AN INVESTIGATION OF THE UNDERREPRESENTATION OF BMEs IN THE UK CONSTRUCTION INDUSTRY

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ABBREVIATIONS

ABIs Area Based Initiatives

ALG Associations of London Governments

ANOVA Analysis of Variance

BCS British Crime Survey

BMEs Black and Minority Ethnics

CBI Confederation of British Industries

CESI Centre for Economic and Social Inclusion

CIH Chartered Institute of Housing

CIPD Chartered Institute of Personnel and Development

CLE Community Local Employees

CLG Communities and Local Government

DCLG Department for Communities and Local Government

DETR Department of the Environment, Transport and the Region

DTI Department of Trade and Industry

DWP Directorate for Works and Pension

EO Equal Opportunity

GDP Gross Domestic Product

HRM Human Resource Management

IDPM Institute for Development Policy and Management

MIP Migrant Integration Programme

MSP Member of Scottish Parliament

MSP Manchester Salford Partnership

ESI Equity Sensitivity Instrument

LFS Labour Force Survey

OCB Organizational Citizenship Behaviour

PASW Predictive Analytics Software

NSR National Strategy Report

NYC New York City

ODPM Office of the Deputy Prime Minister

ONS Office for National Statistics

PAS Planning Advisory Service

PIR Poverty and Inequality Report

RICS Royal Institution of Chartered Surveyors

RTPI Royal Town Planning Institute

SDF Sustainable Development Framework

SES Social Economy Scotland

SIDA Swedish International Development Agency

SHRM Strategic Human Resource Management

SPSS Statistical Package for Social Science

UNCHS United Nations Centre for Human Settlement

UNESCO United Nations Educational Scientific and Cultural Organisation

X² Chi Square

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Maàme

DECLARATION

This thesis is submitted under the University of Salford rules and regulations for the award of a PhD degree by research. While the study was in progress, some research findings were published in refereed conference papers and presentations prior to this submission.

The researcher declares that no portion of the work referred to in this thesis has been submitted in support of an application for another degree of qualification of this, or any other University or Institution of Learning.

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Paul Miss	а	

ABSTRACT

The construction industry forms a significant component of most economies and is responsible for a large share of revenue generation and employment creation. The sector performs well compared to a number of other sectors in terms of productivity and witness steady growth in almost a decade preceding 2008 until impacted upon by the current economic downturn and still performed better than the overall economy average during these difficult times. In the UK, it is responsible for about 7.5 per cent of total employment thus making up the second largest sector of UK employment. Skills requirement to such an important economically viable sector operations is therefore crucial if it is to keep this level of performance.

However, this very important industry suffers from a negative image as it has been characterised by a relatively low-status with unyielding and uncompromising working conditions hardly offering any job security. Regardless of these perceptions of construction as well as its high level demand for skills, it is still characterised by a persistent culture of white male-dominant environment. As a result, BMEs are proportionally underrepresented, despite the skills requirements as well as alleged public commitment towards equality and intolerance of discriminatory practices and in respect of successive increases in the minority ethnic population have meant that the UK is more ethnically diverse than ever. Such demographic changes mean that organizations cannot afford monolithic blocks of workforce and still remain competitive. In view of the above, the constant underrepresentation of BMEs in the industry resulting from the many bottlenecks hampering their recruitment, progression and retention in construction needs urgent attention and thus creates a research gap.

This study seeks to fill this gap to help decision making processes and influence policy in this regard. As an exploratory study it is philosophically based on mixed methods research paradigm. The study used literature review, semi structured interviews and questionnaire survey as data collection techniques. NVivo 8/9 and SPSS 16 were used for Content analysis and quantitative analysis respectively for the empirical data collected. The study concludes having investigated the cultural practices in the industry especially in respect of recruitment, retention and progression for means to advance BME entry into the industry. Having identified the barriers and the possible remedies to ameliorate the situation, a framework has been put forward with the ultimate aim of informing stakeholder programmes, policy decisions and initiatives to enhance the proportional representation of BMEs in the industry.

CHAPTER 1

INTRODUCTION

1.1 Background to the Research

The construction industry, as defined by the Association of Colleges London Region (2008), is responsible for every type of work involved with building, examples of which include houses, offices, shopping centres and sports stadia, roads, water and gas mains, pipelines, dams, tunnels, bridges, railways, canals and more. As a result, there are jobs generated at every stage in the life of such building - from designing and planning projects, to building, altering, decorating, restoring and maintaining them and in addition, end of life demolishing. Examples of professions in the industry, therefore, include Architecture, Building Engineering, Building Services Engineering, Building control Surveying, Building Surveyor, Civil Engineering, Construction Management, Facilities Management, General Practice Surveying, Geospatial Modelling, Geotechnical engineering, Hydrographic Surveying, Landscape Architecture, Land Surveying, Project Management, Quantity Surveying, Structural Engineering, Town planning and more.

The global construction industry is constantly changing and is client focused requiring timely completion of work within budget. It faces various challenges both from the demand and supply sides which require innovative ways to address in an economical social and environmental manner (Kulatunga et al., 2007). Consequently, globalisation has caught up with the industry that requires mobile labour force with goods and services increasingly sourced internationally as a result of the global distribution of construction labour and output (ILO Sectoral Activities, 1998; Flanagan and Jewell, 2004). The Engineering News Record (2005), valued global construction output at over US \$3.6 trillion in 2003 and is said to have grown by just 0.5% to \$4.6 trillion in 2011 still below the levels achieved in 2007 (Crosthwaite, 2012). And, withal, this could be said to be an underestimation as limited and non-existent statistics in developing countries cannot be accounted for. In Europe, the UK ranks third in construction output after Germany and Italy with the US accounting for \$212 billion while in Asia, Japan and Korea have had a significant construction output which has been overshadowed by the recent recession proof growth in China and India in particular, growth which lifts the region's construction output by an additional 2.6% even in the deep of the recession in 2009 (Sleight, 2009). Hitherto, the Asian construction output as a whole had been estimated to make up 26 % of global output with Western Europe contributing the highest at 35 %, the US 25% and the rest of the world accounting for the remainder (Flanagan & Jewel, 2004).

The UK construction industry is the main contributor accounting for approximately one-tenth of her Gross Domestic Product (GDP) and provides over half of the fixed capital investment (Steele and Todd, 2005). It accounts for nearly 7% of the UK economy, over 280,000 businesses, and employs about 3 million people (Fallon, 2013). Being Britain's largest industry and the third largest in the EU, (Ahmed et al., 2008; Dainty et al., 2007; DTI, 2007; Construction Industry Council, 2006) the industry further employs large numbers who are indirectly engaged, creating a whole range of secondary employment which relies on a prosperous construction industry (Ahmed, et al. 2008). Dainty et al. (2007) have identified the construction industry as the biggest UK employer with over two million people while naming it, in terms of the Gross Domestic Product, as being the second largest industry in the European Union (EU). Support, in the form of recruitment events, training, mentoring, professional networking, as well as work placement and experience schemes, expedites entry, retention and progression within the construction industry (Ahmed et al., 2008). The UK construction sector contributed 9.2% of the nation's Gross Value Added (GVA) in 2007 according to the Department of Business Innovation and Skills (2007). The industry therefore consists of numerous firms employing diverse people in a multitude of roles with a sector defined as one which embraces construction materials and products; suppliers and producers; building services manufacturers, providers and installers; contractors, sub-contractors, professionals, advisors and construction clients and those organisations that are relevant to the design and build operation and refurbishment of buildings.

However, this well acclaimed industry has, traditionally, relied on young white males to form the majority of the workforce (Ahmed *et al.*, 2008; Duncan and Mortimer, 2005; Agapiou, 2002; Agapiou *et al.*, 1995). As a result, minority groups, especially BMEs have been underrepresented within the trade and professional occupations within the industry. However, demographic forecasts for the UK have indicated that the proportion of the BME labour supply will become increasingly prominent in future, particularly as the BME age profile is skewed towards young age groups, in contrast to the white population (Labour Force Survey, 2009; Ahmed *et al.*, 2008; Ogbonna *et al.*, 1995). Faced with shrinkage of the traditional pool of applicants, as a result, the construction industry needs to look towards under-represented groups,

such as those from BME communities, to take up the difficult to fill vacancies in the industry in times of growth (Caplan *et al.*, 2009).

