identified Cornish ethnic group affiliation and social exclusion as measured on the B-SEM matrix.

These represent the top level hypotheses of the thesis and it is not within the scope of this thesis to provide a *definitive* answer to these questions. Rather, this represents the first (and most rigorous) attempt to map and place the Cornish within the context of ethnic groups in the region. In order to fully address these research questions they must be further broken down and specific strategies employed.

It was clear from the literature that the most comprehensive and applicable data set in this field was the 2001 Census, the 2011 round remains (at this time) in processing and so the results will be some time away. There were clear and major problems with the data recorded from that write-in option and it would be inappropriate to undertake a repeat of the Census, however it was necessary to examine the scale of the group prior to considering their relative position.

The first stage of analysis was a process of improving the existing 2001 Census data. As stated previously, there had been a rise in the number of agencies collecting ethnicity data with a Cornish option, and a rigorous collation of these (directly measured) results could be used to weight and re-analyse the Census. The first phase of this thesis will therefore consist of a secondary analysis to:

- a. Identify and collect datasets which refer directly to Cornish ethnicity.
- b. Collate these data and compare distributions of the ethnic groupings over separate sets.
- c. Use the collated data as comparators to improve or weight the original Census data.
- d. Use the weighted data in order to undertake more rigorous analyses of the Census and examine the links with social exclusion.

This phase studied the pre-existing data, and collated them into a more coherent form to enable a deeper understanding of the Cornish as a group. This more accurate synthesised Census data provided a baseline from which to analyse the group in relation to others in the same area.

The inherent methodological flaws in secondary analysis prevent highly reliable conclusions to be drawn and so the process served as an exploratory phase to highlight further specific areas of investigation. In order to assess the two research questions in

a more reliable, and valid way two phases of primary research were undertaken. Firstly, primary survey research which sought to:

- a. Measure the levels of self-identified Cornish ethnicity in the region.
- b. Informed by the secondary analysis, examine the population for links with exclusion variables as defined by the B-SEM matrix.

Secondly, a process of qualitative interviews which examined in greater depth the same issues. Whilst all of these phases will be discussed at greater length in subsequent chapters the top level structure of research is dictated here, by the emergent gaps in the literature on the Cornish as a group.

2.6 Summary

This chapter has described the conceptual and substantive elements involved in the definitions of social exclusion, particularly as distinct from older conceptions of poverty and relative deprivation. The B-SEM (Levitas *et al* 2007) matrix presented itself as the most comprehensive tool for the identification, and subsequent utilisation, of exclusion variables and as such this will be the model employed by this thesis. The links between social exclusion and ethnic group affiliation were described and the inherent disadvantage which many indigenous groups find themselves become apparent; thus an examination of the Cornish is both timely and necessary.

The potential for disproportionate disadvantage seemingly increases in areas of pre-existing deprivation and it was shown that Cornwall is indeed such an area. Existing research largely left notions of Cornish ethnicity and disadvantage under-examined and so two key research questions emerged. Firstly, the size of the group and its composition, secondly, the relative position of the group compared to others in the same region. Ultimately it is possible to hypothesise that individuals who self-identify

as Cornish will suffer social exclusion variables significantly differently to others, the next chapter will outline the methods used to test this hypothesis.

3. Method/ology

3.1 Introduction

This chapter has four main sections, the first of which is a discussion of the methodological issues involved in social research as well as the philosophical consideration of mixed method research in general. The subsequent three sections will outline the particular considerations given to methods which address the research questions posed in the last chapter. Firstly, to outline the processes involved in the secondary analysis of large-scale data and the England and Wales Census more specifically. Secondly, the weighting techniques utilised in the collation of data sets and the re-analysis of the 2001 Census data will be outlined in detail. The last sections discuss the methods employed in the primary phases of research, examining the linkage between Cornish ethnic group affiliation and social exclusion, both a postal survey and semi-structured interviews.

3.2 Philosophy of social research

It would be impossible to undertake an examination of social phenomena without due consideration of the underlying philosophical issues regarding access to types of knowledge. Ultimately any research which addresses social issues seeks to make reliable claims which approach the truth of a given problem (Benton and Craib 2001). Whilst there have been traditionally clear divisions in the social sciences between the two major approaches, qualitative and quantitative, there has been a move towards a more inclusive and problem driven set of methodologies (David and Sutton 2004). A brief overview of these debates will frame the later discussion on the methods employed to address the research questions in this instance. The methods employed in

this project, whilst primarily quantitative, also incorporated qualitative data collection and thus a brief discussion of the two positions is relevant.

The qualitative tradition within the social sciences is less closely tied to the objective and empiricist notions of truth than quantitative enquiry, and has therefore been accused of being less-scientific (Berg 1989). Whilst factually accurate such an accusation is value-laden and 'science-centric', rather, qualitative enquiry has as a starting point the notion of a web of interactions between social actors associated with naturalism (Benton and Craib 2001).

As opposed to addressing the problem of the 'way the world is', such an approach seeks to address the way the world is for the actor under examination (Goodman 1982). It is *meaning* which therefore becomes the focus of interest in qualitative enquiry, and the properties of such meaning ascribed to the social phenomena (Schutz [1932] 1967). In pragmatic terms research utilising such an approach seeks to examine the *qualities* of the social; the "how, when and why" (Berg 1989:2). Such an approach is useful in the current context as associations which emerge from large-scale quantitative data are often unable to examine the more complex underlying processes; certainly, the coherent story which emerges in the Cornish case (see page 227) would not have been accessible without rich qualitative data.

Methods often closely allied to qualitative research include interviews, ethnography, observation and newer methods such as visual analyses (David and Sutton 2004). Data produced in this manner relate to individuals' beliefs, and the subsequent analyses can examine the similarities and differences between small numbers of individuals (Winch 1982). Unlike numerical data qualitative results are deeper, richer and far more varied; for these reasons there are necessarily less participants which can be included. Whilst there are clearly implications for the level of generalisability which low levels of participants can yield, there is not a cohesive argument for negation; rather, a

moderation of the generalisability (Williams 2003a). The problems associated with wider applicability are somewhat countered by the high levels of reliability produced (Williams 2003a); access to causality is arguably only achievable using the richer sources of data.

Somewhat opposed to this tradition of qualitative enquiry are those methods which have more reliance on scientific and objective ideals (David and Sutton 2004). The precise nature of whether a social science should (or indeed can) represent objective truth is hotly debated. Many would argue that whilst the researcher necessarily introduces bias social science should aim for objective measures of truth in some form (Williams 2005, Williams 2006). Counter to these arguments is the position that the researcher bias must be central to the position taken and subjectively theorised (Hammersley 2000). Nuances aside, quantitative approaches are more traditionally related to an assumption that the social world exists independently of an actor, and the focus becomes the design and testing of operationalisable hypotheses (David and Sutton 2004).

This tradition underpins the main body of primary research undertaken in this thesis, and though the complex 'story' remained inaccessible without qualitative data the broad size and relative position of the Cornish as a group was best examined (in order to address the current research questions) by utilising numerical (and generalisable) survey results. It was certainly necessary to utilise wider (rather than deeper) data for the exploratory phases of the Cornish position to establish an overview of the group.

A reliance on standardised statistical tests and data analyses, necessarily linked with the positivist tradition, mean that the central foci of quantitative social science are issues of generalisability and reliability. Certainly, the main survey element of the research in this instance contained rigorous sampling and distribution techniques, alongside coherent data analyses, to maintain high levels of generalisable and reliable

results. That is not to imply detached observation and theory generation but rather the inclusion of more evidence to support or (more likely) refute pre-existing hypotheses generated from previous research (May 2011).

Methods which seek this 'underlying mechanism' therefore are those with a heavier reliance on sampling and standardisation (Williams 2000). These mathematically rigorous sampling issues negate the need, in both social and natural sciences, to examine every individual in a given population (Bechhofer and Paterson 2000). A more detailed discussion of the pragmatic issues around sampling will be included later in this chapter (page 123, see also De Vaus 2001), however it is important philosophically that a proportion of a group can be reliably extrapolated to represent the population as a whole. Survey research is by far the most commonly utilised method from the quantitative tradition and seeks to make generalisable claims about a given population; though necessarily without the depth included in qualitative analyses. The statistical associations between variables can reveal large-scale patterns in behaviour, and top level linkages (Oppenheim 1966) – such as between ethnic group affiliation and social exclusion – however deeper underlying causality can only be approached utilising a combination of the two traditions.

To address the links between Cornish ethnicity and social exclusion rigorously and reliably a combination of methods from both of the traditions was required. Whilst from seemingly opposing philosophical standpoints the frequency of mixed methods research has increased in recent years. The criticism of methodological "exclusivism" (Brent and Kraska 2010), is that the rigid boundaries between methodologies can be limiting to the scope of analysis directed at a particular topic. Taking a pragmatic approach, Creswell (2007), argues the focus should be the problem under scrutiny, rather than the methodological tradition most followed by the researcher. A combination of methods from both academic camps means that individual aspects of

social phenomena can be examined using different methodological tools (Brent and Kraska 2010).

How methods are combined is a source of some debate and, in the emerging literature, the most coherent arguments are forwarded by Creswell *et al* (2003). Arguing that mixed methods should represent a distinct research design in itself, Creswell *et al* (2003:215) examine the “implementation”, or sequencing, of qualitative and quantitative sections of a single project. Largely determined by the topic under scrutiny, the phases should represent the key objectives to be examined; so in the current case the intention was to explore the variables across a large sample first and then more in depth using a smaller number of cases. Though more common, the linearity of mixed methods approaches is often questioned and Creswell *et al* (2003) describe a number of cases of concurrent and circular data collection.

Despite these arguments, the mixing of methods “cannot yet be regarded as an orthodoxy” (Fielding 2009:127), and any combination naturally multiplies the risks as well as the advantages of the techniques used. Additionally, the individual researcher effect may well be increased as there are few who are completely adept at both statistical and more empathetic analyses (Brent and Kraska 2010). British sociology has seen a distinct rise in the use of mixed method/ologies at an individual researcher level, however there have been arguments that the discipline as a whole still lacks ‘genuine plurality’ (Payne, Williams and Chamberlain (2004:161).

Arguably all approaches should be considered as being on a continuum – with pure quantitative research at one end and qualitative at the other. Pure mixed method research lies in the middle, and all research projects sit somewhere along the line.

The research questions posed at the beginning of the last chapter require elements of both the philosophical traditions; wider generalisability to the population of Cornwall as far as possible, but retaining causal elements to hint at the underlying processes.

Necessarily those elements of the research questions seeking to make claims about a wider group – the scale of the Cornish for example – will utilise more quantitative methods, whilst the attitudes behind social exclusion factors will require deeper data. The former employs quantitative secondary data analysis alongside primary survey research and the latter a stage of qualitative interviews and analysis.

3.3 Phase one – secondary research and the 2001 England and Wales Census

In order to address, in the first instance, both of the research questions posed it was necessary to rigorously examine, evaluate and improve the largest data set available – the 2001 England and Wales Census. The following sections of this chapter will set out the somewhat complex methods used in this evaluative and improvement phase, from an overview of secondary analysis in general to the weighting techniques (and specific analysis) which were carried out (for the complete process see chapter 4, page 141).

Secondary research differs from the majority of social science enquiry in that it is often not planned, conducted or analysed by the same individual, or group of individuals, and simply ‘implies a reworking of data already analysed’ (Dale *et al.* 1988:3). In a more modern form, the utilisation of pre-existing data has seen a distinct rise in popularity; possibly linked to the modern academic tradition of “publish or perish” (Hofferth 2005:891). It would certainly be impossible for a large proportion of researchers to collect new data for each individual project and the use of secondary research in one field rose (in terms of published papers) from 31% in 1983 to 51% in 1993 and up to 75% in 2003 (Hofferth 2005). Certainly, the rise in advanced statistical packages such as SPSS alongside the relatively cheap cost of (previously time consuming) analysing large scale data justifies a rise in secondary analysis.

There are clear benefits of using pre-collected data; predominantly it is often relatively cheap and easy to obtain. Whilst the process remains largely an exploratory tool, a

single researcher can gain access to particularly large data sets and make wider inferences than would have been possible through primary collection (Kielcolt and Nathan 1985). This increase in sample size is central, especially with the inclusion of multiple data sets, which allow for the exploration of previously under-researched phenomena. For example, secondary analyses allowed the comparison of a number of countries in an examination of global inequality; something which had previously been thought overly ambitious (Roos 1985). The results indicated that, unlike previously thought, there were strong patterns across multiple nations.

The benefits of secondary data analysis must of course be weighed against the disadvantages. The first of these are the inherent problems with survey data and the fact that a second use does not *clean* the data. Additionally, there are problems relating to the limited access to data; the format of the original data; the original aims and the time taken to 'learn' a new data set. Conceptual issues are also fundamental in the reuse of data; how can one be sure that the phenomenon under examination does not change across differing data (Hakim 1982; Hofferth 2005; Kielcolt and Nathan 1985)? Whilst there are many practical advantages to a process as disjointed as this, such as the accuracy of inferences or the lack of ambiguity, the largest drawback remains inherent; that the subsequent analysis of data is not conducted by those individuals who undertook the research (Church 2001). The process is not a new one for the discipline, the analysis of published data featured heavily in the work of luminaries such as Durkheim, Weber and Marx (Frankfort-Nachmias and Nachmias 1996). The utilisation of secondary data is used in a number of methods, ranging from meta-analyses of published material to the re-analysis of large-scale survey data (Kielcolt and Nathan 1985). Most commonly, multiple data are used in conjunction with other pre-existing large-scale results.

The criticisms levelled at secondary data analysis are numerous and with good reason, as any re-analysis based simply on the numerical data excludes a large amount of

important information. However the “notion that such inaccuracies can render the data unusable is trite” (Smith 2009:98). In combination with other methods, secondary analysis is an invaluable *exploratory* tool.

A particularly good example of relatively simple secondary analysis with a high impact was an examination of continued ‘care at home’ in the USA, (Chen *et al* 2008). Utilising large data sets from across the USA which focused on care agencies, the reasons that patients continued to live at home during care were examined. Logistic regression analysis from the pre-existing data showed that there were some simplistic and logical predictors: living with family members; being less than 80; being married; and having a primary caregiver. Clearly these are high impact and life improving results, which would have been unobtainable through alternative routes.

With the focus on the re-analysis and combination of pre-existing data one of the clear foci of research utilising secondary analysis is the identification of relevant data for inclusion, (Kielcolt and Nathan 1985). Sources of data are hugely varied; however common providers include academic institutions, data archives or official government bodies, (Hakim 1982). One of the clearest guides for inclusion comes from the work of Dale *et al*, (1988), which sets out six criteria:

1. The purpose of the study;
2. The information that was collected;
3. The sampling frame;
4. The quality of the data;
5. The generalisability;
6. The timescale and the date.

As well as these inclusion criteria, the ethical considerations of both of the projects under investigation as well as the original study must be taken into account (Dale *et al* 1988). Despite these criteria the process is far from straightforward; as each of the

individual sets of data were collected for differing purposes there are, therefore, errors which must be accounted for. *Collection* errors are present in every type of research, (Jacob 1984) and these sampling errors can only be statistically examined if a random methodology was adopted. However the most fundamental errors present in the majority of analyses are the *conceptual* errors, (Jacob 1984); simply, are two sets measuring the same thing?

3.3.1 The 2001 England and Wales Census

One of the most commonly used data sets for secondary analysis in both the UK and the USA is the National Census (and important specifically for the Cornish case, see chapter 2, page 87). The Census was, and remains, the 'most important single survey of the socio-economic characteristics of the population', (Hakim 1982:27). In short, the Census is a government organised and delivered survey that aims to enumerate and examine all individuals in a geographic area. As a government survey there is a legal requirement for individuals to complete and return the form, which has advantages both for response rates and the limiting of bias. The size of the Census is useful for any subsequent small-area analysis, not limiting the numerical values of each geographic area, (Hakim 1982) except at very small scales.

The Census in the UK has existed since 1801 and (with the exception of 1941), has been taken every 10 years. There are, broadly, three Censuses in the UK which cover England and Wales, Scotland and Northern Ireland; however in the current case the most relevant is the first. Until 1951 there was total coverage in the Census, however from that point onwards sampling was required and still features heavily. One of the key advantages for social science is that the Census is run consistently; that is, the concept formation remains static and overcomes some of the aforementioned conceptual problems (for a good discussion of variable inclusion criteria see, Moss

1999). The post-enumeration surveys in the UK which run shortly after the Census itself provide estimates as to the levels of under-enumeration and are later combined into a single 'One Number Census' to give a more accurate picture (HMSO 1999).

That is not to argue that the Census in any state represents a perfect survey, despite the fact that it remains the only source of information for a number of topics the national coverage limits the number of categories which can be included for small-scale analyses, (Hakim 1982). It is often the case that the Census benefits from collation with other data (Hakim 1982; and more specifically, Cornwall Council 2010). Finer-grained data has advantages over nationally devised variables, and so combination often leads to powerful explanatory results which overcome the problems of inclusion and exclusion of key topics (Benjamin 1955). Particularly relevant in this case are the inclusion and exclusion criteria set out in the Census for ethnicity questions, the inclusion of too many categories limits the survey, whilst the inclusion of too few limits the respondents (Aspinall 2009). This problem was discussed in the first chapter (see page 22) and will emerge in later chapters (see page 238), though the omissions (and complications) based on granular inclusion criteria for ethnic variables is a key theme of this thesis as a whole (see Aspinall 2009; Simpson and Akinwale 2007; Office for National Statistics 2009a; Fein 1990).

The undercounts across ethnic groups have been well documented in the USA, particularly amongst black and Hispanic groups, (Erikson *et al* 1989) leading to some calls for the inclusion of dedicated categories (Hitlin, Brown and Elder 2007). A combination of other data sources, in conjunction with migration data, showed that the missing elements of the Census were explained mostly by predictors such as ethnic group. Census results often display errors at very small scales (Walter and Causey 1991), and one particular examination of regions in the USA found significant errors for analyses conducted with geographic areas of less than 500 individuals (Fay and Herriott 1979). The USA Census bureau integrated the re-analysis of small scales into

its main post-enumeration in 1974 based on that analysis. More relevant to this thesis is the work by Davies *et al.* (1997) who reported that Census data often need improvement through weighting strategies, specifically in terms of deprivation. The authors devised a set of measures which formed the basis of a new index of deprivation, and was found to be a useful improvement to the larger-scale Census data, (Davies *et al* 1997).

Estimating, and improving Census data in the UK does occur, with the most common being the population estimates provided by ONS between Census years. These utilise 'cohort component methods', which uses births, deaths and migration data to update the figures, (National Statistics 2004). Indeed, the ONS do estimate the scale of ethnic group divisions – something they argue is essential in exploring the links with social exclusion. However these estimations require four keys data sets, a baseline; fertility; mortality; and migration data, none of which are currently available for the Cornish (National Statistics 2002). This represents a shift, in the UK Census, from a 'returned form' result to estimating the total population, alongside a notion of measuring the *resident* rather than the *present* population at the time of the Census. Though the use of other data to improve Census results in general is relatively common, the peculiarities of the England and Wales survey, (the integration into the One Number Census (Teague 2000)) mean that efforts similar to those in the USA are redundant, and alternative methods had to be found.

The 2001 Census in the UK included some key developments, yet in other respects it was a traditional Census (HMSO 1999). It was implemented on a single day, with those absent included in a follow up four days later. There was also a post-enumeration survey, the Census Coverage Survey (which had been present prior to the 2001 round), the results of which were included in the Census data as part of the 'One Number Census' programme; (Teague 2000). One of the key areas of development for that round was the ethnic group variable. The 1991 Census was the first time that an ethnic

variable was included and there was some debate about the phrasing of the question (Moss 1999). However 'ethnic group' was favoured as a more inclusive term over alternatives such as 'ancestral origin', and has progressed into the current 2011 round. The 2001 variable represented a large departure from the 1991 round, with more categories as well as the various 'write-in' options. The 'Irish' category was first included in the 2001 round and reported 750,000 individuals in Great Britain born in Ireland, (Howard 2006).

The Office for National Statistics (2009d) recognises that there are "characteristics that we know contributed to low response rates for the 2001 census...such as ethnic group" (2009d:2), and so any secondary analyses which include these data must also recognise this as a limitation on the results. This introduces a level of complexity into research examining ethnic groups in large scale data, aside from measurement and validity problems which is certainly harder to overcome (for a fuller discussion see chapter 7, page 238).

As stated in the previous chapter it was in this round that the Cornish were allocated a 'write-in' option, though the results accurately measured the responses they must be treated with caution (Office for National Statistics 2009b). The absence of a tick-box meant that the 2001 result was most likely be an undercount of the actual figure, with those in the non-manual classes being over represented, (something often linked to greater awareness of ethnic identity, (Hickman and Walter 1997; Clucas 2009)). The numerically large response to the Cornish category led to a resurgence of the argument for a dedicated tick-box for the 2011 round; something which was eventually *not* included, (Office for National Statistics 2009b). Largely, such a decision was based on constraints (of size) for the variables and, whilst there are considerable numbers which self-identify in Cornwall, there is not a case for inclusion in a national survey (Office for National Statistics 2009a). Similar arguments were forwarded for the suspected under-enumeration of the Jewish population (Graham and Waterman 2005; Voas 2007).

3.3.2 Data weighting

Utilising multiple data to examine a previously hidden population or to weight the Census has been shown above to provide a number of benefits, though these are clearly set against the previously mentioned limitations of using secondary data, (Hofferth 2005). The actual *processes* of combination and collation are dependent on the data available and the problem under scrutiny; the three most common and of most relevance to this thesis are; contextual analysis, multiple imputation using multiple data, and multiple set weighting.

Contextual analysis examines the links between environmental (macro) and individual (micro) factors and has seen a rise in popularity across all of the social sciences in recent years. The method rests on the ability within the data to separate out individual factors from those existing at the political and social level, (Stipak and Hensler 1982). Often high impact results are discovered which would have remained hidden using more traditional methods, one example from criminology examined delinquency and highlighted the fact that youth in areas of high male joblessness (who have stressful life events) are more likely to exhibit delinquent behaviour, (Hoffman 2002). However, contextual analysis requires numerous data sets linking known phenomenon rather than the more exploratory analysis required in a narrow field where little is understood.

Bridging the gap between the robustness of contextual analysis and simpler data combination techniques is multiple imputation (using multiple data sets). Often utilised for missing data (see chapter 5, page 179), this method is also particularly useful when dealing with secure and private data (Kohnen and Reiter 2009). Numerous agencies collect information on the same individuals across many areas of public policy, and a combination of these data often leads to the identification of these individuals. However the combination also uncovers important relationships between variables

and so a method was proposed which is based on imputed and simulated data (Kohnen and Reiter 2009). Synthesis (on large scales) is not suitable for real data sets in the public domain and so combinations of data sets which randomly and independently sample units from a sampling frame (to construct a synthetic data set); or imputes the unknown data values for units in the synthetic samples using the original survey data, were proposed (Kohnen & Reiter 2009). Whilst highly applicable to confidential data, there was not a need for such a complex method as this for the current topic, where single variable combination limited the element of identification.

Instead, what was required was a methodologically rigorous way of improving the 2001 England and Wales Census variable to provide more reliable estimates of Cornish ethnicity. Thus weighting techniques which

“...make these data representative of the target population, sample weights need to be applied to the data to deemphasize the disproportionate contribution of those elements that were oversampled.” (Thomas *et al.* 2005:57).

All data are weighted in some form, even so-called un-weighted data merely reports the properties of each case or variable being weighted ‘1’. Unless the sampling process was completely accurate there will necessarily be groups which are over (or under) represented, leading to latent weighting, over which the researcher has no control (Thomas *et al* 2005). The 2001 Census data relating to the Cornish almost certainly contained latent weights and so the analysis and collation of more specific data become central to gaining a clearer picture of the group.

Data weighting as a term covers a number of processes (see for example Cramer 1994; Thomas *et al* 2005; Howitt and Cramer 2001), though the attachment of weights to improve a single variable estimate (case-orientated) is rare. Under more traditional circumstances, data combination in conjunction with weighting is utilised across a number of variables, as in the case of Soloff *et al* (2007). In this instance the authors

combined group level data with individual survey responses, arguing that an individual follow-up survey adds a greater depth to the result as well as representing an improvement on the Census results (Soloff *et al* 2007). Such combinations can yield extremely accurate estimates of errors and lead to the derivation of finite weights for measures such as inequality (Osiers 2009).

A more top-level notion of weighting and combination is utilised in meta-analyses of previously published data to look for formerly unrecorded relationships, (Rosenthal 1984). Traditionally these fall into three main themes; those seeking to combine studies and look for mean relationships, those examining the factors influencing a set of variables across a number of studies and those which aggregate data. Combined with the 'effect-size' calculations provided with many statistics programmes (simply the effect multiplied by the size of the study), powerful relationships can be demonstrated to be statistically significant. The relationship categorisation is not limited to quantitative research; there have been instances where the effect-size is weighted by aggregated, 'viewpoint', data from narrative analysis (Harden and Thomas 2005). However this method more generally relies on relationships between variables being measurable and so was unsuitable for a single variable analysis.

3.3.3 Application

To address the current research questions, what was required were data combination techniques which could be utilised in the collation of multiple data sets in order to derive a single weight to apply to the 2001 Census data. This is not something common to the social sciences and so some relatively rudimentary techniques were utilised alongside a more complex statistical combination taken from the physical sciences. The first stage of analysis was a simple *mean*, taken across all the studies and reporting the

percentage 'Cornish'. To introduce weighting strategies, two distinct methods were devised.

After collecting numerous data sets addressing directly the problem of Cornish ethnicity, the first method used to collate these was a simple technique derived from aggregation. The technique is best described by Clarke and Cooke (1998), in an example relating to factory workers. Three groups of workers (A, B and C) each receive a marginally different weekly wage and so the derivation of an adjusted average wage is as follows:

Table 3.1 - Worker wages, method 1 collation

| Type of worker | Number of workers | Basic Weekly Wage |
|----------------|-------------------|-------------------|
| A | w_A (50) | x_A (100) |
| B | w_B (40) | x_B (110) |
| C | w_C (45) | x_C (120) |

- i. Derive weekly wage (σ):

$$(w_A \times x_A[5000]) + (w_B \times x_B[4400]) + (w_C \times x_C[5400]) = \sigma[14800]$$

- ii. Total number of workers (τ):

$$w_A[50] + w_B[40] + w_C[45] = \tau[135]$$

- iii. Calculate weighted mean (μ):

$$\sigma \div \tau = \mu[109.63]$$

Simply this is the weighted average across the three categories weighted according to the total numbers in the category; achieved by multiplying 'xA' by weight 'wA' and so on for B and C. Simple addition of these then division by the sum of the weights gives a weighted mean (in this instance 109.63), in a more general form this process is:

Equation 3.1 – Method 1 Collation

$$\sum_{i=1}^k w_i x_i \div \sum_{i=1}^k w_i$$

This equation (3.1) describes a general weighted mean of the quantities x^i ($i=1, 2\dots k$) using the weights w^i . This was applied to the Cornish data by ascribing each separate data set referring to the Cornish as cases A, B, C... k with the sample size as frequencies. In this way the Cornish ethnicity estimates are corrected using weights based on the frequencies. Thus in the general form, w is the sample size and x the percentage Cornish reported, with I the number of studies.

Utilising the numbers given in the above example it is possible to derive a weighted (by wage category) mean wage by first accumulating the weekly wages, giving 14,800, then finding the total number of workers, 135, and simply dividing the total wage spend by the worker figure – giving a weighted wage category mean of 109.63.

The second method of collation, with weighted estimation, was taken from the physical sciences. Whilst the problems mentioned previously concerning single variable weighting were new to the social sciences, the physical sciences rely on repetition of results and so weights derived from multiple sources are frequent. Hedges and Olkin (1985) describe the approach taken by Heyl (1930), when examining the results of gravitational constant measures utilising differing substances. The gravitational constant was estimated using glass, platinum and gold. Results from the numerous experiments (using each substance) were examined, first on their range where Gold was considered too large to be included initially. The range for the other two measures was equal and so Heyl took the mean, in the form:

$$\frac{1}{2} (\bar{x} A) + \frac{1}{2} (\bar{x} B) = \mu$$

Here, (\bar{x}) represents the mean result for set A as well as set B, the result μ is the weighted average result. However this did not include the result for the Gold experiments, because of the larger range the weight for Gold was estimated at 1/3 of the others. Thus a weighted average is derived:

$$\frac{3}{7} (\bar{x} A) + \frac{3}{7} (\bar{x} B) + \frac{1}{7} (\bar{x} C) = \mu$$

This was the simple weighting applied by Heyl in the gravitational constant experiment, however Hedges and Olkin (1985) suggest that this could be taken further by including a term for precision (variance) of observation. The weights were subsequently based on the variance, which is equal in this case to 15, 9 and 7.5 respectively. The weights yielded were proportional to 1/15 (0.067), 1/9 (0.111), and 1/7.5 (0.133). The equation now takes the form (where the discrepancy between three times 0.311 and 1 is accounted for by alternative experimental results in this example):

Equation 3.2 – Method 2 Collation

$$\frac{0.067}{0.311} (\bar{x} A) + \frac{0.111}{0.311} (\bar{x} B) + \frac{0.133}{0.311} (\bar{x} C) = \mu$$

These are the figures derived from Heyl's (1930) experimental evidence; however a simple worked example demonstrates the finer grained result as distinct from the previous method. Inputting the wage brackets (though this is overly simplistic) from the previous example, in place of $\bar{x} A/B/C$, and applying the fractions gives:

$$(0.215 \times 100(\bar{x} A)) + (0.357 \times 110(\bar{x} B)) + (0.428 \times 120(\bar{x} C)) = \mu$$

Resulting in:

$$21.5 + 39.27 + 51.36 = 112.13 [\mu]$$

Compared to the previous result of 109.63, there appears to be little change. However the small variance represents a large increase in accuracy, as there are far more factors included in the equation to account for error. Whilst not a perfect statistical weighting system, this derivation of variance (and observed value weights) from the physical sciences was most applicable to the data available in the Cornish case, especially in such an exploratory study where more complex analyses were redundant. In principle, the data sets which contained a Cornish ethnicity variable were grouped and the weighting strategies applied; which yielded a collective mean, weighted by variance as well as range. The specific nature of the data included, as well as the strategies employed for collation, arguably represents a more accurate portrayal of the Cornish than the 2001 Census data alone.

3.3.4 Phase one method

The research questions for phase one were broken down into the following at the end of the second chapter:

- a. Identify and collect datasets that refer directly to Cornish ethnicity;
- b. Collate these data and compare distributions of the ethnic groupings over separate sets;
- c. Use the collated data as comparators to improve or weight the original Census data;
- d. Use the weighted data in order to undertake more rigorous analyses of the Census and examine the links with social exclusion.

This section will outline the methods utilised by each stage. The first stage consisted of a comprehensive trawl of all the relevant data included variables relating to Cornish ethnicity. There are clearly biases inherent in such a trawl of the nature discussed by Jacob (1984), centring on the consistency of measurement of varying phenomena.

Chapter one set out the issues surrounding this growing problem (for all research, see page 22) and examined ethnicity including the significant complicating factors in the Cornish case (Aldous 2002). In this instance it was shown that often it is *self-identification* which can negate, or at least minimise conceptual error in ethnicity measures.

This issue of ethnic identification is partially negated once self-identification becomes central to the process – later chapters, however, will deal more thoroughly with this issue (see page 238). The data which was collected was therefore *any* data which included a self-identified Cornish ethnicity category. The inclusion criteria for data were deliberately left open, as the trawl represents the first collation of data in the field. The first points of access were data archives, as well as government and private surveys in the region. The next levels of access were academic institutions and large employers in the region. Subsequently, a snowball approach was utilised and gatekeepers frequently suggested alternative data sources.

The second stage consisted of a rigorous collation of all of the data collected using the statistical methods discussed previously. All of the data were entered into a single file and the three methods applied, to yield weighted means of ethnic group affiliation in the region. The estimates, whilst not error free, represent the most comprehensive mapping of the Cornish as a group to date. As such, the third stage of secondary analysis sought to apply these new ethnicity levels to the 2001 England and Wales Census data. In simple terms, the weighting strategies were employed as error corrections to the original Census data, implying that (due to a suspected undercount) each Cornish response (1) should count for an increased $(1+x)$ return. As a reliability check the analysis was run firstly with a simple aggregation and then subsequently with methods 1 and 2 as described above (Field 2009, see chapter 4, page 144).

The final stage of secondary analysis was to examine the newly weighted Census data for links with social exclusion. Tables were commissioned by Cornwall Council, which included the Cornish responses across a number of key variables, including those highlighted through the B-SEM, (Levitas *et al* 2007) matrix discussed in depth in chapter 2, page 60. The newly applied data set, created with the weighting strategies applied, is arguably more representative of the population and so a two stage analysis was conducted:

- i. An examination of the un-weighted (original) Census data for links between Cornish ethnicity and social exclusion variables as defined by the B-SEM matrix;
- ii. An examination of the weighted (all three methods) Census data for links between Cornish ethnicity and social exclusion variables as defined by the B-SEM matrix.

At all stages of analysis the Cornish and non-Cornish populations were compared (the non-Cornish simply a subtraction of the total and the Cornish at each stage) using chi-squared statistics. Whilst a simplistic statistical test, the aggregated form of elements of the ONS data did not enable more robust modelling such as logistic regression (Field 2009). The chi-squared analysis enabled statistically significant differences between the two populations to be identified and analysed further using percentage analysis, (Field 2009). The limitations placed on the results by the quality of, and inclusion criteria of the data outweigh the statistical limitations imposed by analyses; especially at this stage of exploratory analysis.

3.4 Phase two – survey research

The results from the first stage of analysis informed the design of the survey element of primary research (chapter 5, see page 165). However the limitations imposed on the

findings required a more robust method in order to make generalisable claims about the size and population of the Cornish. The results of the secondary analysis (see chapter 4, page 159) hinted at significant differences between the Cornish and non-Cornish across a number of areas identified by the B-SEM matrix, and so a direct examination of these variables throughout the County was conducted.

In order to address the research questions more comprehensively it was necessary to break down the larger sections into more operationalisable concepts (chapter 5, see page 182). As such, the survey phase of this research sought to directly address the following:

- i. A direct examination of the levels of self-identified Cornish ethnicity in the County;
- ii. A comparison of the Cornish/non-Cornish population across the exclusion variables examined in the secondary analysis;
- iii. A comparison of the same groups across further B-SEM identified exclusion variables;
- iv. An examination of the tentatively reported east/west gradient of difference.

As stated previously the most suitable way to address these questions, and to make generalisable claims about the population, was to employ a survey methodology (see previous section, page 101). As this represents the first study of its kind into the links between Cornishness and social exclusion it was necessary to begin as generally as possible, in order to assess the presence, extent and depth of the proposed linkage. It would be methodologically flawed to begin by examining low numbers of individual-level cases, to look for causality of a phenomenon which may not be present.

Thus, stage one of the primary research phase was a postal survey distributed in Cornwall addressing the research questions outlined in the previous sections. The advantages of a postal, self-completion, questionnaire as opposed to, say, an online

survey are largely based around increased response rates and the limitation of systematic bias. This is due to the sample being chosen by the researcher and not simply convenience (for a fuller discussion of these topics see May (2011)). However this method cannot by definition analyse the causal processes underlying the effect of the linkage, and as such some level of qualitative analysis was necessary, which will be detailed in subsequent sections (see page 130).

3.4.1 Sample

Any research is reliant on sampling methods in order to give levels of confidence about the claims made (Williams 2003a). As a method which seeks to make highly generalisable claims, any survey research rests significantly on the sampling techniques utilised. The ideal sampling process for social surveys would be none at all; a Census, however that is often (and certainly in this case) impractical, due to both financial and time considerations. Thus it becomes necessary to select, in some way, a selection of the population which accurately represents the whole (Williams 2003a). Mathematically, the most rigorous form of sampling in this form is the probability sample, where every individual has an equal chance of being selected. Statistically, and as long as data were returned from every selected individual, the sampled group would report the same characteristics as the population. However the response rates in social surveys are never 100%, and are declining with every year (May 2011). Therefore an element of error is introduced; although it is possible to estimate with great accuracy this error (Williams 2003a). The following section will detail the population, sampling technique utilised, response rate and level of error which the data was exposed to.

The population in a general sense is the population of Cornwall, which, from the Census statistics discussed above, is in the region of half a million individuals. There was evidence in the secondary analysis of key differences among the population in the

Westernmost and Easternmost areas of the County (as well as in previous research, see Cornwall Strategic Partnership 2007; Cornwall Council 2010; Cornwall Council 2011). In the Westernmost region it has been argued that levels of Cornish ethnicity are highest (Aldous 2002) and so a key area of investigation. In the East, the secondary analysis had shown that the difference amongst the Cornish and non-Cornish populations was most pronounced (see Chapter 4, page 159). Cornwall was, prior to the move to unitary authority, divided into six administrative districts and so initially the sample was to be split along these lines to gain an Eastern and Western population.

In order to sample randomly from these populations a sampling frame was required – simply a list of all available members of the population (Williams 2003). The most comprehensive lists available in the public domain are the electoral roll and the postcode address file (Field 2009). There is no single list of *individuals* which is comprehensive enough for sampling in the UK and so it is necessary to sample based on household addresses (Lynne and Taylor 1995). The electoral roll and the postcode address file (ER and PAF) are by no means perfect, they do not collate data on the homeless and in the case of the ER, and individuals are able to opt out. However they are largely considered to be reasonably accurate despite these limitations (Lynne and Taylor 1995).

Primary research examined the uses of both the ER and the PAF and largely argued that the PAF is the more representative of the two (Lynne and Taylor 1995; Wilson and Elliott 1987). As such it was this list which was utilised as the sampling frame. The PAF is a list of addresses where mail can be delivered in the UK and is split into business and residential addresses (Wilson and Elliott 1987). A number of large scale surveys in the UK utilise the PAF as a sampling frame, largely due to the ease of access and simplicity of use, (Butcher 1988). Whilst the PAF cannot be considered a perfect measure, the inherent stability in household lists is certainly an advantage for survey research. The PAF for Cornwall was obtained through a third-party sampling company,

a total of 248,000 addresses. In order to reduce this, and to gain populations for an eastern and western area, it was necessary to geographically link and break down the PAF.

Cornwall (after moving to Unitary authority) developed Community Network Areas and initially it was hypothesised that the PAF could be broken down along these lines. However there were discrepancies between 2001 Census Ward data and the new CNA data (based on Parish, and no data on population was readily available which maps onto the PAF) meaning that Ward profiles were best suited. These were collated onto maps and data tables, then analysed to gain a geographic and population based sampling frame.

Prior to becoming Unitary, Cornwall was administratively organised into six districts or regions, and were (relatively) evenly distributed around the county. As such, Eastern and Western areas were chosen loosely based around these old districts (Caradon and NC, and Kerrier and Penwith, see figure 3.1) with some Ward based trimming to account for population density (not necessarily adjacent wards – as can be seen in figure 3.2). This was because, in large areas of north Cornwall, there were particularly low density areas and so selecting the highly populated ‘town’ ward of Wadebridge (rather than the surrounding low populated wards) was necessary. For a more comprehensive breakdown of selected wards see Appendix 3.1.

Figure 3.1 Cornwall's administrative districts (pre-unitary authority)

Source: Office for National Statistics
Ward Data 2001/GeoConvert

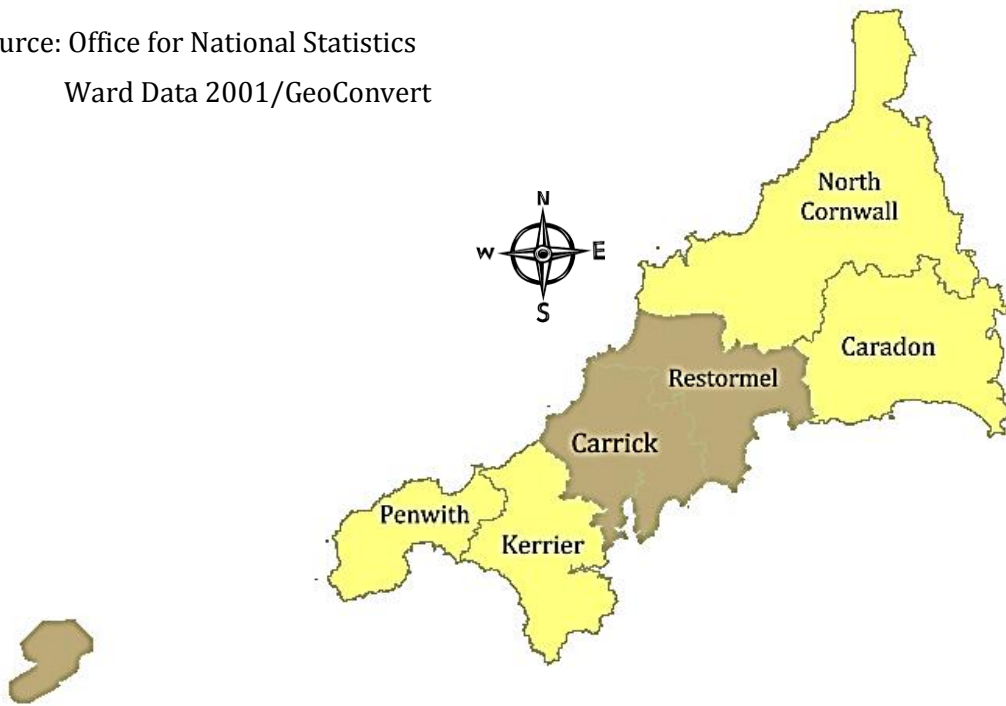
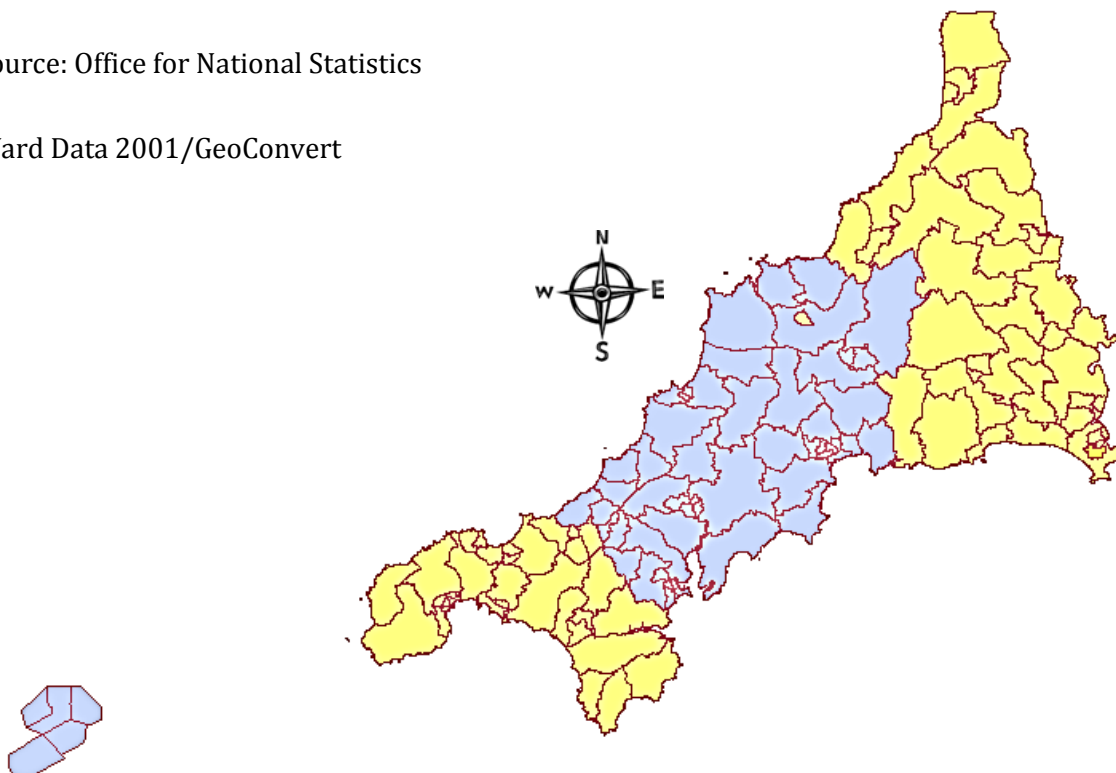


Figure 3.2 Selected wards for inclusion from a PAF breakdown (2009)

Source: Office for National Statistics
Ward Data 2001/GeoConvert



The two selected areas in figure 3.2 show a total number of households of 125,000, approximately 250,000 individuals (Office for National Statistics 2010). The previous evidence, both in the literature and the secondary analysis, had indicated that deprivation was not broken down by ward but rather a broader east/west division (for a good overview, Cornwall Council 2010; Cornwall Council 2011; Cornwall Strategic Partnership 2007). Also, there had been hints that the central regions of the county were atypical of the area in general (see Jaksina 2010). An Easternmost and a Westernmost region were selected with even numbers of individuals by combining wards, largely following the geographies of the older districts. Figure 3.2 shows the selected 2001 Census wards as selected using this approach and the yellow shaded area represents the sampling frame for this phase of research. Appendix 3.1 shows the population breakdowns for these wards individually.

The sample size was dictated by two key factors, firstly the sampling error at a given confidence level and, secondly, the budgetary and time constraints. The social sciences (unlike other branches) usually operate at a confidence level of 95%, a significance level of 0.05%, (Williams 2003a). At this level, a sampling error of 3.2% is achieved by gaining 1000 responses and with the likely response rate below 30% (May 2011) an initial postage of 3000 was necessary. The sampling frame was mapped onto the PAF to give a comprehensive list of addresses in the two population areas – this was achieved by linking the PAF to the 2001 Census Ward codes using conversion software.

In order to achieve this conversion a complex macro was designed in Microsoft Excel which utilised the GeoConvert (<http://geoconvert.mimas.ac.uk/>) algorithms to trace the Ward codes to certain addresses – which were then selected or not selected depending on the codes returned. Simply, if an address fell into one of the areas shown in figure 3.2 it was included in a separate list. This final list was then used as the sampling frame.

In order to maintain the rigorous random aspects, yet to utilise the PAF to the full extent, a systematic sample was used. This process turned the sample size into a fraction of the population (n) and subsequently selected every n th item on the list, after a randomly selected start point (Williams 2003). The problems associated with this selection technique (for example, periodicity) were overcome to a large extent by the significant geographies involved; there were not likely to be similarities between cases which were far apart on the frame. Thus, the selection procedure was as follows: the cut-down of the Cornish PAF totalled 125,596 addresses, and so that formed the population, the sample size was 3,000 and so the fractional n was equal to $1/42$. Therefore the sampling procedure in this case was to sample every 42nd result after a start dictated by a random number generator. The random number was generated by 'Random.org' (www.random.org), a service operated by Trinity College, Dublin. A number was generated between 1 and 100 using atmospheric noise, rather than an algorithm, giving a generated 26. Random numbers generated through mathematical algorithm are only 'pseudo-random', that is, there is an element of bias inherent and true random is only attained through the application of methods utilising natural phenomena (Haahr 2010). The sample was generated by choosing every 42nd result after starting at the 26th result, giving 2990 addresses for use as the final sample.

3.4.2 Instrument and procedure

In order to address the research questions posed at the start of this section the instrument designed contained both ethnicity measures and social exclusion variables. The ethnicity variable, as it was designed to be comparable to the 2001 England and Wales Census data, was taken directly from the 2001 Census form (Office for National Statistics 2001); with the addition of a tick-box Cornish category (see Appendix 3.2).

The social exclusion measures included were taken entirely from previous large-scale surveys, all variables would have been through extensive piloting processes and validation (May 2011). As stated in previous chapters it was the B-SEM matrix of social exclusion (see Levitas *et al* 2007) which was used in the identification of variables for inclusion. This matrix lists variables in national surveys which fulfil the criteria of each element of the matrix and each were identified using the 'working-adult' stream. One variable for every element of the matrix was included in the instrument (see Appendix 3.4), whilst attempting to keep the survey as short as possible to maximise response rates (Williams 2003a). Some demographic variables were included such as sex and age; though no identifying characteristics were collected in accordance with ethical protocol (discussed at the end of this chapter). Though some rewording was required for brevity, the final questionnaire consisted of a booklet of four A4 sides.

The instrument was tested on a small sample of the total respondents in a pilot phase consisting of 60 addresses. This separate sampling process (to achieve a pilot sample from the total sample) was merely a repeat of the procedure described previously. Every 50th address was selected and 60 across the two areas removed from the final sample. These addresses received a questionnaire and 'Freepost' return envelope. The response rate after a two week return period was 33.6% (N=22), acceptable given the low response rates expected in postal surveys (May 2011). Analysis of the small sample revealed that the only change to the instrument required was to make explicit the need for only a single member of the household to complete.

The remaining 2,940 questionnaires were subsequently posted during the summer of 2010. Early returns indicated that a number of the addresses given in the PAF were no longer active, the addressee had moved away or, indeed, the address itself was inaccessible. The large majority of returns were in the first two weeks after postage.

The response rate overall was 27.5% (N=824), and, though lower than the pilot study, this still represents an average rate (May 2011). Whilst there were completion issues, there were no significant problems with incomplete returns. The completed questionnaires were manually imputed into SPSS by a single researcher. The data was frequently cleaned and checked for systematic errors.

3.4.3 Analysis

Whilst a detailed discussion of the analysis of the postal survey can be found in chapter 5, the methods used are relevant to the current section. The B-SEM variables identified and included through the matrix were collated into an index of social exclusion, designed specifically for this phase using the matrix. This interval level variable enabled more advanced quantitative analysis to be conducted than had previously been possible. The index was constructed using logical scale integration and checked for normality and skewness/kurtosis prior to use. The data were then subjected to four stages of more detailed analysis - firstly correlations between variables; secondly, a stage of multiple regression; thirdly, multi-level (hierarchical) regression and, lastly, missing data analysis.

3.5 Phase three - Qualitative interviews

The qualitative element of the research process was largely exploratory, and aimed to examine the underlying processes which emerged from the previous analyses. The results from the previous two stages largely informed the setting of the interview schedule and the following section will outline the methodological processes involved. In order to better address the position of the Cornish it was necessary to collect data which sought to examine Berg's (1989), 'why' questions, rather than merely the 'what'. As discussed on page 104 this triangulation process is the only way that causality can

be approached, and the complex interplay between variables rigorously explored. The use of a mixed methodology, at a simplistic level, aims to explore the same problem through numerous angles (Berg 1989). The first two stages of the thesis rest on relatively high-level quantitative data, the introduction of a third method enables a level of *description* to be introduced into the data.

3.5.1 Transcendental phenomenology

There are, arguably, six main traditions of qualitative enquiry – ethnography, grounded theory, hermeneutics, Duquesne phenomenology, transcendental phenomenology and heuristics (Moustakas 1994). Whilst there are common themes to all of these modes of enquiry, what sets the *transcendental* method aside is that the researcher, "engages in disciplined and systematic effort[s] to set aside prejudgements regarding the phenomenon being investigated" (Moustakas 1994:22). This standpoint fits well with the object of study at this point of the thesis; data from previous stages should inform, yet be largely set aside, in order to view the phenomena afresh. Largely derived from the philosophy of Husserl, phenomenology is broadly what one can achieve in terms of knowledge through consciousness, (Schutz [1932] 1967). In keeping with the long tradition dictated by political thinkers such as Descartes (Hampsher-Monk 1992) and Kant, ([1781] 1990), Husserl highlighted the complex interplay between subjective and objective forms of knowledge, thus:

'The challenge facing the human science researcher is to describe things in themselves, to permit what is before one to enter consciousness and be understood in its meanings and essences in the light of intuition and self-reflection' (Moustakas 1994:27).

The focus of the phenomenological tradition is therefore directly linked to notions of intentionality and the idea that a social object is real at the point of perception, regardless of intentionality; putting that perception at the heart of social science

(Schutz [1932] 1967). The fundamental principle of the method described by Moustakas (1994) is that it is possible to refrain from judgement (often referred to as the *epoche*, or *bracketing*, process); what is observed remains perceived.

Each experience under scrutiny is taken *for itself* and *on its own*, both in description and structure. The method for examining social phenomena is therefore based on these fundamental principles and seeks knowledge in a rigorous way. Beginning by identifying the problem under examination, the social meanings and structures which underlie the processes are interrogated through interview. Knowledgeable (on the topic in question) respondents must be interviewed about a bracketed topic using targeted questions and the data should be subject to a systematic analysis (Moustakas 1994). The respondents chosen at this stage were individuals with a comprehensive knowledge of deprivation across the county as a whole, and with a direct relationship with communities.

The previous two phases of research sought to explore the links between Cornish ethnic group affiliation and social exclusion in large-scale data; both secondary and primary. The links are discussed in detail in chapters 4 and 5 of the thesis; however there were strong indications of discrepancies between the *attitudes* and the *reality* of exclusion. The amount of variance explained in social exclusion indices by ethnicity variables was minimal. Yet there were strong indications that the Cornish, as a group, felt that they suffered. However, the significant link which was reported in the data demanded a more detailed exploration of the problems, and so the conflicting issues which were addressed at this stage were:

1. Did the Cornish (or other groups) feel that they were often excluded, to a greater extent than other groups in the same community?

2. Was this exclusion in any sense real; was it something that those in already deprived communities were aware of, in the same way that other BME groups are?

For Moustakas (1994), these are the explicit bracketed topics for investigation and, in pragmatic terms, are best examined using the interview process described above. These interviews were mainly focused on the specific levels of deprivation which had been witnessed, and the links with groups (either ethnic or geographic), as well as the impact which Cornish ethnicity was felt to have more generally.