Construction is a labour intensive industry which places a heavy reliance on the skills of its workforce. Despite a need to rely adequately on skilled labour the construction industry suffers a high turnover of staff (Sommerville, 1996) and frequently fails to retain those it trains. Notwithstanding, this issue of skill shortages within the industry was highlighted in the Latham Working Group Eight Report (Latham, 1994). The report urged employers to consider the merits of equality practices and to take measures to adopt equality strategies within the industry in order to catch up with other industries and to help lessen the brunt of the possible skill shortages in the future. However, years after Latham Report, the construction employment and training forecast 2001 – 2005 highlighted a shortfall between the supply of qualified new recruits and the demand from the industry (CITB, 2001), indicating that skills shortages were still on the rise. In this regard, therefore, widening the catchment area of recruitment to encourage more active participation of groups currently under-represented would, potentially, increase competition for places and, consequently, raise the quality of entrants to the industry in terms of educational achievement as was noted by Sommerville *et al.* (1993).

The problem of discrimination in employment against minority groups has even spilt over to affect BME construction contractors and consultants as noted in the lack of equality of opportunity for minority-led contractors and consultants in competing for jobs within the housing association sector, for example, stressed by Steel and Todd (2005). According to them, the expectation had been that an initiative by the Housing Corporation, 'the government quango responsible for social housing in the UK' to investigate the potential benefits of establishing a national database of companies of this kind for the sector in England was to help develop, support and promote black and minority ethnic (BME) companies. Simultaneously, this could help redress the skills shortage in the construction industry yet Steel and Todd, (2005) recognise that funding cuts within the Housing Corporation seriously undermined the future sustainability and development of this sector of the construction industry making the skills shortage an imminent problem that requires urgent attention.

Hitherto, interest in the participation of Black and Minority Ethnics (BMEs) in the construction industry had been left to the background until it was heightened by concern about equal opportunities and the noticeable under-representation of women in numerous trades and

professions within the UK construction industry (Latham, 1994). A study commissioned by the Centre for Ethnic Minority Studies (2004) relating to BME people in the construction industry found that BMEs were considerably under-represented within the industry as a whole, especially at middle and senior management level notwithstanding the fact that BMEs are reasonably well represented on construction related training and educational programmes (Ahmed *et al.*, 2008). The dearth of data pertaining to BME workforce within the built environment sector in the UK, particularly their absorption into the industry from education through employment as trainees, graduates and professionals has been stressed by Twomey (2001). The limited existent of research has also been stressed by Ahmed *et al.*, (2008) and with this, the Commission for Architecture and the Built Environment (CABE, 2005) found that, apart from the subject area of landscape design, BMEs are relatively well represented in most of the built environment disciplines in higher education yet as little as 35% compared to 51% of their white counterparts enter the industry. This is reflected more in the industry, where only 13% of employees in the industry are women and even smaller percentage of employees (between 2% to 3%) are BMEs (Gale and Davidson, 2006).

Although, the image of the construction industry itself has been found to be a major barrier for entry into construction (CABE, 2005), language and religion as subsets of culture also form immense barriers for a range of ethnic minority people (Ahmed et al., 2008). Likewise, with the help of Handy's (1995) organizational culture and Hofstede's (1997) national culture frameworks, Rowlinson & Cheung (2004), after analyzing all cultural dimensions and typologies developed in the literature by Ankrah and Langford (2005), investigated the cultural aspects of organizational change in the construction industry and proposed a new measurement tool highlighting the cultural variability between organizations on construction projects. In addition, Oney-Yazıcı et al. (2005), upon reviewing literature concluded that despite the growing importance of organizational culture in construction research, there are few cross-cultural, empirical studies which attribute to the difficulties of conducting research in several countries characterised by a multiplicity of cultures. Furthermore, Cameron & Quinn (1999) propose that what differentiates successful firms from others is their organizational culture since the ability to understand organizational culture is the basis for examining what goes on in organisations, how they are ran and improved as suggested by Schein, (1992). Most organizational scholars and observers recognize that organizational culture has a powerful effect on the performance and long-term effectiveness of organizations.

The foregoing identifies construction as a major industry in every economy and one of the most significant sources of contribution to employment and GDP. In almost all economies, especially in the developed world, it makes up a considerable share of overall activities and its influence is felt in every sector of the economy from transport through mining to services. As construction output is higher in the developed world, it tends to be more attractive for BMEs from other less developed nations to be attracted to better sources of income and as a result migrate to these places. Therefore, the tendency to be discriminated against is higher as BMEs in most cases are seen as taking, rather than contribution to the host's country's economy. This problem of discrimination affects minorities at all levels, from the immigration to the first and subsequent generations, as well as their business. The problem is much compounded and, as a result, requires coordinated efforts from all stakeholders concerned to ensure optimal solution. In view of limited amount of research in BME employment in construction, it is important that more studies of this nature are conducted in this area in order to develop a good understanding for appropriate suggestions and recommendations.

1.2 Problem Statement

It can be noted from the above introduction and background to this study that BMEs undergo a three staged hurdle in their employment in the construction industry. Firstly, the problem at the selection stage has to be surmounted after which the conscious effort of being retained follows. Finally, as should be the case for every job, the BME, based on merit deserves to be promoted. As BMEs are not well represented in the industry, these stages seem insurmountable and hence contribute to further reduce their interest, along with the unattractive nature of the industry to lure or push them out of the industry. The current body of knowledge, as covered by available literature has identified the fact that BMEs have the youngest age profile in the UK (DMAG, 2007; Ahmed et al., 2008), which means that potentially there should be a higher number of individuals from this group trying to gain entry into the labour market.

Yet the unemployment rate for ethnic minorities is disproportionally high and varies amongst different ethnic groups. People from Pakistan, Bangladesh and Black Caribbean backgrounds experience, on average, significantly higher unemployment than their white counterparts (Ahmed et al., 2008; Barnard & Turner, 2011) while Chinese people have the lowest unemployment rate amongst the ethnic groups (Chau & Yu, 2001). For example, three quarters (i.e. 75%) of white Londoners were employed compared to varying rates of employment for ethnic minorities

between 39 per cent for Bangladeshi and 69 per cent for Indians, with other ethnic groups falling within this range (DMAG, 2007). Even when employed ethnic minorities working experience may differ and may be segregated into certain occupations and sectors (Wood et al., 2009) usually concentrated in routine and semi-routine work with lower rates of pay compared with their whites counterparts (Ahmed et al., 2008; Carmichael & Woods, 2000; Heath & Cheung, 2006). Whether employed or unemployed there are differences between ethnic groups but what is the reason for the difference and why do some ethnic groups fair better than others. Available literature highlights differences in education and skills acquisition, language skills particularly and employment for some ethnic minority groups. Discrimination however, remains a bone of contention though it cannot be ruled out but can it solely be blamed for this? In instances like this it is difficult to blame a situation on a single variable as other factors culminate into creating the condition in question.

Therefore, the aim of this research is to investigate the underrepresentation of BMEs in Construction by identifying the gap in the literature on why they continue to be underrepresented in order to enhance their effective participation and engagement. This research eventually developed a framework for the enhancement of the engagement of BMEs focusing on their proportional representation. The study was based in two geographical locations - the North West and the South East of England. Available literature was reviewed in order to understand the current state of the art of the industry vis-à-vis the present precarious UK and global economic climate to better appreciate the prevailing conditions. Also, semi-structured interviews and questionnaires survey were conducted among employers and employees in the industry respectively the outcome of which informed the progress towards achieving the research aim as outlined in section 1.3 below.

1.3 Aim and Objectives

The aim of this research is to investigate the representation of BMEs in the construction industry and propose a strategic framework in order to increase the uptake of ethnic minorities in the industry. This aim was achieved through the following objectives:

a. To explore and analyse the published literature on BMEs representation in construction in view of the skills shortages facing the industry during economic upturns.

- b. To identify BMEs and develop an understanding of how they are perceived in construction and the impact of this on their interest, training and engagement.
- c. To investigate the level of uptake of BMEs within the industry identifying the factors leading to their intake, progression and retention.
- d. To examine the difficulties BMEs face in respect of barriers hindering their engagement and the enablers that could enhance their participation in the industry.
- e. To develop a strategic framework to advance the engagement and full participation of BMEs in the industry.

1.4 Research questions

The research questions formulated in helping to explore and achieve the aims and objectives outlined above are as follows:

- a. What is the state of the construction industry's employment, mode of entry, retention and progression and its contribution to economic development?
- b. Who are BMEs and how are they identified, classified and understood in order to make provision for their representation in the construction sector?
- c. What targeted initiatives in respect of recruitment methods are employed by the industry to encourage diversity and equal opportunity?

1.5 Methodological Steps

The phenomenon being studied, BMEs inclusivity in construction, is a contemporary issue and requires being researched through the participation of the stakeholders in a real-life context, a reason for which both the deductive and inductive approaches were adopted. Therefore, the methodological steps to be followed through this process are outlined below.

Primarily, in order to assess the current state of the art of the industry and the
different professions therein considering the expected skills requirements, a
comprehensive review of relevant literature was undertaken. Through this same
process, a clear definition of BMEs and their identification can be developed along
with an understanding of their perception of the industry and how this affects their
interest, training and engagement. In addition, this aided the review of policy

initiatives and procedures within construction organisations in promoting BMEs engagement in the industry. This, in effect, guided the isolation of the underpinning theory to aid the identification of the knowledge gap in this field of study.

- Secondly, the investigation of the level of uptake of BMEs within the industry to help identify the factors leading to their intake, progression and retention was done through qualitative and quantitative data collection using semi-structured interviews and questionnaires survey respectively. To this effect, chapter 4 constitutes the research design and philosophy section where the selection of appropriate research methodology is justified. This stage led to the analysis of the data collected to examine the difficulties BMEs face in respect of barriers hindering their engagement and the enablers that could enhance their participation in the industry.
- Thirdly, the findings from the empirical data collection were analysed. As this involved two different forms of data, appropriate software i.e. Nvivo 8/9 and SPSS 16 were used for the analysis of the interviews and questionnaires respectively. The two versions of Nvivo had to be used because the University's subscription for the software was upgraded from version 8 to 9. This aided triangulation for validity and reliability where patterns in the themes were noted for complementarities or otherwise which formed the basis for discussion and conclusions.
- The concluding section of the study then develop the proposed strategic framework to advance the engagement and proportional representation of BMEs in the industry.

1.6 Contents of the Thesis

The research comprises four sections made up of seven chapters; a brief summary of this design is sequentially outlined below and in figure 1.1.

Chapter1: Introduction and Background

This chapter covers the introduction and background of the study by presenting a wider overview of the construction industry both nationally and internationally. Additionally, it attempts to identify the research problem: a process through which the justification for this research was established. With this in mind, the aim and objectives of this research were formulated.

Chapters 2: Managing Human Resources in Construction

This Chapter reviews existing literature on the construction industry; its skills requirements and recruitment processes in order to help develop an understanding of the industry and its skills requirements. Here, terminologies were defined and as indicated, previous studies in the field covering governmental and other institutional policy initiatives and programmes in addressing the issue being studied were reviewed extensively.

Chapter 3: Workforce Diversity and Equal Opportunity in construction

The focus of the research was defined under this chapter by outlining the themes drawn based on the review of literature review in this chapter and in chapter two. Consequently, it was possible to attempt a definition of the underpinning theory to form the basis for this study and also to help identify the research gap. In this way, the need for the study was established and justified. This formed the basis for defining the roadmap of investigation to further explore the issue being studied.

Chapter 4: Methodology

This chapter discusses the methodological design adopted in this study. It covers the philosophy underpinning the study through the justification of an appropriate methodology and positioning of the research paradigm: choice of research approach, strategy and data collection techniques adopted. The adoption of a mixed methods i.e. quantitative and qualitative data collection and analysis techniques is presented and justified. Also, it presents the basis for the research design and the use of triangulation as a tool for validation of the results.

Chapter 5: Data Collection Techniques, Analysis and Findings - Qualitative Analysis

This chapter investigates the problem through the use of a data capture tool — 'interviews'. This chapter provides discussions and explanations of the development of the data collection techniques based on a mixed methods approach (see Chapter 4). It consists of semi-structured interviews with employers. A pilot study was conducted to obtain feedback to refine the questions in order to obtain an initial assessment of the effectiveness of the data collection process. This also contributed to the validity and reliability of the data collected. The process at this stage consisted of a two-tier approach with the interviews conducted to investigate further the findings from literature as well as any issues that may arise. Contents analysis tool, Nvivo 8/9 was seen as the appropriate tool to handle this type data. Both versions were used as a result of an upgrade from version 8 to 9.

Chapter 6: Data Collection Techniques, Analysis and Findings - Quantitative Analysis

Here, the problem is explored further through a questionnaires survey after a pilot study had been conducted as a means to refine the questions to enhance validity and reliability as in the case of the interviews. The chapter presents both the descriptive and inferential statistics to triangulate the findings from both literature and the qualitative studies. The questionnaires survey further explored the findings and, again any other issues raised for the purposes of validating the previous findings from both the literature and the qualitative studies.

Chapter 7: Discussion and Conclusions

This final chapter presents and summarizes the overall research findings to draw conclusions on the skills needs for the construction industry and the justification for the involvement of BMEs through proportional representation on the basis of legislation, ethical concepts and, more importantly, from an economic point of view. It also considers the findings and their inclusion into the framework (figure 3.2) in order to account for the views of the participants in the empirical study and how these were reflected in attempts to address the current state of underrepresentation. Then, the limitations of the study were assessed and finally areas for further research suggested. Figure 1.1 presents a graphical presentation of the methodological process.

Part I Introduction & Background

Chapter 1: This chapter covers the background to the research delineates the justification for it and outlines the research aim and objectives and the methodological steps to be undertaken.

Part II Literature Review

Chapter 2: Managing Human Resources in Construction

This chapter reviews literature pertaining to the strategies and approaches adopted in construction in it HRM practices. it reviews the construction industry in general and considers its cultural practices and how these relate to the HRM issues raised earlier.

Chapter 3: Workforce Diversity and EO in Construction

Here, the characteristics of the minority group known as BMEs in the UK population are explored in view of assessing the essence of diversifying the industry to recognise the need to prioritise the recruitment of such groups in the face of skills shortages.

The findings from the two chapters in this part will inform the methodological process in the choice of the research philosophy, approaches and techniques for data collection.

Part III Methodology Data & Analysis

Chapter 4: Research Methodology: From part two, this chapter will justify the methodological process adopted. It will review the philosophy, strategy and techniques. Mixed methods which employs the use of more techniques is used in this research for the purposes of data triangulation and validation.

Chapter 5: Qualitative Analysis: This chapter investigates the problem thought the use of a data capture tool - interviews. It begins with a pilot study before embarking on the main interviews. Contents analysis tool, Nvivo is used to analyse the data.

Chapter 6: Quantitative Analysis: Here the problem is explored further through a questionnaires survey. The chapter presents both the descriptive and inferential statistics to triangulate the findings from both literature and qualitative studies.

Part IV Discussion & Conclusions

Chapter 7: Discussion and Conclusions: This chapter discusses the findings and the proposed framework to the problem. It draws conclusions and recommendations while ending on a note of what the research could not cover, i.e. limitations with suggestions for future research

Fig 1.1: Research design and structure of thesis

1.7 Chapter Summary

The above sections have attempted to put the research into context by introducing the focus of this study. The current state of the art of the construction industry professions and the inclusion of BMEs at the employment, retention and progression levels have been noted. The aim and objectives of the research including the content and composition of the thesis have also been outlined. It has been noted that both qualitative and quantitative data were collected from the field research and analyzed meaning that the study took a hybrid methods approach. The study, from this point, then progresses into the next stage which is about the review of literature based on SHRM strategies and approaches. Here, the state of the art of the professional requirements of the industry and the underrepresentation of BMEs are brought into focus. The need for correcting this is highlighted in view of the possible skill shortages, especially following upturns in recessions, considering the composition of the UK population and its growth trends.