3.5.2 Qualitative sampling

The selection of respondents for qualitative enquiry, whilst not as central to the claims as in quantitative methods is important, as well as often being far more difficult (Williams 2003). Unlike survey methods the use of a sampling frame is often impractical, especially with somewhat hard to reach populations (Creswell 2007). Rather, the utilisation of more opportunistic measures, and a pragmatic approach to selection, is often required. Such 'snowball' sampling (Berg 1989) was used in the selection of individuals for this stage of analysis.

It was decided that community workers (and indeed any key workers linked to vulnerable individuals), would form the basis of the sample. Whilst interviewing Cornish and non-Cornish individuals would have yielded more direct data, the process would merely have repeated the survey research. Additionally, the numbers of possible interviewees was significantly limited by time and budget constraints. A small sample of either deprived or non-deprived respondents (in, for example, focus groups) would not have been as informative as selected key workers, who would have a greater breadth of knowledge, though of course the potential for bias increases with less participants. Though often difficult to contact directly, there were a large number of

community based workers in the county, although a large proportion of these individuals were involved with very specific areas of the community (for example dedicated disability workers). The specific nature of a number of Cornwall Council community workers disqualified them from Moustakas' (1994) definition of a knowledgeable respondent. Similarly disqualified as knowledgeable individuals, in this instance, were either elected MP's or Councillors as well as formal structural organisations such as Cornwall Council, as none of these individuals had direct (or prolonged) contact with the groups in question.

What was required was a set of individuals well placed to comment on the deprived nature of areas of Cornwall, as well as the county as a whole. These sets of community workers had to have deep experience of the individuals within these areas, as well as continual contact. Another central requirement was knowledge of divisions along ethnic lines. The group of workers was small and relatively hard to reach, as the ethnic divisions in Cornwall are under-researched, with BME populations numerically small (Office for National Statistics 2001). Cornish ethnicity is also an emerging group and so workers dedicated specifically to indigenous deprivation are non-existent. In addition, these workers had often never been asked similar questions about the Cornish.

An umbrella organisation which, along with partners, met and discussed racial equality issues in Cornwall was found in the form of the Council for Racial Equality in Cornwall (<http://www.crec.org.uk/>). Comprised of members from numerous other charities, CREC was the starting point for a snowball sample of knowledgeable individuals in the field. Subsequent partner charities (CN4C, <http://www.cn4c.org.uk/> and Cornwall Rural Community Council - <http://www.cornwallrcc.org.uk/>) were identified, and contacted in due course. Workers were largely those with community facing posts, and had significant remit in terms of deprivation. Individuals were contacted (largely through phone and email) and asked to participate in individual interviews which (due to the focussed nature of the topic) lasted between 35-40 minutes, at a location of their

choosing. Respondents had remits ranging from local centres to Cornwall as a whole and all had specific work interests in deprivation and exclusion.

3.5.3 Instrument, procedure and analyses

The operationalisation of the top level questions, discussed at the beginning of the last section, merged with the overall research questions of the thesis. Overall six key problems were included in the interview schedule (see Appendix 3.4):

1. Cornish ethnicity levels in the region;
2. Questions which, whilst general to the whole population, related to levels of social exclusion in the region;
3. Questions which linked social exclusion to ethnic group membership – of any group;
4. An examination of the Cornish/non-Cornish population across key variables highlighted in the previous phases. Specifically B-SEM factors but also more general issues highlighted by the respondent;
5. Factors which influenced social exclusion apart from ethnicity, class; income; gender; age etc;
6. An examination of the discrepancy between public opinion of social exclusion and linkage to Cornishness and the reality.

As stated previously, the most methodologically rigorous way of addressing these questions was the interviewing of respondents face to face (Moustakas 1994; Creswell 2007). The circumstances of the interview process as well as the sensitivity of the data prevented the use of more group based interviewing techniques (such as focus groups). The interviews were conducted in a natural setting chosen by the respondent to maximise response motivation and incentive (Creswell 2007). The phenomenological

approach described in the previous sections highlighted the need for a small group of individuals to be examined that all experienced the same phenomena. The nature of the topics meant that semi-structured interviews were deemed to be the most suitable method. Though a schedule was followed, deviation was important to the interview process and large amounts of data were generated in these unstructured conversational elements. In keeping with the transcendental phenomenological tradition, two main themes were followed throughout the instrument; *what* had been experienced and what *contexts* affected that experience (Moustakas 1994).

The procedure for this phase of primary research was the most flexible and adaptable to each respondent. Nine key individuals were identified as being highly suitable to the aims of the interview process and were contacted with an invitation to become a participant. This first contact outlined the overall aims of the project as well as the ethical issues discussed in the following sections. Seven individuals agreed to participate, three males and four females, all experienced community workers in the county. Role profiles for the seven ranged from local community based project managers to Cornwall wide administration of ESF funds. However, all of the respondents had direct contact with deprived individuals for a significant proportion of their current working time. Interviews were conducted at a place convenient for the respondent, usually a place of work, and generally lasted for 30 minutes. These conversations were recorded using digital as well as analogue recording devices (with consent), and subsequently transcribed verbatim into the CAQDAS package NVivo 8.

The analysis of qualitative data can take many forms, depending on both the data and the purpose of the study in question (Creswell 2007). In this instance the transcendental phenomenological tradition was considered the most appropriate method of analysis, as there was a need to separate the findings from previous phases (Moustakas 1994). In keeping with this tradition, the transcriptions of the original

recordings were subjected to five stages of analysis (described in more detail in chapter 6):

1. A trawl of the data and an identification of significant statements (horizontalization);
2. An identification of clusters of meaning from these statements into themes;
3. Textual description of the above themes;
4. Structural description of the themes, to include contexts etc;
5. Composite description; providing the 'essence' of the phenomena under scrutiny.

(Source: Creswell 2007)

3.6 Ethical considerations

It is not within the scope of this chapter to outline the complex moral and philosophical positions which underlie the ethical processes in social research, though an overview of the position taken is relevant. There is clearly a need to consider the participants of any primary enquiry and this thesis begins from the position outlined by May (2011:59) – that, “ethical decisions are not...defined in terms of what is advantageous to the researcher or the project...they are concerned with what is right or just.” This is the position from which enquiry was designed, and the methods described in this chapter were all built around the need to work towards individual protection at all times. The needs of the individual are necessarily at the centre of ethical consideration in research, however, there is a more central theme in this thesis and the reason for enquiry is for the advancement of knowledge on a previously hidden ethnic group exposed to deprivation. Thus the central issue, espoused by Williams (2003a), becomes even more important: the avoidance of harm, the avoidance of deception, the right to privacy and informed consent. Ultimately, all of the stages of research described in this thesis comply with the Codes of Practice of the University of Plymouth, as well as relevant national bodies (British Sociological Association 2002).

All of the participants, in all stages of the primary research, were given detailed information regarding the potentially sensitive nature of the research and assurance that their responses would be kept confidential at all times. It was made clear that issues around live experience were fundamentally private and that no other individuals would be passed data. This information also included the aims and objectives of the research, as well as information relating to the author and affiliated institutions. At the survey phase, consent was implied in the return of the instrument and at the interview phase was obtained verbally. At no points were any of the participants deceived or misinformed and there was no compulsion to participate in any of the phases. At both stages of primary investigation details were collected for the debriefing of respondents, the results of the thesis were made available to the respondents on request.

The secondary analysis phase did not utilise human participants and so was the least ethically sensitive, however consideration had to be given across two main fields – confidentiality and secondary data use. The first of these was dealt with in accordance with the BSA Code of Ethics (British Sociological Association 2002); the data which was collected was anonymised and, in many cases, aggregated prior to collection. As such, the identification of individuals was not possible. All the data collected was treated in accordance with the Data Protection Act of 1998 and accessible by only the author and the director of studies. The second theme is open to wider interpretation (Williams 2003a) and, whilst all attempts were made to prevent the mis-representation of previously collected data, there can never be a certainty.

The survey research process also followed all of the guidelines mentioned regarding access to data and completion. Whilst no identifying variables were included in the instrument, the data was treated as highly confidential and will not be in the public domain in raw form (British Sociological Association 2002). At the design stage, the inclusion of variables from previously utilised surveys limited the introduction of ethical problems associated with sensitive variables. The respondents were made

aware of the fact that completion was not compulsory as well as being thoroughly debriefed.

Whilst this phase of the research was the least expansive in terms of respondents it was probably the most ethically sensitive; those individuals concerned were holders of a great deal of sensitive information with the potential to harm. The respondents themselves were, however, not being asked anything sensitive personally or being asked to disclose any information which could be used to identify individuals. All of the data collected at this stage remained completely confidential at all stages of the research process, including publication. In the (very) unlikely situation that a respondent had disclosed something illegal, the information would have been passed on to the police. Anonymity, in this case and that of most qualitative research, was largely impossible as the respondents are known to at least the researcher – unlike survey research where the returns are non-identifiable (Berg 1989). Prior to interview, the respondent was made aware of these issues as well as their right to decline or to request that the data not be used. Debriefing was offered to all participants, though they were unlikely to become upset at the content of the interviews. Similar to the other phases, email addresses of all respondents were collected, and a short debriefing statement was sent.

3.7 Summary

Starting by examining the overall position of the philosophy of the social sciences, this chapter outlined the methodological position of the thesis. Whilst there is still some debate around the quantitative/qualitative divide, the consensus is on a continuum of methods; with a mixed methodology somewhere in the centre. This thesis employed methods from both traditions, and these were discussed after some consideration of

the main data sources, the justification for the particular methods (and the choice of weighting techniques) was also examined.

The reasons and underlying principles of the methods at all stages of the research process were described, as well as the ethical considerations which were given to both the human participants and the data in general. The next three chapters will outline the results of the phases discussed in the preceding sections, beginning with the results of the secondary analysis of the 2001 England and Wales Census. Broadly, the following chapters will follow the title of the thesis – firstly an analysis and adjustment of the secondary data and subsequent primary research to extend these findings onto the wider population.

4. Phase One – Secondary Analysis Results

4.1 Introduction

This chapter describes the analysis and adjustment of the 2001 England and Wales Census data referring to the Cornish. Starting with an outline of the data sources which were compiled, the collation process is described and subsequently applied to the Census data. Thus, a more accurate estimate for the levels of Cornish individuals in the county are given, and these are then examined for linkages to the (B-SEM identified) social exclusion variables. Overall, this chapter will show that the Cornish as a group are significantly larger than some existing datasets had indicated, and that (in the Census data at least) there are some significant differences when compared to the non-Cornish population.

4.2 Data collection

The first stage of the secondary analysis was a collection of all the relevant data sets for examination. Prior to collection, the inclusion criteria were identified and, largely, *any* data which included a 'Cornish' category was included. There were so few sets of data which contained this option and the analyses so exploratory that quantity of data was felt to be more significant to the results than strict quality inclusion criteria. The only stipulation at this stage of collection was that the data not be derived, in any part, from the Census. It was also requested that organisations and data suppliers should provide the original data if possible, as well as any accompanying information such as the instrument and finer grained analyses. The collection was centred on a single variable, Cornish ethnicity, and whilst the collection of linked data (with exclusion variables)

would have been preferable (and lent another depth to subsequent analyses) there were simply no such data.

The simplistic and relatively loose inclusion criteria meant that the data trawl process was single-stage and uncomplicated. There were four main stages, firstly, a trawl of the academic literature, and identified researchers were contacted for original data. Secondly, the major data archives in the UK were contacted (for example: www.data-archive.ac.uk/). Thirdly, public information bodies were rigorously searched, for example, the South West Observatory, Regional Development Agency and the Learning and Skills Council. Lastly, individual organisations with a research interest in the Cornish were approached, including NHS trusts, Cornwall Council, Police and Voluntary sector groups. The trawl yield was broken down as follows:

1. Academic literature – the least complex stage of collection, and the one with the highest yield of data, largely consisting of the studies outlined in chapter 2 (see page 91). The raw data was collected from the individuals in the form of multiple SPSS files. Data was available from Griffiths (1989); Aldous (2002) and Willett (2008); however, some contacted (such as Burley 2007, who had utilised secondary data in his analysis) were either unavailable in original format or unsuitable. Unsuitability was normally based on the format of the question relating to ethnic identity, there were those which were overly obscure for inclusion, in this instance, and those with no original data were excluded for similar reasons.
2. Data archives – whilst national data archives hold a significant amount of data, at both a national and local level, a trawl of the major sources highlighted only a single data set for inclusion. The UK data archive (www.data-archive.ac.uk/) and CESSDA (www.cessda.org/) were comprehensively searched, and the one study relevant was identified as an examination of migrants conducted by

Brown (UK Data Archive 2009). The raw data was converted from the original ASCII format into SPSS.

3. Public information bodies – unlike the previous sources this was a more extended trawl as there were a number of administrative and data security processes to complete. A large number of those contacted did not collect relevant data, however almost all were able to provide further information leading to alternative sources. This snowball effect continued and revealed a number of lucrative sources which would have remained hidden. Contacted organisations included; Neighbourhood Statistics, South West Observatory, SW Regional Development Agency, Equality and Human Right Commission, Equality South West, National Pupil Database (DCSF) and the Learning and Skills Council.
4. Individual organisations – the widest section of the trawl, and also that which produced the largest number of results. Organisations were approached based on the information gained in the previous trawl stages. Information from these then led to more contact details, and eventually a saturation point was reached with no more information uncovered. Whilst some organisations were not able to provide data directly, every group provided information *leading* to relevant data. Those unable to provide directly included the Crown Prosecution Service, Magistrate Courts, Citizens Advice Bureau, Office for National Statistics (non-Census), Devon and Cornwall Police, Voluntary Sector, Mebyon Kernow, the Stannary Parliament, the Cornish National Minority Report authors, alongside others.
5. Data *was* offered however by Royal Cornwall Hospital trust, which collected workforce data including a Cornish category; the Cornwall Strategic Partnership from the Quality of Life Tracker Survey (see chapter 2); and Cornwall Libraries who collected a large set of data including a Cornish option

from users. Cornwall Council was the last major organisation in the region to be approached and (due to the on-going transition to unitary authority) was initially unable to co-operate. After some negotiation the relevant data was made available by the authority, and consisted of the workforce profiles, the schools census and social care archives.

Overall, the trawl yielded relatively small number of data sets; however it is likely that the collation represents the most comprehensive set of data referring to the Cornish. The comprehensive nature of the trawl and the number of organisations contacted meant a total number of responses (across 12 data sets) of 254, 110:

- i. Cornwall Council workforce profiles
- ii. Cornwall Libraries service survey
- iii. Willett's (2008) data
- iv. Royal Cornwall Hospitals Trust workforce profiles
- v. Quality of Life Tracker Survey
- vi. UK Data Archive raw data set
- vii. Aldous' (2002) data
- viii. Griffiths' (1989) data
- ix. Schools Census 2007
- x. Schools Census 2008
- xi. Schools Census 2009
- xii. Framework(i) Social Care data

4.3. Collation

These data sets were manually entered into a single SPSS file for analysis, taking the form of a data set per case; the variables being the sample size, variance and level of Cornish ethnicity. In the first stage of analysis the Census data was necessarily

excluded as weights were being derived for that data. There were three stages of collation, leading to percentages for application to the Census as weights for the single variable (see chapter 3, page 115 for details on the exact methods).

A simple aggregation (method 1) of all the collected data reported a mean level of Cornish ethnicity of **28.63%** of the total population of Cornwall. The second method took into account the relative sizes of the data and gave a more accurate result, with larger data sets given higher impact. The weighted mean using this method was **29.13%**. The third method utilised a more complex procedure and included terms in the equation for the range and variance in the data (see chapter 3). There are important factors within any data set which can significantly skew results (Kielcolt and Nathan 1985), however a level of interpretation is required when including weighted terms in equations. The literature had hinted at distinct differences between Cornish ethnicity levels across regions in the County (Aldous 2002; Cornwall Strategic Partnership 2007), and so the weighting term included a positive element for spread of data. In order to counter the large impact of outlying results and to give a more balanced figure the variance from the un-weighted data set was calculated; thus the terms included in the equation took the form:

$$W = (100 - v) + r$$

Where w is the weight derived, v is the variance and r the range. The application, of the equation in full, gave a result across all the data of **30.88%** of Cornish ethnicity levels in Cornwall.

4.4. Census weighting

The three figures produced by the collation process enabled the re-examination of the 2001 England and Wales Census data referring to the Cornish, specifically, the weighting of the ethnicity variable in light of the (more accurate) data. The ‘write-in’

Census option had yielded over 33,000 responses of individuals who had answered 'Cornish' to the ethnicity question and the individual responses were held in aggregate form by the local authority. Dedicated tables of these responses were made available for analysis and included:

- i. An overview of the levels of Cornish ethnicity broken down by administrative district;
- ii. An overview of the levels of Cornish ethnicity in the UK broken down by County and region;
- iii. A specially commissioned table reporting the breakdown of the sub-set of the Census who answered 'Cornish' across variables such as 'age', 'gender', 'employment' and others;
- iv. Another commissioned table identical to the above but across only the working-age population.

The application of the weights derived from collation was, initially, on the data included in Table 1. As the secondary data analyses referred to those Cornish individuals actually in Cornwall a wider application was not suitable. The 2001 Census recorded 33,932 individuals in Cornwall who identified as Cornish; representing 6.77% of the County total of 501,267 (see Appendix 4.2). Thus, prior to an examination of the links with social exclusion, and to address the first of the research questions identified at the end of chapter 2 (see page 97), the weights were applied to that figure in order to achieve a greater level of accuracy. The data breakdown included district level statistics and so the weights were applied to the set as a whole as well as for the 16-64 working age individuals. The application to the district level data necessarily utilised the same distribution reported in the raw Census data, the collation process did not enable finer scale weightings to be deduced, which would have enabled a variance across areas.

What emerged from the application of the derived weights to the Census data was the size of the likely (and suspected) undercount. Across all the collated data there was a consensus of an estimated 26-30% of Cornish in Cornwall, a considerable increase from the reported 6.77% in the Census, and, whilst it remains the largest single data set, the inaccuracy was evident. The lack of a dedicated tick-box discussed in the previous chapter limited greatly the number of individuals who reported – both through a lack of publicity and through strength of affiliation influences (Office for National Statistics 2009a). Though it must be stated that the inclusion of small scale categories such as Cornish in national surveys is potentially impractical, as argued previously the size of the variables would be unwieldy at best (Burton 2010). Whilst the collation of all survey data referring to the Cornish in this instance cannot claim complete accuracy and is necessarily limited, it does represent a more reliable estimate than the 2001 Census. As can be seen in Appendix 4.2 this marks the difference between an estimated 34,000 individuals of Cornish identity in the Census and the 155,000 resulting from the collation.

4.5 Weighted Census data and social exclusion

The links with social exclusion which are felt by those who reported a Cornish identity in the 2001 Census is a more complex question, and the subsequent application of the weights to form simulated data sets added another layer of complexity. The new figures cited in Appendix 4.2 demonstrate the increased size of the Cornish group from that reported and therefore the primary focus of relative position has even more significance – it clearly affects a larger number of individuals.

The least complex methodology to explore the comparative position of the Cornish would have been to undertake an analysis of the collated data sets to contrast with the 2001 England and Wales Census result. This proved to be impossible for a number of

reasons, firstly, the majority of data were only available in a single-variable (ethnicity) format and, secondly, those which were broader were not designed with exclusion variables. In either situation the limitations far outweighed the potential for analysis. Thus, Census data formed the basis of the examination, both in raw and weighted form. These data were, as discussed previously, a breakdown of the Cornish responses to the 2001 Census across a number of variables including exclusion criteria. Though the tables were commissioned by the then Cornwall County Council, subsequent transition to unitary authority meant that the newer Cornwall Council did not rigorously analyse the data (largely due to funding cuts to the research department of the Council). These tables were further populated using data ordered directly from the Office for National Statistics (2001). Specifically, data for the regions 'Cornwall (ONS code: 15)' and 'England (ONS code: 64)' were collated across the previously mentioned variables, for the total as well as working-age populations (see Appendix 4.3/4.4). The weights were also applied to these data, and can be seen in the same tables; these were applied with the assumption of retaining breakdown across weightings. Representative proportions of variables did not change, but rather the amount of individuals was altered by the application of weights; then the process was extrapolated to the entire data set for weighting methods 1, 2 and 3.

Whilst data cleansing is not as fundamental to the research process when utilising secondary data (Field 2009), the variables were compared to the actual data for areas Cornwall (15), and England (64). Significantly this process highlighted the need to order, and to examine individual level and not household level, data for comparison. Subsequently the data was examined through two key phases:

1. A comparison of the Cornish ethnicity data, against the other ethnicities in Cornwall, simply derived from the total data with the Cornish responses subtracted. Each variable would therefore consist of data for the Cornish and

non-Cornish in the same region, and therefore be drawn from the same population to allow statistical testing. The un-weighted tables can be found in Appendices 4.5 and 4.7.

2. A repeat of the same analyses but using the synthesised (weighted) data. These results did not vary significantly according to method, and so only method 3 is shown in Appendices 4.6 and 4.8.

The comparison of the two groups across these key variables aimed to explore the existence of statistically significant differences between the Cornish and non-Cornish in the same region, using both the original and weighted data. However it immediately became clear that the resolution of these data was too large and that some scaling procedures were necessary; *all* of the variables showed statistical significance. A more detailed analysis would be needed to examine in greater detail the underlying processes. District level (that is the six administrative areas of Cornwall prior to unitary status) data were included in the commissioned tables, and were available for the region as a whole (Office for National Statistics 2001). The tables were divided, and populated fully as before, however broken down by the areas: Penwith and IOS (15UF and 15UH), Caradon (15UB), Carrick (15UC), Kerrier (15UD), North Cornwall (15UE) and Restormel (15UG). The analyses from the above stage were repeated across all the areas and all variables, the un-weighted analyses can be found in Appendices 4.9 and 4.10, the weighted in 4.11 and 4.12.

Data were arranged into a tabular format which made comparator analysis more logical and presented the Cornish and non-Cornish responses across variable rows. After a process of data cleansing using the percentages the two groups were subjected to a chi-squared analysis in the statistical package 'R' integrated with Microsoft Excel (Crawley 2007). Chi-squared simply compares an expected result, under a null hypothesis, with the actual set of data (Field 2009), and so examines the assumption that the difference between two results is large enough to claim its observation in the

population (Crawley 2007). In the present case selected variables were entered having been broken down along Cornish/non-Cornish lines, thus, the null hypothesis for each case was the absence of a relationship between the variable in question and Cornish ethnicity. A significant result (at the $p0.05$ level) would lead to a rejection of the null hypothesis and a conclusion that there was a statistically significant relationship. More advanced testing was not possible on the data collected as there were a number of aggregated variables where no case by case sets were available.

4.5.1 Results

The first stage of the analysis consisted of the previously mentioned top-level examination of the whole county, and initial results indicated that there were significant results in all but one variable (household composition) (see Appendices 4.5 and 4.7). Whilst a finer grain analysis was clearly required in order to probe the links more closely, the tentative indication at this stage was that there were clear differences between the Cornish and non-Cornish across some key variables. The analysis of weighted data (see Appendices 4.6 and 4.8) showed that there was extremely little (or indeed no) variance between the weighting methods (1, 2 and 3). Therefore, from this stage onwards the results quoted will be that of the (most advanced) method 3 weight application. The weighted analysis indicated that the results were more highly significant than previously, and, whilst that is not indicative of a stronger relationship it is an indicator of a higher level of certainty about the observed relationships. Additionally the single rejected relationship from the previous round of analysis (household composition) became significant with the application of the weights.

Due to the overwhelming significance of all of the variables at a county wide level a more detailed analysis was conducted at district level. This was intended to reveal any finer-grained patterns in the data.

Overall 22 variables were examined across the two age ranges (total and working-age), and six districts (as well as the county wide) were examined; therefore, a total of 154 results were calculated. Detailed analysis of the first un-weighted district-level data can be found in Appendices 4.9 and 4.10, however, in geographic order from westernmost to easternmost the headline results were:

- i. Penwith and the Isles of Scilly – all of the analysed variables reported significant differences between the two populations, with the exceptions of economic activity, qualification level and method of travel to work.
- ii. Kerrier – only household composition (in the total population) and economic activity (16-64) reported non-significant relationships.
- iii. Carrick – the only variables not reporting a significant relationship were, car and van availability and household composition.
- iv. Restormel – three variables did not show significant relationships, all in the 16-64 population; economic activity, qualification level and method of travel to work.
- v. Caradon – similarly, three variables reporting non-significance in this area were accommodation type, household composition and economic activity.
- vi. North Cornwall – accommodation type and household composition were also not-significant in North Cornwall.

The pattern or gradient which had been hypothesised running from east to west in Cornwall (Cornwall Council 2011), was not evident in un-weighted data, with the significant differences between the populations being relatively evenly spread across the region. There was also no difference in the number of differences in the total and working age populations overall. However there was a clear indication that the majority of the variables tested were significant.

The application of the method 3 weights to district level data had a substantial impact on the results (see Appendices 4.11 and 4.12). All of the tested variables for Carrick, Caradon and North Cornwall became significant at the $p>0.05$ level, whilst in Restormel two of the variables became significant. In Kerrier, and Penwith and the IOS, the variables remained unchanged (for a visual representation of the significance levels over all see Appendices 4.13 and 4.14). Overall, the application of the weights led to changes in the number of variables which were statistically significant. In raw data analysis 15 of the variables were not significant, compared to only six in weighted data (see Appendices 4.13 and 4.14). The tentative conclusion to be drawn from this result is that the difference between the two groups is greater than data in the original 2001 Census shows. The application of weights also highlighted the gradient which was absent in raw data – there appears to be a trend for the not-significant variables to be in the westernmost areas of the county (see Appendix 4.14), which is likely related to the gradient of ethnic identity observed by Aldous (2002), and others.

4.5.1.1 Variables

The interpretation of the results outlined above is important for the progression to more detailed primary research and, indeed, says much about the two groups in itself (see Appendices 4.9 – 4.14). However the conclusions drawn must necessarily be tentative for two key reasons. Firstly, the primary analysis utilised Census data, which had been shown to be flawed if applied without correction and, secondly, the weights are applied from data which are not exclusion related; and again contained errors. The indications which emerge from the analyses are however useful and testable, and so each variable will be considered in turn. There were also some variables included in the data sets which were not statistically testable, as they failed to meet the criteria for chi-squared analysis. Prior to a discussion of the variables it is worth noting that (to

prevent repetition) in all cases the application of weights altered the significance of a result, but in no case the direction of relationship, therefore weighted data results simply infer a greater confidence that the relationship would be observed in the population (Field 2009).

The first variable examined was gender and there were significant differences between the Cornish and non-Cornish populations across the total and working age populations in all of the districts. An examination of the percentages shows, in the total population bracket, that both groups had higher percentages of females, yet the Cornish tended towards a closer grouping. In the 16-64 population the Cornish tended towards a greater difference in gender compared to the non-Cornish. Thus in the Cornish population the significant difference is that the working-age individuals are made up of a greater proportion of males, yet the overall gender split is smaller than the non-Cornish. The conclusion to be drawn, in this case, is that there are more women living longer in the Cornish population when compared to the non-Cornish, and there are two hypotheses which can be forwarded. Firstly, that Cornish males are living significantly shorter lives than the non-Cornish and, secondly, that the females are living significantly longer. The very traditional gender divide in the manual, and often hazardous occupations popular among the Cornish has been posited as leading to the prevalence of older females (Bryant 1993).

Age is a recurring variable throughout all the stages of analysis and cross cuts many variables, however overall in the total population there was a significant difference between the two groups. The Cornish tended towards a higher proportion of older individuals (64+) compared to the non-Cornish in the same region. Whilst this does not differentiate between the two hypotheses forwarded to explain the gender divide, it does logically support the overall finding.

Religion also demonstrated key differences between the two groups, comparing those who answered 'Christian', 'No Religion' and 'Religion not stated' in the total population. Not only was the variable significant as a county wide phenomenon, it was also significant in every district; both in un-weighted and weighted data. In comparison to the non-Cornish population, the Cornish were over-represented in the 'Christian' sector with many less selecting 'No Religion' or 'Religion not stated'. Methodism has traditionally been extraordinarily popular in the region (Hamilton-Jenkin 1934) and arguably one of the central features of a Cornish identity (Milden 2004). Therefore a finding of less secularism amongst that group is logical, especially when taken with the age orientated results quoted above.

The general health variable compared those who selected 'Good' with those who selected 'Fairly Good' and, again, this variable was significant across all age ranges and all geographic areas of the county. The Cornish were more likely than the non-Cornish to select 'fairly good' rather than 'good' and represents the first indication of the links with social exclusion that the Cornish display. The indications in the literature were that the Cornish were overall in worse health than others in the same region (Benzeval 1996; Cornwall and Isles of Scilly Primary Care Trust 2008), and policy has sought to address this discrepancy.

The differences in accommodation between the two groups are complex and geographically located. Firstly, the type of accommodation compared four categories across both groups, detached, semi-detached, terraced and flat and maisonette. In original, un-weighted, data the variable was not significant in the eastern two districts, once again hinting at the gradient of difference between the two groups in terms of housing. However after the application of weights the variable shows significant differences across all geographic areas of the county. Largely the Cornish were more likely to be living in detached or terraced houses.

The differences in tenure compared those who 'owned outright', 'buying with a mortgage', 'social rented' and 'private rented'. Interestingly, this variable was significant across the entire county in both un-weighted and weighted data sets. The Cornish were more likely to own a property outright and far less likely than the non-Cornish in the same region to privately rent or to be buying a property with a mortgage or loan.

The familial living arrangements, common to a more traditional Cornish family discussed in chapter 1 (see page 39), go some way to explaining this result and, in turn, lend some credence to the higher proportion living in detached and terraced houses, especially when considered next to the high proportion of farms and farmhouses associated with the group. These older properties are more likely to be owned outright, through features of timescale if nothing else, though the kinship assistance described by Buck, Bryant and Williams (1993) implies that property stays in Cornish families for a number of generations. These family groups are thus likely to be larger and so conceal a number of other exclusion factors by absorbing deprivation into a larger unit.

Access to motor transport is one of the key variables in terms of exclusion, especially in more rural areas (Levitas *et al* 2007; Smith, Davis and Hirsch 2010). The analysed variable compared those with access to 'none', 'one' or 'two or more' cars/vans in the household. There were significant differences between the two groups, across all of the districts apart from Carrick (in the un-weighted), and all in the weighted analysis. Data indicate that the Cornish are less likely to have no access to motor transport and more likely to have one or more vehicles; there are a number of possible explanations for such a result. That the Cornish are more likely to be in the agricultural and other rural professions was hypothesised and, so, access to transport in such areas is not a luxury but, rather, a necessity. Additionally, the large numbers of individuals contained in one household had also been suggested, and so numerically more vehicles are a necessary by-product of large familiar housing. However the key reason suggested in policy is the

length of commute which individuals in more rural areas are forced to make (Local Intelligence Network Cornwall 2007).

Supporting evidence for the agricultural hypothesis comes from the 'travel to work' variable which compared the 16-64 population across 'working mainly from home' and 'driving a car or van'. Significant differences were reported in all but two districts, and that did not alter with the application of the weights. The main differences were that the Cornish were more likely to work from home and to require no travel to work at all; something in keeping with the agricultural tradition in the region but not conclusive on the evidence given.

The single variable which was not found to be significant at the county level was household composition, which compared the two groups across the reported 'pensioner' and 'other' categories. At a district level the variable was only significant in Penwith and Restormel (in the raw data), and once weighted, significant in all areas but Kerrier. Unsurprisingly in light of the previous findings the Cornish population contained more pensioner households than the non-Cornish in the same area (going some way to dispelling the myth that in-migration is dominated by the elderly). This conclusion could not be drawn directly from Census data in raw form however. Rather, the weighting process illuminated an underlying process in the gender and age differences mentioned previously – either Cornish men are living shorter, or Cornish women are living longer (relative to the non-Cornish population) and leaving one person (often female) pensioner households.

All of the subsequent variables which were analysed were solely on the working age (16-64) population. Beginning with the relative levels of economic activity; clearly a central feature of social exclusion processes, the variable reported no significant differences in four of the districts (in un-weighted data) however, after the application of weights, that narrowed to two. The distribution hinted at economic activity

differences between the two groups being more frequent in the east of the region. The Cornish were more likely to be economically active than the non-Cornish in the same region, however, that is not to immediately conclude that exclusion is nullified as there were varying in-work exclusion factors hinted at by Griffiths (1989). Additionally, the over-representation of the non-manual classes in write-in groups (see Hickman and Walter 1997) may provide some explanations for the binary distribution which emerged.

This polarisation continued into the differences observed in occupation between the two groups; which sought to compare those who responded 'managers and senior professionals', 'skilled trades' and 'elementary occupations'. This variable was significant in all areas across all data, and showed that the Cornish are more likely to be in all of those three groups, the only groups commissioned by Cornwall Council. Interpretation is clearly difficult without complete data; however there is some evidence in this variable for the increased polarity amongst the Cornish respondents, as well as potentially large numbers of Cornish in the mining and china-clay industries. The emergence of a polarised group is largely in agreement with the theoretical literature on an ethnic 'intelligentsia' as a whole, or the notion that elements of an ethnic group are more predisposed to knowledge and its utilisation (Rapoport and Lomsky-Feder 2002).

The level of qualifications reported did not show significant differences between the two groups in Penwith or Restormel, though with the addition of the weights Restormel became significant. The Cornish were more likely to report having 'no qualification', and less likely to be in the 'level 3/4/5 group'. There has long been evidence that the resident population does not have a high level of uptake in the higher or further education sectors (South West Observatory 2008a); and from this evidence it would seem that it is the Cornish, in particular, who are unlikely to proceed into further education.

The industry categories in which individuals were employed was cut down in the Cornwall Council data set, comparing groups across the categories 'manufacturing', 'wholesale and retail', 'hotels and restaurants' and 'public administration and defence, social security and education'. Significant differences showed that the Cornish were more likely to be present in all of these areas and, whilst comparison is difficult without other categories, these imply more manual occupations. This finding supports to some extent the work of Thornton (1996) and Hennessy (1986), who both argued that the long term residents of Cornwall are over-represented in the manual and holiday industries. However this finding may well be skewed by the timing of the Census, carried out in April these results would not include, in the tourism sections, the 'peak season' trade and only include a breakdown of the pre-season workers.

The remainder of the variables included in the analysis, those identified by Cornwall Council for inclusion in the commissioned tables, only consisted of single categories and were therefore not suitable for significance testing. The results quoted in the following section are therefore based on an interpretation of the percentages and should be treated with more caution than the previous results.

These data had hinted at the Cornish being more likely to reside in the same address as the last year, than the non-Cornish in the same region – going some way, again, to providing evidence for the non-mobility of the group, especially when coupled with the outright ownership of property. Interestingly for the current research question is the tentative evidence that the Cornish are more likely to report a limiting long-standing illness than the non-Cornish. This gives weight to the previously mentioned general health finding and also fits the strategy given by the Cornwall and Isles of Scilly Primary Care Trust (2008). There is clearly some skew in these data, which shows the Cornish as being less healthy generally than the non-Cornish group; similarly, the Cornish are over-represented in the categories of higher levels of caring. The links between low geographic mobility, ownership of property, larger familial units and the

presence of caring workload, seem logical and fit again with an older traditional concept of rural identity.

4.6 Discussion

This preliminary and exploratory phase of analysis sought to examine and adjust the results of the 2001 England and Wales Census data referring to the Cornish, specifically concentrating on a more comprehensive mapping and examination of the relative position of the group. The variables which have been examined in the preceding sections allow some moderate conclusions to be drawn and some hypotheses constructed to be taken forward into the following phase of survey research.

Regarding the first of the research questions stated in chapter 2, relating to the size of the group, the results discussed in this chapter allow some more definitive claims to be made about the size of the Cornish. A comprehensive collation of all data relating to the Cornish, and statistically rigorous methods of collation, revealed a more likely figure of 26% to 30% of individuals in the county self-identifying as Cornish. Whilst the undercount in Census data was expected, the scale is large – representing the difference between 34,000 and 155,000 individuals.

In keeping with previous findings on Census undercounts (see Graham and Waterman 2005; Hickman and Walter 1997; Clucas 2009), the implications are that, at small scales, national surveys are inaccurate. However this raises important questions about the measurability and necessity of ethnicity variables in general. To include the appropriate number of categories (itself problematic, see Simpson and Akinwale 2007), would make a single variable unwieldy. This problem is discussed in greater depth in chapter 7; however it is important to note at this point the dichotomy between the inaccuracy of the result and the complex measurement issues at play.

The result from these data, in terms of population breakdown of the Cornish, hinted at one of two processes: either Cornish males had significantly shorter lives than non-Cornish in the same area, or females had significantly longer ones. Coupled with the differences observed in health, that the Cornish were more likely to report a lower level of general health and increased likelihood of long-standing illness, the links with social exclusion become stark. The Cornish were, however, more likely to live in a property which was owned outright (rather than mortgaged), and to have lived there for over one year. Additionally, that property was more likely to be detached and, in general, have access to more motor vehicles.

In terms of employment the Cornish/non-Cornish divide reported a complex and somewhat polarised set of differences; hinting more at the functional bias involved in write-in ethnicity questions rather than the underlying group dynamics (Hickman and Walter 1997; Clucas 2009). The Cornish were more likely to be economically active and employed in managerial, skilled trade or elementary occupations. The group were also less likely to report high levels of qualifications, and were over-represented in the retail, leisure and public administration industries.

The central focus of this stage of analysis was to explore the (tentative) links with social exclusion emerging from Census data, both in raw form and after weighting. The limitations of this process are significant and will be discussed in the following sections; however no previous analysis had explored these links directly. The B-SEM matrix discussed in chapter 2 provided the framework from which to examine social exclusion (Levitas *et al* 2007), and at the top level consisted of three categories – resources, participation and quality of life. The variables included in the present analysis were chosen by Cornwall Council as representative of exclusion indicators and do, indeed, fit well with the matrix. As such, the question of linkage between Cornish ethnic group identification and social exclusion can be addressed in a preliminary fashion.

Resources, according to the matrix, are further divided into 'access to services' and 'economic resources' and in these the Cornish are not demonstrably different from others in the region, though there are hints at more subtle differences. For example, the high levels of home ownership amongst the group could be indicative of a wealthy elite or, contrarily, a lack of Cornish purchasers indicative of socio-economic exclusion. Equally, it could be a signifier of investment in property prior to the dramatic increase in house pricing. In terms of participation the B-SEM matrix identifies 'economic', 'social' and 'educational participation' as central, and in the Cornish case represents a complex result.

The group report significantly lower levels of qualifications when compared to the non-Cornish in the same area and also report more manual occupations. Though in more general terms, the Cornish group are more likely to be in employment. Quality of life is a broader, and vaguer, category consisting of both 'health', as well as the wider living environment. In this the Cornish seemingly experience harsher standards than the non-Cornish. The group are more likely to report lower levels of general health as well as long-standing illness. Coupled with the complex housing results, which often consist of older females, there are hints that exclusion factors may be felt more acutely.

The previously discussed and much popularised (see Cornwall Strategic Partnership 2007), gradient across key variables emerged from weighted data, and there was evidence that the differences between the two populations became more pronounced the closer one got to the border with Devon. On the one hand, unsurprisingly, there is clearly more contact and dichotomy with 'other ethnicities' in areas closer to a border with a county which cannot claim a 'Cornish' ethnicity, the result is also important for the pockets of Cornish in those areas (for a good explanation of ethnic 'clumping' see chapter 7, page 220 as well as Wimmer (2004)). This is clearly an area which required more rigorous examination. The weighting process itself demonstrated that whatever the links with exclusion the group was more numerous than had been previously

thought. The analysis also demonstrated variables which only became statistically significant after the application of the weights and, though not conclusive, there was evidence that sole examination of the Census data would not have given an accurate picture of disadvantage.

In summary, there were strong hints in Census data, both raw and weighted, that the Cornish as a group experienced key exclusion variables in a different way to other groups in the same region. The finding is somewhat strengthened by hints at the previously found east-west gradient and the logical acuteness at the point of intersection. There are also key implications for the numerical size of the group after the weighting process; not only were the Cornish potentially experiencing difference but there were more individuals affected than previously thought. However, the extent of the difference remains elusive and only answerable through direct, targeted, research.

4.7 Limitations

The limitations of the present analysis have been alluded to throughout this chapter and directly impact upon the level of confidence in the claims made. However tentative the conclusions it is worth explicitly stating the methodological constraints which moderate their generalisation. Firstly, whilst the weighting process was as rigorous as possible it represents only the best collation of available data. The field was demonstrated to be highly under-researched and so data size and quality was severely limited, the levels of Cornish ethnicity proposed in the sections above cannot be claimed as accurate though arguably more reliable than raw Census data alone. The weighting process itself, whilst exploratory and innovative for the social sciences, is relatively simplistic; therefore statistically rigorous. As such there are potentially alternative uses for this method for single variable improvement strategies, for

example, the reported levels of disability do not often match actual levels and require estimation (Office for National Statistics 2009c; Tysome 2006).

Census data has inherent errors which filter down through all the analyses, any write-in group has been shown to be representative of a group more attuned to ethnic identity and often more highly educated (Hickman and Walter 1997). Any inherent characteristics of that population would filter through into the resulting conclusions and the polarisation seen in the Cornish group between a so-called intelligentsia and manual-classes may well be a function of that. The true levels of deprivation may remain hidden behind the systematic bias inherent in write-in ethnic variables.

Though these represent significant limitations of the conclusions posited the purpose of this phase of analysis was largely exploratory and tentative. It was hypothesised from the literature that the Cornish were more numerical than previously thought and potentially linked to exclusion factors disproportionately. The former seems likely and the data showed hints of the latter but inconclusive. The results described here are accurate, in that they examine those individuals who selected a 'write-in' Cornish identity in the Census. The limitations are largely upon their wider applicability.

4.7.1 Progression

The commissioning of further data from the 2001 England and Wales Census to explore these issues more comprehensively was inappropriate; the inherent errors would not disappear with volume. As such a progression to testing the tentative hypotheses with direct data collection was necessary. The operationalisation of variables became clear from the hints in secondary data, and therefore targeted questions aimed at sections of the region were discernible. The next stage of analysis was to address the following points:

- i. An examination of Cornish ethnicity levels directly, using a self-identification variable absent in the 2001 Census. The estimated levels in the secondary collation were closer to 30% than 7%, what was the real picture in the region?
- ii. An examination of the linkage with key variables identified through the secondary analysis to enable more conclusive links to be demonstrated (or refuted). Particularly the gender and age breakdowns, religious affiliation, health aspects, accommodation and housing and key employment characteristics.
- iii. An examination of the links with other additional B-SEM identified exclusion variables not present in the secondary analysis (for commissioning reasons).
- iv. Lastly an exploration of the east-west gradient in detail.

4.8 Summary

This chapter outlined the process, and results, of the secondary analysis stage of research, the analysis and adjustment of 2001 Census data. The data collection resulted in 12 key data sets referring to the Cornish and these were collated in a statistically rigorous fashion to derive weights for use in conjunction with Census data. An overall picture of Cornish ethnicity was derived and was argued to be closer to 30% than the reported 7%. The exploration of the links between Cornish ethnic group affiliation and social exclusion variables was tentative and necessarily exploratory. However it was shown that on key B-SEM variables the Cornish and non-Cornish were likely to report differing levels. As such a more direct examination of the specific levels and relative position were required and the next chapter will discuss the results from the postal survey which addressed these issues.

5. Phase Two – Survey Analysis Results

5.1 Introduction

This chapter describes the extension of the 2001 England and Wales Census data referring to the Cornish. Data were collected from 824 postal surveys across two areas in Cornwall and then analysed using a range of quantitative techniques, including simple and multilevel regression analyses. The results indicated that whilst there were some very small scale differences between the Cornish and non-Cornish populations in the region, there were distinctly more significant impacting factors. When examined alongside variables such as income, the Cornish issue was not significant and changes little when modelled in a hierarchical fashion. As such it is the discrepancy between the previously discussed *belief* of difference and the reality which will become the focus for later stages of research.

5.2 Analysis

Raw data from the questionnaires were entered manually into a single SPSS data file for analysis, each question representing one variable except where dummy coding was necessary (see Appendix 3.2 for questionnaire variables). In addition to raw data, a number of collated variables and indices were created for ease of analysis. Firstly, the qualitative 'comment' variable was transformed into a positive or negative categorical variable, as it was hypothesised (from anecdotal evidence) that the direction of comment would be related to Cornish ethnicity; the Cornish being more pessimistic about the region. Secondly, the postcode variable was transformed into an interval

level variable, which was coded in an east-west format for inclusion in more advanced analyses.

The ethnicity variable which was included had, in keeping with the 2001 Census, a large number of categories. However the majority were unused and almost all respondents fell into either the 'White-British' or 'Cornish' categories, so the variable was transformed into a binary categorical variable, important for further analysis (Field 2009). To avoid a similar low cell count the variable relating to religion (question 1.5) was also collapsed.

The set of ten variables which made up question 3.3 (see Appendix 3.2), and referred to contact with family members, were collated into a single 'index of contact'. This was coded using simple addition and weighted for the 'none' responses, so that a high score implied low levels of contact, and vice versa. The five variables in question 3.6 referring to political action were also compiled into a single index where a high score indicated low levels of action. Similarly, the four variables in question 3.7 referring to general fear were collated to produce a 'fear index' and a high score indicated increased levels of fear regarding the surrounding area.

The most central feature of the index construction phase was the design and collation of the social exclusion index. Whilst an analysis of each of the variables in turn would demonstrate the relationships between ethnic identity and key processes, the overall picture of disadvantage was only accessible through the collation of the variables into a logical index of social exclusion (SEI). Social exclusion was demonstrated to be a multi-dimensional process and single measures would not be sufficient. The collation of variables enabled claims to be made about a set of interrelated factors (Bryman and Cramer 2009). The B-SEM matrix (Levitas *et al* 2007) was used as a framework for the design of the questionnaire and so was also utilised in the construction of the SEI, each branch of the matrix was included in the SEI (see Appendix 5.1). The key variable left

out of the matrix was the income factor, which was hypothesised to be important in its own right and, also, distinct from measures of exclusion. The final index consisted of:

| | |
|-------------------------|-------------------------|
| Health | Transport access |
| Long-standing illness | Family contact index |
| House occupation status | Friends contact |
| House state of repair | Social group membership |
| Employment status | Political index |
| Full time/part time | Fear index |
| Qualification level | Victim of crime |

Table 5.1 SEI constituent variables

A visual check of the resulting index demonstrated that the SEI was normally distributed (see Appendix 5.2), and also showed a skewness and kurtosis not significantly differing from normality ($Z_{\text{skewness}}=0.93$, $Z_{\text{kurtosis}}=0.19$, see Appendix 5.3). The index was therefore suitable for inclusion as a distinct variable for further analysis (Wagner 2010). It should also be mentioned at this point that the collation of variables introduces a larger error relating to missing data, as any case not wholly completed is omitted. This error is discussed in depth in section 5.2.5 in this chapter and, in broad terms, did not significantly impact on the results.

5.2.1 Sample characteristics

The overall response rate was 27.5%, which represents 824 individually completed and returned questionnaires. The distribution and return was split into two distinct phases, the pilot and the main body, however there were no significant errors

discovered in the pilot stage and so the returns were included in the main body of the analysis. The response rate, whilst low, is acceptable for a modern postal survey with no follow up publicity; which was made impossible as the main variable (Cornish ethnicity) would have become biased with highly informative publicity. Assuming a 95% confidence interval, as is standard to the social sciences, the response rate gives a sampling error of $\pm 3.5\%$ (Williams 2003a). Mathematically this implies that the relationship which are sought are of the '2-sigma' category; where 'sigma' is one standard deviation from the mean result in a Gaussian distribution (Bryman and Cramer 2009).

The sample was split into 62.4% females and 37.3% males (N=821), with the mean age being slightly over 58 years old (all of the sample statistics are found in Appendix 5.4). The modal age (65 years) shows that largely the sample was made up of older individuals; this is unsurprising as the instrument was sent to households rather than individuals, which are often owned by older people, particularly in Cornwall. The proportion of females was higher than that seen in the 2001 Census result and therefore a function of the survey process itself; possibly the result of the postal instrument being completed during the day (the researcher having little control in postal survey administration, May (2011)).

The distribution of the sample was consistent with the sampling procedure outlined previously, and the two areas (west and east) were returned relatively evenly (48% West against 52% East). The spread across the postcode areas, when split into an east-west gradient, was also consistent. By examining the Community Network Area variable (CNA) it emerged that there was some bias towards the western returns, though this was not absolute, with there being some confusion amongst the respondents about the meaning of 'Community Network Area' (a new feature).

In terms of ethnicity, the most common category was 'White-British' (69.8%, N=821) with the second most frequent 'White-Cornish' (24.6%, N=821). There were a small number of 'other' ethnicities, however they were infrequent and were collapsed into a single category for the rest of the analyses; indeed only five individuals selected a non-white ethnic group. This finding is consistent with the secondary analysis phase discussed in the previous chapter, as well as being inconsistent with the findings of the 2001 England and Wales Census as hypothesised. The string responses collated for the 'other ethnicity' variable showed that the alternative ethnicity written in most frequently was 'English' (N=9).

The majority of the respondents (43%, N=821) were in a first marriage, however there were a significant proportion who were widowed or divorced (24%, N=821). By far the most frequent religious orientation was 'Christian' (70%, N=817), though the second most popular response was 'none' (26%, N=817). The string variable which was included as a write in option for other religions was not frequently used, and a large proportion of the responses were clarification of the previous variable ('C of E'/'Methodist', N=14), although there were 5 'Pagan' respondents.

The section included at the end of the survey for 'additional comments' revealed some key themes of response – and, unsurprisingly, individuals completing the section were either strongly positive or negative about a single aspect of their lived experience. A significant proportion reported that living in, or moving to, Cornwall had been a positive experience. Those who felt negatively reported a number of key issues, often location specific, including poor public transport and ineffective health services. Overall the comments were split relatively evenly between positive (N=140) and negative (N=155).

5.2.2 Relationships

The simplest and most effective way to examine the relationship between two variables is to explore their covariance (Field 2009), and as such, this section will detail the correlation analysis (at the $p>0.05$ level) between logically associated variables included in the survey. Firstly, the bivariate relationships are detailed and then control variables introduced to explore the partial correlation variances. All of the bivariate statistics can be found in Appendix 5.5. The tests used are parametric and non-parametric versions of covariance (Pearson's R and Spearman/Kendall, see Field 2009, chapter 6), shown in subscript, to account for differences in levels of data.

There was a positive significant relationship between self-identified Cornish ethnicity and the social exclusion index (SEI), $r_s=.115$, $p>0.05$. The interpretation of the r^2 (**0.1152**) shows that only 1.32% of variability in the SEI is explained by variability in Cornish ethnicity. However the positive coding does suggest that those respondents who self-identified as Cornish were more likely to score higher on the social exclusion index.

There was no significant relationship between 'Nearest community network area' and SEI, $r_s=.045$, $p=0.240$. Unsurprisingly, there was also no significant relationship between 'Postcode' and SEI, $r_s=.019$, $p=0.622$. There was a significant relationship between 'income' and SEI, $r_s=-.365$, $p>0.05$. This negative correlation shows that, as income increases, so SEI score decreases, and an examination of the bar chart for these two variables reveals this relationship, 13.32% of the variance is explained in the dependent, by the independent.

There was no significant relationship between self-identified Cornish ethnicity and 'income', $r_s=-.070$, $p=0.053$. There was, however, a significant relationship between Cornish ethnicity and postcode $r_s=-.101$, $p>0.05$. The bar charts for the two variables

show that levels of Cornish ethnicity are higher in the Western postcodes than in the East, though there was more variance between distinct areas than as a general trend.

There was no significant relationship between 'postcode' and 'income', $r_s=.049$, $p=0.180$. Nor was there any correlation between Cornish ethnicity and the comment coding, $r_s=.069$, $p=0.196$.

There were significant relationships between Cornish ethnicity and both 'religion' and 'highest qualification' ($r_s=.070$, $p>0.05$; $r_s=-.159$, $p>0.05$ respectively). The Cornish were more likely to be Christian, and to hold lower level of qualifications. Also, those that reported a belief of some description, compared to those who reported no religion, were more likely to hold lower or no qualifications ($r_s=-.113$, $p>0.05$).

There was some variation based on demographic variables, for example, gender was significantly related to SEI ($r_s=.136$, $p>0.05$). The bar charts show that females were more likely to score higher on the social exclusion index. Gender was also significantly linked to marital status ($r_s=.154$, $p>0.05$), indicating that women were more likely to be separated, divorced, or widowed. Age was negatively related to income, ($r_s=.080$, $p>0.05$), indicating that as age increases income decreases. Age was also significantly linked to SEI, ($r_s=.080$, $p>0.05$) indicating that as age increases so the social exclusion score also increases.

Religion was significantly linked to SEI, ($r_s=.089$, $p>0.05$), indicating that those who identified as Christian were more likely to score higher on the SEI than those who reported no religion. There was no significant relationship between comment coding and SEI, ($r_s=.067$, $p=0.250$) indicating that a respondent's level of social exclusion appeared to have no impact on their additional comment status.

In order to explore the significant, and central, relationships more fully it was necessary to introduce control variables, in this way the relationships can be reported whilst holding another variable constant (Bryman and Cramer 2009). The variables

which significantly impacted on the SEI score and therefore relevant for further analysis, were: Cornish ethnicity, income, gender, age and religion. The results of the previous analysis showed that the largest impacting factor, on SEI, was income, accounting for 13.32% of the variance. The other variables, whilst statistically significant, explained relatively small amounts of variance. The relationships between these variables must be explored more fully, starting with partial correlation analysis (see Field 2009 for a good overview of the theoretical standpoint).

As previously, income and SEI were strongly correlated and even when controlling for Cornish ethnicity this strength reduced only marginally ($r_s = -.359$, $p > 0.05$) to 12.9% variance explained. As such, this was a truer measure of the impact income had on SEI. Indeed the examination of all the other significant variables (found in Appendix 5.6), showed that none reduce the impact significantly and that the relationship between income and SEI remains by far the strongest. Though a strong result, this relationship needed to be modelled with all the variables impacting together – utilising semi-partial correlation analysis, or multiple regression, with SEI as the dependent variable (Acton and Miller 2002).

5.2.3 Regression analysis

A model was produced with the dependent variable of SEI and the independents, income, Cornish ethnicity and religion, as well as relevant demographic variables (gender and age). The inclusion of categorical variables in a multiple regression model is possible (Field 2009), but requires logical and consistent re-coding so as the output is interpretable. Cornish ethnicity was coded (0 and 1) as a binary variable and therefore did not violate any of the assumptions; neither did the similarly coded gender variable; whilst age was an interval independent. Therefore, dummy categories were created for the variable income, each compared to the reference category which was

set as £5,000-£9,999 (the majority, modal, category; see Field 2009). Thus the dummy variables included consisted of $k-1$ variables for income, and any deviation from the modal wage would show as an impact on SEI. Religion was recoded with dummy categories produced in a similar fashion and in that case the modal and reference category was Christian.

The variables included in the model were, therefore, SEI (dependent); Age; Cornish ethnicity; Gender [Binary]; Income [Dummies] and Religion [Dummies]. Each of the variables was checked for violations of the assumption of normality (Gaussian distribution). Because of the exploratory nature of the analysis and the hypotheses generated from previous stages of analysis, the regression was run using the ENTER; two block, method (Pallant 2010). The first predictor entered was Cornish ethnicity and the second block contained the remaining variables.

The first model accounted for 1.74% of the variance in the dependent variable ($r^2=.132$), the second model accounted for 17.31% of the variance in the dependent variable ($r^2=.416$). Thus the inclusion of the remaining variables accounted for an extra 15.57% of the variance, a large percentage (see Table 5.3). There was only a relatively small amount of shrinkage in the adjusted r^2 result¹ in the second block and so a generalisable result was produced. The difference accounted for by the new predictors was significant to the model ($r^2\text{change}=.156$, $p>0.05$). The Durbin-Watson statistics, a measure of the assumption of independent errors, was of an acceptable value (DW=1.951). The ANOVA analysis showed both models were a better predictor of the outcome than using the mean alone ($F=12.113$, $p>0.05$, step 1; $F=7.713$, $p>0.05$, step 2; see Appendix 5.7). Thus, the model was a significant fit of the data overall.

¹ An 'adjusted r^2 result describes the variance explained in Y by the predictors, whilst accounting for the derivation from a population sample (Field 2009).

Table 5.2 APA Standard coefficient table – model 1

| | | B | SE B | β |
|--------|-----------------------------|--------|-------|---------|
| | Step 1 | | | |
| | Constant | 56.51 | 0.31 | |
| | Cornish Ethnicity | 2.16 | 0.62 | 0.13* |
| | Step 2 | | | |
| | Constant | 55.87 | 1.395 | |
| | Cornish ethnicity | 1.57 | .591 | .10* |
| | Age | 0.04 | .017 | .09* |
| | Gender | 1.00 | .547 | .07 |
| | No religion vs Christian | -0.137 | .579 | -.09* |
| | Other religion vs Christian | -2.27 | 1.325 | -.06 |
| Income | 0-2.5k vs Baseline | 3.51 | 1.225 | .11* |
| | 2.5-4.9 vs Baseline | 2.38 | 1.088 | .08* |
| | 10-14k vs baseline | -0.99 | .764 | -.06 |
| | 15-19k vs baseline | -2.15 | .864 | -.10* |
| | 20-24k vs baseline | -3.52 | .968 | -.15* |
| | 25-29k vs baseline | -3.70 | 1.155 | -.12* |
| | 30-34k vs baseline | -3.40 | 1.260 | -.10* |
| | 35-39k vs baseline | -5.55 | 1.486 | -.14* |
| | 40-44k vs baseline | -6.94 | 1.756 | -.15* |
| | 45-49k vs baseline | -8.65 | 2.737 | -.11* |
| | 50-74k vs baseline | -5.34 | 1.822 | -.11* |
| | 75-99k vs baseline | -5.57 | 2.699 | -.07* |
| | 100k+ vs baseline | -9.44 | 2.946 | -.12* |

The model coefficients for the second block, shown in Table 5.2, indicate that four variables were significant predictors of social exclusion, as measured on the created SEI: age, Cornish ethnicity, religion and income. The positive relationship between age and SEI ($b=0.37$, $t=2.145$, $p>0.05$) showed that for every one unit increase in age (one year) the SEI score raised by 0.37 units, all other things being equal. Cornish ethnicity; this positive relationship ($b=1.567$, $t=2.650$, $p>0.05$) showed, because of the way the variables were coded, that as ethnic group moved from non-Cornish to Cornish the SEI score raises by 1.567 units; all other things being equal. Only one of the religion dummy variables was significant in the analysis, the comparison between no religion and, the reference category, Christian ($b=-1.365$, $t=-2.357$, $p>0.05$). This negative relationship indicated that, as religion moved from Christian to no religion, so the SEI

score decreased. Those individuals reporting a Christian faith were more likely to report a higher SEI score by 1.365 units; all other things being equal.

All of the income dummy variables were significant, apart from the category which compared the income £10,000-£14,000 with the baseline ($b=-0.994$, $t=1.300$, $p=0.194$). The two dummy variables measuring incomes *less* than the baseline reported positive results, whereas the ten dummy variables measuring *more* than the baseline reported negative results. This indicated that those reporting an income less than the baseline modal category, reported a higher SEI score; and those indicating a higher than modal income reported a lower SEI score; all other things being equal.

The standardised coefficients (for the predictors) show that some had a greater impact on the dependent than others – a finding confirming the previous partial correlation analysis. In ascending order these were:

- i. Age - ($\beta_1=.085$)
- ii. Noreligion v Base - ($\beta_1=-.087$)
- iii. Cornish ethnic identity - ($\beta_1=.096$)
- iv. Income – These ranged from ($\beta_1=-.074$) to ($\beta_1=.145$) however they were significantly higher than the other independents in the model.

It is worth noting at this stage that the income dummy variables had a greater impact on the dependent the further away they were from the modal category. Therefore, the most important variables in the model were those relating to income; with ethnic identity, religion and age all being significant but less explanatory. Gender was in this case not significant at the $p>0.05$ level.

The collinearity diagnostics indicated that none of the VIF statistics were over 10, and that the tolerance statistics were above 0.2, therefore it was possible to conclude that there was no collinearity within the data. An examination of the plot of the standardised residuals showed no sign of violating the assumptions of linearity or

homoscedasticity. The normality plot also showed no change from normality; the normal probability plot also showed that there are no deviations. Thus all of the assumptions for multiple regression analysis were met (see Appendix 5.6 for all diagrams not shown above).

Though not significant in the correlation analyses, there were hints from the literature that social exclusion varied in Cornwall by geographic area. As such the model was re-run to explore this hypothesis, and included the geographic variable (see Appendix 5.8). However the model explained virtually no more variance ($r^2=.419$), and the geography variable itself was not significant at the $p>0.05$ level.

5.2.4 Multi-level regression

A more statistically elegant level of analysis which takes into account the grouping of the data often left out of simple regression models is multi-level, or hierarchical, regression. A more powerful technique, which can be used as an exploratory tool as well as a hypothesis testing method, multi-level regression examines data clustering (Field 2009). Up until this point the data had been treated as evenly dispersed amongst variables and groups, not something that is common in a real world application. Including terms in the regression equations which cater for clustering tested the notion that (whilst income bands are highly related to SEI score) the independent variable may have varied around Cornish ethnicity. A hierarchical analysis of this nature enabled testing of the predictors in a way that examined relationship groupings.

In most cases of survey data analysis there is an underlying assumption that the cases are independent (indeed, regression models assume such independence), however in this case there was an argument that those 'Cornish' respondents had commonality of response. Simply, did two responses share characteristics primarily because they were both from the Cornish group? The intention of multi-level hierarchical modelling was

to test the previous regression analysis, with an included set of 'inter' and 'intra' group terms (Field 2009). To achieve this, the simple regression mode was re-run but with variance included for both the slope and intercept terms in the equation. One of the key benefits of such a technique is the reduction, in effect, that missing data can have on the results (though for a more detailed discussion see the section below, 'missing data'). ANOVA, and therefore regression analysis itself, are highly sensitive to missing data and in this specific case there were issues around missing information with the collation of numerous variables into a single SEI index. Though even taking these data into consideration (see page 179), the broad results from the previous models remained unchanged.

A single multi-level model which examined all of the significant variables was produced in order to explore the relationships described above. The model was run, firstly, without any hierarchical structure and, subsequently, with assumptions written in that assumed group differences between the Cornish/non-Cornish. To reduce the number of parameters needed the multi-level process first included the biggest predictor of SEI; income. This was tested to examine variance based along ethnic group lines – did the Cornish group have something in common? If this was found to be the case then other (minor) predictors could be modelled in a more detailed analysis.

The models described in the following paragraphs modelled the relationship between income and SEI and it was hypothesised that the relationship varied according to Cornish/non-Cornish group membership. The models began with a non-hierarchical ENTER method, and ended with the inclusion of random intercept and slope –all of the models were estimated using the Maximum Likelihood (ML), rather than Restricted Maximum Likelihood (REML), and thus allowed comparison between models (Field 2009).

The first element in this set of models was simply income and SEI, using only fixed effects and no hierarchical structure. This model simply re-iterated the previous findings, and showed a significant relationship between the independents and SEI ($p > 0.05$), apart from the previously stated £10-£14k bracket (see regression analysis), the tabulation can be found in Appendix 5.9. However, this ignored the potentially significant assumption of independence, as it could logically be assumed that scores from Cornish individuals were related to one another; or, at the very least, different from those non-Cornish.

The first introduction of hierarchy was to include Cornish ethnicity as a variant, across intercepts (Albright and Marinova 2010). To assess the impact of the hierarchical structure the -2 Log-likelihood of the two models was compared, to see if there were statistically significant differences. The first result (4558.079) was not altered at all in the second model (4556.129) (see Appendix 5.9). In order to assess the significance it was necessary to subtract the result from the previous model ($4558.079 - 4556.129 = 1.95$) and, given the $df = 16 - 15 = 1$ the result was not above the significant 3.84 ($p, 0.05$) level. Thus, there was no significant variability in the slopes and the model fit was not significantly improved by allowing varying intercepts. The conclusion, in this case, was that the intercepts for the relationship between income and SEI did not vary significantly across the ethnic groups.

Whilst a significant result seemed unlikely given the previous result, an analysis which examined the inclusion of a random slope in the equation was undertaken, and gave a -2 Log-likelihood result of 4556.110 (see Appendix 5.9). As previously, to assess the significance of the different result it was necessary to subtract the result from the previous model ($4556.129 - 4556.110 = 0.019$) and, given the $df = 29 - 16 = 13$ the result was not above the 22.36 ($p, 0.05$) level. Thus, there was also no significant variability in the slopes.

An examination of the model covariance parameters (see Appendix 5.9) made clear the fact that there was no substantial variance attributable to group differences, specifically - $(0.430 / (42.558 + 0.430)) = 1.00\%$ of the variance. The variance term (ICC(1)) for the intercept was not significantly greater than 0, and so it could be concluded that there was little to be gained from further multi-level analysis. Thus the null hypothesis, that there was no variability in the relationship between income and SEI based on ethnic group membership (specifically Cornish), was accepted.

5.2.5 Missing data

The collations of a number of interrelated variables into a single social exclusion index was theoretically and methodologically sound, however there were drawbacks to the process. The problems associated with missing data were clearly multiplied in the construction of the index and, therefore, became more acute (see Appendix 5.10). The only consistent index construction method excludes cases with missing data (for obvious reasons), and it therefore becomes important to examine these missing data, in order to lend rigorousness to the results.

Such an examination is limited by the very nature of the index variable itself for two key reasons: firstly, the use of a large number of variables for inclusion meant that any imputation of synthesised data would be tautological (SPSS Inc. 2010). Secondly, the nested nature of the variables, and the necessary inter-dependence of the factors, inhibited significant imputation. Therefore to assess the pattern of the missing SEI values it was necessary for data to be missing 'completely at random' (MCAR) or, 'missing at random' (MAR). Little's chi-square, MCAR, was significant ($p > 0.05$) and so the data were *not* missing completely at random (NMAR).

Logically, the MCAR result was consistent, the probability of variance in the SEI was dependent, not on a single variable, but on an interrelated set of nested factors. Data

were neither MCAR nor MAR, and none of the EM methods for further analysis were appropriate (SPSS Inc. 2010). The assumptions of MCAR/MAR can be treated lightly to explore the data (McKnight *et al* 2007), and whilst increasing the error factors within missing data analysis, there is a level of freedom within multiple imputation analysis. Proof of this concept was provided by Ginkel (2010:576) who analysed synthesised, and missing, data to explore “low-quality questionnaire data” and concluded that multiple imputations were able to recover synthesised missing data accurately.

To strengthen the results of the analyses discussed in the previous sections of this chapter, a level of missing data analysis and re-analysis was required to rule out the possibility of systematic errors. The emergence of significantly different results in the synthesised data would weaken the credibility of any conclusions. Despite the relative unsuitability it was felt that analysis would be beneficial to at least rule out some bias. The multiple imputation process in SPSS utilises either monotone or fully conditional analyses derived from the variables in question (SPSS Inc. 2010), and, in this instance, data was imputed for the variables ‘Cornish ethnicity’ and ‘SEI’. The result was the production of five synthesised data sets (and the original data), and re-running of the analyses discussed above produced six statistical results. Additionally, a result was given for a pooled data set which estimates what the results would have been if the original data set had no missing values (SPSS Inc. 2010).

5.2.5.1 Multiple imputation results

In all of the following cases the reported results are those from the pooled set, and represent the most accurate estimation of the data without missing values. Firstly, the regression analysis was re-run with the same variables included as before. The model accounted for less variance in the dependent ($r=.121$, step 1; $r=.359$, step 2); however none of the assumptions were broken and so the model remained a good predictor

when compared to the means. An examination of the co-efficient tabulations showed some small, but significant, changes from the original model (see Appendix 5.10). Age was no longer significant ($p=0.233$), additionally, a number of the income dummies became non-significant – those that were closest to the modal category, those at the extremities remained significant in this model (see table in Appendix 5.11). Clearly, the imputation process affected the results and gives a better depiction of the population, however the levels of the three predictors remained virtually unchanged and certainly in the same direction.

| | Original data | Pooled data | df |
|---------|-------------------------------------|-----------------------------------|-----------|
| Model 1 | 4558.079 | 5483.807 | |
| Model 2 | 4556.129 | 5480.337 | |
| Change | 1.95 | 3.47 | 16-15 = 1 |
| ICC(1) | $(0.430 / (42.558 + 0.430)) = 1.00$ | $0.504 / (43.917 + 0.504) = 1.13$ | |

Multi-level models, original and multiple imputation data

Table 5.3 - Multiple imputations, multi-level models

The second stage of analysis at this stage was the repeat of the multi-level modelling process using the multiple imputation data to assess the Cornish/non-Cornish grouping over the SEI/income relationship. Table 5.3 shows the results for the original and the pooled data.

Though the -2Log-likelihood statistics were provided for the imputed sets, but not the pooled, there was still no significant improvement to the fit of the model when allowing for a random intercept; ($5483.807 - 5480.337 = 3.47$) and, given the $df = 16-15 = 1$ then the result was not above the **3.84** ($p, 0.05$) level. By examining the model covariance parameters it becomes clear that there was no substantial variance attributable to group differences - ($0.504 / (43.917 + 0.504) = 1.13\%$ of variance. This variance term (ICC(1)) for the intercept was not significantly greater than 0 and so it was concluded that there was little to be gained from further multi-level analysis. The

analysis shows that the missing data, whilst a factor which needed to be modelled, did not impact on the results significantly.

5.3 Results

As stated at the end of the previous chapter, the problems that this stage of survey research set out to address were:

1. A direct examination of Cornish ethnicity levels in the county.
2. An examination of the Cornish population across key variables highlighted in the secondary analysis.
3. An examination of the Cornish population across other, B-SEM identified social exclusion variables.
4. An exploration of the tentatively observed east-west gradient of difference.

A number of other issues emerged during the survey process itself and were included:

1. A hypothesised link between Cornish ethnicity and the 'direction' of the additional comment, were the Cornish more likely to report pessimistically about the region?
2. A hypothesised link between ethnicity and religious belief, in keeping with the literature on the traditional Cornish and Methodism there was anecdotal evidence of links with religiosity.
3. Whilst not directly testable there was evidence from the data entry phase of a large number of responses with crossed out ticks in the 'White-British' category and a replacement in the Cornish box. Potentially providing anecdotal evidence for access to measurement.

5.3.1 Cornish ethnicity levels

The purpose of this stage of analysis, the extension of the 2001 England and Wales Census data, included a direct variable relating to Cornish ethnicity, in place of the under-used write-in option (Office for National Statistics 2010; Office for National Statistics 2009b). The rigorous collation of all available data in the last phase led to an estimated level of Cornish ethnicity of around 28-30%. The survey reported in this section represents one of the largest randomly sampled instruments to include a Cornish category, second only to the Quality of Life Tracker (QoLT) Survey (Cornwall Strategic Partnership 2007). The findings support the estimated levels proposed in the secondary analysis, a result of 24.6% Cornish in the region. The lowest estimate of the secondary phase was only 3% different from the measured result, and the survey findings only 1% different from the QoLT survey.

The response rate of the survey phase resulted in a sampling error of $\pm 3\%$ at a 95% confidence interval (Williams 2003a), and so levels of Cornish ethnicity in the two regions sampled would be expected to be in the region of 22-28%. The grouping of all of the available results in the area leading to an estimate of one quarter of the population is the most accurate picture of Cornish ethnicity levels to date. There are clearly important implications for the larger than previously thought population, particularly for the community focussed programmes run in deprived areas. Any such initiatives should include, routinely, a measure and examination of the Cornish (see for example Cornwall Rural Community Council 2006). Methodologically, there are implications for the discrepancy between the Census and the directly measured result (see Burton *et al* 2010), undercount of a previously hidden ethnic group represents a key issue in the development of future Census rounds. The findings of this stage of analysis also lend more evidence to the established notion of the under-use of write-in options compared to more direct measurement (Aldridge and Levine 2001).

However what this stage of analysis, or indeed this thesis as a whole cannot measure is the consistency of individuals over different instruments and their potential for changed identities (see Fenton 2010, and discussion in chapter 7, page 244). There is no logical check which identifies individuals who may self-identify as Cornish in this instance but not in others and, whilst this is clearly a multi-dimensional process, there is relevance to the placing of the Cornish option (bullet point seven in the preceding section). Anecdotal evidence collected during the data entry phase hinted at there being a large number of ambiguous entries in the ethnicity variable. There were a significant proportion of the Cornish respondents who had crossed out a previous response in the White-British option; indicating either a reading of the list and choosing the first to apply (an important finding in itself), or, that the respondent was genuinely torn between British and Cornish identity (again a significant finding), or, lastly, that the respondent genuinely felt that both were applicable.

5.3.2 Cornish ethnicity and social exclusion factors (derived from secondary analysis)

The methods utilised in the examination of the survey data, as well as the instrument itself, were employed specifically to explore the links between self-declared Cornish ethnicity and social exclusion. Each of the findings of the secondary analyses was rigorously tested using primary data. Initial correlation analysis showed that the Cornish were not significantly different across gender or age groups. However, there were some differences between the groups in terms of religion as well as qualifications; the Cornish were more likely to report lower levels of qualifications than the non-Cornish.

There were no significant correlations in the initial analysis between Cornish identity and *any* of the other variables that were identified in the secondary analysis. Whilst

this runs counter to the findings in the analysis of the 2001 Census, it does hint that there are more complex relationships between 'Cornish-ness' and social exclusion, than had first been identified. What was not possible in the previous analysis – namely the examination of the population across small scale elements of the variables, as well as in conjunction with other variables - had shown this relationship to be cross-cut by other factors.

5.3.3 Cornish and social exclusion factors (more generally)

The inclusion of other variables identified using the B-SEM matrix (Levitas *et al* 2007), enabled this somewhat complex relationship to be examined using more advanced quantitative techniques. The construction of the SEI score enabled each respondent to be ranked according to levels of exclusion on an interval level variable. Initial correlation analyses showed that self-identified Cornish ethnicity *was* significantly, and positively, linked to SEI score; those reporting a Cornish ethnic identity reported a higher SEI score. Surprisingly, in view of the previous findings, the SEI score (nor income level) did not vary significantly across geographic area when measured using either the community network area, or postcode. Whilst this would have been expected given the locality specific deprivation in Cornwall (Local Intelligence Network Cornwall 2006), it could well be a function of response rates from specific postcodes.

Levels of social exclusion (as measured on the SEI) varied according to gender, with women more likely to report a higher score. Evidence from the secondary analysis supported a hypothesis which could also be forwarded in this instance, that women are more likely to be divorced or widowed and therefore a lone occupant and subsequently excluded (Mingione 2004). A related finding linked age with SEI score, and the large ageing population in Cornwall (Payton 1992); with the older respondents reporting a higher SEI score. Prior to an examination of the underlying processes it is worth noting

that the relationship disappeared in the multiple imputation analysis and so must be treated with some caution. The mechanics of the relationship are linked to the findings of this phase in general and link age, SEI and income. Income is the variable which accounted for the vast majority of variance in SEI score, with the partial correlations showing 12.9% of the variance when controlling for ethnicity. Including controls for other variables did not alter or diminish that relationship.

Again, income was the largest predictor of SEI score when examined using multiple regression modelling, those with lower than modal incomes scored higher on the index than those with greater than modal incomes. The strength of association became stronger the further the respondent was from the modal income (in both directions). This is a central finding when taken in consideration against the other variables; income (in this case) was the biggest predictor of social exclusion. Whilst Cornish ethnic identity was significantly linked to SEI score, the variance explained was miniscule when compared to income factors.

The last variable which impacted significantly on the SEI score in the regression model was religion, or, specifically, the group which reported no religion when compared to Christian faiths. Those who reported 'no religion' were likely to report a lower SEI score. Religion is linked to level of qualifications in the analysis and, so, one hypothesis may be that those reporting no religious faith are better educated, and thus likely to have a higher income (Johnston *et al* 2010).

The increasingly complex relationships were lastly modelled using hierarchical, or multilevel, techniques in order to model the 'between group' and 'intra group' effects. The introduction of variance to the intercept and slope of the models in both cases showed no significant change in the applicability to these data. This lack of group based effects showed that whilst the Cornish seemed to experience (on a small scale) some degree of disproportionate disadvantage, it was overridden by other variables which

had a far greater impact. The results of all the analyses remained even when accounting for missing data.

5.3.4 East/West gradient

The overall levels of Cornish ethnicity varied between the two sampling regions (see chapter 3), and there was also a significant correlation between ethnicity and postcode. Further examination of these data revealed support for the previously mentioned gradient of ethnic affiliation (Aldous 2002). Whilst there were large differences between the postcodes, there was a general trend for levels of Cornish ethnic identity to be higher in the western regions and lower in the eastern areas. Virtually every data set referring to the Cornish has reported the existence of such a gradient, and data in this case supports the hypothesis. One of the reasons suggested for its existence is that levels of in-migration are lower in the west and so the population is more densely comprised of families, which have been resident for longer periods of time (Aldous 2002).

However in contrast to the secondary analysis results the difference between the two populations was not found to be more pronounced in either region. This is partly a function of the limited areas of the survey data, and partially due to the finer grain of the Census data – it would be difficult to conclude either way regarding the acuteness, and geography, without larger data sets. Another complicating factor in this instance is the somewhat atypical nature of south-east Cornwall in terms of both service provision (see Giarchi (1987) and the ‘Gaza strip of Cornwall’), and the need to be seen as poorer to attract funds. Both of these issues would detract from a general pattern of social exclusion in the county and produce mixed messages around an east-west dichotomy.

5.3.5 Cornish ethnicity and comment coding

The data entry phase led to an additional hypothesis being forwarded, that the comments section at the end of the instrument was linked to Cornish ethnicity. Specifically, it was posited that the Cornish would be more likely to report a negative attitude towards the region, and whilst there was little evidence in the Cornish literature, there have been studies demonstrating the notion in other tourism centred areas of deprivation (a particularly acute example is Jamaica, see Harrison 2008). In this case there was no statistically significant relationship – there were hints of the positive association mentioned, but not enough data collected (for this variable) for the result to be reliable. Indeed the relationship between SEI and comment coding, that is, those more prone to exclusion being less likely to be positive, was also not significant at the $p>0.05$ level.

5.3.6 Cornishness, religion and age

Lastly it was hypothesised, again at the data entry phase, that in accordance with the large literature on Cornish Methodism (see for example Milden 2004), levels of religious belief would be linked to Cornish ethnicity. With the rapid decline in religiosity in modern societies (Johnston *et al* 2010) it was hypothesised that this link would vary with age. There was a significant and positive relationship between Cornish ethnicity and religion, indicating that those reporting a Cornish identity were more likely to report a Christian faith. This finding supports the literature on the subject, which highlights the traditional elements of Cornish Methodism (Milden 2004). There was not, however, any link between age and Cornish ethnicity, which runs counter to the hypothesis put forward by Aldous (2002) – who argued that Cornish identity was increasing amongst younger individuals. The complex interplay between three of the variables and SEI began to emerge with the strong and significant link between age and

SEI score; a logical and consistent finding twinned with the negative association between age and income. The large retired population (Payton 1992) are likely to have a reduced earning capacity, relative to working-age respondents, and therefore also be more at risk of exclusion factors. Indeed the relationship between income and SEI is a common theme in the results more broadly.

The link between religion and SEI, whilst significant, is likely to be subtler. Those reporting a Christian faith were likely to report a higher SEI score, as well as lower qualifications. The literature referring to religiosity and qualification level is well developed (see Johnston *et al* 2010), however in the Cornish context the relationship becomes more interesting with the addition of ethnicity. There is clearly a complex interaction between Cornish identity, religiosity, age and qualifications, which are all linked to social exclusion. Though the links have been demonstrated in quantitative data, the impact upon the dependents was so subtle that further investigation would be methodologically flawed and conceptually problematic.

5.4 Discussion

The analysis of the secondary data detailed in the previous chapter indicated that not only were there likely to be a large number of Cornish in the county (which were previously hidden), but that the Cornish and non-Cornish experience key variables in differing ways. The findings of the primary survey both confirm and reject elements of these conclusions. That there are more individuals who affiliate with a Cornish ethnic group than the 2001 Census enumerated seems without question. The secondary analysis raised the estimate from 6.7% to 28-30% and the survey reported around 25%, the latter of two estimates therefore seem the more accurate.

Clearly this raised estimation has distinct implications, the actual number of individuals rises from 33,932 (Office for National Statistics 2001), to an estimated

140,000-150,000. Whilst the undercount was expected (Office for National Statistics 2009b; Hickman and Walter 1997) the scale of the under-enumeration, due primarily to the lack of a dedicated tick box, is large. There are caveats; the survey research is only generalisable to the two geographic areas sampled (see chapter 3), and Cornish levels across the county as a whole were not measured. Additionally, the inherent bias in secondary analysis limits those claims. However the similarity of the estimates across both of the phases does hint at a level of accuracy.

The increased numbers of Cornish individuals in the region raises pertinent questions about the relative deprivation the group may be exposed to; similar to other indigenous populations across the globe (Hunter 2008; Garreta Bochaca 2006). The hints in secondary data which showed differences were ambiguous as to the direction; however the survey phase demonstrated that the Cornish are likely to report higher levels of social exclusion, as measured on the SEI. Unlike the previous analysis, this difference did not vary by geographic area and therefore did not become more pronounced closer to the border with Devon. The difference between the groups also accounted for a very small amount of variance in the index score, so, whilst significant, there were clearly larger factors at play.

There had been hints in the literature of a class dimension to the Cornish problem (Aldous 2002), and the polarisation of the results in the secondary analysis potentially supported this position. The problems of ethnicity measurement mentioned in chapter 3 (and elaborated in chapter 7) make further analysis difficult at this stage. The distinct difficulty in ethnic group categorisation (Simpson and Akinwale 2007), and measurement (Burton *et al* 2010), both over time and individuals, make generalisation across similarly vague categories methodologically flawed. Indeed, quantitative data collected so far in this thesis can only highlight the potential linkages between key variables. In this case, survey data have shown with some strength that ethnicity is *not* a good predictor of social exclusion when compared to factors such as income. There

are clearly limitations to such a finding and the measurement issues are central to that – though the linkage remains necessarily unclear.

The logical impact of income bracket was clearly reported in these data, the higher one went from the modal wage the lower the SEI score and vice versa. Though perhaps a somewhat common sense conclusion, the result is in line with the majority of the literature (Grogan-Kaylor 2010), and is itself representative of the class debate around exclusion (Aldous 2002; Taket *et al* 2009). The inclusion of income and the modelling which followed showed the Cornish issue to be largely insignificant; there was no statistically significant impact on a model which took these groups into account. Even a simple, non-hierarchical model reported little change between groups. That is not to simplify the issue and to conclude that the Cornish experience no social exclusion disproportionately; there was a significant correlation between SEI score and ethnicity. However small the variance there is a real world implication, for those at the close to modal incomes such a difference is tangible.

Social exclusion is by no means a binary phenomenon, and any factor which increases potential suffering by any level should be of import to future policy and research. It should be stated that the very income bands where ethnicity it equitable are the most densely populated bands and so the number of individuals potentially experiencing some difference is large. What is more central for the current project is to explore the underlying processes of difference. There were strong hints in the popular and academic literature that the Cornish as a group were significantly excluded (see chapter 2), yet data in this project have not reported similar levels of difference. As such, the subject of interest becomes the difference between that *belief* of exclusion, and the differing *reality*.

5.5 Summary

This chapter has described the analysis of the primary survey stage of research. As stated in chapter 3, the secondary analysis of the 2001 England and Wales Census was only able to make limited conclusions and the nature of the data constrained even these. The collection of 824 postal surveys across two key regions of Cornwall which directly measured both ethnicity and social exclusion addressed these issues. The subsequent analysis sought to model a number of factors, and their influence, on a newly created social exclusion index (SEI) taken from the B-SEM matrix. Using advanced quantitative techniques it was possible to show that whilst having a small but significant impact the Cornish issue was not significant compared to income when modelling SEI score.

Whilst the conclusion of such a result is not as simplistic as stating that the Cornish are not excluded in any sense, there are certainly hints that the belief and reality of exclusion amongst the group do not match. The next chapter will detail the qualitative phase of the research which sought to directly address the problems raised in both the first and second stages of data collection.

6. Phase Three – Interview Analysis Results

6.1 Introduction

This chapter describes the extension of the 2001 England and Wales Census data referring to the Cornish. The previous chapter, as well as the secondary analysis, explored the large scale links between Cornish ethnicity and social exclusion and found that whilst there was small variance between the populations, there were far greater impacting factors. This chapter details the qualitative phase of research which sought to better understand the underlying processes, both of ‘Cornish-ness’ and social exclusion and the discrepancy between belief and reality discussed in the previous chapter.

6.2 Analysis

Data collection at this phase of analysis sought to address Berg’s (1989) ‘why’ questions rather than the ‘what’ questions which have preceded. The complex interplay between Cornish ethnicity and social exclusion; both in reality and the popular belief, has been demonstrated. However the underlying processes remained unobtainable through large scale quantitative data, and so a richer level of analysis was required. This phase, whilst exploratory, aimed to address the shortcomings of the previous stages by including data from key individuals well placed to have knowledge of the phenomenon under scrutiny.

Overall, seven individuals were interviewed in keeping with the methodological framework set out in chapter 3, the interviews were all tape-recorded and then transcribed verbatim; the interview schedule can be found in Appendix 3.4. The sample

consisted of four females and three males, and all were 'knowledgeable individuals' (Moustakas 1994), the majority worked for charitable organisations and were present in the local community for the majority of their working time. Largely, these were organisations which aimed to tackle social exclusion through the distribution of funding measures and close contact with the community. Representatives from other charitable and community centred organisations were included in the sample, meaning that there were individuals with a localised remit as well as those with a Cornwall wide presence. These interviews were conducted with the assurance of anonymity and, as such, names have been excluded, as have (given the small field they were working in) their specific organisations.

The interviews lasted for (on average) 30-40 minutes and there were little data collected before or after this time as the sensitivity of the subject had already been discussed. Any other relevant information, for example the short discussions to and from the interview locations, were (with consent) included in the transcribed data. The respondents were not asked directly if they considered themselves Cornish as it was felt that this would skew the data, however some individuals volunteered that information readily and (largely) those that didn't often presented another regional identity.

In line with the ethical code of practice, both of the University of Plymouth and the BSA (British Sociological Association 2002), the transcriptions were anonymised and are not included in their entirety in this thesis – the respondents' (known throughout as R-001-R-007) own comments are only used when no identifying remarks were made and place names have been excluded where necessary.

The analysis techniques utilised are in keeping with the transcendental phenomenological method discussed in depth in chapter 3, and take the format:

1. A trawl of the data and an identification of significant statements
2. An identification of clusters of meaning from these statements into coherent themes
3. A textual description of the themes
4. A structural description of the themes which includes the relevant contexts
5. A composite description which provides the 'essence' of the phenomena

(Source: Creswell 2007)

6.2.1 Trawl of data and the identification of significant statements

The first stage of analysis built on the data from the transcriptions (itself based on the two themes – 'what do you know about the phenomenon' and 'what are the contexts of that knowledge'), by highlighting significant statements which provided a strong understanding of how the participant understood the phenomena. These results are expanded upon in the following stages and are not displayed here in their entirety to avoid repetition. This process was termed 'horizontalization', by Moustakas (1994), and the results are listed in Appendix 6.1-6.7 in respondent order.

6.2.2 Identification of clusters of meaning, identifying emerging themes

The statement trawls outlined the main statements made by each of the respondents and there were some recurrent themes. The next stage of analysis in this methodological tradition was the identification of clusters of meaning and then to examine the emergent themes (see table 6.1). This process merely brought together the common ground between the respondents, and a more detailed discussion of the content is found in the following section (6.2.3), though it should be recognised that these unavoidably reflect the interview schedule in some way.

- | |
|--|
| <p>1. Social Exclusion</p> <ul style="list-style-type: none"> • Housing • Income/Employment/Benefits • Transport • Breakdown <ul style="list-style-type: none"> ➢ Not ethnically aligned ➢ Not geographically aligned ➢ Largely universal in key areas <p>2. The Cornish</p> <ul style="list-style-type: none"> • Prevalent, largely white • A 'lazy' group compared with others • Industrial decline, systematic generational unemployment • Not excluded (though the Cornish respondents were less likely to report that) • Mismatch between the belief and reality <ul style="list-style-type: none"> ➢ Aspiration differences ➢ 'Hard done by' attitude becoming reality ➢ Never leaving Cornwall ➢ Insular ➢ Outsider vs. Insider wealth <p>3. Funding Structures</p> <ul style="list-style-type: none"> • Communication breakdown between community needs and funders • More funding needed but different administration <ul style="list-style-type: none"> ➢ Devolved funding ➢ Less hard outcomes ➢ Less geographically orientated ➢ Funding to target isolation ➢ Longer scale funding (no parachute in and out) ➢ More individual level measures of outcomes |
|--|

Table 6.1 – Emergent themes, R-001 through R-007

6.2.3 Textual description of the themes

The themes outlined in the previous section, table 6.1, contained large amounts of data, and there is clearly a need to elaborate on these themes – the next stage of analysis was to provide a narrative of the associated headline results using the respondent's transcripts. The themes are described using the numbering given in table 6.1.

1. Social exclusion; overall the respondents reported widespread social exclusion in the region, with specific problems such as low educational attainment and unemployment the main issues (largely agreeing with the Cornwall Council (2010) and South West Observatory (2011a) findings). More isolated, but still

acute, were the related problems of housing and transport, particularly public transport. It was described, by every respondent, that the problems many individuals had accessing public services; because of the various transport (and scale) issues experienced by those in the more remote, and rural, areas (though of course this would be common to most, if not all, rural areas, see Commins (2004) for a good summary). However, largely, the respondents felt that there was no smaller scale of geographic breakdown, neither was there felt to be any ethnically aligned breakdown of exclusion variables. Levels of deprivation, and exclusion, were felt to be almost universal across all groups.

2. The Cornish; all of the respondents felt that the Cornish were a common and large group in the region, and were a group which actively maintained a strong sense of identity (this both confirms the results reported in chapters 4 and 5, as well as supporting the strong identity literature (for a summary see Payton (1992))). The respondents reported that the group was 'lazy' compared to others in the same area, and were often reluctant to take or seek employment, despite frequent offers and, in this sense, conformed to Dean and Hasting's (2000) stigma. In terms of social exclusion it was reported that the group did suffer, but no worse than any other group – there were a lot of Cornish in the deprived areas, but there were also a large number of other individuals who also experience similar conditions. What emerged strongly, though, was the discrepancy between the *attitude* of the Cornish (that they suffered deprivation), and the *reality*. It was felt that the traditional aspects of some Cornish identity led to self-deprivation (Ratcliffe 2004), especially in terms of employment and housing.
3. Funding structures; whilst largely tangential to the research questions identified one of the main sources of data referred to the funding structures in the county, and their inadequacy. Though there was clearly a large amount of

funding drawn into the region, it was felt to be unfit for purpose, specifically, it was highlighted that the funding needed to be broader in every sense (in keeping with previous research findings on the topic (Cemlyn, Fahmy and Gordon 2005). Funding needed to be broader in a geographic sense, in that the deprived areas benefiting from funding often led to outer areas becoming worse off relatively, and creating, in effect, postcode lotteries of input. Agency integration also needed to be broader to prevent the “parachute effect” (same phrase - R-004/Cemlyn, Fahmy and Gordon 2005), whereby immediate targets were met in a short space of time and then removed – leaving no lasting effect. Lastly, funding streams should be broadened to cater for the less specific (or ‘softer’) outcomes. These were often not measurable against criteria set out by (for example) the ESF, and it was felt that there should be more community involvement in the development of such outcome-led finance. Whilst there are clearly some rural, generic, problems inherent in this debate it was felt by both the respondents, and some previous research (Cemlyn, Fahmy and Gordon 2005), that there were certainly Cornwall specific issues at play.

6.2.4 Structural description of themes

The following stage of analysis took the themes identified and turned the *descriptive* element into a more *contextual* text, whilst there was clearly some repetition in this stage of analysis the themes emerged with far more clarity. This step, again, took each thematic in turn and applied a more critical method in examining the data; additionally, the respondents own contextual data was examined.

1. Social exclusion; a large amount of contextual data was collected from the respondents in terms of social exclusion; particularly, the interplay between employment, the benefit system and income. It was highlighted that

employment was the largest deciding factor on whether or not an individual was going to become, or already was, suffering exclusion. However, when pressed, the respondents revealed that in many cases the benefit system provided such high levels of support that the individuals would have been worse off in employment. As such, it was largely agreed that it was the *amount of household income* which was important, the “connecting factor” (R-005).

2. The Cornish; there was an interesting contextual divide between the respondents when discussing the Cornish directly. Those who had identified as Cornish (without the question being asked) largely felt that the Cornish were suffering in the region, compared to other groups. However once the issue was addressed more rigorously their opinion almost universally changed and a consensus with the other, non-Cornish, respondents was formed. Overall, it was agreed that self-identification as Cornish, by an individual, did not increase the risk of exclusion. Though the complex processes which must underpin such attitudes was expressed.

The divide, between the attitude and reality of deprivation, which was hypothesised, was described, often without prompting. The Cornish were described as possessing an attitude of *expectance* when it came to funding and services in the region, which, when not fulfilled, led to aggravation. This process was compounded by the so-called “outsider” problem (R-005), whereby incoming groups were often better off (at least in terms of social and geographic mobility) and, so, local residents felt worse off in comparison (something previously reported by Bosworth and Willett (2010). This attitude was not totally disconnected from the reality, and the Cornish (argued the respondents) ingest this view, and subsequently act accordingly: “...in truth some people do it to themselves” (R-005). This problem was felt to be

compounded by the insular nature of the group, who never left specific (and small) regions, along with the very real decline in traditional Cornish industries.

3. Funding structures; there was also a clear divide in this thematic, between the Cornwall wide workers and the locality specific individuals. Whilst the former felt that the funding processes were largely adequate (though not sufficient), the latter brought up all the points listed previously. Additionally, these respondents felt that as long as the Cornwall wide workers had made (for example) sufficient appointments there was no attempt to try and improve the lives of individuals. There was a strong feeling amongst this sub-group that funding should have softer outcomes, and be devolved much further; for example there were suggestions of community led initiatives as opposed to nationally structured outcomes.

6.3 Results

The fifth and final stage of the phenomenological analysis was a composite description which included all of the previous stages and attempted to summarise the “essence of the phenomenon” (Creswell 2007:62). This therefore forms the results section of this chapter and takes the format of a series of statements which review the interview phase of research.

- i. Social exclusion; covered, in the county, a large range of variables, including educational attainment and employment (in keeping with the findings reported in the survey results, chapter 5 page 182) through to drug and alcohol misuse (DeHaan and Boljevac 2010), and was prevalent in a number of areas across Cornwall.
- ii. This exclusion was not broken down by geography (Cornwall Strategic Partnership 2007), or ethnic group (Eversole 2005), and it was largely agreed

that there were more determinant factors. These factors revolved around the complex interplay between employment, benefits and income to household (Grogan-Kaylor and Woolley 2010).

- iii. All of the respondents agreed that the Cornish were a large (mostly white) group in the County, being both numerous and fiercely proud of their identity (Cornwall Strategic Partnership 2007; Payton 1992).
- iv. It was also agreed, however, that membership of this group did not determine levels of social exclusion in any way – indeed membership of any group had no impact in the opinion of the respondents. This finding gives more weight to the results of the survey, reported in chapter 5, the lack of a distinct link between the exclusion index and ethnic group affiliation.
- v. The respondents argued that the Cornish *believed* that they were worse off than other groups for two reasons – the relative wealth of incomers to the region, and the attitude of long-term residents. This belief did not match the reality in their opinion.
- vi. The belief, though, *was* felt to be contributing to the problem, and could manifest itself in very real ways. The low aspirations, and low self-esteem, reported were argued to be the internalised manifestation of such beliefs, following phenomena described by both Dean and Hastings (2000) and Taylor *et al* (1990). This was thought to be related to the decline, over the last 50 years, of the main industries in the region (Bosworth and Willett 2010).
- vii. Funding strands which tackled social exclusion and deprivation in the region were felt to be inadequate. There was a need for more devolved funds which target thematic problems, not groups of individuals (Cemlyn, Fahmy and Gordon 2005).
- viii. The inadequacy of such funding was masked (virtually made invisible) by the targets set by regional and national agencies. Because these were hard

outcomes which were too low, and had no base in individual improvement, then they were easily met. This meant that funds were being 'successfully' distributed without the communities themselves experiencing direct benefit. This led to apathy amongst many communities towards the political centre.

6.4 Discussion

The results of the seven qualitative interviews provide a more detailed, and richer, set of data from which a more comprehensive picture emerges, if not about the numerical size of the Cornish then their relative position. Whilst the data generated at this stage are not comprehensive enough to make wholly generalisable claims (indeed such claims are never possible with qualitative data), the individuals were selected for their contact with deprivation and exclusion in Cornwall (for a fuller discussion see chapter 7, page 194). These attitudes cannot be accepted uncritically; however these data generated are arguably more accurate than more official sources, as these individuals had close and consistent contact with the phenomena under scrutiny.

The hypotheses which were forwarded at the end of the previous chapter will be considered in this section, as will some explanatory literature which develops the final stage findings. The key topics which this phase sought to address were:

1. Do the Cornish (or other groups) feel that they are often excluded to a greater extent than other groups in the same community?
2. Is this exclusion in any sense real; is it something that those in already deprived communities are aware of in the same way that other BME groups are?

To the former, the respondents largely agreed that yes, the Cornish certainly felt that they were significantly worse off than other ethnic groups in the same area and there

were a number of reasons proposed for this belief. Firstly the Cornish were described as a particularly insular group who were often reluctant to move to another geographic area. It was hypothesised that this insularity essentially contributed to a lack of aspirations and eventually low self-esteem. Secondly, the relative wealth of some in-migrants was discussed and it was argued that because these individuals were often wealthy (i.e. had the social capital to be geographically and socially mobile) the Cornish felt relative deprivation (similar to the findings of Bosworth and Willett 2011, see later in this chapter – page 210). Arguably this was compounded by the fact that many of the Cornish held the belief that there were ‘special rights’ of the group, entitling them to benefits in the region. These two factors; the belief that there was a ‘right’ for the Cornish in the County, and the relative wealth of some in-migrants led to a particularly acute sense of apathy amongst the Cornish.

The composition of the areas examined was also hypothesised by the respondents as contributing to the belief of relative disadvantage, as a large proportion of the estates examined consisted of Cornish residents – the Cornish being prevalent in most areas of the county. As such, where there was deprivation there were almost always Cornish individuals or familial groups, and the distinction between ubiquitous deprivation and relative disadvantage was difficult. The respondents argued that in some of the estates *everyone* was socially excluded and the very fact that a number of the residents were Cornish meant that there were inherently a number of Cornish who were excluded. Such a linkage is not however an indication of a direct link between ethnic group affiliation and social exclusion factors.

Distinct from the *belief* of exclusion, the reality was often quite different, according to the respondents. Whilst in all areas there were significant levels of exclusion, ranging from housing to alcohol and drug misuse, it was not (in any of the respondents’ opinions) broken down by ethnic group. The increased use of alcohol and the associated health impacts was consummate with similar findings in other rural

locations (DeHaan and Boljevac 2010). Indeed, membership of any ethnic group was argued to have no impact whatsoever on the levels of exclusion, for an individual or household. The variables which did have the greatest, in many cases the only impact were unemployment, benefits and income. The complex interplay between these three variables was highlighted in all interviews with the respondents. That is not to say that the belief cannot have real and concrete implications – “in truth some people do it to themselves” (R-005), but that there may be a level of disjointedness.

The tangential findings relating to the funding structures, which have been arguably unsuitable for the Cornish case, reflect the literature in the field, though are of limited impact to this thesis. There has been a tendency (as reported by the respondents) for agencies to ‘parachute-in’ solutions from other areas, and to adjust for the Cornish context; this was something heavily criticised (Cemlyn, Fahmy and Gordon 2005) and which does not fully engage with the residents. The reliance in the respondents’ areas on hard outcomes which negate the importance of more overarching improvements was also been identified as problematic (Cemlyn, Fahmy and Gordon 2005).

6.4.1 Links to previous phases

The results lend depth to data collected in the first two phases and enable a clearer picture to be built up of the real state of the Cornish group in the county. The secondary analysis of the 2001 England and Wales Census arrived at two distinct conclusions; that the group was larger than previously thought and that there were some small but significant differences between the Cornish and non-Cornish.

The postal survey results clarified the size of the group as closer to a quarter of the population rather than 6%, and also showed that there were moderate differences between the Cornish/non-Cornish. However, the postal survey also showed that the inclusion of other variables such as income led the group differences to be insignificant,

and the variance explained by ethnicity was so minimal that there must be further complexities. These complexities revolved around the discrepancy between the belief and reality of group exclusion. To the first of these conclusions the respondents largely agreed, the Cornish are a prevalent and distinct group in the region:

“Yes. The majority of people are, the majority are still on these estates, I mean particularly with the four estates a lot of them are generational – so you’ve got grandparents, and then the parents and then the children that are Cornish. Cornish through and through.” (R-002)

Largely, the rest of the respondents adhered to this view. However when asked directly about the relative position of the Cornish there was a generally negative (but not totally) response. Those respondents who had *not* identified as Cornish went on to argue that the relative position was the same as other groups:

“...no, I don’t think that, I don’t think that they suffer any more than anybody else.” (R-003)

However those who *had* previously identified as Cornish (without being asked) generally argued:

“...the breakdown of relative deprivation], I think there is something in terms of the indigenous population, in... [pauses]...in a number of ways I think.” (R-004)

Though when pressed directly the same respondent said:

“I have no sense that I’m...I’m...that I suffer deprivation because I am Cornish.” (R-004)

The relevance of this attitude will be expanded in the following chapter; however it is important that the overriding consensus after direct questioning was that the group suffered little or no disproportionate deprivation. The larger impacting variables which emerged from the survey analyses were income related and this finding was strengthened, given the responses at this stage. The respondents overwhelmingly felt that there was a complex interplay between income, employment and benefits, as well

as the stigma attached to increased deprivation in some areas (Dean and Hastings 2000)

Though the underlying process was centred on the net income that a household could command, rather than the source:

“...people can’t just walk into jobs when they have not done it before, so employment I think.” (R-007)

“...those people that were on benefit and reliant, constantly going through this cycle of having to apply for benefit, getting into debt and so on.” (R-006)

“...working, their employment status...but then sometimes it does pay you not to work...I think [it is the amount of money into the household] sometimes, yeah.” (R-003)

Thus the foci of interest became the attitudinal beliefs of the individuals who consider themselves excluded in the face of the evidence given and the emergence of the view along with the driving forces which perpetuate it.

6.4.2 Explanatory literature

Though small, the literature on *perceived discrimination* describes a number of key psychological studies and targeted social research has explored the same phenomena in a number of different contexts. The necessarily complex processes which drive *unfounded*, perceived discrimination are understood less still, however there have been relevant hypotheses which are applicable in the Cornish case.

The attitudinal beliefs which emerged from the literature, alongside the discrepancy which was uncovered in the three stages of analysis described in this thesis, follow a well-researched and entrenched set of beliefs referred to as the ‘personal versus group discrimination discrepancies’ (PGDD). Accordingly, a given individual perceives a large amount of ‘at-group’ discrimination whilst simultaneously reporting low levels of

individual or personal discrimination (Taylor *et al* 1990). There have been three hypotheses posited which potentially explain this behaviour:

- a. That it is representative of a form of denial; specifically, of the personal forms of discrimination, however this is often been considered unlikely (Operario and Fiske 2001).
- b. An exaggeration of the group-level discrimination; this has not been a common explanation as “it would be unpopular to suggest that minority groups exaggerate claims of discrimination” (Taylor *et al* 1990: 259).
- c. A cognitive process, or information-processing, phenomenon; simply, the individual naturally collates evidence of discrimination and mathematics dictates that there will necessarily be more data for the group than for the individual.

There has been significant evidence published reporting the PGDD phenomenon across a wide range of variables and the results have shown that variance is often dependent on a number of key factors (Operario and Fiske 2001). Firstly, levels of group affiliation have been demonstrably linked to group discrimination perception; those with higher levels of affiliation are linked to greater perceived at-group prejudice (Operario and Fiske 2001; Verkuyten 2002). *Allocentrism* has been posited as the reason for this heightened level of perception; simply, the individual level collectivism present in minority (and majority) ethnic groups (Verkuyten 2002). More generally, a highly allocentric individual will identify strongly with cultural markers and therefore be likely to have a heightened awareness and sensitivity towards group information.

Allocentrism is not a uni-directional process and data collected indicate that the perception of discrimination is sometimes *lower* than the reality. Sipe (2009) reported on the attitudes of young people in university towards gender discrimination in the workplace, which largely reflected the belief in a gender neutral workplace; something

at the time not correct. Other factors driving PGDD include the representations given in the mass media, referring to specific and often small, minority groups. These frequently corroborate the sensitivity experienced by highly affiliated individuals and so “the value of the representations of inequality lies not in what they describe, but what they provoke” (Reygadas 2005). The images portrayed in the media are often simplified representations of the kernel of truth underlying them and frequently refer to historical events for validation. The truth, however, is not necessarily an important aspect to those who internalise the media output.

The French riots of 2005, argues Skrobanek (2009), represent a very real application of the PGDD process in action. The rioters contained a large proportion of second or third generation immigrants, the question therefore became: what caused these individuals to re-ethnicise? Skrobanek (2009) argues that groups re-ethnicise when there is a widespread perception of the group suffering discrimination; largely due to the majority group boundaries seeming less-permeable. Therefore, under these circumstances, the group affiliation bond is strengthened and the individuals retreat further into that particular cultural identity. This is by no means the only real effect of perceived difference; it is known that false beliefs can manifest themselves as real behaviour. Geraerts *et al* (2008) demonstrated that a false memory about a food related illness (suggested by the researchers) produced a significant belief amongst the participants that the memory was real. Additionally, those participants developed action based on the false memory – avoidance of the food in question for over four months after the study was completed.

The social effects are arguably just as concrete, with two separate studies examining the links between perceived discrimination and self-reported health variables (Jasinskaja-Lahti *et al.* 2007; Mohensi and Lindstrom 2008). The results of these studies, somewhat surprisingly, indicate that even controlling for gender and other demographic variables, the relationship is a strongly significant one. Overall the

respondents who anticipated *any* discrimination were more likely to report poor health levels, with the effect more pronounced among minority ethnic groups.

Additional research has also shown that perceived discrimination amongst group members can alter behaviour in a subtler way (Rivas-Drake 2008). The choices that Latinos made at a so-called 'selective University' hinted at ethnically orientated beliefs influencing action, which fulfilled ethnic typology displayed in the media:

“...doing well in school, they will be alienated from their ethnic group” (Rivas-Drake 2008:126)

The reality of this attitudinally orientated action, and the PGDD process, is such that techniques have been developed which incorporate the model into inclusion research. Suckling *et al* (2009) utilised a beliefs, barriers and control model (BBaC) to assess the success of inclusion projects in a deprived area of the UK. By assessing beliefs (the perceptions of providers), barriers (the perceived obstacles) and controls (the 'overcoming' techniques) the results were subsequently used to plan inclusion projects.