CHAPTER 2

MANAGING HUMAN RESOURCES IN CONSTRUCTION

2.1 Introduction

This chapter reviews and synthesises the relevant literature of theoretical knowledge by surveying previous research and initiatives that have focused on the experiences of BME people in construction. This helped to develop an understanding of the skills requirement base of the construction industry and examine its role as a major player in any economy. It highlights findings relevant to and expanded upon in the present study, and thereby establishes how this study contributes to the current body of research on BME representation and experiences in the built environment sector. In order to bring this to light a general overview of the industry and the state of skilled labour is also considered. The chapter explores some common strategic approaches to HRM that construction relies upon to cope with the operational environment.

2.2 Human Resource Management in Construction: Basic Characteristics

The nature of human resource management strategies and approaches adopted by construction organizations do not encourage long-term employee participation and job security (Loosemore et al., 2003). This section looks at some of the characteristics in respect of models explain the nature of labour demand in the construction. The construction industry encounters numerous challenges in securing skilled labour in view of the cyclical demands of the industry's market in order to maintaining organisational growth and development. According to Dainty and Loosemore (2012) the industry faces the preoccupation of avoiding workforce overcapacity given the high levels of competition and resulting low profile margins that characterise its operations. Therefore, most companies usually contract outside labour to permit flexibility of operations (Krause-Jensen, 2010). In view of the nature of the industry's markets which are characterised by fluctuating workloads, there are clear financial advantages in this approach in savings for employers on national insurance contributions, the administration cost of making tax deductions from the employees, payments for sickness or holidays. In addition, reliance on labour only subcontracting and the hiring of self-employed operatives greatly reduce the cost of training of employees. However, Wilkinson et al., (2012) consider it debatable whether this is an advantage, since well trained labour who are aligned with an organisations' culture and strategy are likely to be more motivated.

Consequently, Atkinson (1984a) has provided a theoretical organisational framework for explaining how organizations cope with employee resourcing in dynamic industrial environments in his flexible firm model (figure 2.1). This model encompasses three forms of flexibility: financial, functional and numerical which cover flexible pay systems based on local conditions as opposed to national negotiated rates, multi skilling and the ability of employees to switch between different tasks. It also involves the ability of an organisation to rapidly expand or contract to cope with fluctuating workload demands using short-term contracts, subcontracted and outsourced labour. The majority of construction firms share these characteristics of flexibility albeit in the face of some restrictions in some countries due to the activities of trade unions or other collective bargaining organizations.

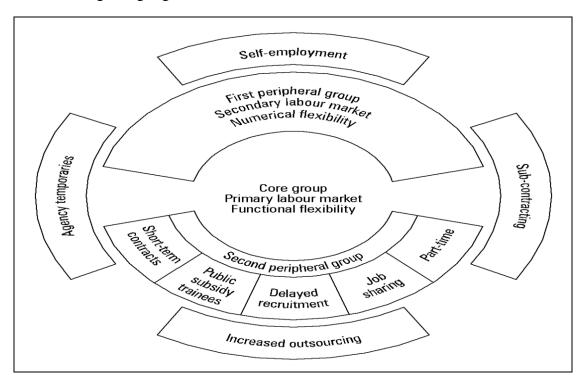


Figure 2.1: The flexible firm model Source: Atkinson, (1984a)

Figure 2.1 considers the labour market structures under conditions of flexible accumulation divides workloads according to whether they are in a core or the periphery. While core workers are drawn from the primary labour market, have permanent contracts and offer functional flexibility, peripheral workers do the opposite and provide more numerical and financial flexibility for organisations. Atkinson's model suggests that for an organisation to cope with different dynamic staffing environments, different flexibilities are required. As a result core staff

may be required to cover for unfamiliar roles in times of labour shortages. Also, Handy (1989) put forward the Shamrock organization which includes a professional core of key employees on permanent contracts and another group made up of workers on short contracts or subcontracts who support the core. There is also a third group made up of part-time and self-employed workers to provide temporal support to cope with peaks and troughs in labour demand.

It is without doubt that workforce flexibility offer benefits especially financial ones, however, it is worth noting that the uncontrolled reliance on it has contributed to a growing sense of job insecurity (Antonioli *et al.*, 2010) as organisations constantly undergo radical restructuring, delay and downsizing (Kayinamura, 2012; Sparrow & Marchington, 1998). Also, research has shown that job insecurity is a source of job stress and burnout which are in turn associated with diminished individual and organisational effectiveness (Stavrou *et al.*, 2006). This fact is also noted by Winch (1994) in his study of UK construction's casual approach to workforce employment as a cause of the industry's poor safety records whilst Debrah and Ofori (1997) recognize the primary cause of the lack of inter-trade cohesiveness amongst the workforce and a lack of investment in developing trade skills as a result of this flexibility.

Therefore, whilst flexibility is an important factor of financial savings, an effective method of coping with fluctuating market and dynamic staffing requirements, maintaining a sizable core staff within construction organizations is seen to be more advantageous and more and more organizations are recognizing this fact. Having noted the level of permissible flexibility in construction organizations in this section, the next section considers their sizes and significance to human resource management strategies and approaches.

2.3 Micro, Small and Medium Scale Enterprises (SMEs)

The previous section has discussed models and approaches in the HRM function determining the nature of managing labour demand in construction. This section looks at the definition of Micro and Small and Medium Scale Enterprises abbreviated as SMEs as its acronym in order to place in context their significance in the construction industry and how it can enhance diversity in the employment process which is the focus of this study. This is deemed necessary due to the fact that there still exist some confusion as to what constitutes a SME, in spite of the amount of time and effort that have gone into coming up with a universally acceptable definition. Also, due to the fact that SMEs are defined based on the scale and structure of businesses in an economy (Gibb, 2004) the inherent differences are unavoidable. Therefore, it is important to attempt a definition a

SME from a regional perspective, in order to determine what is applicable to each region under scrutiny. For instance, the Organisation for Economic Co-operation and Development (OECD) describes SMEs as non-subsidiary, independent firms which employ less than a given number of employees (OECD, 2000a). It further says that this number (number of employees) varies across countries and national statistical systems. Therefore, this section attempts to review literature on the regional definitions of SMEs in order to obtain a clear understanding of what the term entails in order to outline it usefulness to this study.

In the UK, SME is defined based on the purpose of accounting requirements under sections 382 and 465 of the Companies Act 2006. According to this a small company is one that has a turnover of not more than £6.5 million, a balance sheet total of not more than £3.26 million and not more than 50 employees. Also, to qualify for a medium-sized company status a business should have a turnover of not more than £25.9 million, a balance sheet total of not more than £12.9 million and not more than 250 employees. However, it is worth noting that even within the UK this definition is not universally applied. According to SMEs Statistics for the UK, they employ the majority of the UK's workforce. Small Business Service (SBS) Statistics Unit have indicated that out of 4.8 million businesses in the UK, 99.9% were SMEs (BIS (previously BERR) 2007). Despite governments' and many of the multinational organisations' efforts at targeting this group for special financial business support, a single definition for a SME is still nonexistent either nationally or internationally (Ayyagari *et al.*, 2007).

The British Bankers Association (BBA) embeds its own definition within the introduction of its voluntary code - The BBA Business Banking Code (Mullineux, 2009). Here small business customers are defined as sole traders, partnerships, limited liability partnerships and limited companies with an annual turnover of less than £1 million, including associations, charities and clubs which have an annual income of under £1 million. For concerns applying for an account as a group of businesses, the turnover threshold is applicable to the combined turnover of the group and not the individual companies within it.