6.4.3 The Cornish

Whilst a more detailed application and discussion of the explanatory processes is in the following chapter (see page 227), it is necessary to relate the phenomenon to the Cornish at least in part in order to frame later sections. The processes described bear striking resemblance to the responses collected in the third phase of the current research. The Cornish do seem to display the characteristics described by the PGDD literature – the perception of high levels of 'at-group' discrimination yet low levels of reported individual discrimination. Indeed, the self-identified Cornish respondents in this qualitative phase all exhibited similar behaviour.

The explanatory processes driving PGDD stated in the literature also seem to fit the data collected in the Cornish case. High levels of group affiliation, something seen

throughout this project in the strong cultural markers, and additionally high levels of collectivism at the individual level (allocentrism) all contribute to the PGDD process. The literature points to a hyper-sensitivity about any group-orientated information, especially discriminatory. Whilst it cannot be ignored that there are cognitive and information-processing forces at work (there are more data for 'the Cornish' than there are for a single individual); there may well also be a cross cutting feature of class. Garcia *et al* (2007) demonstrated that lower-class individuals act differently in interactions with upper-class individuals; however the behaviour was moderated *only* when the two groups are both members of a numerical minority. It is possible that the class action serves to strengthen, rather than weaken, the group affiliation; and subsequently hyper-sensitivity in Cornwall.

The role of the media in the hyper-sensitivity to group-level information cannot be ignored either, with the Cornish often portrayed in the local and national media as backwards and with low levels of aspiration (Bosworth and Willett 2010):

“[The]...Cornish are already laughed at for being insular and a bit backward, behind the times, you know” (R-007)

This media exposure may cause a positive feedback in the process, creating a constant re-ethnicisation of otherwise ambivalent individuals. The complete process feasibly has real effects on the population as a whole (not just hyper-sensitive individuals), and is potentially responsible for a small amount of the differences seen between the Cornish/non-Cornish populations in these data. The false-memories given by the media, coupled with the anticipated discrimination prevalent in the group, may lead to the higher self-reporting on social exclusion. Additionally, other ethnically orientated action may well manifest itself in the low aspirations described by the respondents during this phase.

6.4.4 Rurality

Also important to the Cornish specific case are issues around rurality and the specific nature of exclusion in deprivation and rural areas. Only with the emergence of arguments around PGDD and the perceived discrimination theories does rural comprehension and experience become central to the Cornish ethnic case. The complex interplay between the underlying PGDD processes and the rural nature of this particular case serve as mutually supportive elements.

Whilst the impact of rurality is often overlooked in social exclusion research, the characteristics are widespread (Commins 2004). It is often subtler and harder to operationalise (Shucksmith and Chapman 1998) even for those affected and so individuals often feel that it is personal failure which is to blame for deprivation, rather than structural factors such as policy (Richardson 2000). The polarisation in data referring to the Cornish may be indicative of exactly this situation, whereby the rural geography creates both increased numbers of rich, and poor, individuals (Shucksmith and Chapman 1998).

Political and cultural power operates differently in the rural settings (Richardson 2000) and potentially limits the access which individuals have to cultural capital (Shubin 2010). Coupled with the discrepancy between the rural idyll and the reality (Phillips, Fish and Agg 2001), the acute sense of difference can be manifest in very real health (Wickrama, Elder and Abraham 2007; Asthana *et al* 2003); homelessness (Clope, Millbourne and Widdowfield 2001) and transport (Gray, Shaw and Farrington 2006) poverty issues. That such impacts are potentially broken down along ethnic lines is a point of contention, as the levels of ethnic minority population is often small, however there is some evidence which links the two (Holloway 2007).

6.5 Summary

This chapter has described the results of the third and final stage of primary analysis, the qualitative interviews conducted with seven knowledgeable individuals around Cornwall. Data derived from this process aimed to address the key limitations of the previous phases, largely to access the 'why' questions, as opposed to the 'what' explored using quantitative techniques. Using a transcendental phenomenological approach to data analysis, which enables the bracketing of previous findings and the inclusion of knowledgeable individual-level data, the hypothesis that there was a discrepancy between the belief amongst the Cornish of disproportionate exclusion, and the reality was tested. Though small scale and largely exploratory the findings indicate that the discrepancy is real and active amongst the population, though there are almost certainly still a large number of Cornish individuals experiencing social exclusion factors. Arguably, there is a real link between Cornish ethnic group affiliation and a belief in group discrimination, and some explanatory psychological research was posited as well as the uniqueness of the rural case. It is now necessary to examine the findings of the projects as a whole, and examine the relative position of the Cornish in light of the results gathered.

7. General Discussion, conclusions and suggestions for further research

7.1 Introduction

This chapter draws together the evidence produced in the three stages of research and examines the impact of the results. The two research questions identified at the end of the literature review in chapter two (see page 97) are considered in light of the new evidence produced, and the implications of the emerging picture of the relative position of the Cornish as a group discussed. These are qualified by a discussion of the methodological and practical limitations on the research and the necessary caveats which limit the strength of any claims. More generally, the impact which the research has had on wider methodological and substantive issues will be considered alongside some suggestions for extending the current research.

7.2 Research question 1

The first significant gap in the literature emerged as being detailed knowledge of the actual size of the Cornish as a group. Whilst the 2001 England and Wales Census had sought to include the Cornish as a write-in group this figure was considered an under-enumeration (Office for National Statistics 2009a) and potentially biased in favour of those with a heightened sense of ethnic identity (Hickman and Walter 1997). Thus the first target of this thesis was to address:

1. *What are the actual numbers of individuals who self-identify as 'Cornish' in Cornwall?*

This question was posed for two clear reasons; the relative position of a group is best explored after the identification of its size and the largest dataset to date was presumed to be inaccurate. The first phase of the project sought to redress the issue by collating all relevant data and introducing a weighting term to the Census data. Throughout the rest of the research the same issue was revisited and the results were mutually supporting and coherent.

7.2.1 Mapping the Cornish through secondary sources

The first stage in addressing the suspected undercount in the 2001 England and Wales Census was an examination of all of the available data in the field and a statistically rigorous collection and collation; this process necessarily featured deliberately loose inclusion criteria in order to collect as much data referring to the Cornish as possible. A wide variety of data were included in the analyses, ranging from NHS staff survey results through to the annual School Census data collected by the (now) Cornwall Council. Ultimately 12 data sets were considered suitable for collation, with a total number of responses of over a quarter of a million.

The collation processes described in chapter 3 (see page 115), ranging from a simple mean of the data to combination techniques more associated with the physical sciences (Heyl 1930), represent an innovation in the social sciences. Whilst data weighting is not a new phenomenon to the discipline, the utilisation of multiple data sets to correct a single Census variable and the subsequent re-analysis is methodologically rare and innovative. Though statistically relatively uncomplicated, the results were consistent with the primary phase of research and a level of robustness was achieved which had previously not been present in studies of the Cornish.

A simple mean of the collected data resulted in a figure of 28.6% of individuals self-selecting a Cornish ethnic identity. Accounting for sample size, this figure increased to

29.1% and with the inclusion of terms in the equation for variance and range the figure increased again to 30.9%. The size of the suspected undercount becomes apparent with the application of these weights to the Census data; implying the difference between the 33,932 individuals up to around 140,000-150,000. The first stage of analysis, therefore, hints at the levels of Cornish ethnicity in the region being closer to a quarter of the population than to 6.7%, however there are some relatively major limitations to the result at this stage.

Whilst the collection and collation of data referring to the Cornish represented the first and most comprehensive to date, the whole process was reliant on the accuracy of the collected data. The distinct lack of research directly addressing the Cornish implies that the existing research is, at best, exploratory and therefore contains tentative results. The biases inherent in all survey data are in this case unknown and so cannot be addressed directly. Coupled with both the lower response rates expected from ethnic groups (Office for National Statistics 2009d) and the systematic bias in the write-in option (Hickman and Walter 1997), the collation (though pioneering) must remain exploratory.

7.2.2. Assessing the levels of Cornish through primary analyses

The second stage of analysis to directly address the first research question was the postal survey and, at N=824, represents the second largest randomly sampled survey to include a Cornish ethnicity variable (after the Quality of Life Tracker Survey (QoL) (Cornwall Strategic Partnership 2007)). The relative agreement between the secondary analyses; the postal survey and the QoL survey lend weight to the subsequent results.

Across the two sub-regions sampled, at the survey stage of the research, the overall measured level of Cornish ethnic affiliation was 24.6%; only 3% different from the lower secondary analysis result and 1% from the QoL result. The sample size results in

an error estimate (at a 95% (2-sigma) confidence interval) of $\pm 3\%$, and therefore it would be expected that in the population levels of Cornish ethnicity would fall between 22% and 28%. The coherence of the measured result is qualified by the sampling techniques, it is only possible to generalise the finding to the two sub-regions examined. Additionally, the more fundamental problems of ethnicity measurement discussed later in this chapter are applicable to the postal survey, with the change over time and assorted problems again moderating the claims which can be made (Burton, Nandi and Platt 2010).

The interview process was, methodologically, unable to produce such exact estimates for the population size, however all of the respondents stated unequivocally that the Cornish in the area were a large group and, in some areas, was the single largest ethnic group. This finding lends more strength to the quarter population estimates compared to the 6.7% reported in the Census and once again lends weight to the mutually supporting results.

7.2.3 Implications

There were strong indications at all stages of the analysis that the true level of Cornish ethnic group affiliation in the county was close to a quarter of the total population and this represents an advancement of the knowledge about the group. There are also important implications across three distinct fields. Firstly, there are clear methodological implications regarding the use of large scale survey data at the micro level, it has been demonstrated that (for ethnicity variables in particular) the US and the England and Wales Census' are often limited by undercounts and scaling errors (Erikson, Kadane and Tukey 1989; Fay and Herriott 1979; Fein 1990). As such it has been suggested that the inclusion of other data sets may be necessary to re-estimate the levels of some groups (Hakim 1982), and the findings of the primary and secondary

research in this instance support such an approach. The implications are not limited solely to ethnicity variables but any other indirectly measured category on large surveys which would benefit from combination with alternative data, for example, the often under-counted disability statistics (Kreider and Pepper 2008; Powell, Johnston and Johnston 2007).

However the measurement issues which become apparent in light of the current findings are not limited to the Census undercounts and there is a wider issue which has become a central theme in this research as well as a fundamental limitation. The objective assumption that individuals fall into distinct ethnic categories, and are subsequently measured by Census variables, is clearly flawed. This is not an argument purporting to the opposite position taken by Carter and Fenton (2009), as there are clearly divisions amongst the population broken down along ethnically aligned action (Fenton 2010). This recurring paradox and tension in the literature, as well as the current findings, will be explored in greater depth in the subsequent sections.

Substantively, there are two major implications of an increased size estimate of the Cornish population both for wider policy development and the assessment of the group in terms of social exclusion. The size of the Cornish, as measured directly and estimated using secondary data, clarifies previous attempts in the literature to estimate using proxy variables such as long-term residency (Buck, Williams and Bryant 1993). There are also indications from this result that the Cornish are indeed what Williams (1992) would term a 'hidden population' in some senses; statistically invisible in regional policy and often overlooked as a distinct group. The importance of the identification and examination of such a hidden population was discussed in chapter two (page 74); however in light of the number of individuals affected the point is worth restating. The results of the research described in this thesis indicate a Cornish population of around 25% and for policy this has significant implications – regardless of their relative position or exposure to social exclusion factors.

There had been a concerted and continued effort to draw funds into the region through streams such as the EU Convergence Programme and other assorted regeneration schemes (South West Observatory Skills and Learning (SLIM) 2008; South West of England Regional Development Agency 2007). These programmes are frequently run according to so-called 'hard' outcomes (Cemlyn, Fahmy and Gordon 2005); a measurable level of intervention which the respondents in the final phase of the project were largely against. These hard outcomes were usually highly specific in the type and relative position of the individuals who benefited and significant changes in the population estimates would naturally have repercussions in the bidding and delivery of these types of funding.

7.3 Research question 2

The second, and arguably more challenging, question raised by the literature was the relative position of the Cornish compared to others in the same geographic area, previous research based on proxy measures had hinted at the long term population displaying characteristics similar to social exclusion (Buck, Williams and Bryant 1993; Thornton 1996). The fate of other indigenous groups around the globe (Eversole 2005) meant that a targeted examination of the Cornish across a number of variables was both timely and sociologically important.

This strand represents the main focus of the thesis and therefore the main focus of the current chapter; the relative position of the Cornish group (whatever its size) in relation to other ethnic groups in the same region. It is worth reiterating that in this instance social exclusion was operationalised in line with the broad agreement of the literature and utilised the B-SEM matrix set out by Levitas *et al* (2007). Whilst by no means a perfect measure of the multi-dimensional and complex phenomenon which is

social exclusion, the matrix can offer a pragmatic way of assessing the position of a group at large scales (see chapter 2, page 59).

7.3.1 Exclusion in the Census?

The second phase of the analysis of the 2001 England and Wales Census data was to search for linkages between self-declared Cornish ethnicity and social exclusion; this was done in original (and therefore write-in only) data, as well as the weighted (and more inclusionary) sets. Utilising data extracted from the standard ONS tables by (the then) Cornwall County Council, the results from the respondents who identified as Cornish were examined and compared to the Cornish totals with the first set removed. Thus comparisons were enabled, and the relative position of the Cornish next to the non-Cornish in the same region assessed.

Initial differences revealed some significant key differences emerging from the Census data; the Cornish were more likely to be Christian, report a lower level of general health, were less likely to have higher qualifications and work in the manufacturing sector. Based on this relatively simplistic analysis the indications were that the literature was correct and that the group did suffer some level of disproportionate disadvantage. However what was not possible at this stage was the examination of impact levels with other variables, or, indeed, the impact on a dependent – the aggregate nature of the raw data prevented more detailed statistical examination. Other variables tested in the Census results hinted at the bi-modality, or polarisation, of the group, some elements were more likely to own a property outright, have increased access to vehicles and be economically active. The bi-modal distribution of those selecting a Cornish ethnic identity across the key variables not only contradicted the consensus in the literature, but also hinted at the increasingly complex nature of the phenomenon. The emerging discrepancy was between the lower health manual

workers on the one hand, and the property owning wealthy 'intelligentsia' on the other (Rapoport and Lomsky-Feder 2002).

Whilst there was some evidence in the Census data to support a notion of a socially excluded population, at least across some of the key variables, there was also evidence of a Cornish intelligentsia – the relatively well financed and employed section of the sub-group in the same vein as other ethnic minority and cultured individuals (Rapoport and Lomsky-Feder 2002). This group was also likely to be over-represented in the Census data as a whole and those selecting a Cornish option were likely to have a heightened sense of ethnic identity, something also linked to heightened social mobility (Hickman and Walter 1997). The hypothesised gradient of Cornish ethnicity, which had been demonstrated in previous analyses (see for example Cornwall Strategic Partnership 2007), was strongly evident in these data.

An additional result hinted at a gradient of difference broken down along similar lines; the difference between the Cornish and the non-Cornish was seemingly more pronounced in the east of the county. Whilst this finding supports the notion of higher deprivation in the west (Cornwall Council 2011; Local Intelligence Network Cornwall 2006), as well as logically fitting the intersection of two different groups; the result later vanished. What may have been emerging from the data was the 'ethnic clumping' described by Wimmer (2004), whereby there are gravitational influences keeping those of similar groups together. The reasoning is simple, that the close links and familial ties of those similarly orientated ethnically will group together.

Overall there was little evidence (at least at this stage of analysis) of a consistent set of characteristics, and individuals, amongst those who identified as Cornish in the differing contexts. It would however be overly simplistic to argue, given the limitations of the secondary analysis, that there was no (even loosely aligned) set of differences and ethnically aligned action in the vein described by Fenton (2010).

7.3.1.1 Limitations

Secondary analysis conducted in any circumstances is reliant on the original data for both reliable and valid results (Hofferth 2005). The data utilised in this phase of analysis are particularly prone to bias and the distinct lack of dedicated ethnicity variables relating to the Cornish necessitated lax inclusion criteria. Adding to these limitations are the conceptual problems of ethnic identification; strength, and type, of affiliation have been shown to alter amongst the Cornish (Aldous & Williams 2001) and as a recurrent theme of the thesis it should not be excluded here. Whilst there are clearly strong limitations, the exploratory nature of this stage coupled with the mutually supportive findings allow some credibility in the linkage to remain.

7.3.2 Modelling exclusion from postal survey results

In order to address the somewhat problematic nature of secondary data, which was not collected with the sole purpose of examining the Cornish in context, a primary data set was constructed through the administration of a large postal survey (N=824). This stage increased the levels of reliability and validity through the testing of the previously mentioned hypotheses, and also sought to reduce the conceptual and methodological limitations discussed in the previous section.

Once again, the initial analyses showed that there were some significant differences between the two populations and therefore supported the previous analysis. Not only were the Cornish less likely to hold higher qualifications but also to report higher levels of religiosity. However, this is largely where the similarity ended; there were no other significant correlations in the data linking the group to either other variables, highlighted at the previous stage, or B-SEM identified social exclusion variables (see analyses, page 170). As such an index was created (SEI) which collated each strand of the B-SEM matrix using a simple weighting strategy (see Appendix 5.2). This index

became the dependent variable in a range of more advanced statistical analyses. Self-identified Cornish ethnicity *was* significantly related to this variable – though only weakly ($r_s=.115$, $p>0.05$) – indicating that the selection of that ethnicity resulted in a higher reporting of social exclusion factors, as measured on the SEI. Interestingly, this finding was not able to support the previous hypotheses around the deprivation gradient as the variance did not vary by any of the geographic measures; though, as mentioned previously, this is likely to be a product of the ‘clumping’ described by Wimmer (2004) rather than an inherently even distribution.

Utilising multiple and multi-level regression techniques the variables which impacted greatest on SEI score were interrogated. Whilst Cornish ethnicity *was* a significant predictor in the former models it was dwarfed by the income variables in terms of variance explained. Confirmation emerged through the hierarchical modelling process, which demonstrated that income as a predictor had a greater impact on SEI, and did not vary by ethnic group. This finding fits coherently with a significant number of studies which have examined the role of ethnic affiliation in educational development in particular; largely demonstrating that it is often socio-economic factors that are at work (Bygren & Szulkin 2010; Chin *et al.* 2009). Coupled with the evidence from Aldous (2002), and the tentative conclusions drawn about deprivation and Cornish ethnic identity, it would seem logical that income was a key indicator.

That is not to say that the case is closed and the Cornish are not socially excluded, there was certainly tentative evidence that (at the modal income bands) issues of ethnic identity became equitable to income. Social exclusion is by no means a binary phenomenon and the small levels of variance represent a very tangible difference for those individuals experiencing them. What became apparent at this stage of analysis was the discrepancy between the *belief* of exclusion (as given in both the popular and academic literature) and the (somewhat different) reality. Whilst income is by no means a perfect proxy for class it is certainly demonstrably connected (Swingewood

1984). The resulting linkage between income and SEI, rather than ethnic identity, hints at a class dimension which has been present throughout the study. The conflation of class and ethnicity has been problematic throughout and again represents the distinct difficulties in the measurement (especially in social surveys) of ethnicity.

7.3.2.1 Limitations

The survey phase was not subject to the same strict limitations as the previous phase – data collected were solely for the research questions designated and the sampling process closely controlled. Whilst this enables stronger claims to be made, within strict statistical significance, there are still some conceptual and practical limitations to these data.

Firstly, and due to financial and time constraints, only the easternmost and westernmost regions of Cornwall were included in the survey population for sampling. Evidence from the literature, as well as hints from the 2001 Census analysis, suggested that the distinction between Cornish and non-Cornish was strongest at the point of intersection (Cornwall Strategic Partnership 2007) – in the east of the county nearest the border with Devon. It had also been demonstrated that Cornish affiliation was strongest in the westernmost regions (Cornwall Strategic Partnership 2007). As such, a comparative sample was selected which incorporated half of the total population of the County ($500,000 \div 2 = 250,000$) and was taken from eastern and western ward data from the ONS. The random sampling procedure utilised in selecting addresses meant that significant conclusions could be drawn about those two areas specifically; however these cannot be universally applied to the county as a whole. Logically one would expect to find similar results in the wider region; however there is no statistical evidence for that claim in this thesis. Further, the conclusions drawn from the available data cannot reveal any underlying causality; merely the statistical links between the

tested variables, and any claims made are based solely on the assumption of relationship rather than directional causality (Williams 2000). Whilst these claims are limited to the eastern and western population shown in chapter three, there is robust statistical evidence that the conclusions drawn at this stage *are* likely to be found in that population.

7.3.3 Interview responses to exclusion

In order to address the problem of causality, the third phase sought to collect qualitative data in the form of interview responses; and the three mixed-method stages enable conclusions supported by the process of triangulation (Berg 1989). This third phase, specifically, sought to directly address the emerging discrepancy between the public opinion and the literature around the fact that the Cornish suffered disproportionately. The fact that it was socio-economic factors and not ethnicity which impacted on exclusion in Cornwall meant that this discrepancy was central to the Cornish case, and so individuals from across the county, all working extremely closely and directly with deprivation, were interviewed. In total 3.5 hours of interview data were collected and included in this process were a wide range of individuals ranging from those running relatively small and targeted community projects to those responsible for the entire county.

The overwhelming consensus amongst the participants was that whilst the Cornish were certainly a distinct and prevalent group in the region they did not suffer social exclusion disproportionately to others in the same geographic area. Almost universally, the respondents reported the group's belief in exclusion as being more acute than the reality of the lived experience. The hypotheses put forward for this discrepancy by the interviewees fell into a small number of themes. Frequently, the low aspirations of the Cornish were discussed and it was felt that the underlying insularity and unwillingness

to relocate to other locations was the cause (in keeping with Dean and Hastings 2000). This was coupled with the influx of more socially mobile (though not necessarily wealthier) migrants, which made the problem seem more acute (see Bosworth and Willett 2011). Particular reference was made to the so-called 'special right' of the Cornish; the attitude amongst the group that the Cornish should have better access to employment and housing allocation. The scenario was put forward, on more than one occasion, whereby the low aspirations of the Cornish had prevented employment which was subsequently taken by migrant workers, something that the group were particularly bitter about (R-004/005 particularly described this in detail). Though the relative position of in-migrants has been well documented in the area (Burley 2007), it is not the case that these individuals bring either wealth or prosperity to the region, let alone keep it (Williams 2003b). However, the inherent difference felt by the indigenous group compared to the (often more mobile, and potentially more affluent) migrant incomers is well documented (Bosworth and Willett 2011).

In keeping with the previous phases of research however the majority of the respondents felt that it was income, employment and aspiration which dictated levels of social exclusion in the County – rather than affiliation to any particular group. Additionally there were indications that attitudinal factors were central to the phenomena:

“...in truth some people do it to themselves” (R-005)

7.3.3.1 Limitations

The interview process countered some of the more general limitations of the survey phase, aiming to explore the causal relationships between the relevant variables. In this sense the discrepancy between belief and objective reality of exclusion became more apparent; however these data are subject to equal and opposite limitations.

The sampling strategy utilised in the collection of these data was necessarily less statistically rigorous than previously. It would have been impractical to interview a statistically significant proportion of the total number of community workers and related professionals in the time allocated for this phase. Those closely linked to deprived communities were also often unwilling to participate in what was considered an 'official' survey. A snowball sample was employed after contacting the select few agencies responsible for the oversight of community contact in the region – and, whilst the claims may not be generalisable in the same sense that survey results are, these data certainly illuminate the causality behind the statistical linkages. Additionally, the population of the workers was so small that the interviews resulted in a large amount of repeat data, something often associated with reaching a saturation point and allowing *moderatum generalisations* (Williams 2003a).

However an inter-related problem of such a sampling methodology is the bias inherent in contacting a small number of agencies. In Cornwall the largest single agency which had workers in community facing positions and examining deprivation directly is CN4C (<http://www.cn4c.org.uk/>). Therefore a large proportion of the individuals contacted at the initial stage were employed (in some form) by that agency. Later interviews hinted at CN4C not being held in particularly high esteem by a number of other workers; thus, the sampling process had to be moderated to include a wider range of individuals. All of the individuals who agreed to discuss the topic and participate in the interview process subsequently went on to highlight their own particular agenda. Funding is particularly competitive in the region at community level and, thus, each respondent felt the need to make the case for their particular projects (see also Cemlyn, Fahmy and Gordon 2005). The consensus which was reached across all the participants on region wide issues demonstrates that this was only a minor limitation to the data.

Lastly, the necessary bias inherent in examining only the areas of disadvantage in order to identify the levels of social exclusion experienced by the Cornish negates those

Cornish 'intelligentsia', or the top level of the bi-modal distribution seen in the first phase. Potentially skewing the results towards a negative view of the group, this bias was almost unavoidable in such a small scale qualitative phase and it is one of the recommendations for further research that the hypotheses generated at this stage be tested using more complete data.

7.4 Cornish as a PGDD case

Overall, the three phases of research give clear indications about the relative position of the Cornish in Cornwall. It was demonstrated in the literature that not only do indigenous people often suffer social exclusion factors more acutely than others in the same region (Eversole 2005), but that the people of Cornwall are such a case and suitable for analysis (Deacon & German 1999; Payton 1993a). The small though coherent literature on Cornish disadvantage seemed to indicate that those long-term residents (often a proxy for ethnicity) did indeed experience key exclusion variables in a different way to others (for example Griffiths 1989; Williams & Harrison 1995).

The initial analysis of the Census data showed that the group was larger than the 'write-in' option had indicated (though such an undercount is unsurprising with the lack of publicity), and that the group formed a bi-modal distribution around deprivation, in keeping with other 'intelligentsia' groups (Rapoport and Lomsky-Feder 2002). On the one hand there were clear indications that the group suffered relative to others, however there were also results that hinted at a Cornish intelligentsia. The latter group were likely to be over-represented due to their heightened sense of ethnic awareness, similar to the Irish situation (Hickman and Walter 1997). Regardless of the distribution there were significant indications that the group experienced some variables identified by the B-SEM matrix differently, if not worse.

Subsequent primary research contradicted this finding to some extent and hinted at the importance of other variables such as income, as well as employment, over ethnic group affiliation. Examining these relationships in more depth through qualitative interviews revealed the large discrepancy which seemingly existed between the *belief* of exclusion and the *reality* amongst the Cornish population. Overall the three phases of research enable some clear conclusions to be drawn about the linkage between Cornish ethnic group affiliation and social exclusion. Firstly, there are indications that at a micro-level some key differences are felt and the fact that these have a real world application should not be ignored. However, the overwhelming consensus in these data is that there are more important factors which negate the Cornish issue.

To directly address the research question posed in chapter two (page 97), it would be overly ambitious to conclude based on the evidence presented in this thesis that the null hypothesis should be accepted. However there are certainly more data supporting that claim than the alternative – that there is a strong positive relationship between Cornish ethnic group affiliation and social exclusion. The complexity of the processes underlying the linkage is more interesting sociologically than definitive conclusions – what causes the discrepancy between the hypothesised links and the somewhat counter evidence posited here?

As was argued in the previous chapter the phenomenon is well documented, and the Cornish situation is strikingly similar to cases where the discrepancy between personal and group discrimination is acute (PGDD) (Taylor *et al.* 1990). Indeed the interview data, whilst not conclusive by any means, showed instances of Cornish respondents failing to report exclusion themselves yet stating that the group was certainly disadvantaged, with further questioning largely reversing this opinion.

The processes which drive instances of PGDD also appear to be present in the Cornish case. Strength of affiliation has been closely linked with perceived group discrimination

(Operario & Fiske 2001; Verkuyten 2002), and whilst affiliation remains a tentative concept for measurement there has been a distinct revival in those identifying as Cornish (Deacon & Payton 1993). Cross-cutting these affiliation ties is the somewhat strengthening process of *allocentrism*, whereby individuals can become hyper-sensitive to cultural markers and information relating to an affiliated group (Verkuyten 2002). The role of the media becomes apparent across all mediums, leading to the so called “othering” of groups through marginalisation and boundary strengthening; one of the defining features of ethnic stigma (Taket *et al.* 2009:166).

The Cornish have often been portrayed in the popular media as somewhat ‘backwards’ and for having low aspirations (Bosworth and Willett 2011; Dean and Hastings 2000) – indeed, Cornish comedians such as Jethro have made careers out of such material. The Cornish tourist trade in particular is also built upon a coherent narrative of the Cornish as a distinct people, and embeds the Celtic image to signpost visitors towards other cultural markers (Hale 2001; Tressider 2010).

This information, to a strongly affiliated and hyper-sensitive individual, potentially becomes internalised and has very real effects, it is well documented that those expecting discrimination score less on self-reported health variables than those unaware (Jasinskaja-Lahti, Liebkind, & Perhoniemi 2007). Indeed, once the variables are more rigorously examined the difference between perceived, and actual, ethnic density impact greatly on the levels of self-reported health (Stafford, Becares and Nazroo 2009). That is certainly not to say that ‘Cornishness’ should be toned down in the mass media, both positive and negative information have an impact, and the existence of broadly supportive local media certainly is not wholly negative.

Running concurrently to the processes of PGDD, through allocentrism, are certainly elements of distinct rurality which only began to emerge in the later stages of the primary research. Political and cultural power operates differently in the rural settings

(Richardson 2000) and potentially limits the access which individuals have to cultural capital (Shubin 2010). Coupled with the discrepancy between the rural idyll and the reality (Phillips, Fish and Agg 2001), the acute sense of difference can be manifest in very real effects. Seen as mutually supportive, in this case, of the underlying hyper-sensitivity experienced by individuals, these rural factors are likely to have a significant impact.

Thus, the central question of this thesis, whether or not the Cornish are socially excluded disproportionately to other groups in the same area, has a more complex answer (as is so often the case) than a simple positive or negative. The results of the primary research in this study have indicated that the group are not at risk as much as may have been expected from the popular press, and the literature in the field. However, the processes by which such a belief of exclusion arises when the reality does not match are well understood; and the Cornish certainly fit the main criteria for a case of rural PGDD. Whilst this conclusion represents an advancement of the sociological knowledge of an otherwise under-researched group, it also ignores some of the subtle nuances of the inter-related variables.

At modal incomes (in the primary survey results), ethnic group affiliation accounted for an equal amount of variance as income. The significance of this result is important, not least because it represents very real effects for a large number of individuals (more so than enumerated in the Census). The PGDD processes are known to create feedback loops, which themselves can influence real behaviour and it is entirely possible that hyper-sensitivity to group information influences the opinions of those reporting a Cornish identity. Any action which is ethnically aligned can have real outputs (Fenton 2010), and so no conclusion which argues simply a case of perceived difference is comprehensive enough.

7.4.1 Implications

The implications of a large group of people that, whilst not directly or acutely excluded but consist of highly affiliated and information sensitive individuals are wide ranging. Firstly, the representation of the Cornish is clearly a central point of focus, and as such any media outlet or producer of information should be cautious about the representations that are broadcast. That is not to say that there needs to be a move towards censorship or indeed moderation, rather the implications of disseminating material in the public domain are better publicised. Rivas-Drake (2008) found young people in the USA orientating aspirational behaviour along ethnic lines, consistent with a notion of 'success alienating one from a group'. Clearly this is an advanced case; however the foundations are arguably present in the Cornish situation.

Secondly, a reactive rather than proactive effort should be concentrated on raising the aspirations of those in deprived areas in Cornwall. Whilst this is one of the key areas for improvement under the new unitary authority (Cornwall Council 2010), and under the older ESF programmes (South West Observatory Skills and Learning (SLIM) 2008), it is not something that is felt on the ground; at least not by the respondents in the interview phase of this study. Small area improvements are one of the key areas which were highlighted by the respondents.

In order to raise aspirations more generally there are wider funding implications, particularly the targeted funds from bodies such as the ESF, and other community development agencies. One of the most frequent complaints amongst the interviewees was the lack of so called 'softer' outcomes for funds in the region. Most of the agencies in the area which fund projects sought to confirm value for money by tick box checks (R-005); this was felt to be unfit for purpose (R-007). The implication of the present results lend support to such a notion of softer outcomes; there is arguably more benefit

in targeting funds towards particular variable improvement rather than groups or specified areas.

Methodologically, the emergence of a comprehensive and cohesive example of a rural PGDD process of which the Cornish are hypothesised to be an example only became apparent through a three-stage research approach. The results therefore contribute in a small way to the evidence in support of methodological pluralism, and against the (now somewhat out-dated) methodological exclusivism.

The allegiance to any particular form of method/ology is no longer commonplace in British sociology and researchers openly utilise methods the most applicable for specific problems. However, as Payne, Williams and Chamberlain (2004) have argued, there is a need for the discipline as a whole to move towards a more inclusive approach.

‘The number of sociological and public issue topics that need to be quantitatively and qualitatively researched shows no sign of declining, but confidence in our capacity to respond to that challenge, in the way that the ESRC has indicated, cannot be high.’ (2004:162)

Whilst there may yet be a lack of ‘genuine plurality’ (2004:161) British sociology has (at an individual level) seen a rise in the utilisation of mixed and multiple methodologies. Whilst it is not within the scope of this thesis to examine the discipline as a whole, it is the purpose to argue that the truth of the Cornish case would not have become apparent without both advanced quantitative and qualitative analyses.

Lastly, and arguably most importantly, the present results highlight the absolute need for continued monitoring of the Cornish as a population. Not only are the group significantly larger than had been previously thought, but there are significant differences from the non-Cornish population to warrant continued monitoring. The inclusion of Cornish categories in local and regional surveys is essential, and continual analysis of this data should be integrated into services. Whilst there is not a strong case for the inclusion of the group in further Census’ (indeed there was no tick box inclusion

for the 2011 round, Office for National Statistics 2009a), there is certainly a need for continued re-analysis along the lines of the current project.

This thesis extends and interprets knowledge on the Cornish and the links with social exclusion however such a small and exploratory research project into such a large area is necessarily limited and will have potentially controversial results. Certainly, the conclusions and hypotheses generated would benefit greatly from further research and testing, together with the release of results from the 2011 Census in 2012.

7.4.2 Limitations

As with all analyses of ethnic group affiliation the strictest limitations are those related to the conceptual difficulties which lie in defining, and ascribing, membership of a particular group to individuals (Banton 2011). One of the central themes of this thesis is that the definition, measurement and subsequent analysis of ethnicity data are inherently complex. The potential conflation of ethnicity variables and others is a constant limitation on the conclusions which can be drawn from the data. Chapter one, which dealt directly with ethnicity and measurement (see page 22) outlined the following debates in greater depth, however they are worth revisiting, if only briefly, as distinct conceptual limitations on the current findings.

There are two main themes to the limitations imposed by ethnicity measurement: firstly, is it *possible* to measure ethnicity, and secondly, is it *desirable* to measure ethnicity. The first is a complex and growing problem in the social sciences; unless a variable is measured based on visual characteristics then the measurement relies on the subjective selection of categories by the respondent. This is therefore wholly dependent on the individual's willingness to identify (to a given degree) with the categories provided (Burton, Nandi and Platt 2010). It is entirely possible that *any* category provided will illicit some response from respondents, and therefore not be

representative of the real situation (Simpson and Akinwale 2007). Whilst strength of affiliation is potentially measurable (Ong, Fuller-Rowell and Phinney 2010) the space required for such variables in general use is excessive. However, the largest problem with the measurement of ethnic affiliation is the very practical difficulty of listing options; how long should such a list be and what should be left to write-in options; yet avoiding the “I didn’t feel like any of those things were me” problem (Smith, Woo and Austin 2010:628).

That is not to say that the conclusions drawn by this thesis fall into the arguments outlined by Carter and Fenton (2009:2), who state that the ethnicity framework, popular throughout the discipline is out-dated and “detached from the world it seeks to describe”. Nor, indeed, is it the place of this thesis to contribute in any great sense to the ‘post-race’ debates of Gilroy (1998) and others (Nayak 2006; Craemer 2011), but rather to propose a research orientated and pragmatic argument to address the limitations discussed.

The solution to the problem proposed is necessarily a pragmatic one; not all categories need to be listed in all circumstances – local surveys need not list national categories and vice versa. This naturally introduces an element of disparity in comparability, though knowledge of the local ethnic groupings before compiling any instrument is essential.

The second issue is arguably more central: *should* ethnicity be measured at all? There are political arguments around the collection of ethnicity data (Bird 1996), however the central issue is largely the *purpose* of collecting ethnicity data. There are two main categories for collection, the use of data to make a population visible and to provide a foundation for comparative research. In the Cornish case the first is a largely positive feature; the data collected illuminate an otherwise hidden population. However the second issue is more complex. The secondary data showed a bi-modal population and,

as such, there were likely to be measurement factors introducing error. Those in disadvantage may well not identify as Cornish despite similar heritage backgrounds (Burton, Nandi and Platt 1997), however both may suffer disadvantage.

By measuring ethnicity, what is actually under interrogation is *ethnically aligned action* (Fenton 2010), and so the argument that there are real mechanisms at play is flawed. Indeed, this position is solidly grounded in the rising literature on the operation of conceptual action in society, rather than concrete and formalised categories (see Banton 2011; Brubaker 2004; Fenton 2010) Whilst this is a strong limitation on the current results, it must also be argued that there is certainly consistent action along ethnic lines in Cornwall, and so any exploration of this is sociologically important.

The results of the analyses are limited inherently by the methodological approaches and subsequent data production of each stage. The secondary analysis was dependent on a number of other data sources and as such was subject to a compounded level of bias and conceptual error. Though as an exploratory phase no generalisable results were drawn. Similarly, though generalisable results can be drawn from the survey data, they are only applicable to the areas of Cornwall which were sampled, and also subject to standard statistical errors. These results can also only explore the statistical linkages between variables and make no claims as to the causal relationships. These relationships are, however, explored in depth by the third stage of analysis – the interview process – though once again the low level of sampling rigour necessary in this process limits the generalisability of the results. Overall the three analyses taken together form a coherent and mutually supportive set of indicators about the size and relative position of the Cornish, in relation to other groups in the area.

7.5 Discussion Summary

This chapter has so far summarised the results of the three stages of analyses and explored the implications of the findings. In addressing the two research questions posed at the end of chapter 2 directly the three stages of analyses were synthesised into a coherent picture of the Cornish as a group. The methodology utilised previous Cornish estimates alongside primary research and, largely, confirmed that the upper estimates were correct. Whilst the Census was accurate, in that it recorded what was written, it was a distinct undercount of the true Cornish population. Thus the research illuminates the errors around indirect measurement of small scale ethnicities in large scale surveys, and the methods designed for the improvement represent an advance in the field. The relative position of the group certainly becomes important when there are over 140,000 (rather than 33,000) individuals involved.

The links between ethnic group affiliation and social exclusion were shown to be complex and, in the Cornish case, the hyper-sensitivity to group information potentially gives an illusion of worse relative disadvantage than is really the case. Such sensitivity is arguably compounded by the legitimisation of the Cornish as a distinct group in the region (Bertrand 2011); the identification with, and subsequent legitimisation in the media of, the Cornish as a group allows for representations to be more individual specific in nature and applicable to each Cornish individual. Though the limitations addressed in this chapter place strict constraints on the generalisability of the conclusions which can be drawn the mutually supportive and coherency of the three phases enables some credible yet tentative conclusions to be drawn and the following sections will summarise these.

7.6 Conclusions and wider applicability

The role of ethnic group affiliation in the relative position of the Cornish in Cornwall is by no means straightforward. That the group exists in greater numbers than previously thought is highly probable, however the links with social exclusion are more complex than had been shown in previous studies. This complexity is compounded by the necessary methodological limitations on any data which measure ethnic affiliation. The conclusions described in the following sections draw on the main themes of the thesis to illuminate the problematic and complex nature of Cornish ethnicity and social exclusion; the wider problems of ethnicity and exclusion; as well as making suggestions for subsequent research which address the limitations of the present study.

7.6.1 Under-enumeration and the Census

The 2001 England and Wales Census measured, for the first time, levels of Cornish ethnicity. The lack of a tick-box option led many to argue that the figure reported, over 33,000, represented a large undercount (Office for National Statistics 2009b) though the accuracy of such a self-selecting sample has not been in question. Rather, there were two sociologically interesting questions, whether there were distinct characteristics in that self-selecting sample and whether the estimate could be improved utilising alternative data sources.

What emerged were the distinct differences between the data which contained a direct Cornish variable, and the write-in variable included in the Census. At its largest the discrepancy was the difference between 33,932 and 155,000 individuals. The collated results, across all three stages of research in this thesis, reported an overall level of Cornish ethnicity in the region of closer to 25-30% rather than the reported 6.7%. Such under-enumeration of small groups across large surveys without a direct category is not uncommon (Graham & Waterman 2005), and has wide ranging implications.

In the Cornish case it would be over ambitious to seek a tick-box option in further national surveys (a position that was unsuccessful in any case for the 2011 Census, Office for National Statistics 2009a); the ethnicity variable would swiftly become unmanageable (Burton, Nandi and Platt 2010). However, there are two main themes that the implications of a large under-enumeration can take. Firstly there are implications for the analysis of large scale ethnicity data, from the Census to other large surveys, the granular texture of the ethnicity data means that at every level there are likely to be categorical difficulties of the type explored by Simpson and Akinwale (Simpson & Akinwale 2007).

Secondly, there are implications for the understanding of the Cornish as a specific group; many local policy decisions should now recognise that close to a quarter of the population of Cornwall would self-identify as Cornish. One of the key recommendations of this thesis is that of continual monitoring, specifically by bodies such as Cornwall Council, of the Cornish, and so a category should certainly be present in local survey instruments at the very least.

The contrary position is also important, over three quarters of the population would *not* identify as solely Cornish (of course there are many individuals with multiple identities) and therefore large scale policy which addresses solely Cornish issues would not target the majority. The overarching conclusion, regarding the Census, from this thesis is in agreement with Hakim (1982) that, whilst there are few better measures of large scale phenomena, at small scales and increased granularity there are benefits from the combination with other data.

7.6.2 Ethnic group affiliation and social exclusion as complex

The rigorous analysis of the group who self-identified as Cornish revealed a complex and multi-dimensional picture of the levels of disadvantage felt. It had been

hypothesised, with strong evidence in the associated literature, that the group potentially experienced social exclusion in a significantly different way to others in the same area (Griffiths 1989; Thornton 1996; Williams 1995). Other indigenous groups in similar areas of disadvantage have most certainly been shown to be particularly at-risk populations (Fontenla, Gonzalez and Quast 2010; Garreta-Bochaca 2006; Sanchez-Perez *et al* 2005). Previous research using long term residency as a proxy for 'Cornishness' had shown some indication of disproportionate disadvantage (Williams & Harrison 1995); though often the results were indicative yet inconclusive (Griffiths 1989).

Data collected and discussed in the previous sections highlight the complex processes which underlie the links between Cornish ethnic group affiliation and the relative experience of social exclusion as defined by the B-SEM matrix (Levitas *et al* 2007). Whilst there are certainly hints that the population experiences certain variables such as educational attainment differently, there are no clear indications that the group are any worse off overall. This finding is necessarily constrained by problematic measurement issues, and the bi-modal distribution of disadvantage which was discovered highlights this problem acutely. However the overwhelming consensus throughout the data was that the indications were it was an individual's income which was the largest explanatory factor in exclusion experience.

This finding lends support to the growing literature which argues that, fundamentally, membership of an ethnic group is a poor indicator of exclusion and that spatial as well as socio-economic factors are better explanatory variables (Bygren & Szulkin 2010; Chin *et al.* 2009; Grogan-Kaylor and Woolley 2010). The complexity of the Cornish situation is not limited to sourcing explanatory factors for the undoubted deprivation in the region; one of the most interesting emergent findings is the discrepancy between the belief of exclusion and the objective reality being experienced.

Hyper-sensitivity to group information (of any kind) is one of the defining features of PGDD and the subsequent confirmation of group boundaries intensifies the differences which are felt (Verkuyten 2002). The data collected in this instance does hint that members of the Cornish group – at least those with influence – are sensitive to group information. The portrayal of the Cornish, in some mediums in a negative light, significantly impacts on the belief that the group is disadvantaged despite individual members experiencing low levels of exclusion (Reygadas 2005). This allocentric behaviour contains inherent feedback loops which serve to maintain feelings of disproportionate experience (Skrobanek 2009); coupled with a naturally socially mobile set of in-migrants over a long period and popular opinion begins to centre on the Cornish as disadvantaged.

As to the small levels of difference observed between the populations there are two hypotheses which are presented. On the one hand the differences (across educational and health variables largely) may well represent the kernel of truth which underlies the somewhat inflated notion of Cornish disadvantage. Alternatively it is possible that the PGDD and allocentric information processes discussed have manifested themselves in a real difference, which post-dates the opinion. This is a well-documented feature of the PGDD phenomena and further complicates the relationship between ethnic group affiliation and social exclusion (Jasinskaja-Lahti, Liebkind and Perhoniemi 2007).

The findings of this thesis outlined highlight the disjointedness within the academic literature around social exclusion and disadvantage generally, and the links to ethnicity more broadly. At the start of chapter 2 the arguments around poverty and social exclusion were outlined; with social exclusion emerging from the work on relative deprivation embodied by Townsend (1962), and Abel-Smith and Townsend (1965). The results from the data presented in this thesis certainly lend weight to the growing literature around the complex relationship between these two concepts. They are certainly not, as Devicienti and Poggi (2010) point out two sides of the same coin.

Cornish exclusion and the underlying processes described in this thesis may well form the basis of a positive feedback loop through which poverty and social exclusion are mutually supportive (yet distinct) processes.

There is, of course, a certain inevitability about a result which implies income related social exclusion is more explanatory than ethnic group membership, and indeed the literature around poverty (see Marshall 1998; Walker 1995) coherently makes such a case. However it is worth highlighting once again that prior to this research little was known about the Cornish population, relative to others in the same region. The fact that income has been shown to impact greatly on lived experience in terms of exclusion - as might be expected - is of sociological interest, despite not being overly surprising. There is often an assumption within the literature that there was a linear transition from writers discussing poverty to those discussing social exclusion as multi-dimensional (Byrne 1999; Room 1995). What the current results indicate is that such simplistic notions are not founded in rigorous data collection and that poverty, or at least relative income discrepancies are still relevant foci of research.

Of course that is not to downplay the importance that the B-SEM social exclusion matrix played in the formation of data in this thesis. The Levitas et al. (2007) matrix was certainly indicative of the somewhat broad literature around social exclusion, and therefore represented the most comprehensive tool with which to examine the Cornish case. However in light of the results presented it becomes clear that there are two main problems with both the B-SEM, and any other variable identification matrix. Firstly there is a necessary element of vagueness about such matrices which allows for conceptual variance and introduces uncertainty into the results. This is admittedly not something which could be tackled with ease, and remains a broad limitation of the model. More concretely, the matrix includes no attitudinal elements whatsoever and this (in light of an analysis of the Cornish case), is something which should be addressed. The emergence of potential PGDD elements, in this examination of the

Cornish, inherently implies that any model which seeks to include variables for exclusion measurement should at least highlight these issues.

It would be impossible to include in any broad-scale matrix all the elements and weighting structures for the examination of a group at-risk of social exclusion, and for an initial exploratory assessment the B-SEM matrix by far suited the purpose. Further research (both in a Cornish context and any other small-scale ethnic group), should certainly examine the need for weighting alongside attitudinal variables. The index produced in the survey analysis stage of this thesis (SEI) certainly gave a good broad view of the levels present in the region, and the utilisation of the B-SEM matrix in this way - one branch for each survey element - proved a useful approach which could be repeated in other geographic areas (particularly in areas of relevance to the current research, Wales being one example).

The findings from the Cornish case certainly contribute to the literature which examines the linkage between disadvantage and ethnicity, not merely through highlighting the inherent complexities but at a more specific level. Ratcliffe (2004), embodies the arguments within this literature by identifying three key spheres through which this linkage exists in the UK; spatial, education and labour market disadvantage. There was certainly a link, in this case, between income and geographic variables, indicating coherence with Ratcliffe (2004); however this linkage was not related to ethnicity membership or exclusion more broadly. This finding is indicative of the problematic nature of the often sweeping generalisations which exist in the literature, contradicted in most cases by the rigorous testing of hypotheses demonstrating increased levels of complexity. In this case the Cornish did not conform to the notion asserted by Ratcliffe (2004) that minority groups are segregated and constrained. Whilst worthy of investigation there was not sufficient evidence in this case to support a spatially segregated hypothesis based around ethnicity. Secondly, Ratcliffe (2004) argued that education is a distinct sphere of ethnic disadvantage and certainly the

results from this thesis support such arguments. The Cornish, in these data, were more likely to hold lower qualifications than non-Cornish. It is the labour market, Ratcliffe's (2004) third sphere, where the results reported in this thesis diverge more fundamentally from the established literature and, therefore, why the Cornish case is a useful one as a contributor.

Minority groups are arguably more acutely disadvantaged in the labour market, than others in the same region (see Chapter 2; page 64). However the Cornish once again show the processes to be fundamentally more complex, attitudinal elements again muddy the waters of any linkage considerably. It may be true that unemployment and employment type vary by ethnic group but the related sensitivity to group information (and the associated positive feedbacks) are just as important as the disadvantage itself.

When considering the impact of the current results on the literature around disadvantage the last and arguably most central question relates to indigenous disadvantage. Described in Chapter 2 were notions that indigenous groups in areas of some deprivation represent the most at-risk groups of social exclusion relative to others in the same area (see Panayi 2000). How useful, in light of the current findings, is it to conceptualise the Cornish as an indigenous group? The arguments for the Cornish forming a distinct ethnic group are strong (and even if these are not accepted then there is still a sociologically interesting phenomenon at play, see the following section), and the influx of migrant and wealthy retired individuals to the territorial area that these people inhabit is also well documented (Williams 2003b).

The emergence from the data of the conclusions proposed in this chapter highlight the fact that the Cornish do not necessarily suffer exclusion worse than others in the same region, however this says more about the literature around indigenous disadvantage than it does about conceptions of the Cornish as an indigenous group. Eversole (2005) posited a somewhat bold claim that there is a necessary link between indigenous

people and poverty, and the claim is indicative of the literature more broadly. Inherent in such statements are simplistic notions of what constitutes a group and what constitutes poverty – both of which the data from this thesis call into question. The strong arguments for the Cornish as an indigenous group, and the subsequent complexities discovered in the linkage to disadvantage, highlight the need for rigorous and comprehensive testing of all similar groups before general statements can be made. However, that is not to argue against the notion that, for the majority of cases indigenous people in areas of deprivation are linked to increased exclusion, but rather that it is useful to include the Cornish as a case as it highlights the complexities of this link.

In summary, it is certainly useful to utilise elements of the literature around disadvantage when examining small-scale ethnic groups such as the Cornish, though caution must be exercised in exploratory studies such as these. The models and theoretical standpoints taken were used as frameworks from which to proceed rather than prescriptive tools; and, as such, the results inform their future use as much as they informed the current results.

7.6.3 Ethnicity and measurement difficulties

One of the significant and recurrent themes throughout the data collection and analysis phases, as well as the review of the literature was the methodologically problematic issue of ethnicity measurement in general. The findings are applicable to the relevance of ethnicity measurement in a wider sense.

The two main themes which emerged, whether it is possible or even desirable to measure ethnicity, follow in the course of a growing publication record. The literature in current years has started to sway in favour of a highly critical approach to ethnic group membership (Carter & Fenton 2009; Simpson and Akinwale 2007), however the

argument presented here is more of pragmatic one. The *possibility* of measurement is unquestionably difficult, with cross-cutting problems such as category numbers (Simpson and Akinwale 2007); affiliative change over time (Ong, Fuller-Rowell and Phinney 2010) and strength of affiliation. What seems certain is that ethnicity cannot be completely captured in a single variable (Burton, Nandi and Platt 2010).

More fundamental are the arguments around the actual desirability in the social sciences for measurement of ethnicity in the first place. There are distinct implications when the imposition of external categories (usually based on visual characteristics) are the only given options, as is the case in many areas – often accompanied by a residual white category (Ahmad 1999). These categories frequently have no meaning for the respondent and therefore the purpose of measurement is entirely without validity and often considered offensive.

The counter arguments to these two themes represent the position of ethnicity measurement taken in this thesis. In terms of possibility of measurement, unless visual identifiers are used the categories are dependent on the subjective selection of a group by a respondent. This introduces a level of abstraction, in that the size, and features, of a group are on some level a consequence of the measurement itself. However, the willingness to identify with a particular group and the strength of that affiliation remains an interesting topic for sociological enquiry.

The problem of the *desirability* of ethnicity data is relevant only in certain specific situations and the real issue is the reason for collection; not simply the collection itself. The collection of such data seems apt for the dual purposes of; illuminating an otherwise hidden population and subsequently exploring that population's relative status. The first is valuable both sociologically and politically, the second however is more problematic. Whilst in this thesis the data collected illuminated the relative position of the Cornish, the results are marred somewhat by the potential conceptual

limitations of the Cornish as an ethnic group in any concrete sense. This lack of stability and the logical change in the group across surveys makes interpretation of the results problematic.

The argument presented is once again a pragmatic one; there seems little question that there are a significant proportion of individuals living in Cornwall who identify, to some extent, with the 'Cornish' ideal type. These individuals become a sociologically valuable object of study if there is, as Fenton (2010) would argue, any ethnically aligned action at all. In this case, and a great deal of other cases also, study of the relative position is relevant and useful if not definitive. Further research would certainly address the more theoretical and conceptual basis of a Cornish ethnic identity utilising the broader results from this project.

To return to the literature outlined in Chapter 1 of this thesis, the work of Weber (1922) was used to illustrate the move from race to subjectively perceived common traits as being indicative of group identification – and the arguments cited above clearly indicate that whatever conception one has of a Cornish identity there are a large proportion of individuals who are willing to self-ascribe as such. The group, in and of itself, therefore becomes an object of interest for social science. More specifically, authors such as Barth (1969) and Merton (1972) argued ethnic groups emerge from the boundaries which are constructed and their recognition by both insiders and outsiders; indeed these are the key elements on which modern ethnicity research rests. The results reported in this thesis certainly show that the Cornish are cohesive in some respects. Or at least there is a cohesive notion of what constitutes 'Cornish-ness' existing in the group consciousness of both inside members and those 'outsiders' who feel themselves looking on. The Cornish respondents at all stages of the research process were quick to argue their case and those who considered themselves non-Cornish were also quick to describe the group as strongly connected. Thus, whatever

characteristics may be contained within any common traits as described by Weber there is certainly a strong subjectively believed perception of their importance.

These arguments were developed in the first chapter into a description of Smith's (1988) model of an ethnies. This model was argued to represent the literature, in that it had as a basis a reliance on self-ascription by individuals to elements of cultural similarity. It was not argued that this represented a perfect, or even a particularly good, model in any respect but rather that it provided a framework from which to examine the Cornish case in detail. The results outlined over the course of this thesis certainly show that there are large numbers of individuals who identify with the cultural markers which emerged from the application of Smith's model to the Cornish literature. The fact that as a framework Smith's model is so useful is indicative of the somewhat problematic nature of ethnicity more generally, as has been argued in this chapter. The resulting numbers of individuals ascribing to conceptions of 'Cornish-ness' vindicate this pragmatism to some extent, but also indicate the underlying complexities. The inability to measure with any great certainty the precise nature of the ethnic constructs described (which has been a theme of the results presented here) calls into question Smith's assertion that they are six defining features at all. Would other models inform the Cornish case as adequately as Smith? Quite probably. It is certainly useful to consider the Cornish as an ethnies, as they certainly seem to themselves, however what constitutes that ethnies is somewhat less clear in light of the current results than at the start when the model was first utilised.

More generally, the arguments outlined in section 1.3.5 of Chapter 1 around problematic conceptions of ethnicity are echoed and supported by the results of this thesis. The lack of coherence across the Cornish as a group on some variables inherently means that a wide range of individuals self-ascribe to some notion of Cornish-ness. This highlights two issues which have been raised previously, that of change across individuals and change over time. The first is embodied by the notions

examined in the preceding sections around being able (or willing) to measure ethnicity; however the second calls into question the stability of the Cornish as a group over time. Simpson and Akinwale (2007) argued that group concepts change significantly over time and that there were therefore logical inconsistencies in repeated measures in surveys such as the Census. The disjointed nature observed in some areas, and age brackets, in data presented here supports these notions. The literature and evidence collected in this thesis point to significant change occurring amongst conceptions of Cornish identity both across individuals and timescales.

However, it is once again worth pointing out that this does not nullify attempts to conceptualise or examine the Cornish as a group – it is still useful to talk of such a group as, to note again, there are a large number of individuals who identify as such. The interesting focus which emerges therefore is what is meant by these individuals in their ascriptive processes and what it is that they are ascribing (something considered by Willett (2008), amongst others). Broadly speaking the results described indicate that individuals who self-ascribe to any notion of Cornish are a little worse off in terms of social exclusion, but are also likely to inflate the discrepancy in the group consciousness. These conclusions are not reduced by complex notions of Cornish content, but simply indicate that any lack of consistent ethnic cohesiveness requires further and finer grained examination in subsequent research.

It would be useful for the Cornish case, in terms of academic research and particularly in light of the current findings, if there was less formal debate around what exactly constitutes Cornish ethnicity and whether or not individuals have legitimate claims to membership. The fact remains, and will continue to do so, that a significant proportion of individuals will identify with conceptions of Cornish-ness and that these are potentially different for each individual. It would be difficult to argue a coherent case for the examination of all these conceptions except in highly specific and identified cases. It is the job of social science to examine the commonalities between such

individuals and to highlight any thematic features – something which has been attempted in the current thesis. Put simply, questions of how relevant it is to conceptualise the Cornish as a distinct ethnic group are potentially redundant; society recognises such a group, and individuals adhere and ascribe to it, and therefore it becomes a legitimate object for sociological interest regardless of which model may best describe it.

How then might the Cornish be situated within the academic literature around ethnicity? The results from all stages of this research highlighted the complexities of ethnicity – both of conceptualisations and of measurement more specifically. Therefore the Cornish case is situated at a point in the literature which focusses on ethnically orientated action rather than objective (or even subjective) coherence. In keeping with the previous arguments and the work of Fenton (2010), the emergence of a PGDD hypothesis and the underlying processes inherent is indicative of ethnic action. ‘At-group’ sensitivity as experienced by the Cornish fundamentally conforms to Fenton’s notion of ethnically (group) aligned (cohesive) action (sensitivity), thus future conceptions of Cornish-ness would benefit from searching for aligned action for analysis, rather than specific and prescriptive cultural elements or markers. What is true for the Cornish case is also true of ethnicity research more broadly, the emergence of complex functions underlying social exclusion linkages necessarily calls into question concrete notions of ethnic group membership. Therefore what informs the Cornish case ultimately also informs the whole, and the results from this study contribute to this position.

7.7 Further research

The conclusions drawn in this and the preceding chapters are necessarily tentative to an extent and limited by the financial, time and staffing constraints imposed on the

research process. Additionally this project represents the first large scale, direct examination of the size and relative position of the Cornish – and as such is necessarily exploratory in nature. Whilst the conclusions about the size of the population are as statistically rigorous as was possible given the available data, there are some inherent errors; the same criticisms can be levelled at the survey work as well as the qualitative element.

Recommendations for further research broadly fall into two categories; those which correct and improve on the current results and those which extend the results into slightly different areas. The 2001 England and Wales Census was (at the time of research) the largest data set referring to the Cornish. However the 2011 Census has been completed and the data will be available for analysis during 2012. This round of the Census will probably result in a higher proportion of Cornish responses; the publicity has been more widespread (though there was still no tick-box option). Certainly the results and hypotheses generated from this thesis would benefit from further examination incorporating these data, and, indeed, any future rounds.

Research should be undertaken which re-runs the analyses described in the first phase of the current research to examine the size of the population, as well as the position compared to others in the same area. Additionally, more local studies should aim to record a Cornish category in survey research and later collations will produce more comprehensive estimates. Research should also aim to address the geographic limitations of the survey work outlined here; an examination of the ‘mid’ area of the County may illuminate phenomena not described before.

An extension of the qualitative aspects of the current project would partially address the second category. Better resourced projects should include a wider range of interviewees from a larger set of agencies around the county, and a discussion of the issues of exclusion in a more systematic way would either support or refute the claims

made here regarding the Cornish as a PGDD case. As data began to show aspects of PGDD in the final stages of the research process it would be beneficial to re-examine the Cornish case with relevant hypotheses, directly addressing these issues.

7.8 Concluding remarks

In summary, the links between Cornish ethnicity and social exclusion suggest that a closer examination is needed of the complex processes which drive deprivation based on group affiliation. It is certainly not as simplistic as arguing that the group either are, or are not, suffering disproportionately to others. The relevance of Taylor *et al's* (1990) PGDD approach is by no means confirmed but should be more fully investigated in the Cornish context. What *is* highly likely is that the Cornish make up to close to a quarter of the population in the region. Data drawn from multiple sources largely confirms the undercount suspected in the 2001 round of the England and Wales Census (Office for National Statistics 2009b). Moving forward to the 2011 round this data should also be treated with caution, yet examined closely and systematically utilising the methods designed for this thesis. For policy makers the impact of the legitimisation processes of emerging ethnic and regional identities should be at the centre of both data collection and analyses.

Ethnicity data itself has been called into question throughout the thesis – though in the Cornish context it does seem likely that Fenton's (2010) 'ethnically aligned action' rings true. Perhaps the most significant point to draw from the thesis is that, regardless of measures, there are a large group of individuals who identify as Cornish and these individuals experience difference. The fact that this difference may only be manifest in the group consciousness does not negate further and more detailed investigation. The Cornish are a group central to the county and, indeed, the region as a whole, continued monitoring and examination of the group should continue. This thesis has extended

knowledge on the Cornish in a number of areas and also raised important questions for subsequent research to address.

Appendix 2

2.1 'Monitoring Poverty and Social Exclusion' series indicators

| <i>Low Income</i> | <i>Children</i> |
|---|---|
| <ol style="list-style-type: none"> 1. Numbers in low income 2. Low income by age group 3. Low income by family type 4. Out of work benefit levels 5. Long term working age receipt of benefits 6. In receipt of tax credits | <ol style="list-style-type: none"> 7. Low income households with children 8. Children in workless households 9. Concentrations of poor children 10. Low birth-weight babies 11. Child health and well being 12. Underage pregnancies 13. Low attainment at school (11 yr olds) 14. Low attainment at school (16 yr olds) 15. School exclusions |
| <i>Young Adults</i> | <i>Working age adults</i> |
| <ol style="list-style-type: none"> 16. Without a basic qualification 17. School leavers (16 yr old NEETS) 18. With a criminal record 19. In low-income households 20. Unemployment (18-24) 21. Low pay | <ol style="list-style-type: none"> 22. Low income and work 23. Low income and disability 24. Economically inactive seeking work 25. Work and disability 26. Workless households 27. Low pay by gender 28. Low pay by industry |

| | |
|---|---|
| | <p>29. Low pay and disability</p> <p>30. Insecure at work</p> <p>31. Support at work</p> <p>32. Premature death</p> <p>33. Limiting longstanding illness</p> <p>34. Mental health</p> |
| <p><i>Pensioners</i></p> <p>35. In low income households</p> <p>36. No private income</p> <p>37. Non take up of benefits</p> <p>38. Excess winter deaths</p> <p>39. Limiting longstanding illness</p> <p>40. Help to live at home</p> <p>41. Anxiety</p> | <p><i>Community Services</i></p> <p>42. Polarisation of low income</p> <p>43. Concentrations of low income</p> <p>44. Victims of crime</p> <p>45. Transport</p> <p>46. Without a bank account</p> <p>47. Without home contents insurance</p> <p>48. Without central heating</p> <p>49. Homelessness</p> <p>50. In mortgage arrears</p> |

(Source: Palmer, Carr, & Kenway 2005)

2.2 'Poverty and Social Exclusion' survey indicators

1. Impoverishment – similar in nature to the traditional definitions of poverty. This took the form of a subjective measure of poverty, the estimated money needed to avoid absolute and overall poverty. Where absolute poverty is the '...severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information'. Overall poverty is '...the lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion' (UN, cited in Gordon (2000:9))

2. Exclusion from the labour market – the survey looks at both individual and household exclusion from the labour market. Individually because this is seen as important not just as a source of income but also because of the social contact as well. Exclusion on this basis can lead to social exclusion regardless of the working status of the rest of a household. The exclusion factors are also present for those that are in a jobless household. The data gathered by this survey points to the fact that a large proportion of the population experiences this factor and so should maybe not be seen as a primary indicator for the individual level (jobless households more so).

3. Service Exclusion - This is a lack of access to basic services; both inside and outside the home. In this instance the internal household factors were looked at in terms of utility disconnections. Specifically, water/gas/electricity and telephone were discussed and whether people had restricted access to these through cost. The external factors were fairly widespread, public service such as libraries, post offices and hospitals were important; as were private services such as corner shops/banks/pubs outside the home. The external factors led to the creation of two groups, those that experienced collective exclusion (where services simply were not available), and individual exclusion (where they were priced out of an individual's reach).

4. Exclusion from social relations - This was a unique feature of this particular survey, it gathered data directly on the level of social interaction and social relations. It examined this in different ways - non-participation in social activities; isolation; lack of support; disengagement; confinement.

a. Non-participation in common social activities - the range of activities was examined and also those that were excluded through lack of money. These included visits to friends or family, sports days etc, hobbies, holidays or dinners out.

b. Isolation - This was taken to be the frequency with which they saw or spoke to family members or friends outside their immediate household.

c. Lack of Support - This was measured using seven different situations (i.e. help around the home when ill or advice about life change etc) and asking how much support they could expect.

d. Disengagement - A lack of civic engagement, measured using examples such as voting, fundraising, public activity, letter writing for publication etc.

e. Confinement - People who are unable to move around freely may not be able to fully participate in social activities. This could include child-care, safety issues etc. As well as affordability.

(Source: Gordon et al 2000)

2.3 B-SEM Matrix Breakdown

The above dimensions are then split into the following specific topic areas:

- Material/economic resources
 - o Income
 - o Possession of necessities
 - o Home ownership
 - o Other assets and savings
 - o Debt
 - o Subjective poverty – people’s perception
- Access to public/private services
 - o Public services
 - o Utilities
 - o Transport
 - o Private services
 - o Access to financial services
- Social resources
 - o Institutionalisation/separation from family
 - o Social support
 - o Frequency and quality of contact with family members/friends etc
- Economic participation
 - o Paid work
 - o Providing unpaid care
 - o Undertaking unpaid work

- o Nature of working life (type of occupation etc)
- o Quality of working life (anti-social working etc)
- Social participation
 - o Participation in common social activities
 - o Social roles
 - Culture, education and skills
 - o Basic skills (literacy, numeracy, and English)
 - o Educational attainment
 - o Access to education
 - o Cultural leisure activities
 - o Internet access
 - Political and civic participation
 - o Citizenship status
 - o Enfranchisement (voter variables)
 - o Civic efficacy (feeling able to affect decisions)
 - o Civic participation (active membership of faith groups etc)
- Health and well-being
 - o Physical health and exercise
 - o Mental health
 - o Disability
 - o Life satisfaction
 - o Personal development
 - o Self-esteem
 - o Vulnerability to stigma (e.g. Long term means tested benefits)
 - o Self-harm and substance misuse
- Living environment
 - o Housing quality
 - o Homelessness
 - o Neighbourhood safety
 - o Neighbourhood satisfaction

- o Access to open space
- Crime, harm and criminalisation
- o Objective safety/victimisation
- o Subjective safety
- o Exposure to bullying and harassment
- o Discrimination
- o Criminal record
- o ASBO
- o Imprisonment

In addition, the team state that it is necessary to examine data sets for seven other variables that are important to this analysis as risk factors:

- Gender
- Ethnicity
- Social Class
- Housing Tenure
- Household composition
- Religious affiliation
- Critical life events

Appendix 3

3.1 Sample frame – ward breakdown by population (ONS 2001b)

| North Cornwall | | | Caradon | | | Kerrier | | | Penwith | |
|----------------|-------------------------|-------|---------|--------------|-------|---------|----------------|----------------|--------------|----------------|
| | | Pop | | | Pop | | | Pop | | |
| 15UEGE | Allan | | 15UBGH | Callington | 4,790 | 15UDFZ | Breage and | 5,848 | 15UFFS | Goldsithney |
| 15UEGF | Altamun | 2,044 | 15UBGJ | Calstock | 6,105 | 15UDGA | Camborne | 6,658 | 15UFFT | Gulval and |
| 15UEGG | Blisland and St Breward | | 15UBGK | Deviock and | 2,009 | 15UDGB | Camborne | 6,868 | 15UFFU | Gwinear, |
| 15UEGH | Bodmin St Mary's | | 15UBGL | Dobwalls | 3,669 | 15UDGC | Camborne | 6,795 | 15UFFW | Hayle North |
| 15UEGJ | Bodmin St Petroc | | 15UBGM | Duloe, | | 15UDGD | Constantine, | 3,747 | 15UFFX | Hayle South |
| 15UEGK | Bude | 4,679 | 15UBGN | Landrake | 3,921 | 15UDGE | Grade-Ruan | 1,954 | 15UFFY | Lelant and |
| 15UEGL | Camelford | 2,252 | 15UBGP | Lanteglos | | 15UDGF | Helston | 5,896 | 15UFFZ | Ludgvan and |
| 15UEGM | Camelot | 4,369 | 15UBGQ | Liskeard | 4,728 | 15UDGG | Helston | 4,330 | 15UFGA | Madron and |
| 15UEGN | Grenville | 1,954 | 15UBGR | Liskeard | 3,921 | 15UDGH | Illogan North | | 15UFGB | Marazion |
| 15UEGP | Lanivet | | 15UBGS | Looe and St | 5,609 | 15UDGJ | Illogan South | 7,127 | 15UFGC | Morvah, |
| 15UEGQ | Launceston | 7,137 | 15UBGT | Lynher | 1,940 | 15UDGK | Mabe and | | 15UFGD | Penzance |
| 15UEGR | Marhamchurch | 2,119 | 15UBGU | Menheniot | 3,727 | 15UDGL | Meneage | 2,545 | 15UFG E | Penzance |
| 15UEGS | North Petherwin | 2,359 | 15UBGW | Millbrook | 2,039 | 15UDGM | Mullion | 1,971 | 15UFGF | Penzance |
| 15UEGT | Padstow and District | | 15UBGX | Rame | 1,881 | 15UDGN | Porthleven | 3,841 | 15UFGG | Penzance |
| 15UEGU | Poughill and Stratton | 4,565 | 15UBGY | St Cleer and | 3,765 | 15UDGP | Redruth | | 15UFGH | St Buryan |
| 15UEGW | St Endellion and St Kew | | 15UBGZ | St Germans | 4,029 | 15UDGQ | Redruth | | 15UFGJ | St Erth and |
| 15UEGX | St Minver | | 15UBHA | Saltash | 3,075 | 15UDGR | St Day, | | 15UFGK | St Ives North |
| 15UEGY | South Petherwin | 2,476 | 15UBHB | Saltash | 4,081 | 15UDGS | St Keveve | 2,103 | 15UFG L | St Ives |
| 15UEGZ | Stokeclimsland | 2,421 | 15UBHC | Saltash Pill | 4,320 | 15UDGT | Stithians | | | |
| 15UEHA | Tremaine | 2,233 | 15UBHD | Saltash St | 1,856 | 15UDGU | Wendron | 2,140 | | |
| 15UEHB | Valency | 2,168 | 15UBHE | Torpoint | 3,854 | | | | | |
| 15UEHC | Wadebridge | 6,355 | 15UBHF | Torpoint | 4,583 | | | | | |
| 15UEHD | Week St Mary and | 2,227 | | | | | | | | |
| TOTAL E | 123,260 | | | | | | TOTAL W | 124,861 | | |
| | | | | | | | | | FRAME | 248,121 |

3.2 Instrument



Cornwall Living Experience

Questionnaire 2010

Please take the time to complete this short questionnaire which aims to explore the experience of current residents of Cornwall. You have been selected from a sampling frame of residents and so your time is much appreciated. The results of this survey will form part of a larger project being run at the University of Plymouth that examines, amongst other things, the experience of residents in the County. Your responses will be completely confidential and results anonymized.

The survey should take no more than 5 minutes to complete, after which please simply return using the Freepost envelope provided.

Section 1 - The first few questions are about you.

1.1 What is your sex?

- Male
- Female

1.2 What was your age at your last birthday?

1.3 Which of the following 'Community Network Areas' is closest to your place of residence?

- | | |
|--|---|
| <input type="checkbox"/> Penzance, Marazion & St. Just | <input type="checkbox"/> Bude |
| <input type="checkbox"/> Helston & The Lizard | <input type="checkbox"/> Launceston |
| <input type="checkbox"/> Hayle & St. Ives | <input type="checkbox"/> Callington |
| <input type="checkbox"/> Camborne & Redruth | <input type="checkbox"/> Saltash & Torpoint |
| <input type="checkbox"/> Falmouth & Penryn | <input type="checkbox"/> Camelford |

1.4 What is your marital status?

- | | |
|---|------------------------------------|
| <input type="checkbox"/> Single (never married) | <input type="checkbox"/> Separated |
| <input type="checkbox"/> Married (first marriage) | <input type="checkbox"/> Divorced |
| <input type="checkbox"/> Co-habiting | <input type="checkbox"/> Widowed |
| <input type="checkbox"/> Re-Married | |

1.5 What is your religion?

- | | |
|-------------------------------|---------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Jewish |
|-------------------------------|---------------------------------|

- Christian (inc. Church of England, Catholic, Protestant and all other Christian denominations)
 Muslim
- Buddhist
 Sikh
- Hindu
 Any other religion

Please write in.....

1.6 What is your ethnic group? (Choose ONE section from A to E then select the box to indicate your cultural background)

| | | | | |
|---|---|--|---|---|
| A <input type="checkbox"/> British <input type="checkbox"/> Irish <input type="checkbox"/> Cornish <input type="checkbox"/> Other | B <input type="checkbox"/> Caribbean <input type="checkbox"/> African <input type="checkbox"/> Asian <input type="checkbox"/> Other | C <input type="checkbox"/> Indian <input type="checkbox"/> Pakistani <input type="checkbox"/> Bangladeshi <input type="checkbox"/> Other | D <input type="checkbox"/> Caribbean <input type="checkbox"/> African <input type="checkbox"/> Other | E <input type="checkbox"/> Chinese <input type="checkbox"/> Other |
|---|---|--|---|---|

1.7 How is your health in general? Would you say it was....

- Very good
 Bad
- Good
 Very bad?
- Fair

1.8 Do you have any long-standing illness, disability or infirmity? Long-standing in this instance means anything that has troubled you over a period of time, or is likely to affect you over a period of time.

- Yes
 No

Section 2 - The next section is about your housing and work arrangements.

2.1 In which of these ways do you occupy your accommodation?

- Own it outright
 Rent it
- Buying it with the help of a mortgage or loan.
 Live here rent free, including relatives
- Pay part rent or part mortgage, shared ownership
 Squatting

2.2 Would you describe the state of repair of your home as good, adequate or poor?

- Good
 Poor
- Adequate

2.3 Last week, were you doing any work as an employee, or on a Government training scheme; or as self-employed or in your own/family business?

- Yes (go to Question 2.4)
 No (Go to Question 2.6)

2.4 IF YES - In your (main) job are you working...

- Full-time Part-time

2.5 IF YES - What is/was the business of your employer at the place where you work? For example, MAKING SHOES, REPAIRING CARS, SECONDARY EDUCATION.

2.6 IF NO – Last week, were you any of the following?

- Retired Permanently sick/disabled
 Student Providing unpaid care
 Looking after home/family None of the above

2.7 ALL – Please could you indicate which group best represents your income in the last 12 months. Please include income from earnings, self-employment, benefits, pensions and interest from savings.

- | | |
|--|--|
| <input type="checkbox"/> None/Under £2,500 | <input type="checkbox"/> £30,000 - £34,999 |
| <input type="checkbox"/> £2,500 - £4,999 | <input type="checkbox"/> £35,000 - £39,000 |
| <input type="checkbox"/> £5,000 - £9,999 | <input type="checkbox"/> £40,000 - £44,999 |
| <input type="checkbox"/> £10,000 - £14,999 | <input type="checkbox"/> £45,000 - £49,999 |
| <input type="checkbox"/> £15,000 - £19,999 | <input type="checkbox"/> £50,000 - £74,999 |
| <input type="checkbox"/> £20,000 - £24,999 | <input type="checkbox"/> £75,000 - £99,999 |
| <input type="checkbox"/> £25,000 - £29,999 | <input type="checkbox"/> £100,000 or more |

2.8 Please specify the **HIGHEST** qualification that you hold from the list below, or the nearest equivalent.

- | | |
|---|--|
| <input type="checkbox"/> 1+ O Level/CSE/GCSE (any grades) | <input type="checkbox"/> NVQ Level 1, Foundation GNVQ |
| <input type="checkbox"/> 5+ O Levels/CSE's(grade1), GCSE's (A- C), School certificate | <input type="checkbox"/> NVQ Level2, Intermediate GNVQ |
| <input type="checkbox"/> 1+ A Levels/AS Levels | <input type="checkbox"/> NVQ Level 3, Advanced GNVQ |
| <input type="checkbox"/> 2 + A Levels/AS Levels | <input type="checkbox"/> NVQ Level 4-5, HNC, HND |
| <input type="checkbox"/> First Degree (e.g. BA, BSc) | <input type="checkbox"/> Other Qualifications (City and guilds, RSA/OCR, BTEC) |
| <input type="checkbox"/> Higher Degree (e.g. MA, PhD, PGCE) | <input type="checkbox"/> No Qualifications |

Section 3 – The next section is about your living experience

3.1 Do you have regular access to a car?

- Yes No

3.2 How do you usually travel to work?

- | | |
|--|--|
| <input type="checkbox"/> Car/van/minibus/works van | <input type="checkbox"/> Railway train |
| <input type="checkbox"/> Motorbike/moped/scooter | <input type="checkbox"/> Underground train/light rail/tram |
| <input type="checkbox"/> Bicycle | <input type="checkbox"/> Walk |
| <input type="checkbox"/> Bus/coach/private bus | <input type="checkbox"/> Other way of travelling |
| <input type="checkbox"/> Taxi | |

3.3 Are there any of the following members of your family (other than those you live with) who you see or speak to every day or nearly every day? (Please tick ALL that apply)

- | | |
|--|--|
| <input type="checkbox"/> Mother/father (inc. step and adoptive) | <input type="checkbox"/> Niece/nephew (inc. step and adoptive) |
| <input type="checkbox"/> Sister/brother (inc. step and adoptive) | <input type="checkbox"/> Aunt/uncle (inc. step and adoptive) |
| <input type="checkbox"/> Daughter/son (inc. step and adoptive) | <input type="checkbox"/> Other relative |
| <input type="checkbox"/> Granddaughter/grandson (“) | <input type="checkbox"/> No contact daily/nearly daily |
| <input type="checkbox"/> Grandmother/grandfather (“) | <input type="checkbox"/> Never have contact with family |

3.4 How many friends do you have who you see or speak to every day or nearly every day? Friends can be from work, neighbours or anyone else you think of as a friend.

- | | |
|--|----------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> 6 – 10 |
| <input type="checkbox"/> One | <input type="checkbox"/> 10 – 15 |
| <input type="checkbox"/> Two | <input type="checkbox"/> 15 + |
| <input type="checkbox"/> Three to five | |

3.5 In the last 12 months have you been involved with any groups? Groups can be formally organized groups or just people who get together to do an activity or talk about things.

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

3.6 Which, if any, of the following have you done in the last three years? Please answer ALL statements.

| Activity | Yes | No |
|--|--------------------------|--------------------------|
| Presented my views to a local MP/Councilor | <input type="checkbox"/> | <input type="checkbox"/> |
| Voted in the last general election | <input type="checkbox"/> | <input type="checkbox"/> |
| Voted in the last local election | <input type="checkbox"/> | <input type="checkbox"/> |
| Stood for public office | <input type="checkbox"/> | <input type="checkbox"/> |
| Taken an active part in a political campaign | <input type="checkbox"/> | <input type="checkbox"/> |

3.7 Most of us are worry at some time or other about being a victim of crime; please indicate how worried you are about the following: Please answer ALL statements.

| | Very worried | Fairly worried | Not very worried | Not at all worried |
|--|--------------------------|--------------------------|--------------------------|---------------------------|
| Having your home broken into or something stolen | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Being mugged or robbed | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Being physically attacked because of your colour, ethnic origin or religion | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Having your vehicle stolen or things stolen from off of or out of your vehicle | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3.8 Have you ever been the victim of any crime, however minor, that was reported to the Police? *BCS04*

- Yes No

3.9 Is there anything else that you would like to add about your experience of living in Cornwall that you feel is important?

.....

3.10 Finally, could you please provide your postcode. This will NOT be used as an identifier or passed on to ANY other organisation.

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
|--|--|--|--|--|--|--|

An executive summary of the findings of the project will be available as an email once the research has been completed. If you would like to receive this information please provide an email address in the space below.

.....

Thank you very much for your time.

Please return your completed questionnaire using the Freepost envelope provided.

3.3 Variable identification matrix

| Themes | Sub-Theme |
|--------------------------------------|--|
| MATERIAL/ECONOMIC RESOURCES | Estimated total household income |
| | Components of household income |
| | Possession of necessities |
| | Home ownership |
| | Other assets and savings |
| | Debt |
| | Subjective Poverty |
| | Public services |
| | Utilities |
| | Transport |
| ACCESS TO PUBLIC AND PRIVATE SERVICE | Private services |
| | Access to financial services (includes access to a bank account) |
| | Institutionalisation/ separation from family |
| | Social support (affective and instrumental) |
| SOCIAL RESOURCES | Frequency and quality of contact with family members/friends/co-workers |
| | Paid work - employed, self-employed, unemployed, non-employed |
| | Providing unpaid care |
| ECONOMIC PARTICIPATION | Undertaking unpaid work |
| SOCIAL PARTICIPATION | Nature of working life (includes type of work undertaken, full-time/part-time status) |
| | Quality of working life (anti-social hours, nature of contract, leave entitlement, flexible working arrangements, workplace injuries) |
| | Participation in common social activities including performing social roles |
| | Basic skills (literacy, numeracy, English language competency) |
| | Educational attainment |
| CULTURE, EDUCATION, SKILLS | Access to education (includes school exclusion; but also access to lifelong learning for working age adults and older people) |
| | Cultural leisure activities |
| | Internet access |
| | Citizenship status |
| POLITICAL and CIVIC PARTICIPATION | Enfranchisement (includes voter registration, entitlement and turnout) |
| | Political participation |
| | Civic efficacy (e.g. feeling able to affect decisions) |
| | Civic participation and voluntary activity/membership (includes active membership of faith groups) |
| | Physical health and exercise |
| HEALTH AND WELLBEING | Mental health |
| | Disability |
| | Life satisfaction |
| | Personal development (including for children, but not only for them) |
| | Self-esteem/personal efficacy |
| | Vulnerability to stigma (incl. long-term receipt of means tested benefits) |
| | Self-harm and substance misuse (includes alcohol) |
| Housing Quality | |
| LIVING ENVIRONMENT | Homelessness |
| | Neighbourhood safety (includes traffic, atmospheric pollution, noise pollution) |
| | Neighbourhood satisfaction |
| | Access to open space |
| | Objective safety/victimisation (includes actual and risk of abuse within the home) |
| CRIME, HARM AND CRIMINALISATION | Subjective safety (includes perceptions of safety within home and outside) |
| | Exposure to bullying and harassment |
| | Discrimination |
| | Criminal record |
| | ASBO |
| | Imprisonment |

3.4 Interview schedule

Interview Schedule – Interviews 2010

Preamble: Thank you for agreeing to take part in this research project. I will first just say a small amount about the project itself and the information that I would like to discuss today. I will also outline the confidentiality of the data as well as the dissemination of results. If you are happy to continue after that I will continue to record the interview as we go.

This is a project that was designed at the University of Plymouth in conjunction with Cornwall Council. The main themes of the research are to examine the levels of Cornish people in the County as well as examine the levels of deprivation felt by them in areas of disadvantage. There have been a number of stages to the project, including secondary analysis and a large primary survey. However the data that we have got so far does not include personal opinions or other rich sources.

As such, we decided to talk to those that were best placed to give an opinion on the matters – those that spent a large period of their working time in the community working with groups in areas of deprivation.

Date of birth (year):

Gender:

Occupation:

Geographic region: Interviewed at

Interviewee's name:

Interview ID:

1. Could you describe your role, with relation to the work that you do in the community in Cornwall?
2. During this time in the community would you say that you come into contact with many individuals who experience social exclusion? By social exclusion I mean factors which detract from their lived experience so poverty, health issues, lower qualifications or job opportunities as well as property and social/family problems?

PROBE SOCIAL EXCLUSION - GIVE EXAMPLES PLEASE

3. Could you describe any particularly common problems that, in your experience, people in Cornwall suffer?
4. Would you say that these problems that you describe are common to groups of people rather than simply being along an individual basis?

GIVE EXAMPLES

5. Moving on, in your role do you come into contact with different ethnic groups in the region? If so are there any particular groups?

6. Ignoring for a moment the different arguments about what it means to be Cornish, would you say that the Cornish are a distinct group in the County?

7. If so are they a particularly common group? In other words, do you feel that there are a lot of Cornish people in Cornwall?

8. In terms of the disadvantage that we were discussing before, do you feel that the Cornish are suffering in the County?

GIVE EXAMPLES

9. What about in relation to other groups, particularly other ethnic groups?

10. Do you think that it is a popular belief that the Cornish are excluded in some way?

11. Do you think that this belief matches the reality that you have just outlined?

12. What other factors do you feel that are important in terms of the disadvantage that you observe in the region, what causes are there that we have not discussed already?

13. Do you feel that these are greater causes than belonging to any particular group?

14. Do you feel that there is enough done in the region to combat social exclusion, amongst any groups? How does the exclusion in the County affect those that you come into contact with directly?

15. What would you improve on, to improve the relative experience of many in the region?

16. Finally, is there anything else that you would like to add? Anything that you can think of that is relevant that I have not covered?

Thank you very much for agreeing to talk to me, the data that is collected at this stage will have a direct impact on the results of the project as a whole and will feed in to the policy recommendations that we will be making at the end stage.

The email that I contacted you initially, is this the best way to contact you? If so, I will be sending a short summary of findings once the project has completed.

Appendix 4

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4.1 Application of derived weights to the 2001 Census returns; 'Cornish' subset of ethnicity variable

| ALL | All | Census | | Method 1 | | Method 2 | | Method 3 | |
|---|---------------|---|---|---|---|---|---|---|---|
| | | Number of people who identified themselves as Cornish | Percentage of people who identified themselves as Cornish | Number of people who identified themselves as Cornish | Percentage of people who identified themselves as Cornish | Number of people who identified themselves as Cornish | Percentage of people who identified themselves as Cornish | Number of people who identified themselves as Cornish | Percentage of people who identified themselves as Cornish |
| Cornwall and the Isles of Scilly | 501267 | 33,932 | 6.77 | 143,513 | 28.63 | 146,019 | 29.13 | 154,791 | 30.88 |
| Caradon | 79649 | 4439 | 5.57 | 22,804 | 28.63 | 23,202 | 29.13 | 24,596 | 30.88 |
| Carrick | 87865 | 5784 | 6.58 | 25,156 | 28.63 | 25,595 | 29.13 | 27,133 | 30.88 |
| Kerrier | 92517 | 6965 | 7.53 | 26,488 | 28.63 | 26,950 | 29.13 | 28,569 | 30.88 |
| North Cornwall | 80509 | 4851 | 6.03 | 23,050 | 28.63 | 23,452 | 29.13 | 24,861 | 30.88 |
| Penwith | 63012 | 5810 | 9.22 | 18,040 | 28.63 | 18,355 | 29.13 | 19,458 | 30.88 |
| Restormel | 95562 | 6047 | 6.33 | 27,359 | 28.63 | 27,837 | 29.13 | 29,510 | 30.88 |
| Isles of Scilly | 2153 | 36 | 1.67 | 616 | 28.63 | 627 | 29.13 | 665 | 30.88 |
| 16-64 | | | | | | | | | |
| Cornwall and the Isles of Scilly | 307936 | 21,416 | 6.95 | 88,162 | 28.63 | 89,702 | 29.13 | 95,091 | 30.88 |
| Caradon | 49691 | 2857 | 5.75 | 14,227 | 28.63 | 14,475 | 29.13 | 15,345 | 30.88 |
| Carrick | 53486 | 3651 | 6.83 | 15,313 | 28.63 | 15,580 | 29.13 | 16,516 | 30.88 |
| Kerrier | 57340 | 4466 | 7.79 | 16,416 | 28.63 | 16,703 | 29.13 | 17,707 | 30.88 |
| North Cornwall | 48684 | 3082 | 6.33 | 13,938 | 28.63 | 14,182 | 29.13 | 15,034 | 30.88 |
| Penwith and IOS | 39738 | 3581 | 9.01 | 11,377 | 28.63 | 11,576 | 29.13 | 12,271 | 30.88 |
| Restormel | 58997 | 3779 | 6.41 | 16,891 | 28.63 | 17,186 | 29.13 | 18,218 | 30.88 |

4.2 Whole county - total population/un-weighted vs. weighted data

| | Actual Cornish | | Estimated Cornish | | | Actual All | | Actual All | |
|--|---|------------|----------------------------------|----------------------------------|----------------------------------|------------------------------------|------------|-------------------|------------|
| | Cornwall and the Isles of Scilly | Percentage | Weighted number (method 1) | Weighted number (method 2) | Weighted number (method 3) | Cornwall (all eths) numbers. | Percentage | England | Percentage |
| ALL PEOPLE | 33,932 | N/A | 143,513 | 146,019 | 154,791 | 501,269 | N/A | 49,138,831 | N/A |
| Male | 17,227 | 50.77% | 72,860 | 74,133 | 78,586 | 242,486 | 48.37% | 23,922,144 | 48.68% |
| Female | 16,705 | 49.23% | 70,653 | 71,886 | 76,205 | 258,783 | 51.63% | 25,216,687 | 51.32% |
| RESIDENT TYPE | | | | | | | | | |
| Person in Household | 33,750 | 99.46% | 142,743 | 145,236 | 153,961 | 492,852 | 98.32% | 48,248,150 | 98.19% |
| USUAL ADDRESS ONE YEAR AGO | | | | | | | | | |
| Lived at same address one year ago | 31,425 | 92.61% | 132,910 | 135,231 | 143,355 | 433,136 | 86.41% | 42,643,599 | 86.78% |
| AGE | | | | | | | | | |
| 0 to 15 | 5,275 | 15.55% | 22,310 | 22,700 | 24,063 | 92,605 | 18.47% | 9,901,581 | 20.15% |
| 16 to 29 | 4,162 | 12.27% | 17,603 | 17,910 | 18,986 | 70,172 | 14.00% | 8,630,216 | 17.56% |
| 30 to 49 | 8,394 | 24.74% | 35,502 | 36,122 | 38,292 | 130,846 | 26.10% | 14,239,076 | 28.98% |
| 50 to 64 | 8,860 | 26.11% | 37,473 | 38,127 | 40,418 | 106,918 | 21.33% | 8,559,958 | 17.42% |
| 65 to 74 | 4,302 | 12.68% | 18,195 | 18,513 | 19,625 | 51,771 | 10.33% | 4,102,841 | 8.35% |
| 75 and over | 2,939 | 8.66% | 12,430 | 12,647 | 13,407 | 48,957 | 9.77% | 3,705,159 | 7.54% |
| COUNTRY OF BIRTH | | | | | | | | | |
| Born in England | 33,460 | 98.61% | 141,517 | 143,988 | 152,638 | 468,051 | 93.37% | 42,968,596 | 87.44% |
| RELIGION | | | | | | | | | |
| Christian | 26,437 | 77.91% | 111,813 | 113,766 | 120,600 | 372,540 | 74.32% | 35,251,244 | 71.74% |
| No religion | 4,566 | 13.46% | 19,312 | 19,649 | 20,829 | 83,694 | 16.70% | 7,171,332 | 14.59% |
| Religion not stated | 2,527 | 7.45% | 10,688 | 10,874 | 11,528 | 40,316 | 8.04% | 3,776,515 | 7.69% |
| LIMITING LONG-TERM ILLNESS | | | | | | | | | |
| Has a limiting long-term illness | 7,936 | 23.39% | 33,565 | 34,151 | 36,202 | 100,850 | 20.12% | 8,369,174 | 17.03% |
| GENERAL HEALTH | | | | | | | | | |
| Good | 21,151 | 62.33% | 89,457 | 91,019 | 96,487 | 326,439 | 65.12% | 33,322,634 | 67.81% |
| Fairly Good | 8,973 | 26.44% | 37,951 | 38,613 | 40,933 | 117,506 | 23.44% | 10,675,657 | 21.73% |
| PROVISION OF UNPAID CARE | | | | | | | | | |
| 1 or more hours per week | 5,227 | 15.40% | 22,107 | 22,493 | 23,845 | 55,568 | 11.09% | 4,854,731 | 9.88% |
| ACCOMMODATION TYPE | | | | | | | | | |
| Detached | 14,039 | 41.37% | 59,377 | 60,414 | 64,043 | 199,102 | 39.72% | 12,035,934 | 24.49% |
| Semi-detached | 8,963 | 26.41% | 37,908 | 38,570 | 40,887 | 131,985 | 26.33% | 16,658,414 | 33.90% |
| Terraced | 8,453 | 24.91% | 35,751 | 36,376 | 38,561 | 117,019 | 23.34% | 12,897,630 | 26.25% |
| Flat, maisonette or apartment | 1,752 | 5.16% | 7,410 | 7,539 | 7,992 | 31,540 | 6.29% | 5,968,097 | 12.15% |
| TENURE | | | | | | | | | |
| Owned: Owns outright | 13,357 | 39.36% | 56,492 | 57,479 | 60,932 | 158,926 | 31.70% | 11,795,960 | 24.01% |
| Owned: Buying with a mortgage or loan | 12,729 | 37.51% | 53,836 | 54,776 | 58,067 | 204,629 | 40.82% | 22,566,967 | 45.92% |
| Social rented | 3,891 | 11.47% | 16,457 | 16,744 | 17,750 | 58,853 | 11.74% | 8,648,718 | 17.60% |
| Private rented | 3,182 | 9.38% | 13,458 | 13,693 | 14,516 | 61,270 | 12.22% | 4,419,320 | 8.99% |
| CAR OR VAN AVAILABILITY | | | | | | | | | |
| None | 4,279 | 12.61% | 18,098 | 18,414 | 19,520 | 66,168 | 13.20% | 9,938,541 | 20.23% |
| One | 15,082 | 44.45% | 63,788 | 64,902 | 68,801 | 225,708 | 45.03% | 20,241,494 | 41.19% |
| Two | 14,389 | 42.41% | 60,857 | 61,920 | 65,640 | 198,959 | 39.69% | 18,608,115 | 37.87% |
| HOUSEHOLD COMPOSITION | | | | | | | | | |
| One Person Household - Pensioner | 2,517 | 7.42% | 10,645 | 10,831 | 11,482 | 35,221 | 7.03% | 2,939,465 | 5.98% |
| One Person Household - Other | 2,011 | 5.93% | 8,505 | 8,654 | 9,174 | 29,311 | 5.85% | 3,210,799 | 6.53% |
| Data collected from ONS Standard Tables in Feb 2010 unless stated otherwise. | | | | | | | | | |

4.3 Whole County - working age population/un-weighted vs. weighted data

| 16-64 Age | Actual Cornish | | Estimated Cornish | | | Actual All | | Actual All | |
|--|----------------------------------|---------------|----------------------------|----------------------------|----------------------------|------------------------------|---------------|-------------------|---------------|
| | Cornwall and the Isles of Scilly | Percentage | Weighted number (method 1) | Weighted number (method 2) | Weighted number (method 3) | Cornwall (all eths) numbers. | Percentage | England | Percentage |
| ALL PEOPLE | 21,416 | N/A | 88,162 | 89,702 | 95,091 | 307,936 | N/A | 31,429,250 | N/A |
| Male | 11,199 | 52.29% | 46,102 | 46,908 | 49,726 | 151,767 | 49.29% | 15,568,527 | 49.54% |
| Female | 10,217 | 47.71% | 42,060 | 42,794 | 45,365 | 156,169 | 50.71% | 15,860,723 | 50.46% |
| USUAL ADDRESS ONE YEAR AGO | | | | | | | | | |
| Lived at same address one year ago | 19,567 | 91.37% | 80,550 | 81,957 | 86,881 | 263,850 | 85.68% | 26,911,432 | 85.63% |
| ECONOMIC ACTIVITY | | | | | | | | | |
| Economically active | 15,615 | 72.91% | 64,281 | 65,404 | 69,333 | 222,435 | 72.23% | 23,415,009 | 74.50% |
| Employee: full-time | 7,925 | 37.01% | 32,624 | 33,194 | 35,188 | 116,469 | 37.82% | 14,571,176 | 46.36% |
| Employee: part-time | 3,619 | 16.90% | 14,898 | 15,158 | 16,069 | 51,475 | 16.72% | 4,698,299 | 14.95% |
| Self-employed | 3,358 | 15.68% | 13,824 | 14,065 | 14,910 | 41,887 | 13.60% | 2,840,986 | 9.04% |
| Unemployed | 713 | 3.33% | 2,935 | 2,986 | 3,166 | 12,604 | 4.09% | 1,304,548 | 4.15% |
| Economically inactive | 5,801 | 27.09% | 23,881 | 24,298 | 25,758 | 85,689 | 27.83% | 8,034,278 | 25.56% |
| Retired | 1,607 | 7.50% | 6,615 | 6,731 | 7,135 | 20,090 | 6.52% | 1,409,765 | 4.49% |
| Other | 4,194 | 19.58% | 17,265 | 17,567 | 18,622 | 65,599 | 21.30% | 6,624,513 | 21.08% |
| AVERAGE HOURS WORKED | | | | | | | | | |
| Average weekly hours worked: Males | 43 | N/A | N/A | N/A | N/A | 42 | N/A | 42 | N/A |
| Average weekly hours worked: Female | 30 | N/A | N/A | N/A | N/A | 30 | N/A | 31 | N/A |
| OCCUPATION | | | | | | | | | |
| 1/2. Managers and senior officials and professional occupations | 3,636 | 16.98% | 14,968 | 15,230 | 16,145 | 45,549 | 14.79% | 5,843,392 | 18.59% |
| 5 Skilled Trades Occupations | 3,703 | 17.29% | 15,244 | 15,510 | 16,442 | 35,542 | 11.54% | 2,543,612 | 8.09% |
| 9 Elementary Occupations | 3,298 | 15.40% | 13,577 | 13,814 | 14,644 | 29,358 | 9.53% | 2,589,233 | 8.24% |
| HIGHEST LEVEL OF QUALIFICATION | | | | | | | | | |
| No qualifications | 5,645 | 26.36% | 23,238 | 23,644 | 25,065 | 73,547 | 23.88% | 7,655,147 | 24.36% |
| Level 3/4/5 | 4,666 | 21.79% | 19,208 | 19,544 | 20,718 | 75,081 | 24.38% | 9,427,360 | 30.00% |
| INDUSTRY | | | | | | | | | |
| D Manufacturing | 1,987 | 9.28% | 8,180 | 8,323 | 8,823 | 23,451 | 7.62% | 3,284,625 | 10.45% |
| G Wholesale and Retail trade; Repair of Motor Vehicles | 3,799 | 17.74% | 15,639 | 15,912 | 16,868 | 38,010 | 12.34% | 3,715,782 | 11.82% |
| H Hotels and Restaurants | 1,582 | 7.39% | 6,513 | 6,626 | 7,024 | 18,225 | 5.92% | 1,044,151 | 3.32% |
| L/M/N: Public Administration & Defence; Social security (L); Education (M); Health and Social Work (N) | 4,935 | 23.04% | 20,316 | 20,670 | 21,912 | 55,859 | 18.14% | 5,334,664 | 16.97% |
| METHOD OF TRAVEL TO WORK | | | | | | | | | |
| Work mainly at or from home | 2,255 | 10.53% | 9,283 | 9,445 | 10,013 | 27,974 | 9.08% | 1,959,427 | 6.23% |
| Driving a car or van | 8,518 | 39.77% | 35,066 | 35,678 | 37,821 | 123,078 | 39.97% | 12,176,189 | 38.74% |
| MARITAL STATUS | | | | | | | | | |
| Single (never married) | 6,201 | 28.95% | 25,527 | 25,973 | 27,534 | 91,861 | 29.83% | 11,325,451 | 36.03% |
| LIMITING LONG-TERM ILLNESS | | | | | | | | | |
| Has a limiting long-term illness | 4,039 | 18.86% | 16,627 | 16,918 | 17,934 | 49,694 | 16.14% | 4,289,853 | 13.65% |
| GENERAL HEALTH | | | | | | | | | |
| Good | 13,868 | 64.76% | 57,090 | 58,087 | 61,576 | 207,242 | 67.30% | 21,704,214 | 69.06% |
| Fairly Good | 5,362 | 25.04% | 22,073 | 22,459 | 23,808 | 70,295 | 22.83% | 6,774,286 | 21.55% |
| Data collected from the Standard Tables (ONS) in Feb 2010, unless otherwise stated. | | | | | | | | | |
| N/K - Not known. Largely because the standard tables do not include information to this level. For the breakdowns required it was not considered necessary to commission whole tables for this | | | | | | | | | |

4.4 Whole County analysis – total population un-weighted data

| | <i>Actual Cornish</i> | | <i>Actual Non-Cornish</i> | | | |
|---|---|------------|-------------------------------|------------|--------|------------|
| | Cornwall and the Isles of Scilly | Percentage | Non-Cornish | Percentage | x2 | Sig < 0.05 |
| ALL PEOPLE | 33,932 | N/A | 467,337 | N/A | | |
| Male | 17,227 | 50.77% | 225,259 | 48.20% | | |
| Female | 16,705 | 49.23% | 242,078 | 51.80% | 83.58 | Y |
| RESIDENT TYPE | | | | | | |
| Person in Household | 33,750 | 99.46% | 459,102 | 98.24% | | |
| USUAL ADDRESS ONE YEAR AGO | | | | | | |
| Lived at same address one year ago | 31,425 | 92.61% | 401,711 | 85.96% | | |
| AGE | | | | | | |
| 0 to 15 | 5,275 | 15.55% | 87,330 | 18.69% | | |
| 16 to 29 | 4,162 | 12.27% | 66,010 | 14.12% | | |
| 30 to 49 | 8,394 | 24.74% | 122,452 | 26.20% | | |
| 50 to 64 | 8,860 | 26.11% | 98,058 | 20.98% | | |
| 65 to 74 | 4,302 | 12.68% | 47,469 | 10.16% | | |
| 75 and over | 2,939 | 8.66% | 46,018 | 9.85% | 903.33 | Y |
| COUNTRY OF BIRTH | | | | | | |
| Born in England | 33,460 | 98.61% | 434,591 | 92.99% | | |
| RELIGION | | | | | | |
| Christian | 26,437 | 77.91% | 346,103 | 74.06% | | |
| No religion | 4,566 | 13.46% | 79,128 | 16.93% | | |
| Religion not stated | 2,527 | 7.45% | 37,789 | 8.09% | 308.58 | Y |
| LIMITING LONG-TERM ILLNESS | | | | | | |
| Has a limiting long-term illness | 7,936 | 23.39% | 92,914 | 19.88% | | |
| GENERAL HEALTH | | | | | | |
| Good | 21,151 | 62.33% | 305,288 | 65.33% | | |
| Fairly Good | 8,973 | 26.44% | 108,533 | 23.22% | 182.83 | Y |
| PROVISION OF UNPAID CARE | | | | | | |
| 1 or more hours per week | 5,227 | 15.40% | 50,341 | 10.77% | | |
| ACCOMMODATION TYPE | | | | | | |
| Detached | 14,039 | 41.37% | 185,063 | 39.60% | | |
| Semi-detached | 8,963 | 26.41% | 123,022 | 26.32% | | |
| Terraced | 8,453 | 24.91% | 108,566 | 23.23% | | |
| Flat, maisonette or apartment | 1,752 | 5.16% | 29,788 | 6.37% | 116.68 | Y |
| TENURE | | | | | | |
| Owned: Owns outright | 13,357 | 39.36% | 145,569 | 31.15% | | |
| Owned: Buying with a mortgage or loan | 12,729 | 37.51% | 191,900 | 41.06% | | |
| Social rented | 3,891 | 11.47% | 54,962 | 11.76% | | |
| Private rented | 3,182 | 9.38% | 58,088 | 12.43% | 996.96 | Y |
| CAR OR VAN AVAILABILITY | | | | | | |
| None | 4,279 | 12.61% | 61,889 | 13.24% | | |
| One | 15,082 | 44.45% | 210,626 | 45.07% | | |
| Two | 14,389 | 42.41% | 184,570 | 39.49% | 69.96 | Y |
| HOUSEHOLD COMPOSITION | | | | | | |
| One Person Household - Pensioner | 2,517 | 7.42% | 32,704 | 7.00% | | |
| One Person Household - Other | 2,011 | 5.93% | 27,300 | 5.84% | 1.99 | N |
| Data collected from ONS Standard Tables in Feb 2010 unless stated otherwise. | | | | | | |

4.5 Whole county analysis – total population, method 3 weighted data

| | Weighted number (method 3) | Percentage | Non-Cornish | Percentage | x2 | Sig < 0.05 |
|---|----------------------------|------------|----------------|------------|---------|------------|
| ALL PEOPLE | 154,791 | N/A | 346,478 | N/A | | |
| Male | 78,586 | 50.77% | 163,900 | 47.30% | | |
| Female | 76,205 | 49.23% | 182,578 | 52.70% | 514.23 | Y |
| RESIDENT TYPE | | | | | | |
| Person in Household | 153,961 | 99.46% | 338,891 | 97.81% | | |
| USUAL ADDRESS ONE YEAR AGO | | | | | | |
| Lived at same address one year ago | 143,355 | 92.61% | 289,781 | 83.64% | | |
| AGE | | | | | | |
| 0 to 15 | 24,063 | 15.55% | 68,542 | 19.78% | | |
| 16 to 29 | 18,986 | 12.27% | 51,186 | 14.77% | | |
| 30 to 49 | 38,292 | 24.74% | 92,554 | 26.71% | | |
| 50 to 64 | 40,418 | 26.11% | 66,500 | 19.19% | | |
| 65 to 74 | 19,625 | 12.68% | 32,146 | 9.28% | | |
| 75 and over | 13,407 | 8.66% | 35,550 | 10.26% | 5558.96 | Y |
| COUNTRY OF BIRTH | | | | | | |
| Born in England | 152,638 | 98.61% | 315,413 | 91.03% | | |
| RELIGION | | | | | | |
| Christian | 120,600 | 77.91% | 251,940 | 72.71% | | |
| No religion | 20,829 | 13.46% | 62,865 | 18.14% | | |
| Religion not stated | 11,528 | 7.45% | 28,788 | 8.31% | 1896.95 | Y |
| LIMITING LONG-TERM ILLNESS | | | | | | |
| Has a limiting long-term illness | 36,202 | 23.39% | 64,648 | 18.66% | | |
| GENERAL HEALTH | | | | | | |
| Good | 96,487 | 62.33% | 229,952 | 66.37% | | |
| Fairly Good | 40,933 | 26.44% | 76,573 | 22.10% | 1125.93 | Y |
| PROVISION OF UNPAID CARE | | | | | | |
| 1 or more hours per week | 23,845 | 15.40% | 31,723 | 9.16% | | |
| ACCOMMODATION TYPE | | | | | | |
| Detached | 64,043 | 41.37% | 135,059 | 38.98% | | |
| Semi-detached | 40,887 | 26.41% | 91,098 | 26.29% | | |
| Terraced | 38,561 | 24.91% | 78,458 | 22.64% | | |
| Flat, maisonette or apartment | 7,992 | 5.16% | 23,548 | 6.80% | 724.28 | Y |
| TENURE | | | | | | |
| Owned: Owns outright | 60,932 | 39.36% | 97,994 | 28.28% | | |
| Owned: Buying with a mortgage or loan | 58,067 | 37.51% | 146,562 | 42.30% | | |
| Social rented | 17,750 | 11.47% | 41,103 | 11.86% | | |
| Private rented | 14,516 | 9.38% | 46,754 | 13.49% | 6163.63 | Y |
| CAR OR VAN AVAILABILITY | | | | | | |
| None | 19,520 | 12.61% | 46,648 | 13.46% | | |
| One | 68,801 | 44.45% | 156,907 | 45.29% | | |
| Two | 65,640 | 42.41% | 133,319 | 38.48% | 433.08 | Y |
| HOUSEHOLD COMPOSITION | | | | | | |
| One Person Household - Pensioner | 11,482 | 7.42% | 23,739 | 6.85% | | |
| One Person Household - Other | 9,174 | 5.93% | 20,137 | 5.81% | 12.44 | Y |
| Data collected from ONS Standard Tables in Feb 2010 unless stated otherwise. | | | | | | |