Considering their size and class dimension the most striking phenomenon of SMEs is perhaps their contribution to employment in the European economy. No less than 67% of employment in the private, non-financial economy is found in SMEs. Almost 88 million people are employed by SMEs, whereas large enterprises employ almost 43 million people. Within the group of SMEs, the micro firms employ most people at almost 39 million which is 30% of the total employment

in the private, non-financial economy. According to the EU report by Audretsch *et al.* (2009) between 2002 and 2007, the number of jobs in the EU non-financial business sector increased by 8.7 million to which growth SMEs accounted for 7.3 million, while employment in LSEs increased by only 1.4 million. Thus, SMEs' contribution to employment growth (84%) has been much more than could be expected from their share in total employment (67%). As a result, from both static and dynamic points of view, the contribution of SMEs to employment is impressive. Businesses qualify as micro, small and medium-sized enterprises (SMEs) if they fulfil the criteria as indicated in the recommendations, which are summarized in table 2.1. An enterprise qualifies as a SME if it meets either the turnover ceiling or the balance sheet ceiling in addition to the staff headcount ceiling but not necessarily both - European Commission (in Turner *et al.*, 2009).

Table 2.1: European Commission criteria for SMEs

Enterprise category	Headcount	Turnover	or	Balance sheet total
medium-sized	< 250	≤€ 50 million	<u></u>	€ 43 million
Small	< 50	≤€ 10 million	<u> </u>	€ 10 million
Micro	< 10	≤€ 2 million	<u> </u>	€ 2 million

Source: European Commission (2008)

The social and economic significance of micro, small and medium-sized enterprises in the EU cannot be overemphasized as they represent 99 % of all enterprises in the EU and provide about 90 million jobs which contribute to entrepreneurship and innovation. However, SMEs face particular difficulties, which the EU and national legislation try to address by granting them various advantages. The foregoing sections have been preoccupied with the characteristics of the dominant firms in construction. The next section considers employment processes and functions and of the minority group whose representation is the focus of this study.

2.4 Employment in the HR Function

The first two definitions of employment by the Oxford dictionary online as 'the state of having paid work' (http://oxforddictionaries.com, 25.05.2011) as in a fall in the numbers in full-time employment and the action of giving work to someone as in the employment of an engineer directly fit the description of this study. Again, the Cambridge business dictionary online defines employment as 'work that you are paid to do for a particular company or organization'

(http://dictionary.cambridge.org, 25.05.2011). The free dictionary online (http://www.thefreedictionary.com/Engagement, 25.05.2011) also gives engagement as a direct synonym of employment. Although employment is much broader, and entails a level of commitment when engagement is used, it denotes the full commitment of an employee when the two are used together. In fact for the employee to be motivated to contribute their best to an organization they must be well engaged in consideration to the full ramifications of the term. In human resource management this is a very important phenomenon as it defines the success or failure of a business. Research by the Institute of Employment Studies (IES) has shown that when employees feel engaged, they feel more positive about their organisation; this can lead to enhanced motivation, performance, job satisfaction and quality of working life. There is an increasing body of evidence that employee wellbeing and engagement has a direct relationship with positive business outcomes. These qualities are covered in section 2.4.2, however, the two most important steps in the employment process to establish who gets to interview and the job in the process of recruitment and selection are discussed in section below.

2.4.1 Recruitment and selection

Recruitment and selection processes are used to attract the people who meet set criteria for placement in organisational roles. They may follow as a result of new vacancies, shortfalls in the skills after restructuring, retraining, redeployment or the vacation of a post resulting from a multitude of reasons. Potential candidates may be internal or external to an organisation. The following sub sections further cover these two processes along with a third dimension on training.

a. The Recruitment Process of Human Resource Management

Recruitment is the first stage in the process of employment, which continues with selection and ceases with the placement of a candidate. Through this exercise, managers are able to locate people to fill vacant positions. It is the next step in the procurement function after the manpower planning where potential applications are discovered for actual or anticipated organizational vacancies (Arthur, 2012). In construction projects, this process has been problematic process especially during periods of high unemployment, as the recruiter and applicant have specific needs and expectations which have to be satisfied. There is often a temptation for employers to see the process as one-way, a dangerous mistake, particularly in times of high demand (Loosemore *et al.*, 2003). In such an environment, good employees are a scarce resource as it is a seller's market, where employers need to impress potential candidates. In addition they give the

example where declining numbers of construction graduates have led to a shortage in certain skills such as quantity surveying in the UK and construction employers have had to offer increasingly attractive reward packages in order to meet their recruitment needs. The recruitment process can be initiated either within or outside an organisation.

Internal Recruitment results from Reliance on competitive bidding processes for specific work packages to subcontracting, most construction firms are shying away from directly recruited labour as their structures change to core or peripheral dominance in their labour force. External recruitment involves using direct advertising, recruitment agencies or informal means such as word of mouth and approaches to suitable candidates. The cost of repeated advertising and the competition for staff in a shrinking labour market have led many companies to increase their use of agency recruitment in recent years. Although it is known to save time and resources in advertising and vetting large numbers of applications the process is however, fairly expensive in respect of the charges in agency fees to find suitable candidates, and it can also lead to the loss of some degree of autonomy over the process as well as the recruited employees (Arthur, 2012). Druker and White (1996a) explain that at site level, informal methods of recruitment predominate in construction, largely because of the propensity for site based line managers to employ staff for their projects. Loosemore et al., (2003) again stress that there have been situations where companies may identify managers and professionals working for rival companies, by enticing them with handsome monetary rewards and other incentives. Having examined the recruitment process the next section covers the next stage which is the process of selection.

b. The Selection Process of Human Resource Management

HR selection is the process of collecting and evaluating information about an individual in order to extend an offer of employment, which could be either a first position for a new employee or a different position for a current employee. The selection process is performed under legal and environmental constraints and addresses the future interests of the organisation and of the individual (Gatewood *et al.*, 2010; Chomoro-Premuzic and Furnham, 2010). Through such information, a list of suitable candidates for a position is identified after which the critical task of choosing the right candidate who fits the requirements. This task of deciding who best satisfies the current and future needs of an organization is a cumbersome process as it is difficult to predict how a person will perform in a future position which brings Cooper & Robertson (1995), to suggest that in most companies, construction ones alike, the process is no more than a lottery.

This said however, a candidate's suitability could be assessed through psychological methods and personal assessments like interviews, astronomy, graphology (analysis of handwriting), bio-data analysis, personality tests and trials among others. Therefore, it is important to nurture trust at this early stage in the process, a point stressed by Searle and Billsberry (2011). For such reasons outlined above, training and development are crucial components to aid both parties in the process and is covered in the next subsection.

c. Human Resource training and development

Training is an essential ingredient for change responsible for learning and unlearning habits, and attitudes. The facilitation of organisational and individual learning is mainly possible through training and development (Salas, *et al.*, 2012; Beardwell & Holden, 1997). Systematic and ad hoc human resource training and development programmes equip members of staff with the skills required for their current and future roles. As a motivating factor, such programmes serve as an ingredient for engendering staff member's commitment to their organizations (Stewart & Sambrook, 2012). Sisson & Storey (2000) stress that those who benefit from the required training and skills are more likely to feel valued. It is therefore necessary that construction organizations take steps to integrate employees into the organisation and then to facilitate their development and retention through these media. Gregory (2012) confirms Feldman's (1980) evidence to indicate that effective orientation yields better results in the recipients through effective and efficient performance. However, in reality most organisations give new employees no more than a quick tour of the workplace, with cursory introductions to co-workers and other professional colleagues.

Certainly, at construction project level there is very little evidence of comprehensive orientation programmes other than in the most innovative projects, which are usually restricted to hearth and safety requirements based on legislation. As prescribed by Noe *et al.* (2000) if orientation involves getting employees started in the right direction, personnel development is about keeping them there and ensuring that they contribute and add value to the business. Loosemore *et al.*, (2003) give the object of training and development essentially as the attempt to alter permanently the behaviour of employees in a way which will bring improvements in the achievement of organisational goals as well as provide opportunities for learning job-related skills, attitudes and knowledge. As a learning tool, its success depends on employee motivation and ability to learn as

well as the willingness to transfer the acquired knowledge and skills to the job which leant behaviour should be appraised and reinforced.