4.6 Whole county analysis – 16-64 population un-weighted data

| 16-64 Age | Cornwall and the Isles of Scilly | Percentage | Non-Cornish | Percentage | x2 | Sig < 0.05 |
|--|----------------------------------|---------------|----------------|---------------|--------|------------|
| ALL PEOPLE | 21,416 | N/A | 286,520 | N/A | | |
| Male | 11,199 | 52.29% | 140,568 | 49.06% | | |
| Female | 10,217 | 47.71% | 145,952 | 50.94% | 83.28 | Y |
| USUAL ADDRESS ONE YEAR AGO | | | | | | |
| Lived at same address one year ago | 19,567 | 91.37% | 244,283 | 85.26% | N/A | N/A |
| ECONOMIC ACTIVITY | | | | | | |
| Economically active | 15,615 | 72.91% | 206,820 | 72.18% | | |
| Employee: full-time | 7,925 | 37.01% | 108,544 | 37.88% | | |
| Employee: part-time | 3,619 | 16.90% | 47,856 | 16.70% | | |
| Self-employed | 3,358 | 15.68% | 38,529 | 13.45% | | |
| Unemployed | 713 | 3.33% | 11,891 | 4.15% | | |
| Economically inactive | 5,801 | 27.09% | 79,888 | 27.88% | | |
| Retired | 1,607 | 7.50% | 18,483 | 6.45% | | |
| Other | 4,194 | 19.58% | 61,405 | 21.43% | 5.98 | Y |
| AVERAGE HOURS WORKED | | | | | | |
| Average weekly hours worked: Males | 43 | N/A | N/A | N/A | | |
| Average weekly hours worked: Female | 30 | N/A | N/A | N/A | | |
| OCCUPATION | | | | | | |
| 1/2. Managers and senior officials and professional occupations | 3,636 | 16.98% | 41,913 | 14.63% | | |
| 5 Skilled Trades Occupations | 3,703 | 17.29% | 31,839 | 11.11% | | |
| 9 Elementary Occupations | 3,298 | 15.40% | 26,060 | 9.10% | 254.19 | Y |
| HIGHEST LEVEL OF QUALIFICATION | | | | | | |
| No qualifications | 5,645 | 26.36% | 67,902 | 23.70% | | |
| Level 3/4/5 | 4,666 | 21.79% | 70,415 | 24.58% | 122.79 | Y |
| INDUSTRY | | | | | | |
| D Manufacturing | 1,987 | 9.28% | 21,464 | 7.49% | | |
| G Wholesale and Retail trade; Repair of Motor Vehicles | 3,799 | 17.74% | 34,211 | 11.94% | | |
| H Hotels and Restaurants | 1,582 | 7.39% | 16,643 | 5.81% | | |
| L/M/N: Public Administration & Defence; Social security (L); Education (M); Health and Social Work (N) | 4,935 | 23.04% | 50,924 | 17.77% | 56.61 | Y |
| METHOD OF TRAVEL TO WORK | | | | | | |
| Work mainly at or from home | 2,255 | 10.53% | 25,719 | 8.98% | | |
| Driving a car or van | 8,518 | 39.77% | 114,560 | 39.98% | 44.74 | Y |
| MARITAL STATUS | | | | | | |
| Single (never married) | 6,201 | 28.95% | 85,660 | 29.90% | | |
| LIMITING LONG-TERM ILLNESS | | | | | | |
| Has a limiting long-term illness | 4,039 | 18.86% | 45,655 | 15.93% | | |
| GENERAL HEALTH | | | | | | |
| Good | 13,868 | 64.76% | 193,374 | 67.49% | | |
| Fairly Good | 5,362 | 25.04% | 64,933 | 22.66% | 71.33 | Y |
| Data collected from the Standard Tables (ONS) in Feb 2010, unless otherwise stated. | | | | | | |

4.7 Whole county analysis – 16-64 population, method 3 weighted data

| 16-64 Age | Weighted number (method 3) | Percentage | Non-Cornish | Percentage | x2 | Sig < 0.05 |
|--|----------------------------|---------------|----------------|---------------|---------|------------|
| ALL PEOPLE | 95,091 | N/A | 212,845 | N/A | | |
| Male | 49,726 | 52.29% | 102,041 | 47.94% | | |
| Female | 45,365 | 47.71% | 110,804 | 52.06% | 497.56 | Y |
| USUAL ADDRESS ONE YEAR AGO | | | | | | |
| Lived at same address one year ago | 86,881 | 91.37% | 176,969 | 83.14% | | |
| ECONOMIC ACTIVITY | | | | | | |
| Economically active | 69,333 | 72.91% | 153,102 | 71.93% | | |
| Employee: full-time | 35,188 | 37.01% | 81,281 | 38.19% | | |
| Employee: part-time | 16,069 | 16.90% | 35,406 | 16.63% | | |
| Self-employed | 14,910 | 15.68% | 26,977 | 12.67% | | |
| Unemployed | 3,166 | 3.33% | 9,438 | 4.43% | | |
| Economically inactive | 25,758 | 27.09% | 59,931 | 28.16% | | |
| Retired | 7,135 | 7.50% | 12,955 | 6.09% | | |
| Other | 18,622 | 19.58% | 46,977 | 22.07% | 45.8 | Y |
| AVERAGE HOURS WORKED | | | | | | |
| Average weekly hours worked: Males | N/A | N/A | N/A | N/A | | |
| Average weekly hours worked: Female | N/A | N/A | N/A | N/A | | |
| OCCUPATION | | | | | | |
| 1/2. Managers and senior officials and professional occupations | 16,145 | 16.98% | 29,404 | 13.81% | | |
| 5 Skilled Trades Occupations | 16,442 | 17.29% | 19,100 | 8.97% | | |
| 9 Elementary Occupations | 14,644 | 15.40% | 14,714 | 6.91% | 1781.83 | Y |
| HIGHEST LEVEL OF QUALIFICATION | | | | | | |
| No qualifications | 25,065 | 26.36% | 48,482 | 22.78% | | |
| Level 3/4/5 | 20,718 | 21.79% | 54,363 | 25.54% | 733.28 | Y |
| INDUSTRY | | | | | | |
| D Manufacturing | 8,823 | 9.28% | 14,628 | 6.87% | | |
| G Wholesale and Retail trade; Repair of Motor Vehicles | 16,868 | 17.74% | 21,142 | 9.93% | | |
| H Hotels and Restaurants | 7,024 | 7.39% | 11,201 | 5.26% | | |
| L/M/N: Public Administration & Defence; Social security (L); Education (M); Health and Social Work (N) | 21,912 | 23.04% | 33,947 | 15.95% | 382.71 | Y |
| METHOD OF TRAVEL TO WORK | | | | | | |
| Work mainly at or from home | 10,013 | 10.53% | 17,961 | 8.44% | | |
| Driving a car or van | 37,821 | 39.77% | 85,257 | 40.06% | 270.19 | Y |
| MARITAL STATUS | | | | | | |
| Single (never married) | 27,534 | 28.95% | 64,327 | 30.22% | | |
| LIMITING LONG-TERM ILLNESS | | | | | | |
| Has a limiting long-term illness | 17,934 | 18.86% | 31,760 | 14.92% | | |
| GENERAL HEALTH | | | | | | |
| Good | 61,576 | 64.76% | 145,666 | 68.44% | | |
| Fairly Good | 23,808 | 25.04% | 46,487 | 21.84% | 425.77 | Y |
| Data collected from the Standard Tables (ONS) in Feb 2010, unless otherwise stated. | | | | | | |

4.8 Cornwall district breakdown – total population/original (un-weighted) data

| | Penwith and IOS | | | | Caradon | | | | Carrick | | | | Kerrier | | | | North Cornwall | | | | Restormel | | | |
|--|-----------------|--------|-----------------|--------|---------------|--------|-----------------|--------|---------------|--------|-----------------|--------|---------------|--------|-----------------|--------|----------------|--------|-----------------|--------|---------------|--------|-----------------|--------|
| | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % |
| ALL PEOPLE | 5,846 | | 59,316 | | 4,439 | | 75,229 | | 5,784 | | 82,063 | | 6,965 | | 85,570 | | 4,851 | | 75,562 | | 6,047 | | 89,504 | |
| Male | 2,916 | 49.88% | 28,353 | 47.80% | 2,257 | 50.84% | 36,326 | 48.29% | 2,891 | 49.98% | 39,011 | 47.54% | 3,564 | 51.17% | 41,529 | 48.53% | 2,507 | 51.68% | 36,559 | 48.38% | 3,092 | 51.13% | 43,488 | 48.59% |
| Female | 2,930 | 50.12% | 30,963 | 52.20% | 2,182 | 49.16% | 38,903 | 51.71% | 2,893 | 50.02% | 43,052 | 52.46% | 3,401 | 48.83% | 44,041 | 51.47% | 2,344 | 48.32% | 39,113 | 51.76% | 2,955 | 48.87% | 46,016 | 51.41% |
| x2 and Sig | 9.23 | | <0.05 | | 10.98 | | <0.05 | | 12.95 | | <0.05 | | 17.93 | | <0.05 | | 20.70 | | <0.05 | | 14.68 | | <0.05 | |
| RELIGION | | | | | | | | | | | | | | | | | | | | | | | | |
| Christian | 4,537 | 77.61% | 42,529 | 71.70% | 3,501 | 78.87% | 56,607 | 75.25% | 4,414 | 76.31% | 60,290 | 73.47% | 5,402 | 77.56% | 62,728 | 73.31% | 3,834 | 79.04% | 56,858 | 75.25% | 4,749 | 78.53% | 67,091 | 74.96% |
| No religion | 823 | 14.08% | 11,074 | 18.67% | 549 | 12.37% | 12,343 | 16.41% | 831 | 14.37% | 14,070 | 17.15% | 962 | 13.81% | 15,157 | 17.71% | 611 | 12.60% | 11,964 | 15.83% | 790 | 13.06% | 14,521 | 16.22% |
| Religion not stated | 405 | 6.93% | 4,961 | 8.36% | 338 | 7.61% | 5,655 | 7.52% | 460 | 7.95% | 6,827 | 8.32% | 522 | 7.49% | 6,993 | 8.17% | 355 | 7.32% | 6,226 | 8.24% | 447 | 7.39% | 7,127 | 7.96% |
| x2 and Sig | 64.13 | | <0.05 | | 49.70 | | <0.05 | | 31.43 | | <0.05 | | 75.88 | | <0.05 | | 44.04 | | <0.05 | | 47.30 | | <0.05 | |
| GENERAL HEALTH | | | | | | | | | | | | | | | | | | | | | | | | |
| Good | 3,608 | 61.72% | 37,642 | 63.46% | 2,816 | 63.44% | 49,781 | 66.17% | 3,632 | 62.79% | 54,140 | 65.97% | 4,221 | 60.60% | 55,594 | 64.97% | 3,104 | 63.99% | 49,424 | 65.41% | 3,770 | 62.34% | 58,381 | 65.23% |
| Fairly Good | 1,539 | 26.33% | 14,037 | 23.66% | 1,174 | 26.45% | 17,097 | 22.73% | 1,489 | 25.74% | 19,004 | 23.16% | 1,837 | 26.37% | 19,769 | 23.10% | 1,268 | 26.14% | 17,878 | 23.66% | 1,666 | 27.55% | 20,743 | 23.18% |
| x2 and Sig | 17.65 | | <0.05 | | 29.31 | | <0.05 | | 23.72 | | <0.05 | | 48.16 | | <0.05 | | 12.47 | | <0.05 | | 51.29 | | <0.05 | |
| ACCOMMODATION TYPE | | | | | | | | | | | | | | | | | | | | | | | | |
| Detached | 1,966 | 33.63% | 19,000 | 32.03% | 1,862 | 41.95% | 29,838 | 39.66% | 2,278 | 39.38% | 30,892 | 37.64% | 2,892 | 41.52% | 34,189 | 39.95% | 2,391 | 49.29% | 35,941 | 47.56% | 2,650 | 43.82% | 35,203 | 39.33% |
| Semi-detached | 1,328 | 22.72% | 13,053 | 22.01% | 1,198 | 26.99% | 20,393 | 27.11% | 1,689 | 29.20% | 22,154 | 27.00% | 1,705 | 24.48% | 21,594 | 25.24% | 1,188 | 24.49% | 19,259 | 25.49% | 1,855 | 30.68% | 26,570 | 29.69% |
| Terraced | 2,075 | 35.49% | 19,444 | 32.78% | 1,077 | 24.26% | 18,395 | 24.45% | 1,370 | 23.69% | 18,876 | 23.00% | 1,929 | 27.70% | 22,366 | 26.14% | 860 | 17.73% | 12,748 | 16.87% | 1,142 | 18.89% | 16,738 | 18.70% |
| Flat, maisonette or apartment | 376 | 6.43% | 5,070 | 8.55% | 223 | 5.02% | 3,874 | 5.15% | 351 | 6.07% | 6,844 | 8.34% | 278 | 3.99% | 3,815 | 4.46% | 261 | 5.38% | 4,277 | 5.66% | 263 | 4.35% | 5,906 | 6.60% |
| x2 and Sig | 40.11 | | <0.05 | | 4.15 | | 0.25 | | 45.06 | | <0.05 | | 11.91 | | <0.05 | | 6.35 | | 0.09 | | 66.13 | | <0.05 | |
| TENURE | | | | | | | | | | | | | | | | | | | | | | | | |
| Owned: Owns outright | 2,228 | 38.11% | 18,662 | 31.46% | 1,608 | 36.22% | 21,773 | 28.94% | 2,201 | 38.05% | 25,609 | 31.21% | 2,832 | 40.66% | 26,830 | 31.35% | 2,042 | 42.09% | 25,263 | 33.43% | 2,446 | 40.45% | 27,431 | 30.65% |
| Owned: Buying with a mortgage or loan | 2,059 | 35.22% | 21,425 | 36.12% | 1,749 | 39.40% | 34,595 | 45.99% | 2,125 | 36.74% | 33,288 | 40.56% | 2,688 | 38.59% | 36,072 | 42.15% | 1,689 | 34.82% | 27,847 | 36.85% | 2,419 | 40.00% | 38,669 | 43.20% |
| Social rented | 796 | 13.62% | 8,340 | 14.06% | 531 | 11.96% | 8,461 | 11.25% | 780 | 13.49% | 9,717 | 11.84% | 724 | 10.39% | 9,590 | 11.21% | 545 | 11.23% | 9,855 | 13.04% | 515 | 8.52% | 9,003 | 10.06% |
| Private rented | 607 | 10.38% | 8,410 | 14.18% | 429 | 9.66% | 7,802 | 10.37% | 538 | 9.30% | 10,367 | 12.63% | 601 | 8.63% | 10,436 | 12.20% | 461 | 9.50% | 9,640 | 12.76% | 546 | 9.03% | 11,433 | 12.77% |
| x2 and Sig | 127.81 | | <0.05 | | 118.53 | | <0.05 | | 157.26 | | <0.05 | | 261.68 | | <0.05 | | 152.46 | | <0.05 | | 260.32 | | <0.05 | |
| CAR OR VAN AVAILABILITY | | | | | | | | | | | | | | | | | | | | | | | | |
| None | 1,000 | 17.11% | 11,639 | 19.62% | 464 | 10.45% | 8,622 | 11.46% | 816 | 14.11% | 11,894 | 14.49% | 841 | 12.07% | 10,915 | 12.76% | 459 | 9.46% | 8,126 | 10.75% | 699 | 11.56% | 11,501 | 12.85% |
| One | 2,815 | 48.15% | 28,134 | 47.43% | 1,868 | 42.08% | 33,578 | 44.63% | 2,549 | 44.07% | 36,186 | 44.10% | 3,074 | 44.13% | 39,342 | 45.98% | 1,998 | 41.19% | 33,816 | 44.75% | 2,778 | 45.94% | 40,439 | 45.18% |
| Two + | 2,006 | 34.31% | 18,352 | 30.94% | 2,071 | 46.65% | 31,728 | 42.18% | 2,394 | 41.39% | 32,478 | 39.58% | 3,015 | 43.29% | 33,973 | 39.70% | 2,367 | 48.79% | 32,377 | 42.85% | 2,536 | 41.94% | 36,004 | 40.23% |
| x2 and Sig | 35.53 | | <0.05 | | 29.10 | | 0.66% | | 3.90 | | 0.14 | | 26.85 | | <0.05 | | 56.34 | | <0.05 | | 11.30 | | <0.05 | |
| HOUSEHOLD COMPOSITION | | | | | | | | | | | | | | | | | | | | | | | | |
| One Person Household - Pensioner | 498 | 8.52% | 4,804 | 8.10% | 275 | 6.20% | 4,831 | 6.42% | 437 | 7.56% | 6,322 | 7.70% | 486 | 6.98% | 5,672 | 6.63% | 354 | 7.30% | 5,155 | 6.82% | 467 | 7.72% | 6,043 | 6.75% |
| One Person Household - Other | 351 | 6.00% | 3,962 | 6.68% | 248 | 5.59% | 4,044 | 5.38% | 389 | 6.73% | 5,008 | 6.10% | 416 | 5.97% | 5,004 | 5.85% | 265 | 5.46% | 4,256 | 5.63% | 342 | 5.66% | 5,137 | 5.74% |
| x2 and Sig | 4.65 | | <0.05 | | 0.68 | | 0.41 | | 2.61 | | 0.11 | | 0.19 | | 0.66 | | 1.37 | | 0.24 | | 4.10 | | <0.05 | |
| Data collected from ONS Standard Tables in Feb 2010 unless stated otherwise. | | | | | | | | | | | | | | | | | | | | | | | | |
| Non-Corn is the Total District data minus the 'Cornish' data. | | | | | | | | | | | | | | | | | | | | | | | | |

4.9 Cornwall district breakdown - working age population/original (un-weighted) data

| 16-64 Age | Penwith and IOS | | | | Caradon | | | | Carrick | | | | Kerrier | | | | North Cornwall | | | | Restormel | | | |
|--|-----------------|--------|----------|--------|---------|--------|----------|--------|---------|--------|----------|--------|---------|--------|----------|--------|----------------|--------|----------|--------|-----------|--------|----------|--------|
| | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % | Cornish | % | Non-Corn | % |
| ALL PEOPLE | 3,581 | | 36,157 | | 2,857 | | 46,834 | | 3,651 | | 49,835 | | 4,466 | | 52,874 | | 3,082 | | 45,602 | | 3,779 | | 55,218 | |
| Male | 1,868 | 52.16% | 17,640 | 48.79% | 1,491 | 52.19% | 23,025 | 49.16% | 1,873 | 51.30% | 24,092 | 48.34% | 2,327 | 52.10% | 26,095 | 49.35% | 1,624 | 52.69% | 22,413 | 49.15% | 2,016 | 53.35% | 27,292 | 49.43% |
| Female | 1,713 | 47.84% | 18,517 | 51.21% | 1,366 | 47.81% | 23,809 | 50.84% | 1,778 | 48.70% | 25,743 | 51.66% | 2,139 | 47.90% | 26,779 | 50.65% | 1,458 | 47.31% | 23,189 | 50.85% | 1,763 | 46.65% | 27,926 | 50.57% |
| x2 and Sig | 14.88 | | <0.05 | | 9.86 | | <0.05 | | 11.91 | | <0.05 | | 12.47 | | <0.05 | | 14.51 | | <0.05 | | 21.76 | | <0.05 | |
| ECONOMIC ACTIVITY | | | | | | | | | | | | | | | | | | | | | | | | |
| Economically active | 2,506 | 69.98% | 25,143 | 69.54% | 2,159 | 75.57% | 34,861 | 74.44% | 2,697 | 73.87% | 35,951 | 72.14% | 3,148 | 70.49% | 37,424 | 70.78% | 2,377 | 77.13% | 33,067 | 72.51% | 2,728 | 72.19% | 40,179 | 72.76% |
| Economically inactive | 1,075 | 30.02% | 10,995 | 30.41% | 698 | 24.43% | 11,976 | 25.57% | 954 | 26.13% | 13,884 | 27.86% | 1,318 | 29.51% | 15,455 | 29.23% | 705 | 22.87% | 12,544 | 27.51% | 1,051 | 27.81% | 15,019 | 27.20% |
| x2 and Sig | 0.25 | | 0.61 | | 1.84 | | 0.18 | | 5.08 | | <0.05 | | 0.16 | | 0.69 | | 31.21 | | <0.05 | | 0.65 | | 0.42 | |
| OCCUPATION | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/2. Managers and senior officials and professional occupations | 630 | 17.59% | 5,079 | 14.05% | 547 | 19.15% | 7,702 | 16.45% | 671 | 18.38% | 8,411 | 16.88% | 655 | 14.67% | 6,688 | 12.65% | 519 | 16.84% | 6,541 | 14.34% | 614 | 16.25% | 7,498 | 13.58% |
| 5 Skilled Trades Occupations | 634 | 17.70% | 4,042 | 11.18% | 503 | 17.61% | 4,966 | 10.60% | 593 | 16.24% | 4,954 | 9.94% | 761 | 17.04% | 6,009 | 11.36% | 617 | 20.02% | 5,862 | 12.85% | 595 | 15.74% | 5,929 | 10.74% |
| 9 Elementary Occupations | 596 | 16.64% | 3,228 | 8.93% | 417 | 14.60% | 4,094 | 8.74% | 484 | 13.26% | 4,206 | 8.44% | 718 | 16.08% | 4,634 | 8.76% | 503 | 16.32% | 4,544 | 9.96% | 580 | 15.35% | 5,355 | 9.70% |
| x2 and Sig | 43.03 | | <0.05 | | 40.62 | | <0.05 | | 57.80 | | <0.05 | | 64.91 | | <0.05 | | 31.17 | | <0.05 | | 23.12 | | <0.05 | |
| HIGHEST LEVEL OF QUALIFICATION | | | | | | | | | | | | | | | | | | | | | | | | |
| No qualifications | 886 | 24.74% | 8,814 | 24.38% | 728 | 25.48% | 9,939 | 21.22% | 880 | 24.10% | 10,037 | 20.14% | 1,237 | 27.70% | 13,202 | 24.97% | 884 | 28.68% | 11,392 | 24.98% | 1,030 | 27.26% | 14,523 | 26.30% |
| Level 3/4/5 | 858 | 23.96% | 8,870 | 24.53% | 638 | 22.33% | 12,537 | 26.77% | 931 | 25.50% | 15,361 | 30.82% | 892 | 19.97% | 11,977 | 22.65% | 610 | 19.79% | 10,441 | 22.90% | 737 | 19.50% | 11,230 | 20.34% |
| x2 and Sig | 0.59 | | 0.44 | | 42.88 | | <0.05 | | 57.92 | | <0.05 | | 25.33 | | <0.05 | | 27.42 | | <0.05 | | 2.42 | | 0.12 | |
| INDUSTRY | | | | | | | | | | | | | | | | | | | | | | | | |
| D Manufacturing | 278 | 7.76% | 1,823 | 5.04% | 265 | 9.28% | 3,942 | 8.42% | 293 | 8.03% | 3,294 | 6.61% | 477 | 10.68% | 4,057 | 7.67% | 334 | 10.84% | 4,282 | 9.39% | 340 | 9.00% | 4,066 | 7.36% |
| G Wholesale and Retail trade; Repair of Motor Vehicles | 620 | 17.31% | 4,050 | 11.20% | 510 | 17.85% | 5,542 | 11.83% | 659 | 18.05% | 5,903 | 11.85% | 807 | 18.07% | 6,410 | 12.12% | 547 | 17.75% | 5,616 | 12.32% | 656 | 17.36% | 6,696 | 12.13% |
| H Hotels and Restaurants | 329 | 9.19% | 2,802 | 7.75% | 212 | 7.42% | 2,178 | 4.65% | 248 | 6.79% | 2,712 | 5.44% | 248 | 5.55% | 2,165 | 4.09% | 252 | 8.18% | 2,735 | 6.00% | 293 | 7.75% | 4,051 | 7.34% |
| L/M/N: Public Administration & Defence; Social security (L); Education (M); Health and Social Work | 784 | 21.89% | 5,472 | 15.13% | 658 | 23.03% | 10,004 | 21.36% | 957 | 26.21% | 9,908 | 19.88% | 1,062 | 23.78% | 9,892 | 18.71% | 626 | 20.31% | 6,875 | 15.08% | 848 | 22.44% | 8,760 | 15.86% |
| x2 and Sig | 14.98 | | <0.05 | | 45.73 | | <0.05 | | 13.63 | | <0.05 | | 10.61 | | <0.05 | | 9.65 | | <0.05 | | 22.97 | | <0.05 | |
| METHOD OF TRAVEL TO WORK | | | | | | | | | | | | | | | | | | | | | | | | |
| Work mainly at or from home | 371 | 10.36% | 3,489 | 9.65% | 345 | 12.08% | 4,218 | 9.01% | 375 | 10.27% | 4,151 | 8.33% | 428 | 9.58% | 4,202 | 7.95% | 431 | 13.98% | 5,380 | 11.80% | 305 | 8.07% | 4,279 | 7.75% |
| Driving a car or van | 1,202 | 33.57% | 11,734 | 32.45% | 1,157 | 40.50% | 19,348 | 41.31% | 1,464 | 40.10% | 20,001 | 40.13% | 1,771 | 39.66% | 21,933 | 41.48% | 1,271 | 41.24% | 18,107 | 39.71% | 1,653 | 43.74% | 23,437 | 42.44% |
| x2 and Sig | 0.36 | | 0.55 | | 24.38 | | <0.05 | | 12.20 | | <0.05 | | 17.00 | | <0.05 | | 5.22 | | <0.05 | | 0.03 | | 0.87 | |
| GENERAL HEALTH | | | | | | | | | | | | | | | | | | | | | | | | |
| Good | 2,276 | 63.56% | 23,755 | 65.70% | 1,856 | 64.96% | 32,301 | 68.97% | 2,394 | 65.57% | 34,384 | 69.00% | 2,834 | 63.46% | 35,133 | 66.45% | 2,039 | 66.16% | 30,752 | 67.44% | 2,469 | 65.33% | 37,038 | 67.08% |
| Fairly Good | 905 | 25.27% | 8,297 | 22.95% | 743 | 26.01% | 10,331 | 22.06% | 870 | 23.83% | 10,969 | 22.01% | 1,100 | 24.63% | 12,034 | 22.76% | 777 | 25.21% | 10,670 | 23.40% | 967 | 25.59% | 12,625 | 22.86% |
| x2 and Sig | 9.86 | | <0.05 | | 25.13 | | <0.05 | | 10.07 | | <0.05 | | 11.39 | | <0.05 | | 4.62 | | <0.05 | | 12.50 | | <0.05 | |
| Data collected from the Standard Tables (ONS) in Feb 2010, unless otherwise stated. | | | | | | | | | | | | | | | | | | | | | | | | |

4.10 Cornwall district breakdown - total population/method 3 weighted data

| | Penwith and IOS | | | | Caradon | | | | Carrick | | | | Kerrier | | | | North Cornwall | | | | Restormel | | | |
|---|-----------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|----------------|--------|---------------|--------|---------------|--------|---------------|--------|
| | Est Corn | % | Non-Corn | % | Est Corn | % | Non-Corn | % | Est Corn | % | Non-Corn | % | Est Corn | % | Non-Corn | % | Est Corn | % | Non-Corn | % | Est Corn | % | Non-Corn | % |
| ALL PEOPLE | 20,123 | | 45,039 | | 24,596 | | 55,072 | | 27,133 | | 60,714 | | 28,569 | | 63,966 | | 24,861 | | 55,662 | | 29,510 | | 66,041 | |
| Male | 10,037 | 49.88% | 21,232 | 47.14% | 12,506 | 50.84% | 26,077 | 47.35% | 13,562 | 49.98% | 28,340 | 46.68% | 14,619 | 51.17% | 30,474 | 47.64% | 12,848 | 51.68% | 26,218 | 47.10% | 15,089 | 51.13% | 31,491 | 47.68% |
| Female | 10,086 | 50.12% | 23,807 | 52.86% | 12,090 | 49.16% | 28,995 | 52.65% | 13,571 | 50.02% | 32,374 | 53.32% | 13,950 | 48.83% | 33,492 | 52.36% | 12,013 | 48.32% | 29,444 | 52.90% | 14,421 | 48.87% | 34,550 | 52.32% |
| x2 and Sig | 41.74 | | <0.05 | | 83.15 | | <0.05 | | 82.13 | | <0.05 | | 98.49 | | <0.05 | | 144.14 | | <0.05 | | 97.04 | | <0.05 | |
| RELIGION | | | | | | | | | | | | | | | | | | | | | | | | |
| Christian | 15,617 | 77.61% | 31,449 | 69.83% | 19,399 | 78.87% | 40,709 | 73.92% | 20,706 | 76.31% | 43,998 | 72.47% | 22,158 | 77.56% | 45,972 | 71.87% | 19,649 | 79.04% | 41,043 | 73.74% | 23,176 | 78.53% | 48,664 | 73.69% |
| No religion | 2,833 | 14.08% | 9,064 | 20.12% | 3,042 | 12.37% | 9,850 | 17.89% | 3,898 | 14.37% | 11,003 | 18.12% | 3,946 | 13.81% | 12,173 | 19.03% | 3,131 | 12.60% | 9,444 | 16.97% | 3,855 | 13.06% | 11,456 | 17.35% |
| Religion not stated | 1,394 | 6.93% | 3,972 | 8.82% | 1,873 | 7.61% | 4,120 | 7.48% | 2,158 | 7.95% | 5,129 | 8.45% | 2,141 | 7.49% | 5,374 | 8.40% | 1,819 | 7.32% | 4,762 | 8.55% | 2,181 | 7.39% | 5,393 | 8.17% |
| x2 and Sig | 455.79 | | <0.05 | | 375.85 | | <0.05 | | 199.17 | | <0.05 | | 415.90 | | <0.05 | | 306.89 | | <0.05 | | 312.95 | | <0.05 | |
| GENERAL HEALTH | | | | | | | | | | | | | | | | | | | | | | | | |
| Good | 12,419 | 61.72% | 28,831 | 64.01% | 15,603 | 63.44% | 36,994 | 67.17% | 17,038 | 62.79% | 40,734 | 67.09% | 17,314 | 60.60% | 42,501 | 66.44% | 15,908 | 63.99% | 36,620 | 65.79% | 18,398 | 62.34% | 43,753 | 66.25% |
| Fairly Good | 5,298 | 26.33% | 10,278 | 22.82% | 6,505 | 26.45% | 11,766 | 21.36% | 6,985 | 25.74% | 13,508 | 22.25% | 7,535 | 26.37% | 14,071 | 22.00% | 6,498 | 26.14% | 12,648 | 22.72% | 8,130 | 27.55% | 14,279 | 21.62% |
| x2 and Sig | 80.44 | | <0.05 | | 222.74 | | <0.05 | | 150.01 | | <0.05 | | 263.10 | | <0.05 | | 87.20 | | <0.05 | | 341.16 | | <0.05 | |
| ACCOMMODATION TYPE | | | | | | | | | | | | | | | | | | | | | | | | |
| Detached | 6,767 | 33.63% | 14,199 | 31.53% | 10,317 | 41.95% | 21,383 | 38.83% | 10,686 | 39.38% | 22,484 | 37.03% | 11,862 | 41.52% | 25,219 | 39.43% | 12,254 | 49.29% | 26,078 | 46.85% | 12,932 | 43.82% | 24,921 | 37.74% |
| Semi-detached | 4,571 | 22.72% | 9,810 | 21.78% | 6,638 | 26.99% | 14,953 | 27.15% | 7,923 | 29.20% | 15,920 | 26.22% | 6,994 | 24.48% | 16,305 | 25.49% | 6,088 | 24.49% | 14,359 | 25.80% | 9,053 | 30.68% | 19,372 | 29.33% |
| Terraced | 7,143 | 35.49% | 14,376 | 31.92% | 5,968 | 24.26% | 13,504 | 24.52% | 6,427 | 23.69% | 13,819 | 22.76% | 7,912 | 27.70% | 16,383 | 25.61% | 4,407 | 17.73% | 9,201 | 16.53% | 5,573 | 18.89% | 12,307 | 18.64% |
| Flat, maisonette or apartment | 1,294 | 6.43% | 4,152 | 9.22% | 1,236 | 5.02% | 2,861 | 5.20% | 1,647 | 6.07% | 5,548 | 9.14% | 1,140 | 3.99% | 2,953 | 4.62% | 1,338 | 5.38% | 3,200 | 5.75% | 1,283 | 4.35% | 4,886 | 7.40% |
| x2 and Sig | 183.85 | | <0.05 | | 31.55 | | <0.05 | | 287.83 | | <0.05 | | 65.78 | | <0.05 | | 44.48 | | <0.05 | | 443.51 | | <0.05 | |
| TENURE | | | | | | | | | | | | | | | | | | | | | | | | |
| Owned: Owns outright | 7,669 | 38.11% | 13,221 | 29.35% | 8,910 | 36.22% | 14,471 | 26.28% | 10,325 | 38.05% | 17,485 | 28.80% | 11,616 | 40.66% | 18,046 | 28.21% | 10,465 | 42.09% | 16,840 | 30.25% | 11,937 | 40.45% | 17,940 | 27.17% |
| Owned: Buying with a mortgage or loan | 7,087 | 35.22% | 16,397 | 36.41% | 9,691 | 39.40% | 26,653 | 48.40% | 9,968 | 36.74% | 25,445 | 41.91% | 11,026 | 38.59% | 27,734 | 43.36% | 8,656 | 34.82% | 20,880 | 37.51% | 11,805 | 40.00% | 29,283 | 44.34% |
| Social rented | 2,740 | 13.62% | 6,396 | 14.20% | 2,942 | 11.96% | 6,050 | 10.99% | 3,659 | 13.49% | 6,838 | 11.26% | 2,970 | 10.39% | 7,344 | 11.48% | 2,793 | 11.23% | 7,607 | 13.67% | 2,513 | 8.52% | 7,005 | 10.61% |
| Private rented | 2,089 | 10.38% | 6,928 | 15.38% | 2,377 | 9.66% | 5,854 | 10.63% | 2,524 | 9.30% | 8,381 | 13.80% | 2,465 | 8.63% | 8,572 | 13.40% | 2,363 | 9.50% | 7,738 | 13.90% | 2,665 | 9.03% | 9,314 | 14.10% |
| x2 and Sig | 582.61 | | <0.05 | | 899.68 | | <0.05 | | 778.73 | | <0.05 | | 1,442.49 | | <0.05 | | 1,068.70 | | <0.05 | | 1,729.98 | | <0.05 | |
| CAR OR VAN AVAILABILITY | | | | | | | | | | | | | | | | | | | | | | | | |
| None | 3,442 | 17.11% | 9,197 | 20.42% | 2,571 | 10.45% | 6,515 | 11.83% | 3,828 | 14.11% | 8,882 | 14.63% | 3,450 | 12.07% | 8,306 | 12.99% | 2,352 | 9.46% | 6,233 | 11.20% | 3,411 | 11.56% | 8,789 | 13.31% |
| One | 9,690 | 48.15% | 21,259 | 47.20% | 10,350 | 42.08% | 25,096 | 45.57% | 11,957 | 44.07% | 26,778 | 44.10% | 12,609 | 44.13% | 29,807 | 46.60% | 10,240 | 41.19% | 25,574 | 45.95% | 13,557 | 45.94% | 29,660 | 44.91% |
| Two + | 6,905 | 34.31% | 13,453 | 29.87% | 11,475 | 46.65% | 22,324 | 40.54% | 11,230 | 41.39% | 23,642 | 38.94% | 12,367 | 43.29% | 24,621 | 38.49% | 12,131 | 48.79% | 22,613 | 40.63% | 12,376 | 41.94% | 26,164 | 39.62% |
| x2 and Sig | 161.97 | | <0.05 | | 221.03 | | <0.05 | | 24.85 | | <0.05 | | 147.80 | | <0.05 | | 394.43 | | <0.05 | | 75.13 | | <0.05 | |
| HOUSEHOLD COMPOSITION | | | | | | | | | | | | | | | | | | | | | | | | |
| One Person Household - Pensioner | 1,714 | 8.52% | 3,588 | 7.97% | 1,524 | 6.20% | 3,582 | 6.50% | 2,050 | 7.56% | 4,709 | 7.76% | 1,993 | 6.98% | 4,165 | 6.51% | 1,814 | 7.30% | 3,695 | 6.64% | 2,279 | 7.72% | 4,231 | 6.41% |
| One Person Household - Other | 1,208 | 6.00% | 3,105 | 6.89% | 1,374 | 5.59% | 2,918 | 5.30% | 1,825 | 6.73% | 3,572 | 5.88% | 1,706 | 5.97% | 3,714 | 5.81% | 1,358 | 5.46% | 3,163 | 5.68% | 1,669 | 5.66% | 3,810 | 5.77% |
| x2 and Sig | 20.97 | | <0.05 | | 5.13 | | <0.05 | | 16.78 | | <0.05 | | 1.05 | | 0.31 | | 9.59 | | <0.05 | | 27.84 | | <0.05 | |
| Data collected from ONS Standard Tables in Feb 2010 unless stated otherwise. Non-Corn is the Total District data minus the 'Cornish' data. | | | | | | | | | | | | | | | | | | | | | | | | |

4.11 Cornwall district breakdown - working age population/method 3 weighted data

| 16-64 Age | Penwith and IOS | | | | Caradon | | | | Carrick | | | | Kerrier | | | | North Cornwall | | | | Restormel | | | |
|--|-----------------|--------|----------|--------|-------------|--------|----------|--------|-------------|--------|----------|--------|-------------|--------|----------|--------|----------------|--------|----------|--------|-------------|--------|----------|--------|
| | Est Cornish | % | Non-Corn | % | Est Cornish | % | Non-Corn | % | Est Cornish | % | Non-Corn | % | Est Cornish | % | Non-Corn | % | Est Cornish | % | Non-Corn | % | Est Cornish | % | Non-Corn | % |
| ALL PEOPLE | 12,271 | | 27,467 | | 15,345 | | 34,346 | | 16,516 | | 36,970 | | 17,707 | | 39,633 | | 15,034 | | 33,650 | | 18,218 | | 40,779 | |
| Male | 6,401 | 52.16% | 13,107 | 47.72% | 8,008 | 52.19% | 16,508 | 48.06% | 8,473 | 51.30% | 17,492 | 47.31% | 9,226 | 52.10% | 19,196 | 48.43% | 7,922 | 52.69% | 16,115 | 47.89% | 9,719 | 53.35% | 19,589 | 48.04% |
| Female | 5,870 | 47.84% | 14,360 | 52.28% | 7,337 | 47.81% | 17,838 | 51.94% | 8,043 | 48.70% | 19,478 | 52.69% | 8,481 | 47.90% | 20,437 | 51.57% | 7,112 | 47.31% | 17,535 | 52.11% | 8,499 | 46.65% | 21,190 | 51.96% |
| x2 and Sig | 67.04 | | <0.05 | | 72.12 | | <0.05 | | 72.68 | | <0.05 | | 65.92 | | <0.05 | | 95.94 | | <0.05 | | 142.10 | | <0.05 | |
| ECONOMIC ACTIVITY | | | | | | | | | | | | | | | | | | | | | | | | |
| Economically active | 8,587 | 69.98% | 19,062 | 69.40% | 11,596 | 75.57% | 25,424 | 74.02% | 12,200 | 73.87% | 26,448 | 71.54% | 12,481 | 70.49% | 28,091 | 70.88% | 11,595 | 77.13% | 23,849 | 70.87% | 13,151 | 72.19% | 29,756 | 72.97% |
| Economically inactive | 3,684 | 30.02% | 8,386 | 30.53% | 3,749 | 24.43% | 8,925 | 25.99% | 4,316 | 26.13% | 10,522 | 28.46% | 5,226 | 29.51% | 11,547 | 29.14% | 3,439 | 22.87% | 9,810 | 29.15% | 5,067 | 27.81% | 11,003 | 26.98% |
| x2 and Sig | 1.13 | | 0.29 | | 13.44 | | <0.05 | | 30.88 | | <0.05 | | 0.87 | | 0.35 | | 206.31 | | <0.05 | | 4.25 | | <0.05 | |
| OCCUPATION | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/2. Managers and senior officials and professional occupations | 2,159 | 17.59% | 3,550 | 12.93% | 2,938 | 19.15% | 5,311 | 15.46% | 3,035 | 18.38% | 6,047 | 16.36% | 2,597 | 14.67% | 4,746 | 11.97% | 2,532 | 16.84% | 4,528 | 13.46% | 2,960 | 16.25% | 5,152 | 12.63% |
| 5 Skilled Trades Occupations | 2,173 | 17.70% | 2,503 | 9.11% | 2,702 | 17.61% | 2,767 | 8.06% | 2,683 | 16.24% | 2,864 | 7.75% | 3,017 | 17.04% | 3,753 | 9.47% | 3,010 | 20.02% | 3,469 | 10.31% | 2,868 | 15.74% | 3,656 | 8.96% |
| 9 Elementary Occupations | 2,042 | 16.64% | 1,782 | 6.49% | 2,240 | 14.60% | 2,271 | 6.61% | 2,189 | 13.26% | 2,501 | 6.76% | 2,847 | 16.08% | 2,505 | 6.32% | 2,454 | 16.32% | 2,593 | 7.71% | 2,796 | 15.35% | 3,139 | 7.70% |
| x2 and Sig | 232.12 | | <0.05 | | 355.75 | | <0.05 | | 402.94 | | <0.05 | | 405.49 | | <0.05 | | 243.36 | | <0.05 | | 175.10 | | <0.05 | |
| HIGHEST LEVEL OF QUALIFICATION | | | | | | | | | | | | | | | | | | | | | | | | |
| No qualifications | 3,036 | 24.74% | 6,664 | 24.26% | 3,910 | 25.48% | 6,757 | 19.67% | 3,981 | 24.10% | 6,936 | 18.76% | 4,905 | 27.70% | 9,534 | 24.06% | 4,312 | 28.68% | 7,964 | 23.67% | 4,965 | 27.26% | 10,588 | 25.96% |
| Level 3/4/5 | 2,940 | 23.96% | 6,788 | 24.71% | 3,427 | 22.33% | 9,748 | 28.38% | 4,212 | 25.50% | 12,080 | 32.68% | 3,537 | 19.97% | 9,332 | 23.55% | 2,976 | 19.79% | 8,075 | 24.00% | 3,553 | 19.50% | 8,414 | 20.63% |
| x2 and Sig | 2.65 | | 0.10 | | 313.46 | | <0.05 | | 349.86 | | <0.05 | | 134.02 | | <0.05 | | 181.85 | | <0.05 | | 15.78 | | <0.05 | |
| INDUSTRY | | | | | | | | | | | | | | | | | | | | | | | | |
| D Manufacturing | 953 | 7.76% | 1,148 | 4.18% | 1,423 | 9.28% | 2,784 | 8.10% | 1,325 | 8.03% | 2,262 | 6.12% | 1,891 | 10.68% | 2,643 | 6.67% | 1,629 | 10.84% | 2,987 | 8.88% | 1,639 | 9.00% | 2,767 | 6.79% |
| G Wholesale and Retail trade; Repair of Motor Vehicles | 2,125 | 17.31% | 2,545 | 9.27% | 2,739 | 17.85% | 3,313 | 9.65% | 2,981 | 18.05% | 3,581 | 9.69% | 3,200 | 18.07% | 4,017 | 10.14% | 2,668 | 17.75% | 3,495 | 10.39% | 3,162 | 17.36% | 4,190 | 10.27% |
| H Hotels and Restaurants | 1,127 | 9.19% | 2,004 | 7.29% | 1,139 | 7.42% | 1,251 | 3.64% | 1,122 | 6.79% | 1,838 | 4.97% | 983 | 5.55% | 1,430 | 3.61% | 1,229 | 8.18% | 1,758 | 5.22% | 1,413 | 7.75% | 2,931 | 7.19% |
| L/M/N: Public Administration & Defence; Social security (L); Education (M); Health and Social Work | 2,687 | 21.89% | 3,569 | 13.00% | 3,534 | 23.03% | 7,128 | 20.75% | 4,329 | 26.21% | 6,536 | 17.68% | 4,211 | 23.78% | 6,743 | 17.01% | 3,054 | 20.31% | 4,447 | 13.22% | 4,088 | 22.44% | 5,520 | 13.54% |
| x2 and Sig | 78.77 | | <0.05 | | 367.96 | | <0.05 | | 94.69 | | <0.05 | | 63.90 | | <0.05 | | 72.44 | | <0.05 | | 169.03 | | <0.05 | |
| METHOD OF TRAVEL TO WORK | | | | | | | | | | | | | | | | | | | | | | | | |
| Work mainly at or from home | 1,271 | 10.36% | 2,589 | 9.42% | 1,853 | 12.08% | 2,710 | 7.89% | 1,696 | 10.27% | 2,830 | 7.65% | 1,697 | 9.58% | 2,933 | 7.40% | 2,102 | 13.98% | 3,709 | 11.02% | 1,470 | 8.07% | 3,114 | 7.64% |
| Driving a car or van | 4,119 | 33.57% | 8,817 | 32.10% | 6,214 | 40.50% | 14,291 | 41.61% | 6,623 | 40.10% | 14,842 | 40.15% | 7,022 | 39.66% | 16,682 | 42.09% | 6,200 | 41.24% | 13,178 | 39.16% | 7,969 | 43.74% | 17,121 | 41.99% |
| x2 and Sig | 1.61 | | 0.20 | | 181.59 | | <0.05 | | 75.21 | | <0.05 | | 89.82 | | <0.05 | | 35.31 | | <0.05 | | 0.17 | | 0.68 | |
| GENERAL HEALTH | | | | | | | | | | | | | | | | | | | | | | | | |
| Good | 7,799 | 63.56% | 18,232 | 66.38% | 9,969 | 64.96% | 24,188 | 70.43% | 10,830 | 65.57% | 25,948 | 70.19% | 11,236 | 63.46% | 26,731 | 67.45% | 9,946 | 66.16% | 22,845 | 67.89% | 11,903 | 65.33% | 27,604 | 67.69% |
| Fairly Good | 3,101 | 25.27% | 6,101 | 22.21% | 3,991 | 26.01% | 7,083 | 20.62% | 3,936 | 23.83% | 7,903 | 21.38% | 4,361 | 24.63% | 8,773 | 22.13% | 3,790 | 25.21% | 7,657 | 22.75% | 4,662 | 25.59% | 8,930 | 21.90% |
| x2 and Sig | 44.48 | | <0.05 | | 184.09 | | <0.05 | | 61.12 | | <0.05 | | 59.96 | | <0.05 | | 30.58 | | <0.05 | | 81.96 | | <0.05 | |
| Data collected from the Standard Tables (ONS) in Feb 2010, unless otherwise stated. | | | | | | | | | | | | | | | | | | | | | | | | |

4.12 Results table – un-weighted data

| Chi-squared results of Cornish/Non-Cornish comparisons using unweighted 2001 Census data. | | Whole County | | Districts | | | | | | | | | | | |
|---|--------------------------------|--------------|-------|-------------------------|-------|---------|-------|---------|-------|-----------|-------|---------|-------|------------------------|-------|
| | | Cornwall | | West Penwith and IOS | | Kerrier | | Carrick | | Restormel | | Caradon | | East North Cornwall | |
| Whole population | GENDER | 83.58 | <0.05 | 9.23 | <0.05 | 17.93 | <0.05 | 12.95 | <0.05 | 14.68 | <0.05 | 10.98 | <0.05 | 20.70 | <0.05 |
| | AGE | 903.33 | <0.05 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | RELIGION | 308.58 | <0.05 | 64.13 | <0.05 | 75.88 | <0.05 | 31.43 | <0.05 | 47.30 | <0.05 | 49.70 | <0.05 | 44.04 | <0.05 |
| | GENERAL HEALTH | 182.83 | <0.05 | 17.65 | <0.05 | 48.16 | <0.05 | 23.72 | <0.05 | 51.29 | <0.05 | 29.31 | <0.05 | 12.47 | <0.05 |
| | ACCOMMODATION TYPE | 116.68 | <0.05 | 40.11 | <0.05 | 11.91 | <0.05 | 45.06 | <0.05 | 66.13 | <0.05 | 4.15 | 0.25 | 6.35 | 0.09 |
| | TENURE | 996.96 | <0.05 | 127.81 | <0.05 | 261.68 | <0.05 | 157.26 | <0.05 | 260.32 | <0.05 | 118.53 | <0.05 | 152.46 | <0.05 |
| | CAR OR VAN AVAILABILITY | 69.96 | <0.05 | 35.53 | <0.05 | 26.85 | <0.05 | 3.90 | 0.14 | 11.30 | <0.05 | 29.10 | <0.05 | 56.34 | <0.05 |
| | HOUSEHOLD COMPOSITION | 1.99 | 0.16 | 4.65 | <0.05 | 0.19 | 0.66 | 2.61 | 0.11 | 4.10 | <0.05 | 0.68 | 0.41 | 1.37 | 0.24 |
| 16-64 | GENDER | 497.56 | <0.05 | 14.88 | <0.05 | 12.47 | <0.05 | 11.91 | <0.05 | 21.76 | <0.05 | 9.86 | <0.05 | 14.51 | <0.05 |
| | ECONOMIC ACTIVITY | 45.80 | <0.05 | 0.25 | 0.61 | 0.16 | 0.69 | 5.08 | <0.05 | 0.65 | 0.42 | 1.84 | 0.18 | 31.21 | <0.05 |
| | OCCUPATION | 1,781.33 | <0.05 | 43.03 | <0.05 | 64.91 | <0.05 | 57.80 | <0.05 | 23.12 | <0.05 | 40.62 | <0.05 | 31.17 | <0.05 |
| | HIGHEST LEVEL OF QUALIFICATION | 733.28 | <0.05 | 0.59 | 0.44 | 25.33 | <0.05 | 57.92 | <0.05 | 2.42 | 0.12 | 42.88 | <0.05 | 27.42 | <0.05 |
| | INDUSTRY | 387.71 | <0.05 | 14.98 | <0.05 | 10.61 | <0.05 | 13.63 | <0.05 | 22.97 | <0.05 | 45.73 | <0.05 | 9.65 | <0.05 |
| | METHOD OF TRAVEL TO WORK | 270.19 | <0.05 | 0.36 | 0.55 | 17.00 | <0.05 | 12.20 | <0.05 | 0.03 | 0.87 | 24.38 | <0.05 | 5.22 | <0.05 |
| | GENERAL HEALTH | 425.77 | <0.05 | 9.86 | <0.05 | 11.39 | <0.05 | 10.07 | <0.05 | 12.50 | <0.05 | 25.13 | <0.05 | 4.62 | <0.05 |