It is crucial that in a modern dynamic business environment training should engender a learning culture. Keep and Rainbird (2000) suggest three deferent states of learning in organizations which border on individuals learning, organizational collective learning and the learning organization where systemic learning is the target. Unfortunately, Druker *et al.* (1996) found that most construction firms are far from learning organizations. They further discovered that training was in decline within construction as there was little evidence of old training initiatives being replaced with new ones. They also asserted that severe skills shortages, which predictably emerge in every construction boom, were largely the result of growing self employment responsible for over 85 percent of the industry employment that are so highly geared that long-term investments in training have been ignored in the traditional short-term boom-bust cycle of construction activity. Nevertheless, training is still a fundamental requirement for improving organisational performance and filling skills gaps. This section has covered employment processes in organisations. The quality responsible for achieving organizational goals is discussed in the next section.

2.4.2 Employee Engagement

This section covers the commitment to organizations through motivations to achieve set targets known as employee engagement. The term engagement is usually used loosely without its connotation in human resource management being considered in its full ramifications. It is however, a crucial phenomenon if, employees are to give their best to their organizations. According to Robinson *et al.* (2004), engagement is big in the HR consultancy market, yet there is a dearth of academic research in this area. In their study, they found that engagement is more than a passing fad as it brings clear business benefits and is seen to bring real competitive advantage to organisations that are well advanced in its usage.

However, it must be stressed that raising engagement levels, and maintaining them, takes time and effort as well as commitment and investment. In investigating what HR professionals mean when they use the term 'engagement', Robinson *et al.* 2004 delineate issues like belief in the organisation, desire to work to make things better, understanding of business context and the 'bigger picture', respectful of, and helpful to, colleagues; willingness to 'go the extra mile';

keeping up to date with developments in the field and the like. In this regard, a clear view of the behaviours demonstrated by the engaged employee emerge and is seen to have clear overlaps with the concepts of commitment and organisational citizenship behaviour although there are differences. In particular, engagement is two-way: organisations must work to engage the employee, who in turn has a choice about the level of engagement to offer back to the employer (van Emmerik and Euwema, 2006). Engagement is a positive attitude held by the employee towards the organisation and its values. An engaged employee is aware of the business context, and works with colleagues to improve performance within the job for the benefit of the organisation and in turn the organisation must work to develop and nurture engagement, which requires a two-way relationship between employer and employee (CIPD, 2012).

Therefore, it is required of employers to determine the best possible ways in which they can get the best out of their employees whatever their role in the organisation. In this way, new concepts driving the talent world will be achieved in order to tap into the full potential of the workforce. Engagement is critical to success in this endeavour, because it is the way to release the talent and creativity that delivers the innovation needed for future competitiveness. (Macleod & Clarke, 2009). Demonstrably, there is an equally strong relationship between engagement and the drive in most organisations to ensure their workforce reflects the diversity of the population as ensuring fairness and equal opportunities at work for all employees lies at the heart of engagement. It is hard to imagine an engaged workforce where one group felt that their voice was ignored and ensuring EO and fair treatment as an essential strand of an engagement strategy.

In measuring engagement, attitude surveys of employees based on data from the Institute of Employment Studies (IES) were found to yield positive responses, which indicate that certain issues underpin the determination of the level of engagement sustainable in particular instances. These factors include the following: a positive attitude and pride in the organisation, belief in the organisation's products and services, a perception that the organisation enables the employee to perform well, a willingness to behave altruistically and be a good team player, an understanding of the bigger picture and a willingness to go beyond the requirements of the job (Robinson *et al.*, 2004). Furthermore, engagement levels can vary, in association with a variety of personal and job characteristics and with experiences at work.

As a result, organisations need to work harder to minimize, or better, prevent, the impact of bad experiences. They also need to ensure that employees' development needs (including the special

needs of professionals) are taken seriously; pay attention to, and value the roles of, support staff; and to maintain the interest of longer-serving employees. The relatively high levels of engagement of the oldest employees, and of minority ethnic staff, suggest sources of untapped potential within some organizations (Macleod & Clarke, 2009).

a. Drivers of Engagement

Research shows that committed employees perform better (Macleod & Clarke, 2009, Shah & Jehn, 1993). If it is accepted that 'engagement', as many believe, is a step higher up from 'commitment', then it is clearly in any organisation's interest to understand the drivers of engagement. There is every indication that opinions about, and experiences of, many aspects of working life are strongly correlated with engagement levels. However, the strongest driver of all is a sense of feeling valued and involved. The line manager obviously plays a very important role in fostering employees' sense of involvement and value – an observation that is completely consistent with IES' research in many different areas of HR practice and employment. It is therefore worth noting the critical importance of the employee-manager relationship based on which the engagement model (figure 2.2) has been developed.

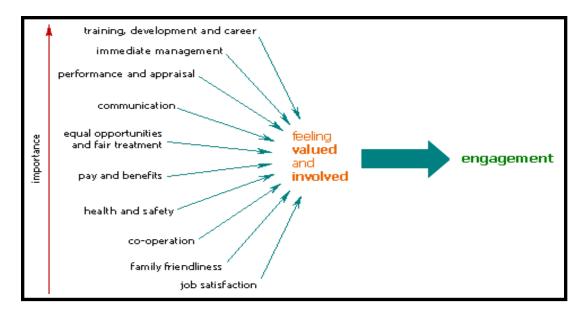


Fig2.2: The engagement model / diagnostic tool for engagement (Source: IES Survey, 2003)

The diagnostic tool above (figure 2.2) illustrates the strong link between feeling valued and involved and engagement. Almost all of the drivers of engagement, although identified in the NHS, are applicable in all organizations, regardless of sector; however, some variability is likely, and the relative strength of each driver is also likely to be contingent upon the organisation being

studied (Macleod and Clarke, 2009). It is worth noting, therefore, that the following factors should be assured else attempts to raise engagement levels are likely to founder: good quality line management, two-way communication, effective internal co-operation, a development focus, commitment to employee wellbeing and clear, accessible HR policies and practices, to which managers at all levels are committed. Easy as it may sound, it requires a huge amount of effort, a high sense of commitment and continuing investment to ensure that all of these basics are in place and working well. Embarking on a drive to increase engagement levels should not be undertaken lightly, bearing in mind the ease with which engagement can be easily transform or shatter and undermine underlying organisational goals (Lloyd, 2004).

Clearly, engaged employees understand the value of ensuring a positive customer experience as they are empowered (Gian, 2012) and are more likely to demonstrate their commitment by delivering high quality products and services. Like the connection to organizational performance, the connection to positive customer experiences is vital to healthy engagement levels. It has been noted that engaged employees are seven times less likely to leave in the next year and one and half times more likely to stay for at least 5 years (Roberts & Davenport, 2002; Attridge, 2009; Schaufeli *et al.*, 2006). Organizations need to protect their investments in their workforce by retaining employees and their intellectual capital to ensure business continuity and the ability to meet key business objectives. Knowing who is engaged in an organisation can be the best starting point for addressing unwanted attrition that could lead to competitive weakness and high turnover levels.

b. Employees' Relations with their Organization

Whether or not employees feel fairly or equitably treated by their work organizations has been found to be an important determinant of work outcomes, such as organizational citizenship behaviours and job performance (Bing & Burroughs, 2001). However, not all employees react in the same manner to inequitable treatment, due to a construct known as equity sensitivity. To capture individual differences in equity sensitivity, Huseman, *et al.*, (1985) developed the Equity Sensitivity Instrument (ESI), which utilized a forced-distribution format to allocate points between benevolent and entitlement statements, subsequently forcing the resulting scores to be unidimensional. Recently, Davison & Bing (2008) demonstrated that equity sensitivity may be a multidimensional construct, and that using a single-stimulus format of the ESI reveals this multidimensionality.

Hence, the research on the construct called equity sensitivity (Huseman *et al.*, 1985) has indicated that individuals have different tolerances for the level of equity in their exchange relationships with their organizations, (Finnegan & Taylor, 2004) which helps to explain why individuals may react differently to the same inequitable situations. Huseman *et al.* (1987) proposed that these differences in equity sensitivity lie on a continuum from benevolent to equity sensitive to entitled. *Benevolents* are conceptualized as individuals who are focused on what they contribute to the organization (i.e., inputs) and thus have a greater tolerance for under-reward, whereas *entitleds* are more focused on what they receive from the organization (i.e., outcomes) and are thus more tolerant of over-reward.