4.13 Results table – method 3 weighted data

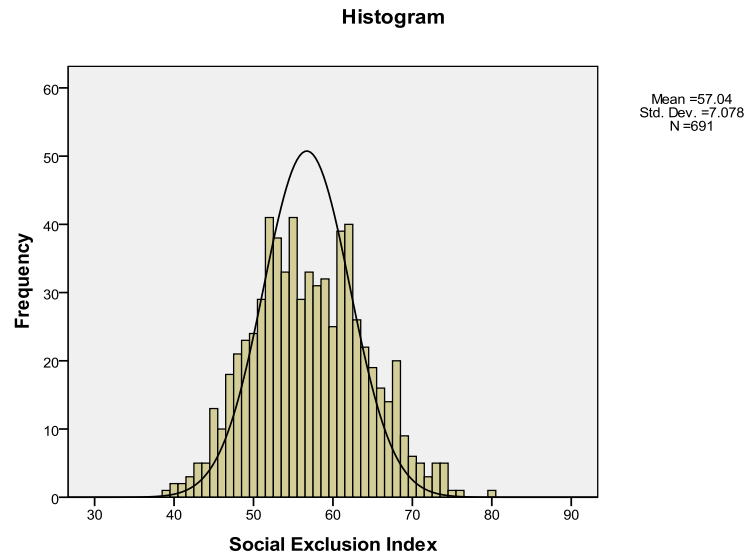
| Chi-squared results of Cornish/Non-Cornish comparisons using weighted (method 3) 2001 Census data. | | Whole County | | Districts | | | | | | | | | | | |
|--|--------------------------------|---------------------|-------|-----------------------------|-------|----------------|-------|----------------|-------|------------------|-------|----------------|-------|----------------------------|-------|
| | | Cornwall | | West Penwith and IOS | | Kerrier | | Carrick | | Restormel | | Caradon | | East North Cornwall | |
| Whole population | GENDER | 514.23 | <0.05 | 41.74 | <0.05 | 98.49 | <0.05 | 82.13 | <0.05 | 97.04 | <0.05 | 83.15 | <0.05 | 144.14 | <0.05 |
| | AGE | 5558.96 | <0.05 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | RELIGION | 1896.95 | <0.05 | 455.79 | <0.05 | 415.90 | <0.05 | 199.17 | <0.05 | 312.95 | <0.05 | 375.85 | <0.05 | 306.89 | <0.05 |
| | GENERAL HEALTH | 1125.93 | <0.05 | 80.44 | <0.05 | 263.10 | <0.05 | 150.01 | <0.05 | 341.16 | <0.05 | 222.74 | <0.05 | 87.20 | <0.05 |
| | ACCOMMODATION TYPE | 724.28 | <0.05 | 183.85 | <0.05 | 65.78 | <0.05 | 287.83 | <0.05 | 443.51 | <0.05 | 31.55 | <0.05 | 44.48 | <0.05 |
| | TENURE | 6163.63 | <0.05 | 582.61 | <0.05 | 1442.49 | <0.05 | 778.73 | <0.05 | 1729.98 | <0.05 | 899.68 | <0.05 | 1068.70 | <0.05 |
| | CAR OR VAN AVAILABILITY | 433.08 | <0.05 | 161.97 | <0.05 | 147.80 | <0.05 | 24.85 | <0.05 | 75.13 | <0.05 | 221.03 | <0.05 | 394.43 | <0.05 |
| | HOUSEHOLD COMPOSITION | 12.44 | <0.05 | 20.97 | <0.05 | 1.05 | 0.31 | 16.78 | <0.05 | 27.84 | <0.05 | 5.13 | <0.05 | 9.59 | <0.05 |
| 16-64 | GENDER | 497.56 | <0.05 | 67.04 | <0.05 | 65.92 | <0.05 | 72.68 | <0.05 | 142.10 | <0.05 | 72.12 | <0.05 | 95.94 | <0.05 |
| | ECONOMIC ACTIVITY | 45.80 | <0.05 | 1.13 | 0.29 | 0.87 | 0.35 | 30.88 | <0.05 | 4.25 | <0.05 | 13.44 | <0.05 | 206.31 | <0.05 |
| | OCCUPATION | 1,781.83 | <0.05 | 232.12 | <0.05 | 405.49 | <0.05 | 402.94 | <0.05 | 175.10 | <0.05 | 355.75 | <0.05 | 243.36 | <0.05 |
| | HIGHEST LEVEL OF QUALIFICATION | 733.28 | <0.05 | 2.65 | 0.10 | 134.02 | <0.05 | 349.86 | <0.05 | 15.78 | <0.05 | 313.46 | <0.05 | 181.85 | <0.05 |
| | INDUSTRY | 382.71 | <0.05 | 78.77 | <0.05 | 63.90 | <0.05 | 94.69 | <0.05 | 169.03 | <0.05 | 367.96 | <0.05 | 72.44 | <0.05 |
| | METHOD OF TRAVEL TO WORK | 270.19 | <0.05 | 1.61 | 0.20 | 89.82 | <0.05 | 75.21 | <0.05 | 0.17 | 0.68 | 181.59 | <0.05 | 35.31 | <0.05 |
| | GENERAL HEALTH | 425.77 | <0.05 | 44.48 | <0.05 | 59.96 | <0.05 | 61.12 | <0.05 | 81.96 | <0.05 | 184.09 | <0.05 | 30.58 | <0.05 |

Appendix 5

5.1 Social exclusion index (SEI) and B-SEM (Levitas et al 2007)

| Domains | Themes | Sub-Theme | In SEI | |
|---------------------------------|--|---|--|---|
| RESOURCES | MATERIAL/ECONOMIC RESOURCES | 1. Estimated total household income | Y | |
| | | 2. Home ownership | Y | |
| | ACCESS TO PUBLIC AND PRIVATE SERVICES | 3. Transport | Y | |
| PARTICIPATION | SOCIAL RESOURCES | 4. Frequency and quality of contact with family members/friends/co-workers | Y | |
| | | ECONOMIC PARTICIPATION | 5. Paid work - employed, self-employed, unemployed, non-employed | Y |
| | | | 6. Nature of working life (includes type of work undertaken, full-time/part-time status) | Y |
| | 7. Providing unpaid care | Y | | |
| | SOCIAL PARTICIPATION | 8. Participation in common social activities including performing social roles | Y | |
| | CULTUR, EDUCATION AND SKILLS | 9. Educational attainment | Y | |
| | POLITICAL PARTICIPATION | 10. Political participation | Y | |
| QUALITY OF LIFE | HEALTH AND WELLBEING | 11. Physical health and exercise | Y | |
| | | 12. Disability | Y | |
| | LIVING ENVIRONMENT | 13. Housing Quality | Y | |
| | | 14. Neighbourhood safety (includes traffic, atmospheric pollution, noise pollution) | Y | |
| CRIME, HARM AND CRIMINALISATION | 15. Objective safety/victimisation (includes actual and risk of abuse within the home) | Y | | |

5.2 Social exclusion index normality plot



5.3 SEI Statistics

Statistics

Social Exclusion Index

| | | |
|---|------------------------|-------|
| N | Valid | 691 |
| | Missing | 133 |
| | Skewness | .161 |
| | Std. Error of Skewness | .093 |
| | Kurtosis | -.364 |
| | Std. Error of Kurtosis | .186 |

5.4 Sample characteristics

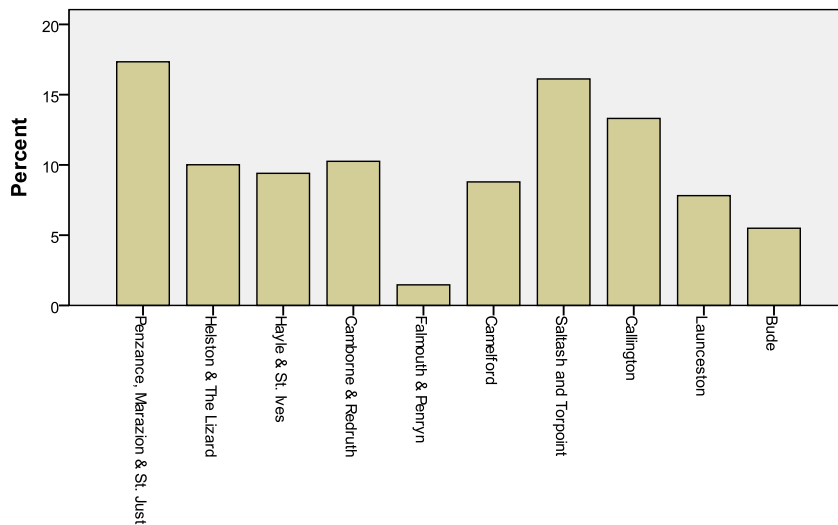
Sex

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 307 | 37.3 | 37.4 | 37.4 |
| | Female | 514 | 62.4 | 62.6 | 100.0 |
| | Total | 821 | 99.6 | 100.0 | |
| Missing | -9 | 3 | .4 | | |
| Total | | 824 | 100.0 | | |

Age last birthday

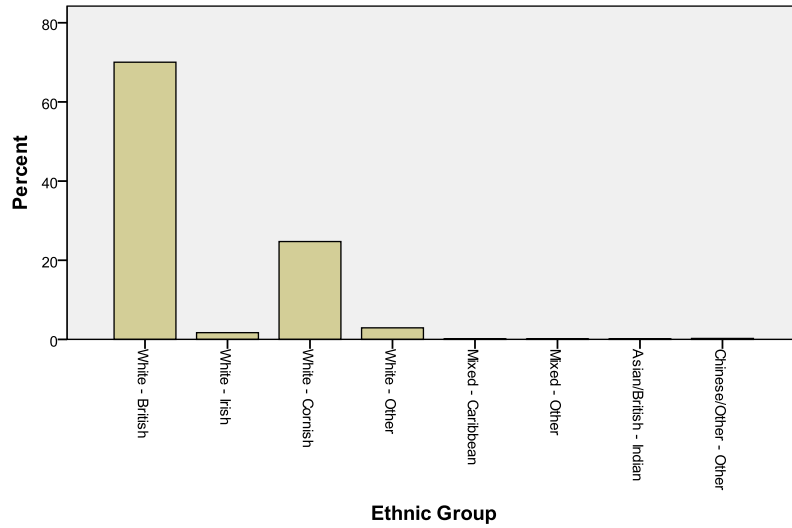
| | | |
|------|---------|-------|
| N | Valid | 813 |
| | Missing | 11 |
| Mean | | 58.15 |
| Mode | | 65 |

Nearest Community Network Area

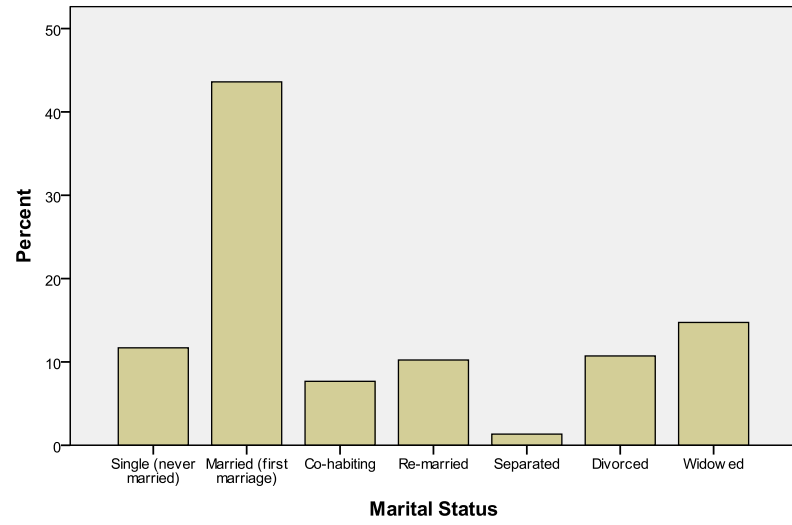


Nearest Community Network Area

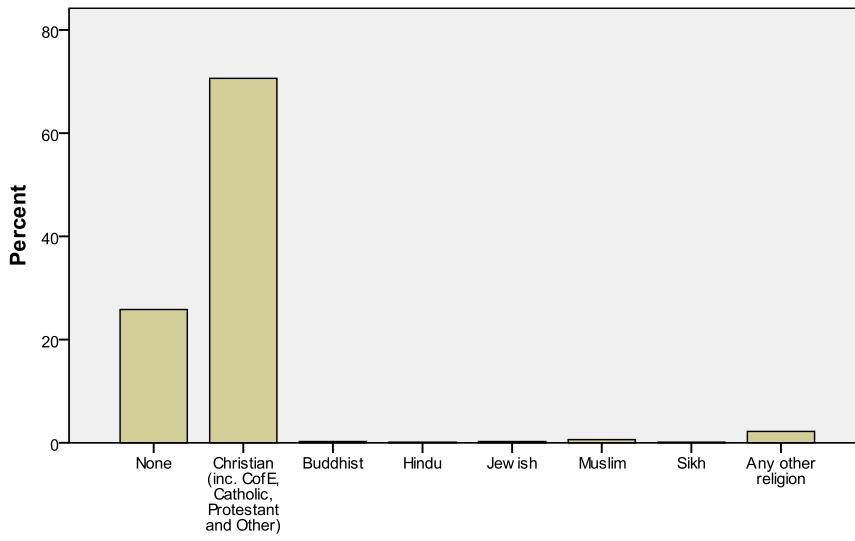
Ethnic Group



Marital Status

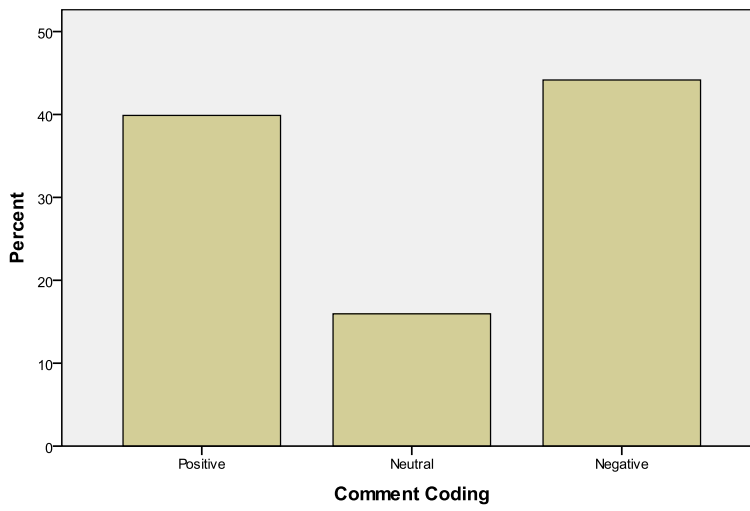


Religion



Religion

Comment Coding



5.5 Bivariate correlations

Correlations

| | | | Cornish ethnic identity | Social Exclusion Index |
|----------------|-------------------------|-------------------------|-------------------------|------------------------|
| Spearman's rho | Cornish ethnic identity | Correlation Coefficient | 1.000 | .115** |
| | | Sig. (1-tailed) | . | .001 |
| | | N | 824 | 691 |
| | Social Exclusion Index | Correlation Coefficient | .115** | 1.000 |
| | | Sig. (1-tailed) | .001 | . |
| | | N | 691 | 691 |

** . Correlation is significant at the 0.01 level (1-tailed).

Correlations

| | | | Social Exclusion Index | Nearest Community Network Area |
|----------------|--------------------------------|-------------------------|------------------------|--------------------------------|
| Spearman's rho | Social Exclusion Index | Correlation Coefficient | 1.000 | .045 |
| | | Sig. (2-tailed) | . | .240 |
| | | N | 691 | 689 |
| | Nearest Community Network Area | Correlation Coefficient | .045 | 1.000 |
| | | Sig. (2-tailed) | .240 | . |
| | | N | 689 | 819 |

Correlations

| | | Social Exclusion Index | PostcdNumeric |
|------------------------|---------------------|------------------------|---------------|
| Social Exclusion Index | Pearson Correlation | 1 | .019 |
| | Sig. (2-tailed) | | .622 |
| | N | 691 | 672 |
| PostcdNumeric | Pearson Correlation | .019 | 1 |
| | Sig. (2-tailed) | .622 | |
| | N | 672 | 797 |

Correlations

| | | Social Exclusion Index | Please indicate your income in the last 12 months |
|---|---------------------|------------------------|---|
| Social Exclusion Index | Pearson Correlation | 1 | -.365** |
| | Sig. (2-tailed) | | .000 |
| | N | 691 | 657 |
| Please indicate your income in the last 12 months | Pearson Correlation | -.365** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 657 | 757 |

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

| | | | Cornish ethnic identity | Please indicate your income in the last 12 months |
|----------------|---|-------------------------|-------------------------|---|
| Spearman's rho | Cornish ethnic identity | Correlation Coefficient | 1.000 | -.070 |
| | | Sig. (2-tailed) | . | .053 |
| | | N | 824 | 757 |
| | Please indicate your income in the last 12 months | Correlation Coefficient | -.070 | 1.000 |
| | | Sig. (2-tailed) | .053 | . |
| | | N | 757 | 757 |

Correlations

| | | | Cornish ethnic identity | PostcdNumeric |
|----------------|-------------------------|-------------------------|-------------------------|---------------|
| Spearman's rho | Cornish ethnic identity | Correlation Coefficient | 1.000 | -.101** |
| | | Sig. (2-tailed) | . | .004 |
| | | N | 824 | 797 |
| | PostcdNumeric | Correlation Coefficient | -.101** | 1.000 |
| | | Sig. (2-tailed) | .004 | . |
| | | N | 797 | 797 |

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

| | | | Social Exclusion Index | Sex |
|----------------|--------------|-------------------------|------------------------|--------|
| Spearman's rho | Social Index | Exclusion | 1.000 | .136** |
| | | Correlation Coefficient | . | .000 |
| | | Sig. (2-tailed) | | |
| | | N | 691 | 689 |
| | Sex | Correlation Coefficient | .136** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 689 | 821 |

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

| | | | Social Exclusion Index | Age last birthday |
|-------------------|-----------|---------------------|------------------------|-------------------|
| Social Index | Exclusion | Pearson Correlation | 1 | .080* |
| | | Sig. (2-tailed) | | .036 |
| | | N | 691 | 683 |
| Age last birthday | | Pearson Correlation | .080* | 1 |
| | | Sig. (2-tailed) | .036 | |
| | | N | 683 | 813 |

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

| | | | Social Exclusion Index | Religion collapsed |
|----------------|--------------|-------------------------|------------------------|--------------------|
| Spearman's rho | Social Index | Exclusion | 1.000 | .089* |
| | | Correlation Coefficient | . | .019 |
| | | Sig. (2-tailed) | | |
| | | N | 691 | 691 |

| | | | |
|--------------------|-------------------------|-------|-------|
| Religion collapsed | Correlation Coefficient | .089* | 1.000 |
| | Sig. (2-tailed) | .019 | . |
| | N | 691 | 824 |

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

| | | | Social Exclusion Index | Comment Coding |
|----------------|------------------------|-------------------------|------------------------|----------------|
| Spearman's rho | Social Exclusion Index | Correlation Coefficient | 1.000 | .067 |
| | | Sig. (2-tailed) | . | .250 |
| | | N | 691 | 297 |
| | Comment Coding | Correlation Coefficient | .067 | 1.000 |
| | | Sig. (2-tailed) | .250 | . |
| | | N | 297 | 351 |

Correlations

| | | | Sex | Marital Status |
|----------------|----------------|-------------------------|--------|----------------|
| Spearman's rho | Sex | Correlation Coefficient | 1.000 | .154** |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 821 | 818 |
| | Marital Status | Correlation Coefficient | .154** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 818 | 821 |

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

| | | | Religion collapsed | What is the highest qualification that you hold? |
|----------------|--|-------------------------|--------------------|--|
| Spearman's rho | Religion collapsed | Correlation Coefficient | 1.000 | -.113** |
| | | Sig. (2-tailed) | . | .001 |
| | | N | 824 | 789 |
| | What is the highest qualification that you hold? | Correlation Coefficient | -.113** | 1.000 |
| | | Sig. (2-tailed) | .001 | . |
| | | N | 789 | 789 |

** . Correlation is significant at the 0.01 level (2-tailed).

5.6 Partial correlations

Correlations

| Control Variables | | | Please indicate your income in the last 12 months | Social Exclusion Index | Cornish ethnic identity |
|-------------------------|---|-------------------------|---|------------------------|-------------------------|
| -none ^a | Please indicate your income in the last 12 months | Correlation | 1.000 | -.365 | -.082 |
| | | Significance (2-tailed) | . | .000 | .035 |
| | | df | 0 | 655 | 655 |
| | Social Exclusion Index | Correlation | -.365 | 1.000 | .120 |
| | | Significance (2-tailed) | .000 | . | .002 |
| | | df | 655 | 0 | 655 |
| | Cornish ethnic identity | Correlation | -.082 | .120 | 1.000 |
| | | Significance (2-tailed) | .035 | .002 | . |
| | | df | 655 | 655 | 0 |
| Cornish ethnic identity | Please indicate your income in the last 12 months | Correlation | 1.000 | -.359 | |
| | | Significance (2-tailed) | . | .000 | |
| | | df | 0 | 654 | |
| | Social Exclusion Index | Correlation | -.359 | 1.000 | |
| | | Significance (2-tailed) | .000 | . | |
| | | df | 654 | 0 | |

a. Cells contain zero-order (Pearson) correlations.

Correlations

| Control Variables | | | Please indicate your income in the last 12 months | Social Exclusion Index | Sex |
|--------------------|---|-------------------------|---|------------------------|-------|
| -none ^a | Please indicate your income in the last 12 months | Correlation | 1.000 | -.364 | -.217 |
| | | Significance (2-tailed) | . | .000 | .000 |
| | | df | 0 | 653 | 653 |
| | Social Exclusion Index | Correlation | -.364 | 1.000 | .128 |
| | | Significance (2-tailed) | .000 | . | .001 |
| | | df | 653 | 0 | 653 |
| | Sex | Correlation | -.217 | .128 | 1.000 |
| | | Significance (2-tailed) | .000 | .001 | . |
| | | df | 653 | 653 | 0 |
| Sex | Please indicate your income in the last 12 months | Correlation | 1.000 | -.347 | |
| | | Significance (2-tailed) | . | .000 | |
| | | df | 0 | 652 | |
| | Social Exclusion Index | Correlation | -.347 | 1.000 | |
| | | Significance (2-tailed) | .000 | . | |
| | | df | 652 | 0 | |

a. Cells contain zero-order (Pearson) correlations.

Correlations

| Control Variables | | | Please indicate your income in the last 12 months | Social Exclusion Index | Age last birthday |
|--------------------|---|-------------------------|---|------------------------|-------------------|
| -none ^a | Please indicate your income in the last 12 months | Correlation | 1.000 | -.366 | -.009 |
| | | Significance (2-tailed) | . | .000 | .814 |
| | | df | 0 | 648 | 648 |
| | Social Exclusion Index | Correlation | -.366 | 1.000 | .076 |
| | | Significance (2-tailed) | .000 | . | .052 |
| | | df | 648 | 0 | 648 |
| | Age last birthday | Correlation | -.009 | .076 | 1.000 |
| | | Significance (2-tailed) | .814 | .052 | . |
| | | df | 648 | 648 | 0 |
| Age last birthday | Please indicate your income in the last 12 months | Correlation | 1.000 | -.367 | |
| | | Significance (2-tailed) | . | .000 | |
| | | df | 0 | 647 | |
| | Social Exclusion Index | Correlation | -.367 | 1.000 | |
| | | Significance (2-tailed) | .000 | . | |
| | | df | 647 | 0 | |

a. Cells contain zero-order (Pearson) correlations.

Correlations

| Control Variables | | | Please indicate your income in the last 12 months | Social Exclusion Index | Religion collapsed |
|--------------------|---|-------------------------|---|------------------------|--------------------|
| -none ^a | Please indicate your income in the last 12 months | Correlation | 1.000 | -.365 | -.001 |
| | | Significance (2-tailed) | . | .000 | .970 |
| | | df | 0 | 655 | 655 |
| | Social Exclusion Index | Correlation | -.365 | 1.000 | .080 |
| | | Significance (2-tailed) | .000 | . | .039 |
| | | df | 655 | 0 | 655 |
| | Religion collapsed | Correlation | -.001 | .080 | 1.000 |
| | | Significance (2-tailed) | .970 | .039 | . |
| | | df | 655 | 655 | 0 |
| Religion collapsed | Please indicate your income in the last 12 months | Correlation | 1.000 | -.366 | |
| | | Significance (2-tailed) | . | .000 | |
| | | df | 0 | 654 | |
| | Social Exclusion Index | Correlation | -.366 | 1.000 | |
| | | Significance (2-tailed) | .000 | . | |
| | | df | 654 | 0 | |

a. Cells contain zero-order (Pearson) correlations.

5.7 Regression statistics – model 1

Model Summary^c

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .132 ^a | .018 | .016 | 6.977 | .018 | 12.113 | 1 | 679 | .001 | 1.951 |
| 2 | .416 ^b | .173 | .151 | 6.482 | .156 | 7.341 | 17 | 662 | .000 | |

a. Predictors: (Constant), Cornish ethnic identity

b. Predictors: (Constant), Cornish ethnic identity, 15-19k vs baseline, Age last birthday, 75-99k vs baseline, 100k plus vs baseline, 50-74k vs baseline, 45-49k vs baseline, 40-44k vs baseline, OtherreligvBase, 35-39k vs baseline, 25-29k vs baseline, 2.5-4.9 vs Baseline, 30-34k vs baseline, 20-24k vs baseline, NoReligvBase, Gender Recoded, 0-2.5k vs Baseline, 10-14k vs baseline

c. Dependent Variable: Social Exclusion Index

ANOVA^c

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 589.735 | 1 | 589.735 | 12.113 | .001 ^a |
| | Residual | 33056.944 | 679 | 48.685 | | |
| | Total | 33646.678 | 680 | | | |
| 2 | Regression | 5832.810 | 18 | 324.045 | 7.713 | .000 ^b |
| | Residual | 27813.868 | 662 | 42.015 | | |
| | Total | 33646.678 | 680 | | | |

a. Predictors: (Constant), Cornish ethnic identity

b. Predictors: (Constant), Cornish ethnic identity, 15-19k vs baseline, Age last birthday, 75-99k vs baseline, 100k plus vs baseline, 50-74k vs baseline, 45-49k vs baseline, 40-44k vs baseline, OtherreligvBase, 35-39k vs baseline, 25-29k vs baseline, 2.5-4.9 vs Baseline, 30-34k vs baseline, 20-24k vs baseline, NoReligvBase, Gender Recoded, 0-2.5k vs Baseline, 10-14k vs baseline

c. Dependent Variable: Social Exclusion Index

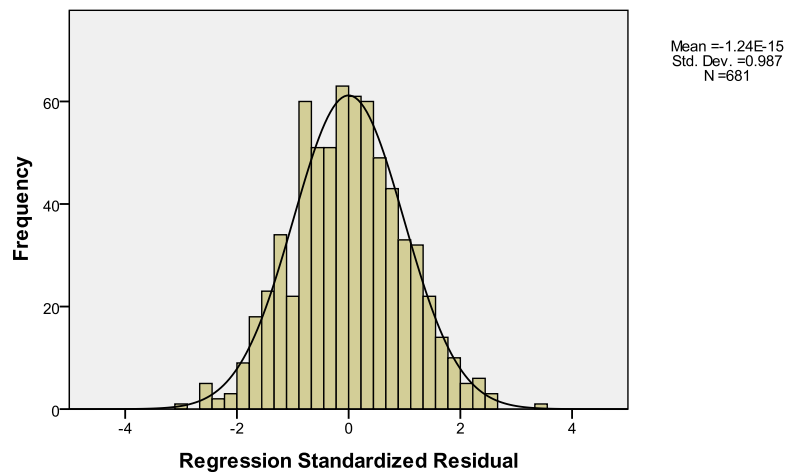
Residuals Statistics^a

| | Minimum | Maximum | Mean | Std. Deviation | N |
|----------------------|---------|---------|-------|----------------|-----|
| Predicted Value | 46.75 | 64.78 | 57.04 | 2.929 | 681 |
| Residual | -19.921 | 22.598 | .000 | 6.396 | 681 |
| Std. Predicted Value | -3.516 | 2.640 | .000 | 1.000 | 681 |
| Std. Residual | -3.073 | 3.486 | .000 | .987 | 681 |

a. Dependent Variable: Social Exclusion Index

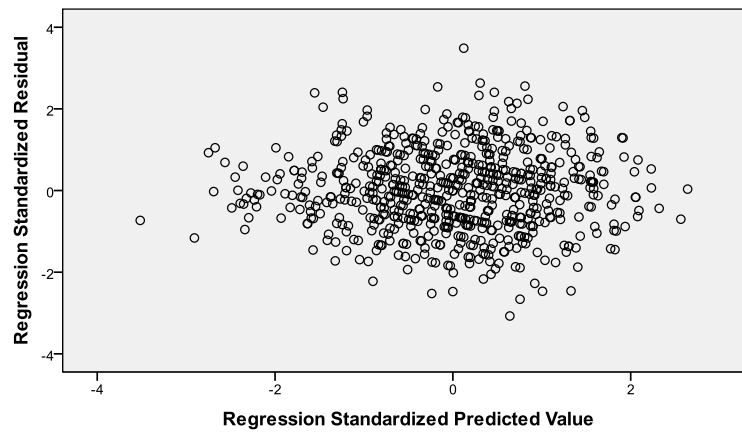
Histogram

Dependent Variable: Social Exclusion Index



Scatterplot

Dependent Variable: Social Exclusion Index



5.8 Regression coefficients – model 2

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .419 ^a | .176 | .152 | 6.467 | .176 | 7.216 | 19 | 642 | .000 | 1.934 |

a. Predictors: (Constant), OtherreligvBase, 15-19k vs baseline, Age last birthday, 100k plus vs baseline, 45-49k vs baseline, PostcdNumeric, 75-99k vs baseline, 50-74k vs baseline, 40-44k vs baseline, 35-39k vs baseline, Cornish ethnic identity, 25-29k vs baseline, 2.5-4.9 vs Baseline, 30-34k vs baseline, 20-24k vs baseline, NoReligvBase, Gender Recoded, 0-2.5k vs Baseline, 10-14k vs baseline

b. Dependent Variable: Social Exclusion Index

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | | Collinearity Statistics | | |
|-------|-------------------------|-----------------------------|------------|---------------------------|--------|------|--------------|---------|-------|-------------------------|-------|--|
| | | B | Std. Error | Beta | | | Zero-order | Partial | Part | Tolerance | VIF | |
| 1 | (Constant) | 55.600 | 1.502 | | 37.007 | .000 | | | | | | |
| | Age last birthday | .037 | .018 | .084 | 2.097 | .036 | .085 | .082 | .075 | .795 | 1.258 | |
| | PostcdNumeric | .026 | .026 | .038 | 1.032 | .302 | .010 | .041 | .037 | .954 | 1.048 | |
| | Cornish ethnic identity | 1.484 | .605 | .090 | 2.452 | .014 | .128 | .096 | .088 | .945 | 1.058 | |
| | Gender Recoded | .919 | .553 | .064 | 1.663 | .097 | .114 | .066 | .060 | .875 | 1.143 | |
| | 0-2.5k vs Baseline | 3.513 | 1.242 | .114 | 2.830 | .005 | .145 | .111 | .101 | .797 | 1.255 | |
| | 2.5-4.9 vs Baseline | 2.420 | 1.099 | .086 | 2.203 | .028 | .157 | .087 | .079 | .844 | 1.185 | |
| | 10-14k vs baseline | -1.045 | .769 | -.058 | -1.359 | .175 | .028 | -.054 | -.049 | .701 | 1.426 | |
| | 15-19k vs baseline | -2.242 | .882 | -.105 | -2.542 | .011 | -.049 | -.100 | -.091 | .748 | 1.336 | |
| | 20-24k vs baseline | -3.716 | .978 | -.154 | -3.800 | .000 | -.102 | -.148 | -.136 | .778 | 1.285 | |
| | 25-29k vs baseline | -3.741 | 1.167 | -.126 | -3.206 | .001 | -.081 | -.126 | -.115 | .837 | 1.195 | |
| | 30-34k vs baseline | -3.530 | 1.263 | -.110 | -2.796 | .005 | -.078 | -.110 | -.100 | .837 | 1.195 | |
| | 35-39k vs baseline | -5.544 | 1.488 | -.142 | -3.727 | .000 | -.115 | -.146 | -.134 | .888 | 1.126 | |
| | 40-44k vs baseline | -6.767 | 1.815 | -.139 | -3.728 | .000 | -.121 | -.146 | -.134 | .926 | 1.080 | |
| | 45-49k vs baseline | -9.753 | 2.977 | -.120 | -3.276 | .001 | -.105 | -.128 | -.117 | .951 | 1.051 | |
| | 50-74k vs baseline | -4.892 | 1.882 | -.097 | -2.600 | .010 | -.077 | -.102 | -.093 | .927 | 1.079 | |
| | 75-99k vs baseline | -5.536 | 2.696 | -.075 | -2.054 | .040 | -.064 | -.081 | -.074 | .968 | 1.033 | |
| | 100k plus vs baseline | -9.499 | 2.941 | -.117 | -3.230 | .001 | -.095 | -.126 | -.116 | .974 | 1.026 | |
| | NoReligvBase | -1.450 | .588 | -.093 | -2.465 | .014 | -.106 | -.097 | -.088 | .910 | 1.099 | |
| | OtherreligvBase | -2.649 | 1.351 | -.072 | -1.961 | .050 | -.041 | -.077 | -.070 | .953 | 1.050 | |

a. Dependent Variable: Social Exclusion Index

5.9 Multi-level regression model parameters – three models

Information Criteria^a

| | |
|--------------------------------------|----------|
| -2 Log Likelihood | 4558.079 |
| Akaike's Information Criterion (AIC) | 4588.079 |
| Hurvich and Tsai's Criterion (AICC) | 4588.790 |
| Bozdogan's Criterion (CAIC) | 4671.151 |
| Schwarz's Bayesian Criterion (BIC) | 4656.151 |

The information criteria are displayed in smaller-is-better forms.

a. Dependent Variable: Social Exclusion Index.

Estimates of Covariance Parameters^a

| Parameter | Estimate | Std. Error | Wald Z | Sig. | 95% Confidence Interval | |
|-----------|-----------|------------|--------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Residual | 42.882954 | 2.307069 | 18.588 | .000 | 38.591416 | 47.651730 |

a. Dependent Variable: Social Exclusion Index.

Type III Tests of Fixed Effects^a

| Source | Numerator df | Denominator df | F | Sig. |
|--------------|--------------|----------------|-----------|------|
| Intercept | 1 | 691.000 | 15099.927 | .000 |
| NonevsBase | 1 | 691 | 4.428 | .036 |
| OnevsBase | 1 | 691 | 5.300 | .022 |
| TwovsBase | 1 | 691 | 3.217 | .073 |
| ThreevsBase | 1 | 691.000 | 9.829 | .002 |
| FourvsBase | 1 | 691 | 17.524 | .000 |
| FivevsBase | 1 | 691 | 13.684 | .000 |
| SixvsBase | 1 | 691 | 11.419 | .001 |
| SevenvsBase | 1 | 691 | 17.435 | .000 |
| EightvsBase | 1 | 691 | 18.597 | .000 |
| NinevsBase | 1 | 691 | 11.839 | .001 |
| TenvsBase | 1 | 691 | 13.173 | .000 |
| ElevenvsBase | 1 | 691 | 5.748 | .017 |
| TwelvevsBase | 1 | 691 | 10.130 | .002 |

a. Dependent Variable: Social Exclusion Index.

Information Criteria^a

| | |
|--------------------------------------|----------|
| -2 Log Likelihood | 4556.129 |
| Akaike's Information Criterion (AIC) | 4588.129 |
| Hurich and Tsai's Criterion (AICC) | 4588.937 |
| Bozdogan's Criterion (CAIC) | 4676.740 |
| Schwarz's Bayesian Criterion (BIC) | 4660.740 |

The information criteria are displayed in smaller-is-better forms.

a. Dependent Variable: Social Exclusion Index.

Estimates of Covariance Parameters^a

| Parameter | Estimate | Std. Error | Wald Z | Sig. | 95% Confidence Interval | |
|-------------------------------|---------------------|------------|--------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Residual | 42.597484 | 2.295349 | 18.558 | .000 | 38.328100 | 47.342437 |
| Intercept [subject = Cornish] | Variance .384219 | .563183 | .682 | .495 | .021722 | 6.796100 |

a. Dependent Variable: Social Exclusion Index.

Information Criteria^a

| | |
|--------------------------------------|----------|
| -2 Log Likelihood | 4556.110 |
| Akaike's Information Criterion (AIC) | 4614.110 |
| Hurvich and Tsai's Criterion (AICC) | 4616.742 |
| Bozdogan's Criterion (CAIC) | 4774.716 |
| Schwarz's Bayesian Criterion (BIC) | 4745.716 |

The information criteria are displayed in smaller-is-better forms.

a. Dependent Variable: Social Exclusion Index.

Estimates of Covariance Parameters^b

| Parameter | Estimate | Std. Error | Wald Z | Sig. | 95% Confidence Interval | |
|----------------------------------|----------------------------------|------------|--------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Residual | 42.558258 | 2.306688 | 18.450 | .000 | 38.269088 | 47.328155 |
| Intercept [subject = Cornish] | Variance .430341 | .680599 | .632 | .527 | .019391 | 9.550289 |
| NonevsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| OnevsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| TwovsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| ThreevsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| FourvsBase [subject = Cornish] | Variance .371495 | 2.825291 | .131 | .895 | 1.248534E-7 | 1.105364E6 |
| FivevsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| SixvsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| SevenvsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| EightvsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| NinevsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| TenvsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| ElevenvsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |
| TwelvevsBase [subject = Cornish] | Variance .000000 ^a | .000000 | . | . | . | . |

a. This covariance parameter is redundant. The test statistic and confidence interval cannot be computed.

b. Dependent Variable: Social Exclusion Index.

5.10 Missing data analysis - EM

EM Means^a

| |
|-------|
| SEI |
| 57.04 |

a. Little's MCAR test: Chi-Square = .000, DF = 0, Sig. = .

Univariate Statistics

| | N | Mean | Std. Deviation | Missing | | No. of Extremes ^a | |
|---------|-----|-------|----------------|---------|---------|------------------------------|------|
| | | | | Count | Percent | Low | High |
| SEI | 691 | 57.04 | 7.078 | 133 | 16.1 | 0 | 1 |
| Cornish | 824 | | | 0 | .0 | | |

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

5.11 Missing data analysis - multiple regression

Model Summary^d

| Imputation Number | Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|-------------------|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| | | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| Original data | 1 | .132 ^a | .018 | .016 | 6.977 | .018 | 12.113 | 1 | 679 | .001 | 1.951 |
| | 2 | .416 ^b | .173 | .151 | 6.482 | .156 | 7.341 | 17 | 662 | .000 | |
| 1 | 1 | .134 ^a | .018 | .017 | 6.993 | .018 | 14.851 | 1 | 808 | .000 | 2.051 |
| | 2 | .352 ^c | .124 | .104 | 6.675 | .106 | 5.633 | 17 | 791 | .000 | |
| 2 | 1 | .111 ^a | .012 | .011 | 6.926 | .012 | 10.051 | 1 | 808 | .002 | 1.971 |
| | 2 | .351 ^c | .123 | .103 | 6.595 | .111 | 5.891 | 17 | 791 | .000 | |
| 3 | 1 | .143 ^a | .020 | .019 | 6.883 | .020 | 16.782 | 1 | 808 | .000 | 1.937 |
| | 2 | .372 ^c | .138 | .119 | 6.524 | .118 | 6.377 | 17 | 791 | .000 | |
| 4 | 1 | .110 ^a | .012 | .011 | 6.942 | .012 | 9.983 | 1 | 808 | .002 | 2.006 |
| | 2 | .370 ^c | .137 | .117 | 6.559 | .124 | 6.701 | 17 | 791 | .000 | |
| 5 | 1 | .121 ^a | .015 | .013 | 7.050 | .015 | 12.071 | 1 | 808 | .001 | 1.982 |
| | 2 | .359 ^c | .129 | .109 | 6.699 | .114 | 6.110 | 17 | 791 | .000 | |

a. Predictors: (Constant), Cornish ethnic identity

b. Predictors: (Constant), Cornish ethnic identity, 15-19k vs baseline, Age last birthday, 75-99k vs baseline, 100k plus vs baseline, 50-74k vs baseline, 45-49k vs baseline, 40-44k vs baseline, OtherreligvBase, 35-39k vs baseline, 25-29k vs baseline, 2.5-4.9 vs Baseline, 30-34k vs baseline, 20-24k vs baseline, NoReligvBase, Gender Recoded, 0-2.5 k vs Baseline, 10-14k vs baseline

c. Predictors: (Constant), Cornish ethnic identity, 15-19k vs baseline, 100k plus vs baseline, 75-99k vs baseline, 50-74k vs baseline, 45-49k vs baseline, Age last birthday, 40-44k vs baseline, 35-39k vs baseline, 25-29k vs baseline, OtherreligvBase, 2.5-4.9 vs Baseline, 30-34k vs baseline, 20-24k vs baseline, Gender Recoded, 0-2.5k vs Baseline, NoReligvBase, 10-14k vs baseline

d. Dependent Variable: Social Exclusion Index

| POOLED DATA, Multiple Imputation | B | SE B | Significance** |
|----------------------------------|-------|------|----------------|
| Step 1 | | | |
| Constant | 56.61 | .297 | |
| Cornish Ethnicity | 2.01 | .620 | .001* |
| Step 2 | | | |
| Constant | 56.23 | 1.37 | |
| Cornish ethnicity | 1.62 | 0.60 | .01* |
| Age | 0.02 | 0.02 | .23 |
| Gender | 0.88 | 0.60 | .14 |
| No religion vs Christian | -1.19 | 0.58 | .04* |
| Other religion vs Christian | -1.60 | 1.23 | .19 |
| 0-2.5k vs Baseline | 2.88 | 1.22 | .02* |
| 2.5-4.9 vs Baseline | 2.16 | 1.35 | .12 |
| 10-14k vs baseline | -0.34 | 0.82 | .67 |
| 15-19k vs baseline | -1.54 | 0.92 | .09 |
| 20-24k vs baseline | -2.92 | 0.97 | .01* |
| 25-29k vs baseline | -2.99 | 1.20 | .01* |
| 30-34k vs baseline | -2.41 | 1.35 | .07 |
| 35-39k vs baseline | -5.05 | 1.52 | .01* |
| 40-44k vs baseline | -6.41 | 1.79 | .01* |
| 45-49k vs baseline | -6.67 | 2.77 | .02* |
| 50-74k vs baseline | -4.79 | 1.86 | .01* |
| 75-99k vs baseline | -3.79 | 2.63 | .15 |
| 100k+ vs baseline | -8.82 | 3.01 | .01* |

Note: $R^2=.015$ for Step 1, $\Delta R^2=.11$ for Step 2 ($p>0.05$). * $p>0.05$ ** β not calculated for

pooled

MI

data

Appendix 6

6.1 – 6.7 Respondent significant statements (stage one analysis)

6.1 R-001

| |
|---|
| R-001 |
| Felt that housing was an important issue, that there were generations at a time in a single property, Cornish are housing poor. |
| It is important to link agencies to the communities. |
| Respondent started in volunteering and worked their way up. |
| Employment, R-001 felt, was a key social exclusion factor. |
| Income decided employment, long running. |
| Transport is a really big issue in Cornwall. |
| No groups are particularly at risk (even ethnic groups). |
| Cornish are a big group but not suffering any different to other groups in the region. |
| The Cornish are very lazy; they need to broaden their horizons. |
| The Polish are coming in now and the Cornish are not happy but they do not do the jobs anyway. |
| The difference between belief and reality is very large in terms of exclusion. |
| All groups suffer exclusion, there is no commonality. |
| The area needs more funding, but more targeted funding in specific areas. |

6.2 R-002

| |
|---|
| R-002 |
| Again, involved in bringing communities and agencies together. |
| Huge deprivation in the area, R-002 has lived in that area all his/her life. |
| Employment and the related benefit trap are central to levels of deprivation. |
| No particular group of people are any more at risk than any others. |
| Family and work are the central issues; if your dad worked then you will work etc. |
| Most people on that estate were Cornish. However there are a lot of incomers to the area from places such as London and Manchester. |
| Respondent is Cornish, and feels that the Cornish are often of a lower income than others. |
| Second homes penalise locals and compound the problem. |
| Jobs, the Polish and the Cornish compete but usually the Cornish are unwilling to work. |
| Income may be the overarching decider, as benefits are often better than low paid seasonal work. |
| There is a difference between belief and reality, the Cornish feel very hard done by. The Cornish feel that they should come first. |
| It is all about aspirations and there are very few in Cornwall. |
| It doesn't matter if you are Cornish; living in the region is hard regardless. |
| Funding should be more devolved as the residents do not feel that they can approach service providers. |

6.3 R-003

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| R-003 |
| Social exclusion is prevalent, and employment is a real issue in the area. |
| Public transport is also a real problem in some locations. |
| Isolation in a lot of places is a big factor; the respondent felt that a lot of time was spent on the phone because of this. |
| Exclusion in Cornwall is broken down geographically. |
| There are a lot of excluded Cornish, or at least the Cornish like to think so. |
| The Cornish can be difficult about being Cornish, though they are not suffering any worse than anyone else. |
| The claim that they do suffer more however, they see themselves as having more right. |
| The belief and the reality are unmatched. |
| Employment is central, but then it sometimes it pays not to work, so maybe it is income? |
| There should be funding to target isolation – transport – to give people fair access to the NHS and similar. It needs to engage the community that it aims to target. |

6.4 R-004

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| R-004 |
| Finance, there is a large group of financially excluded that struggle. |
| It is largely geographically located social exclusion, steep hills etc. |
| Financial deprivation leads to health and housing problems, this is also common. |
| The indigenous population does indeed suffer, unless they are re-migrants to the area having returned from other areas of the UK. |
| Those who never leave the County really suffer, like the respondents siblings. |
| Cornish people do not have the self-push, the motivation needed to better themselves. |
| The Cornish are strong believers in identity and a large group in the region. |
| Asked outright, it was difficult to say if the group were excluded. |
| The belief that the group suffer, however, is very common. |
| That belief, regardless of truth, can become a lived reality if it is there long enough. |
| It maybe the assertion of other groups onto the Cornish that creates that belief. |
| There is a sense of defeatism, even with the incoming funding. |
| CN4C take the wrong approach, they parachute in funding without a longer plan, there needs to be better communication between communities and agencies. |
| Criticisms of hard outcomes; they are very narrow for proper funding. |
| There needs to be wider funding, as it is can leave those on the edge of a funded area worse off. |
| There is an attitude that Cornwall is last in line for benefits but first in line for cuts. |

6.5 R-005

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| R-005 |
| There is a difference between outsiders and insiders in the area, anyone from outside is better off (i.e. able to move etc) and so locals feel hard done by in comparison. |
| Common themes are unemployment, mental ill health, drugs and alcohol abuse. |
| There is a benefit trap, and low self-esteem contributes to this problem greatly. |
| This deprivation is not geographically located in any real sense. |
| Low income is probably the connecting factor for a lot of these things. |
| In order to combat low self-esteem there should be more stealth learning, games which lead to learning. |
| The Cornish, whilst not excluded directly, are indeed less likely to engage on some levels. |
| The Cornish are very set and unwilling to change that mindset. |
| The opinion of others is that the Cornish have a certain way, 'dreckly', and they don't fight that. |
| There is a belief that if someone comes from outside Cornwall they bring something with them. |
| The Cornish feel put upon and this is often done to them by themselves. |
| CUC has retained skills in Cornwall; this is a positive thing in the region. |
| There is deprivation amongst the Cornish, but they needn't suffer as much as they do. |
| One key factor is the decline of the industries in the region. |
| Regeneration funding does not impact on the individuals despite the reports to the contrary. |
| Too much flying in to an area and then flying out again with funds. There should be sustained contact with the community. |

6.6 R-006

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| R-006 |
| Social exclusion is common due to the decline in industry, leads to high unemployment. |
| Incoming groups already have health and education problems in many cases, and they tend towards already deprived areas. |
| There are no real common themes of exclusion, a bubble board! |
| No groups of people either, there is exclusion right across the board. |
| The Cornish as a group are prevalent; however everybody is excluded in some places. |
| The Cornish are resentful of others coming here with problems, there is some anger. |
| The solution is to work with the problems, not a specific group – there is no link. |
| Cornish often do not want jobs, so they are taken by others. This contributes to the resentment. |
| People in some areas of deprivation feel worthless. |
| Funding strands should target smaller groups and be more specific. |
| Funding should also have a lower number of outcomes, if one person can be kept off the street then the public purse benefits in the long run. |
| Funding therefore should compare costs against the likely costs of no intervention. |
| There should be more devoted strands, based on a three year funding plan with less rigidity. |

6.7 R-007

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| R-007 |
| Respondent tries to match needs to agency funds. |
| 90% of that area falls into the definition of socially excluded/deprived. |
| Common are unemployment and low educational attainment as well as teen pregnancy. |
| A fear of change is very common; there are low levels of aspiration. |
| Elderly suffer the least, as they are well cared for on that estate. |
| The estate is largely (white) Cornish. |
| There is a Cornish racism; the Cornish seem to hate all other groups in the area! Especially the Polish as they are 'stealing' jobs. |
| The Cornish are insular – that is they don't go beyond specific towns or Cornwall as a whole. So they do experience things differently, maybe not worse though. |
| The attitude of others (dumb and poor Cornish) rubs off. |
| Employment is a culturally rare thing now, second generation unemployed in a lot of cases. |
| Aspirations are misplaced – to have a large TV and sofa rather than bettering oneself etc. |
| Men are out of work when they traditionally would not have been; the women are therefore the first to attempt to change things. |
| CN4C, whilst providing funds, are not fit for purpose. The targets are hit but they are the wrong targets and there is little real world change. |
| There has to be more realistic targets and outcomes, funding will not change 20 years of cultural behaviour in 18 months. |
| Funding should be provided for specific community development programmes which involve residents. |
| None of the residents vote – they feel cut off and apathetical to a system that is foreign to them. |

References

- Abel-Smith, B. & Townsend, P. 1965, *The poor and the poorest*. Bell and Sons: London.
- Acton, C. & Miller, R. 2002, *SPSS for social scientists*. 2nd edn, Palgrave Macmillan: Basingstoke.
- Ahmad, W. 1999, 'Ethnic statistics: better than nothing or worse than nothing?' In *Statistics and Society: The arithmetic of politics*. D. Dorling & S. Simpson, eds., Arnold: London.
- Ahmad, W. & Bradby, H. 2007, 'Locating ethnicity and health: exploring concepts and contexts.' *Sociology of Health and Illness*, vol. 29, no. 6, pp. 795-810.
- Alberro, M. 2001, 'Celtic Galicia? Ancient connections and similarities in the traditions, superstitions, and folklore of the Cornish peninsula and Galicia in Spain.' In *Cornish Studies Nine*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 13-44.
- Albright, J. and Marinova, D., 2010. *Estimating multi-level models using SPSS, Stata, SAS and R [Online]*. Available at: <http://www.indiana.edu/~statmath/stat/all/hlm/hlm.pdf> (Accessed 8/11/10)
- Aldous, P. & Williams, M. 2001, 'A question of ethnic identity.' In *Cornish Studies Nine*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 213-226.
- Aldous, P. M. 2002, *Young People and Migration Choices in Cornwall*. Unpublished M.Phil Dissertation, University of Plymouth.
- Aldridge, A. & Levine, K. 2001, *Surveying the social world*. Open University Press: Buckingham.
- Angarrack, J. 1999, *Breaking the chains: propaganda, censorship, deception and the manipulation of public opinion in Cornwall*. Cornish Stannary Publications: Camborne.
- Aspinall, P. 2009, 'The future of ethnicity classifications.' *Journal of Ethnic and Migration Studies*, vol. 35, no. 9, pp. 1417-1435.

- Asthana, S., Gibson, A., Moon, G., & Brigham, P. 2003, 'Allocating resources for health and social care: the significance of rurality.' *Health and Social Care in the Community*, vol. 11, no. 6, pp. 486-493.
- Asthana, S., Halliday, J., & Gibson, A. 2008, 'Social exclusion and social justice: a rural perspective on resource allocation.' *Policy and Politics*, vol. 37, no. 2, pp. 201-214.
- Banton, M. 2008, 'The Sociology of ethnic relations.' *Ethnic and Racial Studies*, vol. 31, no. 7, pp. 1267-1285.
- Banton, M. 2011, 'A theory of social categories.' *Sociology*, vol. 45, no. 2, pp. 187-201.
- Barry, B. 2002, 'Social exclusion, social isolation, and the distribution of income.' In *Understanding Social Exclusion*. J. Hills, J. Le Grand, & D. Piachaud, eds., Oxford University Press: Oxford, pp. 13-29.
- Barth, F. 1969, 'Ethnic Groups and Boundaries.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 294-324.
- BBC News, 2010. 'Devonwall' plan set for go-ahead [Online]. Available at: www.bbc.co.uk/news/uk-england-11677092 (Accessed 15/2/11)
- Bechhofer, F. & Paterson, L. 2000, *Principles of research design in the social sciences*. Routledge: London.
- Benjamin, B. 1955, 'Quality of response in Census taking.' *Population Studies*, vol. 8, no. 3, pp. 288-293.
- Benton, T. & Craib, I. 2001, *Philosophy of social science. The philosophical foundations of social thought*. Palgrave: Basingstoke.
- Benzeval, M. 1996, 'Health.' In *Britain divided; the growth of social exclusion in the 1980s and 1990s*. A. Walker & C. Walker, eds., CPAG Ltd: London, pp. 153-169.
- Berg, B. 1989, *Qualitative research methods for the social sciences*. 5th edn, Pearson: London.
- Berghman, J. 1995, 'Social exclusion in Europe: policy context and analytical framework.' In *Beyond the threshold: the measurement and analysis of social exclusion*. G. Room, ed., Policy Press: Bristol, pp. 10-28.

- Bertrand, J. 2011, 'Indigenous peoples' rights' as a strategy of ethnic accommodation: contrasting experiences of Cordillerans and Papuans in the Philippines and Indonesia.' *Ethnic and Racial Studies*, vol. 34, no. 5, pp. 850-869.
- Bird, J. 1996, *Black students and higher education: rhetoric and realities*. Open University Press: Buckingham.
- Bloch, A. 1996, 'Ethnic inequality and social security policy.' In *Britain divided; the growth of social exclusion in the 1980s and 1990s*. A. Walker & C. Walker, eds., CPAG Ltd: London, pp. 111-122.
- Bosworth, G. & Willett, J. 2011, 'Embeddedness or escapism? Rural perceptions and economic development in Cornwall and Northumberland.' *Sociologia Ruralis*, vol. 51, no. 2, pp. 195-214.
- Bradshaw, J. 2002, 'Child poverty and child outcomes.' *Children & Society*, vol. 16, pp. 131-140.
- Brent, J. & Kraska, P. 2010, 'Moving beyond our methodological default: a case for mixed methods.' *Journal of Criminal Justice Education*, vol. 21, no. 4, pp. 412-430.
- British Sociological Association 2002, *Statement of ethical practice for the British Sociological Association*. British Sociological Association, Durham.
- Brittain, V. 2009, 'Besieged in Britain.' *Race Class*, vol. 50, no. 1, pp. 1-29.
- Brubaker, R. 2004, 'In the name of the nation: reflections on nationalism and patriotism.' *Citizenship Studies*, vol. 8, no. 2, pp. 115-127.
- Bryant, L. 1993, 'The Cornish family.' In *Cornwall since the war*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 181-197.
- Bryman, A. & Cramer, D. 2009, *Quantitative data analysis with SPSS 14,15 and 16. A guide for social scientists*. Routledge: Hove.
- Buck, M., Williams, M., & Bryant, L. 1993, 'Housing the Cornish: Containing the Crisis.' In *Cornish Studies One*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 97-108.