Equity sensitives are described as individuals who prefer their outcome/input ratios to be equal to the ratios of comparison to others, and who experience distress when either under- or over-rewarded (Huseman et al., 1987). Because the forced-distribution format of the original ESI forces individuals to allocate a set number of points between benevolent and entitlement statements, benevolence and entitlement are measured as opposite ends of the same continuum and are perfectly negatively correlated. Davison & Bing (2008) saw this measurement system as a potential limitation, and suggested that the equity sensitivity construct might instead be multidimensional, with benevolence and entitlement as separate dimensions of a single construct, and might be only moderately correlated or even uncorrelated, rather than perfectly negatively correlated. Specifically, a benevolent orientation instead might be the result of combining a high degree of input focus with a low degree of outcome focus, whereas an entitled orientation might result from a low degree of input focus combined with a high degree of outcome focus. Equity sensitives, given their focus on the reciprocity of the exchange with the organization, might have both a high input focus and a high outcome focus. Figure 2.3 illustrates the multidimensional model of equity sensitivity.

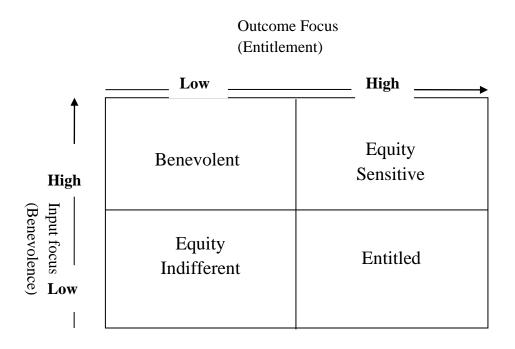


Figure 2.3: Prototypical Categories of the Multidimensional Equity Sensitivity Construct Source: Davison and Bing (2008)

In the Figure 2.3 above, the vertical axis represents a continuum of input focus from low to high, and the horizontal axis represents a continuum of outcome focus from low to high as well. As the figure shows, the benevolent prototype results from a high-input, low outcome focus. The entitled prototype results from a low-input, high-outcome focus. The equity sensitivity prototype arises from a high degree of focus on *both* inputs and outcomes. However, and perhaps most importantly, this multidimensional model of equity sensitivity allows for a low-input, low-outcome focus combination, which Davison and Bing (2008) termed *equity indifference*. The conceptualization of entitlement and benevolence as separate dimensions of equity sensitivity has the potential to improve the prediction of organizational criteria, because the separate input- and outcome-focused dimensions may interact to explain behaviour. For example, input-focused criteria, such as OCBs, are highest only when benevolence is high and entitlement is low.

Alternatively, outcome-focused criteria, such as pay dissatisfaction, may be at the highest point only when entitlement is high and benevolence is low. Importantly, individuals who are low on both benevolence and entitlement may differ, and this prototype of indifference can only be captured through the measurement of benevolence and entitlement as separate dimensions. Therefore, the reaction of the BME in respect of the treatment they may receive and their reaction

to their organisation and work and generally to employment more or less follows these constructs and explains why others feel that they need to cope with discrimination and adjust accordingly while others rather think otherwise based on the finding in the qualitative study (section 5.4.2-b). The engagement of employees generally depends on the style of leadership, which is the subject matter of the responsibility for HR in industry and follows in the discussion below.

c. Human Resource Management Function in the Construction Industry

This section discusses the responsibility for the HRM function and the effect of the style adopted in construction in the process. Unlike other industries, construction operations have distinctive features which make them project-based with characteristics, such as impermanence, uniqueness and uncertainty (Hamilton, 1997). Thus, whilst repetitive organizations may have dedicated HRM department probably to develop the strategic priorities and direction of the HRM function, the implemented in construction is done at project level and is the responsibility of line managers e.g. project and site managers at that chain of the production function. Therefore, Dainty and Loosemore (2012) note that regardless of the particular approach a construction firm adopts, the project-based structure demands that managers responsible for activities at a functional level must take some responsibility for managing people-related functions at a site-based level. This is because construction projects are often physically located well away from head office, which empowers line managers to act with even more autonomy than their colleagues in other industries. As a result HRM departments act in an advisory capacity to line management who retain control of the staff within their work group, project or department drawing on specialist advice when required; a relationship summarized by Mullins (1999) in the model in figure 2.4.

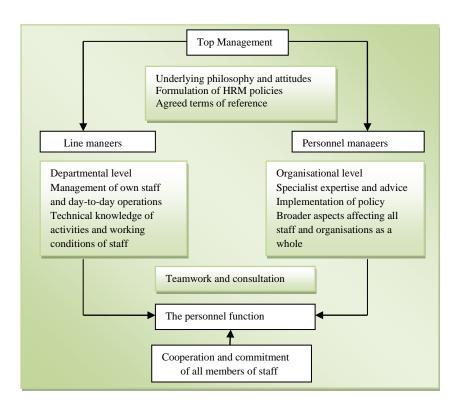


Figure 2.4: The Personnel Function

Source: Mullins (1999)

The above model depicts Mullins's approach, which emphasizes that the personnel/HRM function must represent a shared responsibility between senior managers, line managers, staff and HRM specialists (Mullins, 1999). With respect to construction particular aspects of the people-management function are delineated between the three groups of top *management*, *Personnel management* and *line management who as* project and site managers deal with the day-to-day personnel-related matters such as the orientation of work responsibility, employee performance, safety, work-based training and communication. Although they have direct responsibility for staffing and personnel decision, they are able to draw on the support of the specialist HRM managers who provide specialist advice concerning people-management issues that line managers may be ill-equipped to handle. Such people management approach adopted by these line managers depends on the level of experience and training they have in this regard which is the remit of the next section.

2.5 People Management in Construction.

Though management styles vary between firms and across countries, thus making generalization difficult, UK construction can however be said to be beset by a poor image in relation to approaches in human resource management (Wilkinson *et al.*, 2012). This section, therefore, considers line mangers attitudes towards people based on a continuum of managerial styles ranging from job centred to employee centred as notes The Michigan studies (Likert, 1961). The Ohio State studies rather refer to these styles as initiating-structure behaviour and consideration behaviour respectively to refer the same styles of leadership (Griffin, 2013). Job centred managers focus on tasks to be done and operate through formal rules and procedures, clearly defined hierarchies, specialisation, job separation, and top down information systems. They insist on loyalty obedience and adherence to strict deadlines and rely upon close supervision, monetary rewards and threats of punishment as a means of achievement (Loosemore *et al.*, 2003).

In contrast, employee-centred managers, also known as employee orientated managers, focus on people rather than the job acknowledging that employees' needs are not completely satisfied by monetary rewards (Likert, 1961). This is base on the conviction that that scientific management creates more uncertainty than it solves, by placing people in a restrictive environment where they behave dysfunctionally. Therefore as noted by Dainty and Loosemore (2012), they focus on the spiritual aspects of organisational life working on the assumption that efficiency is achieved through the satisfaction of people's needs upon the belief that the best mechanism for achieving this is through decentralisation characterised by flexibility, openness, collective responsibility, participative decision making, trust and absence of rules and procedures. Such managers consider that uncertainty is inevitable in organisational life and seek to accommodation it rather than suppress it and achieve this by emphasising the value of lateral communication, group and teamwork within organizations.

However, in the real world, these extreme approaches on the continuum are not practical and most managers fall somewhere in-between by combining elements of both styles in their own unique approaches to management. Although as it sounds the employee-centred style immediately appears more attractive and ethical the development of management theory does not recommend one best way to manage. Rather, it has been found that the most appropriate managerial approaches depend upon four factors, namely: the people being managed, the task, the technology and the environment. However, while no two construction projects are exactly the

same, there are common attributes which would imply that an employee-centred emphasis would be appropriated on most occasions. Furthermore, Dainty and Loosemore (2012) explain that in comparison to other industrial production processes, the construction process is relatively small batch in nature, being concerned with the production of one-off products of a relatively unique and prototype nature. In spite of attempts at mechanisation, construction still remains a labour-intensive, low-tech production process which relies heavily on the creativity of professionals and craftsmen, who still value their autonomy and intellectual freedom in a relatively uncertain and unpredictable production environment. Such knowledge as hidden and applicable to tacit knowledge resources in organizations cannot be managed and taught in the same manner as explicit knowledge (Pathirage *et al.* 2005; Al-Karaghouli *et al.*, 2013).