- Buck, M., Bryant, L., & Williams, M. 1993, *Housing and households in Cornwall. A pilot study of Cornish families*. Department of Applied Social Science, University of Plymouth, Plymouth.
- Burchardt, T., Le Grand, J., & Piachaud, D. 2002a, 'Introduction' In *Understanding Social Exclusion*. J. Hills, J. Le Grand, & D. Piachaud, eds., Oxford University Press: Oxford, pp. 1-12.
- Burchardt, T., Le Grand, J., & Piachaud, D. 2002b, 'Degrees of exclusion: Developing a dynamic, multidimensional measure.' In *Understanding Social Exclusion*. J. Hills, J. Le Grand, & D. Piachaud, eds., Oxford University Press: Oxford, pp. 30-43.
- Burke, G. 1984, 'The Cornish Diaspora of the Nineteenth Century.' In *International Labour Migration: Historical Perspectives*. S. Marks & P. Richardson, eds., Maurice Temple Smith: Hounslow, pp. 57-75.
- Burley, S. 2007, *Migration and economy in Cornwall*. Unpublished PhD thesis, University of Plymouth.
- Burton, J., Nandi, A., & Platt, L. 2010, 'Measuring ethnicity: challenges and opportunities for survey research.' *Ethnic and Racial Studies*, vol. 33, no. 8, pp. 1332-1349.
- Burton, R. 1997, 'A passion to exist: cultural hegemony and the roots of Cornish identity.' In *Cornish Studies Five*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 151-163.
- Burton, R. 2000, *Cultural entrepreneurship and the search for authenticity in Cornwall*. PhD Thesis, University of Exeter.
- Butcher, R. 1988, 'The use of the Postcode Address File as a sampling frame.' *Journal of the Royal Statistics Society-Series D.*, vol. 37, no. 1, pp. 15-24.
- Bygren, M. & Szulkin, R. 2010, 'Ethnic environment during childhood and the educational attainment of immigrant children in Sweden.' *Social Forces*, vol. 88, no. 3, pp. 1305-1330.
- Byrne, D. 1999, *Social Exclusion* Open University Press: Buckingham.
- Callinicos, A. 2004, *Making history. Agency, structure, and change in social theory*. 2nd edn, Leiden: Brill.

- Carew, R. 1602, *The survey of Cornwall*. Adams and Dart: London.
- Carter, B. & Fenton, S. 2009, 'Not thinking ethnicity: a critique of the ethnicity paradigm in an over-ethnicised Sociology.' *Journal for the Theory of Social Behaviour*, vol. 40, no. 1, pp. 1-18.
- Cemlyn, S., Fahmy, E., Gordon, D., and Bennett, S., 2002. *Poverty and neighbourhood renewal in West Cornwall - final report [Online]*. Available at: http://www.bristol.ac.uk/poverty/Regional%20poverty_files/cornw/02NR-CORNW.pdf (accessed 18/7/09)
- Cemlyn, S., Fahmy, E., & Gordon, D. 2005, 'Poverty, neighbourhood renewal and the voluntary and community sector in West Cornwall.' *Community Development Journal*, vol. 40, no. 1, pp. 76-85.
- Chen, S., Mefford, L., Brown, J., Hsu, M., Clem, R., & Newman, L. 2008, 'Predictors of American elders' home stay: A secondary data analysis study.' *Nursing and Health Sciences*, vol. 10, pp. 117-124.
- Chin, R., Neville, B., Peckham, C., Wade, A., Bedford, H., & Scott, R. 2009, 'Socioeconomic deprivation independent of ethnicity increases status epilepticus risk.' *Epilepsia*, vol. 50, no. 5, pp. 1022-1029.
- Church, R. 2001, 'The effective use of secondary data.' *Learning and Motivation*, vol. 33, pp. 32-45.
- Clarke, G. & Cooke, D. 1998, *A basic course in statistics*. 4th edn, Arnold: London.
- Cloke, P., Millbourne, P., & Widdowfield, R. 2001, 'Homelessness and rurality: exploring connections in local spaces of rural England.' *Sociologia Ruralis*, vol. 41, no. 4, pp. 438-453.
- Clucas, M. 2009, 'The Irish health disadvantage in England: contribution of structure and identity components of Irish ethnicity.' *Ethnicity and Health*, vol. 14, no. 6, pp. 553-573.
- Cockerham, P. 2001, 'Models of memorialization: Cornwall, Ireland and Brittany compared.' In *Cornish Studies Nine*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 45-82.

- Cohen, A. 1969, 'Ethnicity and Politics.' In *Ethnicity*. J. Hutchinson & A. D. Smith, eds., Oxford University Press: Oxford, pp. 83-84.
- Cohen, A. 1974, 'The Lesson of Ethnicity.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 370-384.
- Cole, D. 1997, 'The Cornish: identity and genetics-an alternative view.' In *Cornish Studies Five*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 21-29.
- Commins, P. 2004, 'Poverty and social exclusion in rural areas: characteristics, processes and research issues.' *Sociologia Ruralis*, vol. 44, no. 1, pp. 60-75.
- Communities and Local Government 2006, *2005 Citizenship Survey - Community cohesion topic report*. Department for Communities and Local Government, London.
- Communities and Local Government 2007a, *National Indicators for Local Authorities and Local Partnerships: Handbook of Definitions*. Department for Communities and Local Government, London, Annex 3 - Adult Health and Well-being and Tackling Social Exclusion and Promoting Equality.
- Communities and Local Government 2007b, *The English Indices of Deprivation 2007*. Department for Communities and Local Government, London.
- Communities and Local Government 2010, *The English indices of deprivation 2010*. Department for Communities and Local Government, London.
- Conolly, A. 2008, 'Challenges of generating qualitative data with socially excluded young people.' *International Journal of Social Research Methodology*, vol. 11, no. 3, pp. 201-214.
- Conversi, D. 2008, 'Democracy, Nationalism and Culture: A social critique of Liberal Monoculturalism.' *Sociology Compass*, vol. 2, no. 1, pp. 156-182.
- Convery, P. 1996, 'Unemployment.' In *Britain divided; the growth of social exclusion in the 1980s and 1990s*. A. Walker & C. Walker, eds., CPAG Ltd: London, pp. 170-197.
- Cornish Constitutional Convention 2002, *Devolution for one and all; governance for Cornwall in the 21st Century*. Cornish Constitutional Convention, Truro.

Cornish Constitutional Convention 2004, *Southern Discomfort*. Cornish Constitutional Convention, Truro.

Cornish Constitutional Convention 2009, *The next push*. Cornish Constitutional Convention, Truro.

Cornwall and Isles of Scilly Economic Forum 2007, *Strategy and Action - The Economic Development Strategy for Cornwall and the Isles of Scilly 2007 - 2021*. Cornwall Council, Truro.

Cornwall and Isles of Scilly Primary Care Trust 2008, *Stretching our ambition for a healthy future*. Cornwall and Isles of Scilly PCT, St Austell.

Cornwall Children and Young People's Partnership 2008, *Kernow matters: needs assessment for Cornwall's children and young people's plan 2008-11*. Cornwall Council, Truro.

Cornwall Council, 2007. *One Cornwall One Council [Online]*. Available at:
<http://www.onecornwall.cornwall.gov.uk/index.aspx?articleid=42135> (accessed 02/02/09)

Cornwall Council, 2009. *Cornwall in context [Online]*. Available at:
<http://www.cornwall.gov.uk/default.aspx?page=5435> (accessed 3.7.09)

Cornwall Council 2010, *Understanding Cornwall 2009-2010 - big messages*. Cornwall Council, Truro.

Cornwall Council 2011, *Child Poverty Needs Assessment for Cornwall 2011*. Cornwall Council, Truro.

Cornwall Neighbourhoods for Change 2007a, *One and All? A report on the correlation between areas of economic deprivation and social housing in Cornwall*. CN4C, Redruth.

Cornwall Neighbourhoods for Change 2007b, *Objective won? A report on the true impact of ESF on the day to day lives of people and communities in disadvantaged neighbourhoods in Cornwall*. CN4C, Redruth.

Cornwall Rural Community Council 2006, *Social inclusion conference report*. CRCC, Truro.

- Cornwall Strategic Partnership 2007, *Quality of life tracker survey*. Cornwall Council, Truro.
- Craemer, T. 2011, 'Invisible norms? Statistics of racial polarization and consensus.' *Social Science Research*, vol. 40, pp. 1170-1185.
- Cramer, D. 1994, *Introducing statistics for social research: step-by-step calculations and computer techniques using SPSS*. Routledge: London.
- Crawley, M. 2007, *The R Book* John Wiley and Sons: Chichester.
- Creswell, J., Plano Clark, V., Gutmann, M., & Hanson, W. 2003, 'Advanced mixed methods research designs.' In *Handbook of mixed methods in social and behavioural research*. A. Tashakkori & C. Teddlie, eds., Sage: London.
- Creswell, J. 2007, *Qualitative inquiry and research design; choosing among five approaches*. Sage: London.
- Crowther, D. & Carter, C. 2001, 'Community identity and cyberspace: a study of the Cornish community.' In *Cornish Studies Nine*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 227-246.
- Crozier, G. & Davies, J. 2008, 'The trouble is they don't mix': self-segregation or enforced exclusion?' *Race Ethnicity and Education*, vol. 11, no. 3, pp. 285-301.
- Dale, A., Arber, S., & Procter, M. 1988, *Doing secondary analysis*. Unwin Hyman: London.
- David, M. & Sutton, C. 2004, *Social Research; The Basics*. Sage: London.
- Davies, H., Joshi, H., & Clarke, L. 1997, 'Is it cash that the deprived are short of?' *Journal of the Royal Statistical Society A*, vol. 160, no. 1, pp. 107-126.
- De Vaus, D. 2001, *Research design in social research*. Sage: London.
- Deacon, B., George, A., & Perry, R. 1988, *Cornwall at the crossroads?* Cornish Social and Economic Research Group: Redruth.
- Deacon, B. & Payton, P. 1993, 'Re-inventing Cornwall: Culture Change on the European Periphery.' In *Cornish Studies One*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 62-79.

- Deacon, B. 1993, 'And shall Trelawny die? The Cornish identity.' In *Cornwall since the war*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 200-223.
- Deacon, B. and German, J., 1999. *Cornish National Minority Report [Online]*. Available at: <http://www.geecee.co.uk/CNMR/contents.htm> (Accessed 5/10/08)
- Deacon, B., Cole, D., & Tregidga, G. 2003, *Mebyon Kernow and Cornish nationalism*. Ashley Drake: Cardiff.
- Deacon, B. 2007, *Cornwall: A concise history*. University of Wales Press: Cardiff.
- Dean, J. & Hastings, A. 2000, *Challenging images. Housing estates, stigma and regeneration*. Policy Press, Bristol.
- DeHaan, L. & Boljevac, T. 2010, 'Alcohol prevalence and attitudes among adults and adolescents: their relation to early adolescent alcohol use in rural communities.' *Journal of Child and Adolescent Substance Abuse*, vol. 19, no. 3, pp. 223-243.
- Devereux, G. 1975, 'Ethnic Identity: Its Logical Foundations and its Dysfunctions.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 385-414.
- Devicienti, F. & Poggi, A. 2010, 'Poverty and social exclusion: two sides of the same coin or dynamically interrelated processes?' *Applied Economics* pp. 1-23.
- Dorling, D., Vickers, D., Thomas, B., Pritchard, J., & Ballas, D. 2008, *Changing UK; The way we live now*. Social and Spatial Inequalities Group, Sheffield.
- Draeger, J. 2008, 'Must We Care About Racial Injustice?' *Journal of Social Philosophy*, vol. 39, no. 1, pp. 62-76.
- Economic and Social Research Council, 2008. *Delivery Plan 2008-2011 [Online]* Available at: http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/ESRC_Delivery_Plan-2008-2011_tcm6-24959.pdf (accessed 21/4/2009)
- Endean-Ivall, D. 1988, *Cornish heraldry and symbolism*. Dyllansow Truran: Redruth.
- Endelman, M. 1985, 'Political language and political reality.' *PS: Political Science and Politics*, vol. 18, no. 1, pp. 10-19.

- Enterprise for Inclusion 2007, *Tackling social exclusion in rural England*. Plunkett Foundation, Oxford.
- Erikson, E., Kadane, J., & Tukey, J. 1989, 'Adjusting the 1980 Census of population and housing.' *Journal of the American Statistical Association*, vol. 84, no. 408, pp. 927-944.
- Everett, S. & Aitchison, C. 2008, 'The role of food tourism in sustaining regional identity: a case study of Cornwall, South West England.' *Journal of Sustainable Tourism*, vol. 16, no. 2, pp. 150-167.
- Eversole, R. 2005, 'Overview-patterns of indigenous disadvantage worldwide.' In *Indigenous peoples and poverty; an international perspective*. R. Eversole, J. McNeish, & A. Cimadamore, eds., Zed Books: London, pp. 29-37.
- Fay, R. & Herriot, R. 1979, 'Estimates of income for small places: an application of James-Stein procedures to Census data.' *Journal of the American Statistical Association*, vol. 74, no. 366, pp. 269-277.
- Fein, D. 1990, 'Racial and ethnic differences in US Census omission rates.' *Demography*, vol. 27, no. 2, pp. 285-302.
- Feldmayer, B. 2010, 'The effects of racial/ethnic segregation on Latino and Black homicide.' *The Sociological Quarterly*, vol. 51, no. 4, pp. 600-623.
- Fenton, S. 2010, *Ethnicity* 2nd edn, Polity: Cambridge.
- Field, A. 2009, *Discovering statistics using SPSS*. 3rd edn, Sage: London.
- Fielding, N. 2009, 'Mixed methods research in the real world.' *International Journal of Social Research Methodology*, vol. 13, no. 2, pp. 127-138.
- Fontenla, M., Gonzalez, F., & Quast, T. 2010, 'Are recessions good for everyone's health? The association between mortality and the business cycle by race/ethnicity in the US.' *Applied Economic Letters*, vol. 18, no. 3, pp. 207-212.
- Frankfort-Nachmias, C. & Nachmias, D. 1996, *Research methods in the social sciences*. 5th edn, Arnold: London.
- Garcia, S., Hallahan, M., & Rosenthal, R. 2007, 'Poor expression: concealing social class stigma.' *Basic and Applied Social Psychology*, vol. 29, no. 2, pp. 99-107.

- Garreta Bochaca, J. 2006, 'Ethnic minorities and the Spanish and Catalan education systems: From exclusion to intercultural education.' *International Journal of Intercultural Relations*, vol. 30, pp. 261-279.
- Geraerts, E., Bernstein, D., Merckelbach, H., Linders, C., Raymaekers, L., & Loftus, E. 2008, 'Lasting false beliefs and their behavioural consequences.' *Psychological Science*, vol. 19, no. 8, pp. 749-753.
- Giarchi, G. 1987, 'Cornwall's Gaza strip: administrative and cultural constraints to geriatric care in a peripheral rural area.' In *Social Gerontology: new directions*. S. di Gregorio, ed., Croom Helm: New York.
- Giddens, A. 1990, *The Consequences of Modernity*. Polity: Cambridge.
- Gilbert, C. S. 1817, *An historical survey of the county of Cornwall: to which is added, a complete heraldry of the same; with numerous engravings*. Longman, Hurst, Rees, Orme, and Brown.: London.
- Gilroy, P. 1998, 'Race ends here.' *Ethnic and Racial Studies*, vol. 21, no. 5, pp. 838-847.
- Ginkel, J. 2010, 'Investigation of multiple imputation in low-quality questionnaire data.' *Multivariate Behavioural Research*, vol. 45, no. 3, pp. 574-598.
- Ginsburg, N. 1996, 'Housing.' In *Britain divided; the growth of social exclusion in the 1980s and 1990s*. A. Walker & C. Walker, eds., CPAG Ltd: London, pp. 140-152.
- Gleason, P. 1983, 'Identifying Identity: A Semantic History.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 460-487.
- Goodman, N. 1982, 'The way the world is.' In *Knowledge and values in social and educational research*. E. Bredo & W. Feinberg, eds., Temple University Press: Philadelphia, pp. 129-136.
- Goodwin, H. 2007, 'Indigenous tourism and poverty reduction.' In *Tourism and indigenous peoples: issues and implications*. R. Buller & T. Hinch, eds., Elsevier/Butterworth - Heinemann: Amsterdam.
- Gordon, D., Adelman, L., Ashworth, K., Bradshaw, J., Levitas, R., Middleton, S., Pantazis, C., Patsios, D., Payne, S., Townsend, P., & Williams, J. 2000, *Poverty and social exclusion in Britain*. Joseph Rowntree, York.

- Graham, D. & Waterman, S. 2005, 'Underenumeration of the Jewish population in the UK 2001 Census.' *Population, Space and Place*, vol. 11, pp. 89-102.
- Gray, D., Shaw, J., & Farrington, J. 2006, 'Community transport, social capital and social exclusion in rural areas.' *Area*, vol. 38, no. 1, pp. 89-98.
- Griffiths, A. 1989, *Change in the countryside, the Cornish perspective. A study of twelve rural parishes in Cornwall*. Cornwall Rural Development Committee, Exeter.
- Gripaios, P. & McVittie, E. 2003, 'UK Objective One regions: a suitable case for treatment?' *European Urban and Regional Studies*, vol. 10, no. 4, pp. 369-373.
- Grogan-Kaylor, A. & Woolley, M. 2010, 'The social ecology of race and ethnicity school achievement gaps: economic, neighbourhood, school and family factors.' *Journal of Human Behaviour in the Social Environment*, vol. 20, no. 7, pp. 875-896.
- Haahr, M., 2010. *What's this fuss about true randomness?*[Online] Available at: www.random.org (Accessed 08/08/2010)
- Hakim, C. 1982, *Secondary analysis in social research; a guide to data sources and methods with examples*. George Allen and Unwin: London.
- Hale, A. 2000, 'King Arthur and modern Cornwall.' In *Inside Merlin's Cave: A Cornish Arthurian reader 1000-2000*. A. Hale, A. M. Kent, & T. Saunders, eds., Francis Boutle: London, pp. 20-26.
- Hale, A. 2001, 'Representing the Cornish: contesting heritage interpretation in Cornwall.' *Tourist Studies*, vol. 1, no. 2, pp. 185-196.
- Hamilton Jenkin, A. K. 1934, *The story of Cornwall*. 2nd edn, Thomas Nelson and Sons: London.
- Hammersley, M. 2000, *Taking sides in social research, essays on partisanship and bias*. Routledge: London.
- Hampsher-Monk, I. 1992, *A history of modern political thought. Major political thinkers from Hobbes to Marx*. Blackwell: Oxford.
- Handelman, D. 1977, 'The organisation of ethnicity.' *Ethnic Groups*, vol. 1, pp. 187-200.

- Harden, A. & Thomas, J. 2005, 'Methodological issues in combining diverse study types in systematic reviews.' *International Journal of Social Research Methodology*, vol. 8, no. 3, pp. 257-271.
- Harrison, D. 2008, 'Pro-poor tourism; a critique.' *Third World Quarterly*, vol. 29, no. 5, pp. 851-868.
- Harvey, R., Smith, M., Sherren, S., Bailey, L., & Hyndman, S. 1986, 'How Celtic are the Cornish? A study of biological affinities.' *Man*, vol. 21, no. 2, pp. 177-201.
- Hayden, C. 2001, 'Cornwall: a very difficult woman? A feminist approach to issues of Cornish identity.' In *Cornish Studies Nine*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 204-212.
- Hedges, L. & Olkin, I. 1985, *Statistical methods for meta-analysis*. Academic Press: London.
- Hennessy, S., Greenwood, J., Shaw, G., & Williams, A. 1986, *Tourism in Cornwall project, discussion paper 1. The role of tourism in local economies; a pilot study of Looe, Cornwall*. University of Exeter: Exeter.
- Heyl, P. 1930, 'A re-determination of the constant of gravitation.' *National Bureau of Standards Journal of Research*, vol. 5, pp. 1243-1290.
- Hickman, M. & Walter, B. 1997, *Discrimination and the Irish community in Britain; a report of research undertaken for the Commission for Racial Equality*. Commission for Racial Equality, London.
- Hitlin, S., Brown, J., & Elder, G. 2007, 'Measuring Latinos: Racial vs. Ethnic Classification and Self-Understandings.' *Social Forces*, vol. 86, no. 2, pp. 587-612.
- HMSO 1999, *The 2001 Census of Population, White Paper (CM4253)*. TSO, London.
- Hobcraft, J. 2002, 'Social exclusion and the generations.' In *Understanding Social Exclusion*. J. Hills, J. Le Grand, & D. Piachaud, eds., Oxford University Press: Oxford, pp. 62-83.
- Hofferth, S. 2005, 'Secondary data analysis in family research.' *Journal of Marriage and Family*, vol. 67, pp. 891-907.

- Hoffman, J. 2002, 'A contextual analysis of differential association, social control, and strain theories of delinquency.' *Social Forces*, vol. 81, no. 3, pp. 753-785.
- Holloway, S. 2007, 'Burning issues: whiteness, rurality and the politics of difference.' *Geoforum*, vol. 38, no. 1, pp. 7-20.
- Howard, K. 2006, 'Constructing the Irish of Britain: ethnic recognition and the 2001 UK Censuses.' *Ethnic and Racial Studies*, vol. 29, no. 1, pp. 104-123.
- Howitt, D. & Cramer, D. 2001, *A guide to computing statistics with SPSS 11 for Windows, with supplements for releases 8,9 and 10*. Pearson: Harlow.
- Humpage, L. 2005, 'Tackling indigenous disadvantage in the twenty-first century: 'social inclusion' and Maori in New Zealand.' In *Indigenous peoples and poverty; an international perspective*. R. Eversole, J. McNeish, & A. Cimadamore, eds., Zed Books: London, pp. 158-184.
- Hunter, B. 2008, "Indigenous social exclusion: Insights and challenges for the concept of social inclusion.", *Social Inclusion Down Under - Symposium of Brotherhood of St.Laurence*, Melbourne.
- Husk, K. 2010, 'Accessing education in Cornwall: exploring the structure/agency debate amongst potential students.' In *Cornish Studies Seventeen*. P. Payton, ed., University of Exeter Press: Exeter.
- Hutchinson, J. & Smith, A. D. 1996, 'Theories of Ethnicity - Introduction.' In *Ethnicity*. J. Hutchinson & A. D. Smith, eds., Oxford University Press: Oxford, pp. 32-34.
- Iganski, P. & Johns, N. 1998, 'The problem of 'diversity' and health care provision for minority ethnic communities.' *Journal of Contemporary Health*, vol. 7, pp. 87-89.
- Iganski, P. & Payne, G. 1999, 'Socio-economic re-structuring and employment: the case of minority ethnic groups.' *British Journal of Sociology*, vol. 50, no. 2, pp. 195-215.
- Iganski, P., Mason, D., Humphreys, A., & Watkins, M. 2001, 'Equal opportunities and positive action in the British National Health Service; some lessons from the recruitment of minority ethnic groups to nursing and midwifery.' *Ethnic and Racial Studies*, vol. 24, no. 2, pp. 294-317.

- Iganski, P., Payne, G., & Roberts, J. 2001, 'Inclusion or exclusion? Reflections on the evidence of declining racial disadvantage in the British labour market.' *International Journal of Sociology and Social Policy*, vol. 21, no. 4/5/6, pp. 184-211.
- Ivey, A. & Payton, P. 1994, 'Towards a Cornish Identity Theory.' In *Cornish Studies Two*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 151-163.
- Jacob, H. 1984, *Using published data, errors and remedies*. Sage: London.
- Jaksina, K. 2010, *Population growth in a high amenity area: migration and socio-economic change in Cornwall*. PhD Thesis, University of Plymouth.
- James-Korany, M. 1993, 'Blue Books' as sources for Cornish Emigration History.' In *Cornish Studies One*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 31-45.
- James, W. 1900, 'On a Certain Blindness in Human Beings.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 34-36.
- Jasinskaja-Lahti, I., Liebkind, K., & Perhoniemi, R. 2007, 'Perceived ethnic discrimination at work and well-being of immigrants in Finland: the moderating role of employment status and work-specific group-level control beliefs.' *International Journal of Intercultural Relations*, vol. 31, pp. 223-242.
- Jay, E. 1992, *'Keep them in Birmingham' Challenging racism in the south-west England*. Commission for Racial Equality, London.
- Jenner, H. 1904, *A handbook of the Cornish language*. David Nutt: London.
- Jimenez, T. 2010, 'Affiliative ethnic identity: a more elastic link between ethnic ancestry and culture.' *Ethnic and Racial Studies*, vol. 33, no. 10, pp. 1756-1775.
- Johns, N. 2004, 'Ethnic diversity policy: perceptions within the NHS.' *Social Policy and Administration*, vol. 38, no. 1, pp. 73-88.
- Johns, N. & Green, A. 2009, 'Equality, equal opportunities and diversity: obfuscation as social justice.' *Equal Opportunities International*, vol. 28, no. 4, pp. 289-303.
- Johnson, M., Boeck, T., Skinner, A., & Fleming, J. 2008, *COHDMAP - Developing a toolkit for estimating population change*. Institute of Community Cohesion, Coventry.

- Johnston, R., Sirkeci, I., Khattab, N., & Modood, T. 2010, 'Ethno-religious categories and measuring occupational attainment in relation to education in England and Wales: a multilevel analysis.' *Environment and Planning A*, vol. 42, pp. 578-591.
- Jung, C. 1930, 'Your Negroid and Indian Behaviour.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 191-201.
- Kalter, F. & Kogan, I. 2006, 'Ethnic inequalities at the transition from school to work in Belgium and Spain: Discrimination or self-exclusion?' *Research into Social Stratification and Mobility*, vol. 24, pp. 259-274.
- Kant, I. 1990, [1781] *Critique of pure reason*. Prometheus: New York.
- Kent, A. 1996, 'Art thou of Cornish crew?' Shakespeare, Henry V and Cornish identity.' In *Cornish Studies Four*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 7-25.
- Khattab, N., Johnston, R., Modood, T., & Ibrahim, S. 2011, 'Economic activity in the South-Asian population in Britain: the impact of ethnicity, religion and class.' *Ethnic and Racial Studies*, vol. iFirst, pp. 1-16.
- Kiecolt, K. & Nathan, L. 1985, *Secondary analysis of survey data*. Sage: London.
- Kiernan, K. 2002, 'Disadvantage and demography - chicken and egg?' In *Understanding Social Exclusion*. J. Hills, J. Le Grand, & D. Piachaud, eds., Oxford University Press: Oxford, pp. 84-96.
- Koff, H. 2009, 'Understanding 'La Contagion': power, exclusion and urban violence in France and the United States.' *Journal of Ethnic and Migration Studies*, vol. 35, no. 5, pp. 771-790.
- Kohnen, C. & Reiter, J. 2009, 'Multiple imputation for combining confidential data owned by two agencies.' *Journal of the Royal Statistical Society A*, vol. 172, no. 2, pp. 511-528.
- Kreider, B. & Pepper, J. 2008, 'Inferring disability status from corrupt data.' *Journal of Applied Econometrics*, vol. 23, pp. 329-349.
- Lang, T. 1996, 'Dividing up the cake: food as social exclusion.' In *Britain divided; the growth of social exclusion in the 1980s and 1990s*. A. Walker & C. Walker, eds., CPAG Ltd: London, pp. 213-228.

- Lessof, C. & Jowell, R. 2000, 'Measuring social exclusion - Working Paper.' *Centre for Research into Elections and Social Trends*, vol. 84.
- Levitas, R. 2006, 'The concept and measurement of social exclusion.' In *Poverty and social exclusion in Britain; the millennium survey*. C. Pantazis, D. Gordon, & R. Levitas, eds., Policy Press: Bristol, pp. 123-160.
- Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd, E., and Patsios, D., 2007. *The multi-dimensional analysis of social exclusion [Online]*. Available at: http://www.cabinetoffice.gov.uk/social_exclusion_task_force/publications/multidimensional.aspx (accessed 21/4/2009)
- Local Intelligence Network Cornwall 2006, *Poverty and deprivation in Cornwall: an analysis at census output level area*. Cornwall Council, Truro.
- Local Intelligence Network Cornwall 2007, *Cornwall sustainable community strategy evidence report*. Cornwall Council, Truro.
- Lupton, R. & Power, A. 2002, 'Social exclusion and neighbourhoods.' In *Understanding Social Exclusion*. J. Hills, J. Le Grand, & D. Piachaud, eds., Oxford University Press: Oxford, pp. 118-140.
- Lynne, P. & Taylor, B. 1995, 'On the bias and variance of samples of individuals: a comparison of the Electoral Registers and Postcode Address File as sampling frames.' *Journal of the Royal Statistical Society-Series D*, vol. 44, no. 2, pp. 173-194.
- Mannila, S. & Reuter, A. 2009, 'Social exclusion risks and their accumulation among Russian-speaking, ethnically Finnish and Estonian immigrants to Finland.' *Journal of Ethnic and Migration Studies*, vol. 35, no. 6, pp. 939-956.
- Marshall, G. 1998, *Oxford dictionary of Sociology*. 2nd edn, Oxford University Press: Oxford.
- Mason, D. 1995, *Race and Ethnicity in Modern Britain*. 2nd edn, Oxford University Press: Oxford.
- May, T. 2011, *Social research issues, methods and process*. 4th edn, Open University Press: Buckingham.

- McCrone, D. & Bechhofer, F. 2008, 'National Identity and social inclusion.' *Ethnic and Racial Studies*, vol. 31, no. 7, pp. 1245-1266.
- McDonald, M., Cohen, A., Frankenburg, D., Grillo, R. D., San Roman, T., Shokeid, M., & Weingrod, A. 1986, 'Celtic Ethnic Kinship and the Problem of Being English.' *Current Anthropology*, vol. 27, no. 4, pp. 333-347.
- McKnight, P., McKnight, K., Sidani, S., & Figueredo, A. 2007, *Missing data; a gentle introduction*. The Guildford Press: New York.
- Mendola, D., Busetta, A., & Aassve, A. 2009, 'What keeps young adults in permanent poverty? A comparative analysis using ECHP.' *Social Science Research*, vol. 38, pp. 840-857.
- Merton, R. 1972, 'Insiders and Outsiders: A Chapter in the Sociology of Knowledge.' *American Journal of Sociology*, vol. 78, no. 1, pp. 9-47.
- Milden, K. 2004, "Are you church or chapel?" Perceptions of spatial and spiritual identity within Cornish Methodism.' In *Cornish Studies Twelve*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 144-165.
- Miles, R. 1993, *Racism after 'Race relations'*. Routledge: London.
- Miliband, D. 2006, *Social exclusion: the next steps forward*. ODPM: London.
- Millar, J. 1996, 'Gender.' In *Britain divided: the growth of social exclusion in the 1980s and 1990s*. A. Walker & C. Walker, eds., CPAG Ltd: London, pp. 99-109.
- Mingione, E. 2004, 'Poverty and social exclusion in European cities; diversity and convergence at the local level.' *City*, vol. 8, no. 3, pp. 381-389.
- Mitchell, P. 1993, 'The demographic revolution.' In *Cornwall Since the War*. P. Payton, ed., Institute of Cornish Studies: Redruth.
- Modood, T. 2004, 'Capitals, ethnic identity and educational qualifications.' *Cultural Trends*, vol. 13, no. 2, pp. 87-105.
- Mohensi, M. & Lindstrom, M. 2008, 'Ethnic differences in anticipated discrimination, generalised trust in other people and self-rated health: a population-based study in Sweden.' *Ethnicity and Health*, vol. 13, no. 5, pp. 417-434.

- Moss, C. 1999, 'Selection of topics and development of questions for the 2001 Census.' *Population Trends*, vol. 97.
- Moustakas, C. 1994, *Phenomenological research methods*. Sage: London.
- Mowbray, J. 2006, 'Ethnic minorities and language rights: the state, identity and culture in international legal discourse.' *Studies in Ethnicity and Nationalism*, vol. 6, no. 1, pp. 2-29.
- Nash, M. 1989, 'The Core Elements of Ethnicity.' In *Ethnicity*. J. Hutchinson & A. D. Smith, eds., Oxford University Press: Oxford, pp. 24-28.
- National Statistics 2002, *Population projections by ethnic group; a feasibility study*. TSO, London.
- National Statistics 2004, *Population estimates; a short guide to population estimates*. TSO, London.
- Nayak, A. 2006, 'After race: ethnography, race and post-race theory.' *Ethnic and Racial Studies*, vol. 29, no. 3, pp. 411-430.
- Objective One Partnership Office 2006, *Jobcentre plus co-financing programme: the economic benefit arising from the equal opportunities cross cutting theme*. The Partnership Office for Cornwall and the Isles of Scilly, Truro.
- Office for National Statistics, 2001. *Census 2001 - England Individual Form [Online]*. Available at: <http://www.statistics.gov.uk/census2001/pdfs/engi1.pdf> (Accessed 10/5/10)
- Office for National Statistics 2009a, *Information paper: deciding which tick-boxes to add to the ethnic group question in the 2011 England and Wales Census*. Office for National Statistics, London.
- Office for National Statistics 2009b, *Final recommended questions for the 2011 Census in England and Wales. National Identity*. Office for National Statistics, London.
- Office for National Statistics 2009c, *Quarterly Labour Force Survey, January-March 2009*. Office for National Statistics, London.

- Office for National Statistics 2009d, *Developing enumeration intelligence*. Office for National Statistics, London.
- Office for National Statistics. 2001 Census; Standard Area Statistics (England and Wales) [Computer file]. 2010. ESRC/JISC Census Programme, Census Dissemination Unit, Mimas (University of Manchester)
- Ong, A., Fuller-Rowell, T., & Phinney, J. 2010, 'Measurement of ethnic identity; recurrent and emergent issues.' *Identity: an International Journal of Theory and Research*, vol. 10, no. 3, pp. 9-49.
- Operario, D. & Fiske, S. 2001, 'Ethnic identity moderates perceptions of prejudice; judgements of personal versus group discrimination and subtle versus blatant bias.' *Personality and Social Psychology Bulletin*, vol. 27, no. 5, pp. 550-561.
- Oppenheim, A. 1966, *Questionnaire design and attitude measurement*. Gower: Aldershot.
- Osier, G. 2009, 'Variance estimation for complex indicators of poverty and inequality using linearization techniques.' *Survey Research Methods*, vol. 3, no. 3, pp. 167-195.
- Overland, I. 2005, 'Poverty and international aid among Russia's indigenous peoples.' In *Indigenous peoples and poverty; an international perspective*. R. Eversole, J. McNeish, & A. Cimadamore, eds., Zed Books: London, pp. 108-125.
- Pallant, J. 2010, *SPSS survival manual*. 4th edn, McGraw-Hill: Maidenhead.
- Palmer, G., Carr, J., & Kenway, P. 2005, *Monitoring poverty and social exclusion 2005*. Joseph Rowntree, York.
- Panayi, P. 2000, *An ethnic history of Europe since 1945: Nations, states and minorities*. Pearson: Harlow.
- Parekh, A., MacInnes, T., & Kenway, P. 2010, *Monitoring poverty and social exclusion 2010*. Joseph Rowntree Foundation, York.
- Payne, G., Williams, M., & Chamberlain, S. 2004, 'Methodological pluralism in British sociology.' *Sociology*, vol. 38, no. 1, pp. 153-163.
- Payne, J. 1995, *Interpreting the index of local conditions: relative deprivation in Devon and Cornwall*. Plymouth Business School, University of Plymouth, Plymouth.

- Payton, P. 1992, *The making of modern Cornwall*. Dyllansow Truran: Redruth.
- Payton, P. 1993a, 'Post-war Cornwall: a suitable case for treatment?' In *Cornwall since the war*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 6-21.
- Payton, P. 1993b, 'Territory and identity.' In *Cornwall since the war*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 224-252.
- Payton, P. & Deacon, B. 1993, 'The ideology of language revival.' In *Cornwall since the war*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 271-290.
- Payton, P. 1996, *Cornwall, a history*. 2nd edn, Cornwall Editions: Fowey.
- Payton, P. 1997, 'Cornwall in context: the new Cornish historiography.' In *Cornish Studies Five*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 9-20.
- Payton, P. 2005, *The Cornish overseas*. Cornwall Editions: Fowey.
- Penglase, C. 1994, 'Authenticity in the revival of Cornish.' In *Cornish Studies Two*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 96-107.
- Perry, R., Dean, K., & Brown, B. 1986, *Counterurbanization: case studies of urban to rural movement*. Geo Books: Norwich.
- Perry, R. 1993, 'Economic change and "opposition" policies.' In *Cornwall Since the War*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 48-83.
- Phillips, E., Odunlami, A., & Bonham, V. 2007, 'Mixed Race: Understanding Difference in the Genome Era.' *Social Forces*, vol. 86, no. 2, pp. 795-820.
- Phillips, M., Fish, R., & Agg, J. 2001, 'Putting together ruralities: towards a symbolic analysis of rurality in the British mass media.' *Journal of Rural Studies*, vol. 17, pp. 1-27.
- Pilkington, A. 2003, *Racial disadvantage and ethnic diversity in Britain*. Palgrave MacMillan: Basingstoke.
- Popkin, E. 1999, 'Guatemalan Mayan migration to Los Angeles: constructing transnational linkages in the context of the settlement process.' *Ethnic and Racial Studies*, vol. 22, no. 2, pp. 267-289.

- Popkin, E. 2005, 'The emergence of Pan-Mayan ethnicity in the Guatemalan transnational community linking Santa Eulalia and Los Angeles.' *Current Sociology*, vol. 53, no. 4, pp. 675-706.
- Powell, R., Johnston, M., & Johnston, D. 2007, 'Assessing walking limitations in stroke survivors: are self-reports and proxy-reports interchangeable?' *Rehabilitation Psychology*, vol. 52, no. 2, pp. 177-183.
- Rapoport, T. & Lomsky-Feder, E. 2002, 'Intelligentsia' as ethnic habitus: the inculcation and restructuring of intelligentsia among Russian Jews.' *British Journal of Sociology of Education*, vol. 23, no. 2, pp. 233-248.
- Ratcliffe, P. 2004, *'Race', Ethnicity and Difference; Imagining the Inclusive Society*. Open University Press: Maidenhead.
- Reygadas, L. 2005, 'Imagined inequalities: representations of discrimination and exclusion in Latin America.' *Social Identities*, vol. 11, no. 5, pp. 489-508.
- Richardson, T. 2000, 'Discourses of rurality in EU spatial policy: the European spatial development perspective.' *Sociologia Ruralis*, vol. 40, no. 1, pp. 53-71.
- Rivas-Drake, D. 2008, 'Perceived opportunity, ethnic identity, and achievement motivation among Latinos at a selective public university.' *Journal of Latinos and Education*, vol. 7, no. 2, pp. 113-128.
- Roberts, K. 2001, 'Unemployment without social exclusion: evidence from young people in Eastern Europe.' *International Journal of Sociology and Social Policy*, vol. 21, no. 4/5/6, pp. 118-144.
- Room, G. 1995, 'Poverty and social exclusion: the new European agenda for policy and research.' In *Beyond the threshold: the measurement and analysis of social exclusion*. G. Room, ed., Policy Press: Bristol, pp. 1-9.
- Roos, P. 1985, *Gender and work: a comparative analysis of industrial societies*. State University New York Press: New York.
- Rosenthal, R. 1984, *Meta-analytic procedures for social research*. Sage: London.
- Rowse, A. L. 1941, *Tudor Cornwall: Portrait of a society*. 6th edn, Macmillan: London.

- Said, E. 1978, *Orientalism*. Routledge: London.
- Saltern, I. 2011, *The Cornish national minority report 2: including the Cornish - a case for recognition*. Joseph Rowntree Foundation, York.
- Sanchez-Perez, H., Morales, G., & Jansa, J. 2005, 'The conditions of life and health for indigenous women in areas of high marginalization, Chiapas, Mexico.' In *Indigenous peoples and poverty; an international perspective*. R. Eversole, J. McNeish, & A. Cimadamore, eds., Zed Books: London, pp. 38-52.
- Sandford, M. 2006, 'English regionalism through the looking glass: perspectives on the English Question from the North-East and Cornwall.' *National Identities*, vol. 8, no. 1, pp. 77-93.
- Schermerhorn, R. 1970, 'Ethnicity and Minority Groups.' In *Ethnicity*. J. Hutchinson & A. D. Smith, eds., Oxford University Press: Oxford, pp. 17-18.
- Schutz, A. 1967, [1932] *The phenomenology of the social world*. Northwestern University Press: Illinois.
- Seward, A. 1997, 'Cornish rugby and cultural identity: A socio-historical perspective.' In *Cornish Studies Five*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 164-179.
- Sheaff, R. 1996, 'A century of centralization: Cornish health and healthcare.' In *Cornish Studies Four*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 128-146.
- Shubin, S. 2010, 'Cultural exclusion and rural poverty in Ireland and Russia.' *Transactions of the Institute of British Geography*, vol. 35, no. 4, pp. 555-570.
- Shucksmith, M. & Chapman, P. 1998, 'Rural development and social exclusion.' *Sociologia Ruralis*, vol. 38, no. 2, pp. 225-242.
- Simmel, G. 1908, 'The Web of Group Affiliations.' In *Theories of Ethnicity*. W. Sollors, ed., Macmillan: London, pp. 37-51.
- Simpson, L. & Akinwale, B. 2007, 'Quantifying stability and change in ethnic groups.' *Journal of Official Statistics*, vol. 23, no. 2, pp. 185-208.

- Sipe, S., Johnson, D., & Fisher, D. 2009, 'University students' perceptions of gender discrimination in the workplace: reality versus fiction.' *Journal of Education for Business*, vol. 84, no. 6, pp. 339-349.
- Skrobanek, J. 2009, 'Perceived discrimination, ethnic identity and the (re-) ethnicisation of youth with a Turkish ethnic background in Germany.' *Journal of Ethnic and Migration Studies*, vol. 35, no. 4, pp. 535-554.
- Smith, A., Phillips, C., & Brown, T. 2008, 'Ethnic identity, religiousness and drinking among African Americans: what's the connection?' *Journal of Ethnicity in Substance Abuse*, vol. 7, no. 4, pp. 465-479.
- Smith, A. D. 1988, *The Ethnic Origins of Nations*. Blackwell: Oxford.
- Smith, D. M. 2005, *On the margins of inclusion; changing labour markets and social exclusion in London*. Policy Press: Bristol.
- Smith, E. 2009, 'What can secondary data analysis tell us about school exclusions in England?' *International Journal of Research and Method in Education*, vol. 32, no. 1, pp. 89-101.
- Smith, F., Woo, M., & Austin, S. 2010, 'I didn't feel like any of those things were me': results of a qualitative pilot study of race/ethnicity survey items with minority ethnic adolescents in the USA.' *Ethnicity and Health*, vol. 15, no. 6, pp. 621-638.
- Smith, N., Davis, A., & Hirsch, D. 2010, *A minimum income standard for rural households*. Joseph Rowntree Foundation, York.
- Social Exclusion Task Force, 2007. *Reaching out: progress on social exclusion [Online]*. Available at: http://www.cabinetoffice.gov.uk/social_exclusion_task_force/publications/reaching_out/progress_report.aspx (accessed 21/4/2009)
- Sollors, W. 1996, 'Foreword: Theories of American Ethnicity.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, p. x-xliv.
- Soloff, C., Sanson, A., Wake, M., & Harrison, L. 2007, 'Enhancing longitudinal studies by linkage to national databases: *Growing up in Australia*, the longitudinal study of Australian children.' *International Journal of Social Research Methodology*, vol. 10, no. 5, pp. 349-363.

South West Observatory Skills and Learning (SLIM) 2003, *Moving towards inclusion - A picture of disadvantage in the South West*. SWO, Taunton.

South West Observatory 2008a, *The State of the South West 2008*. SWO, Taunton.

South West Observatory 2008b, *The south west barometer 2008*. SWO, Taunton.

South West Observatory Skills and Learning (SLIM) 2008, *Impact analysis: ESF Objective One programme, Cornwall and the Isles of Scilly. Volume 1: Findings and recommendations report*. SWO, Taunton.

South West Observatory 2011a, *State of the South West 2011* SWO, Taunton.

South West Observatory 2011b, *Indices of deprivation (ID) 2010 - Deprivation in the South West* SWO, Taunton.

South West of England Regional Development Agency 2006, *Regional economic strategy for South West England 2006-2015*. SWRDA, Exeter.

South West of England Regional Development Agency 2007, *Economic inclusion in the South West: opportunities for a fresh approach?* SWRDA, Exeter.

South West Public Health Observatory 2008, *Calling Time - Reducing alcohol harm in the South west*. South West Public Health Observatory, Bristol.

SPSS Inc, 2010. *SPSS Missing Values 17.0 [Online]* Available at:

<http://www.washington.edu/uware/spss/docs/SPSS%20Missing%20Values%2017.0.pdf> (Accessed 5/11/10)

Stafford, M., Becares, L., & Nazroo, J. 2009, 'Objective and perceived ethnic density and health: findings from a United Kingdom General Population Survey.' *American Journal of Epidemiology*, vol. 170, no. 4, pp. 484-493.

Stipak, B. & Hensler, C. 1982, 'Statistical inference in contextual analysis.' *American Journal of Political Science*, vol. 26, no. 1, pp. 151-175.

Stoyle, M. 1996, 'Sir Richard Grenville's Creatures': The new Cornish Tertia, 1644-46.' In *Cornish Studies Four*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 26-44.

- Stoyle, M. 2002, *West Britons: Cornish identities and the early modern British state*. University of Exeter Press: Exeter.
- Suckling, S., Ryan, P., & Dent, M. 2009, 'Beliefs, barriers and control: a model for research into social exclusion.' *International Journal of Public Sector Management*, vol. 22, no. 5, pp. 423-431.
- Sumartojo, S. 2009, 'Britishness in Trafalgar square: urban place and the construction of national identity.' *Studies in Ethnicity and Nationalism*, vol. 9, no. 3, pp. 410-428.
- Swingewood, A. 1984, *A short history of sociological thought*. 3rd edn, Palgrave: Basingstoke.
- Taket, A., Crisp, B., Nevill, A., Lamaro, G., Graham, M., & Barter-Godfrey, S. 2009, *Theorising Social Exclusion* Routledge: Oxon.
- Tanton, R., Harding, A., Daly, A., McNamara, J., & Yap, M. 2010, 'Australian children at risk of social exclusion: a spatial index for gauging relative disadvantage.' *Population, Space and Place*, vol. 16, pp. 135-150.
- Taylor, D., Wright, S., Moghaddam, F., & Lalonde, R. 1990, 'The personal/group discrimination discrepancy: perceiving my group, but not myself, to be a target for discrimination.' *Personality and Social Psychology Bulletin*, vol. 16, no. 2, pp. 254-262.
- Teague, A. 2000, 'New methodologies for the 2001 Census in England and Wales.' *International Journal of Social Research Methodology*, vol. 3, no. 3, pp. 245-255.
- Terlouw, K. 2009, 'Rescaling regional identities: communicating thick and thin regional identities.' *Studies in Ethnicity and Nationalism*, vol. 9, no. 3, pp. 452-464.
- Thomas, A. 1994, 'Cornwall's territorial dilemma: European region or 'Westcountry' sub-region?' In *Cornish Studies Two*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 138-150.
- Thomas, B., Groff, S., Tsang, K., & Carlson, L. 2009, 'Patient ethnicity; a key predictor of cancer care satisfaction.' *Ethnicity and Health*, vol. 14, no. 4, pp. 351-358.
- Thomas, S., Heck, R., & Bauer, K. 2005, 'Weighting and adjusting for design effects in secondary data analyses.' *New Directions for Institutional Research*, vol. 127, pp. 51-72.

- Thornton, P. 1996, 'Second homes in Cornwall.' In *Cornish Studies Four*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 152-157.
- Tonkin, E., McDonald, M., & Chapman, M. 1989, 'History and Ethnicity.' In *Ethnicity*. J. Hutchinson & A. D. Smith, eds., Oxford University Press: Oxford, pp. 18-24.
- Toomer, J. 1929, 'Race Problems and Modern Society.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 168-190.
- Townsend, P. 1962, 'The meaning of poverty.' *The British Journal of Sociology*, vol. 13, no. 3, pp. 210-227.
- Tressider, R. 2010, 'What no pasties? Reading through the Cornish tourism brochure.' *Journal of Travel and Tourism Marketing*, vol. 27, no. 6, pp. 596-611.
- Tysome, T. 2006, 'Staff are afraid to declare disability.' *Times Higher Education* 8/12/06.
- UK Data Archive., 2009. *Brown, B. - Migrants Study of Cornwall [Online]* Available at: <http://www.data-archive.ac.uk/findingdata/snDescription.asp?sn=1817&key=cornish> (Accessed 2/11/09)
- UN Committee on the Elimination of Racial Discrimination 2007, *Canada's violation of the international convention on the elimination of all forms of racial discrimination (CERD) affecting aboriginal peoples in Canada*. OHCHR, Geneva.
- Verkuyten, M. 2002, 'Perceptions of ethnic discrimination by minority and majority early adolescents in the Netherlands.' *International Journal of Psychology*, vol. 37, no. 6, pp. 321-332.
- Vink, C. 1993, 'Be forever Cornish!' Some observations on the ethno-regional movement in contemporary Cornwall.' In *Cornish Studies One*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 109-119.
- Voas, D. 2007, 'Estimating the Jewish undercount in the 2001 Census: a comment on Graham and Waterman (2005) 'Underenumeration of the Jewish population in the UK 2001 Census'.' *Population, Space and Place*, vol. 13, pp. 401-407.
- Wagle, U. 2008, 'Multidimensional poverty: an alternative measurement approach for the United States?' *Social Science Research*, vol. 37, pp. 559-580.

- Wagner, W. 2010, *Using SPSS for social statistics and research methods*. 2nd edn, Pine Forge Press: Thousand Oaks.
- Walker, R. 1995, 'The dynamics of poverty and social exclusion.' In *Beyond the threshold: the measurement and analysis of social exclusion*. G. Room, ed., Policy Press: Bristol, pp. 102-128.
- Walsemann, K., Gee, G., & Geronimus, A. 2009, 'Ethnic differences in trajectories of depressive symptoms: disadvantage in family background, high school experiences, and adult characteristics.' *Journal of Health and Social Behaviour*, vol. 50, pp. 82-98.
- Walter, B. 1986, 'Ethnicity and Irish residential distribution.' *Transactions of the Institute of British Geographers*, vol. 11, no. 2, pp. 131-146.
- Weber, M. 1922, 'Ethnic Groups.' In *Theories of Ethnicity*. W. Sollors, ed., MacMillan: London, pp. 52-66.
- Wickrama, K., Elder, G., & Abraham, T. 2007, 'Rurality and ethnicity in adolescent physical illness: are children of the growing rural Latino population at excess health risk?' *The Journal of Rural Health*, vol. 23, no. 3, pp. 228-237.
- Willett, J. 2008, 'Cornish identity; vague notion or social fact?' In *Cornish Studies Sixteen*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 183-205.
- Williams, C. 1995, 'Housing in Cornwall: A two-tier system?' In *Cornish Studies Three*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 194-205.
- Williams, M. 1992, 'The invisible people.' *Radical Statistics*, vol. 52, pp. 21-29.
- Williams, M. & Harrison, E. 1995, 'Movers and Stayers: A comparison of migratory and non-migratory groups in Cornwall, 1981-91.' In *Cornish Studies Three*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 176-193.
- Williams, M. & Champion, T. 1998, 'Cornwall, poverty, and in-migration.' In *Cornish Studies Six*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 118-126.
- Williams, M. 2000, *Science and social science, An introduction*. Routledge: London.
- Williams, M. 2002, 'The new Cornish social science.' In *Cornish Studies Ten*. P. Payton, ed., Institute of Cornish Studies: Redruth, pp. 44-66.

- Williams, M. 2003a, *Making sense of social research*. Sage: London.
- Williams, M. 2003b, 'Why is Cornwall poor? Poverty and in-migration since the 1960s.' *Contemporary British History*, vol. 17, no. 3, pp. 55-70.
- Williams, M. 2005, 'Situated objectivity.' *Journal for the Theory of Social Behaviour*, vol. 35, no. 1, pp. 99-120.
- Williams, M. 2006, 'Can scientists be objective?' *Social Epistemology*, vol. 20, no. 2, pp. 163-180.
- Wilson, P. & Elliot, D. 1987, 'An evaluation of the Postcode Address File as a sampling frame and its use within OPCS.' *Journal of the Royal Statistical Society-Series A.*, vol. 150, no. 3, pp. 230-240.
- Wimmer, A. 2004, 'Does ethnicity matter? Everyday group formation in three Swiss immigrant neighbourhoods.' *Ethnic and Racial Studies*, vol. 27, no. 1, pp. 1-36.
- Wimmer, A. 2008, 'Elementary strategies of ethnic boundary making.' *Ethnic and Racial Studies*, vol. 31, no. 6, pp. 1025-1055.
- Winch, P. 1982, 'The idea of a social science.' In *Knowledge and values in social and educational research*. E. Bredo & W. Feinberg, eds., Temple University Press: Philadelphia, pp. 137-153.
- Wolter, K. & Causey, B. 1991, 'Evaluation procedures for improving population estimates for small areas.' *Journal of the American Statistical Association*, vol. 86, no. 414, pp. 278-284.
- Yang, K. 2007, 'Individual capital and its measurement in social surveys.' *Survey Research Methods*, vol. 1, no. 1, pp. 19-27.
- Yarwood, R. 2010, 'An exclusive countryside? Crime concern, social exclusion and community policing in two English villages.' *Policing and Society*, vol. 20, no. 1, pp. 61-78.