Additionally, the current business environment, now very competitive and saturated with risk and uncertainty justifies an employee-oriented style of construction project management. This stems from the fact that there is no evidence to suggest that construction is immune to such changes, which are producing a situation where the ability to innovate is increasingly crucial to success and in an increasingly dynamic world it has been said that it is far more useful to be skilled in thinking than to be stuffed with facts (De Bono, 1993). Therefore, Loosemore *et al.* (2003) stress the necessity of intellectualism in modern management noting it as being in total contrast to the past, where success could be reliably achieved through the application of well-established and proven systems, processes and techniques, which had been mechanically absorbed in a rote-learning environment. They further confirm Stacey's argument that the application of this traditional approach to the current business environment is counterproductive because in an unpredictable environment order is known to lead to chaos where chaos would have led to order (Stacey, 1992). The irony in Stacey's insight is his suggestion that traditional management approaches have been the cause of the uncertainty and instability which they have sought to eliminate or control.

Therefore, while scientific, job centred culture of construction techniques are valuable, there is relatively little attention to psychological, sociological and behavioural issues, which offer potential insight into the behaviour of people in the construction industry. However, research suggests that when applied in isolation behaviour modification techniques are of limited effectiveness as they fail to take account of other sources of employees' motivation, such as intrinsic beliefs and values. An instance being a behaviour-modification experiment designed to

improve solid waste recycling behaviours found to be only partially effective because employees' values were not aligned with the contractors waste management policies (Lingard *et al.* 2001).

The educational system is also known to play an important role in reinforcing the industry's scientific values, because delivery is normally based within a formal classroom environment (op cit). This is as a result of high contact hours in most construction project management courses assessed mainly by formal examinations hence the learning experience is generally characterised by high level of prescription. Such teaching styles are known to permit less thinking, flexible and inquisitive questioning and thus discourage student-centred learning to enhance the debate of contentious issues and develop the intellect.

2.6 Global distribution of construction output and employment

The inherent instinct of humans to protect themselves from the elements, means that construction activity is ubiquitous wherever there is human settlement. However, the amount that a country spends on construction is closely related to its income also known as GDP. In 1998, expenditure varied from US\$5 per head in Ethiopia to almost US\$5,000 in Japan. The UK construction industry is the biggest employer with over two million people (Dainty *et al.*, 2007) and main contributor to the Gross Domestic Product (Steele & Todd, 2005). The UK construction industry is also the second largest industry in the European Union (EU) and contributes a healthy 8.2% to UK's Gross Value Added (DTI, 2007). The industry incorporates a broad range of businesses and services, including the construction and supply of materials and products; building service manufacturers, providers and installers; contractors, sub-contractors, advisors and construction clients that design, build, operate and refurbish buildings and properties throughout the country. Figure 2.5 shows the global distribution of construction output and labour.

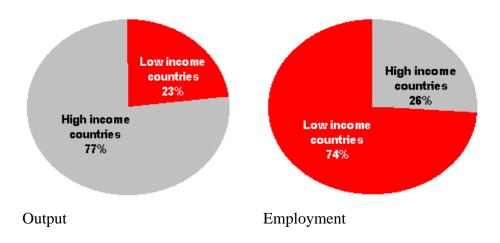


Figure 2.5: Global Distribution of Construction Output and Employment Source: ILO (2006) in Akintoye et al. (2012).

The distribution of construction employment is almost the exact reverse of the distribution of output (Akintoye et al., 2012). While three-quarters of output is in the developed countries, three-quarters of employment is in the developing world. Official data suggest there are around 111 million construction workers in the world, some 80 million of them in the low and middle-income countries (ILO, 2006). These numbers do not reflect the reality since many construction workers in developing countries are not included in the official data as they are informally employed (Akintoye et al. 2012) and therefore, the real number could be much higher.

According to the ILO (2006), differences in technology have been cited as the reason for the greater employment-generating potential of construction activity in the developing countries. Poorer nations have cheap labour readily available and so the majority of tasks are undertaken by manual methods with minimal use of machinery and equipment. Although there is a very wide choice of technology available for most types of construction informed by appropriate technology, the implementation of a particular mode tends to reflect the relative cost of labour and capital. However, in the richer countries, labour tends to be expensive and machines have largely replaced workers in many of the tasks on construction sites except for some repair and maintenance where labour is still intensive.

2.6.1 Construction Professions in the UK

In order that the various jobs needed to complete a particular construction project can be achieved successfully, a number of professions come into play as shown in table 2.2.

Table 2.2: Construction Professionals in the UK economy

Occupation		2007	2008	2009	2010	2011	2012
Architects 2431		54,426	49,846	44,076	41,948	41,418	41,834
	annual % change		-8.4	-11.6	-4.8	-1.3	1.0
Civil engineers 2121		79,030	90,904	82,006	79,094	79,261	81,016
	annual % change		15.0	-9.8	-3.6	0.2	2.2
Mechanical engineers 2122		82,349	81,472	73,793	71,911	72,452	73,801
	annual % change		-1.1	-9.4	-2.6	0.8	1.9
Electrical engineers 2123		53,522	53,541	48,495	47,258	47,613	48,500
	annual % change		0.0	-9.4	-2.6	0.8	1.9
Town planners 2432		22,650	23,814	21,569	21,019	21,177	21,572
	annual % change		5.1	-9.4	-2.6	0.8	1.9
Managers in construction 1122		251,301	258,970	232,398	223,826	223,355	226,314
	annual % change		3.1	-10.3	-3.7	-0.2	1.3
Quantity surveyors 2433		35,904	44,884	43,112	43,353	44,227	45,036
	annual % change		25.0	-3.9	0.6	2.0	1.8

Source: LFS, Construction Skills Network (2009).

Shown above is the construction skills requirement as forecasted by the Construction Skills Network 2007- 2012 in 2009 showing the general categories of professions. Even with the downturn, professions like quantity surveying showed a significant annual percentage change of 0.6 in 2010 and a significant anticipated growth rate of 2.0 in 2011.

Characteristically, UK construction has been said to be very fragmented with less formal training compared to the EU due to its reliance on apprenticeship for most trades (Byrne *et al.*, 2005). This confirms a study by ILO (2001) which described the UK construction industry as 'hollowed out' with reliance on self-employed labour that is mostly supplied through labour agencies or sub-contractors. At present, despite the current and projected shortfall in available skilled workers and the ongoing recession of the U.K construction industry which is just beginning to pick up, an upturn which is predicted to be severely affected if the skill shortfall is not addressed (Construction Skills Network, 2009), BMEs are still severely underrepresented and constitute a loss of a potential workforce to the UK economy. There are a number of factors that have been identified as contributing to the BMEs underrepresentation in construction as discussed below after considering a general overview of the level of skill shortages in the industry.

2.6.2 Skilled Labour Shortfall in Construction

The UK construction industry was said to employ over two million people and construction-related employment was projected to grow at between 1% and 2% annually, which equates to

80,000 new recruits to the industry each year until this recent recession (CITB, 2003). This anticipated growth led to an estimated annual increase with the need for 8,830 workers, 1,870 professionals and technical staff, and an additional 1,110 new recruits each year for the wood trade and interior fit-outs. The industry, as a result, is anticipated to experience problems in meeting its skill requirements, particularly in London and the Southeast where the representation of BMEs is very significant and where most of UK's construction activity is concentrated (Construction Skills Network, 2007). This anticipated growth, predicted to be 6.6% regionally in the North West alone between the years 2007 to 2011 brought about the imminent need to address the lack of skills as an urgent priority. Construction 2025, a UK government strategic focus to transform UK construction into a real force to be reckoned with on the world stage (Hansford, 2013) is set to be bridled with difficulties in the face of skill shortages and a lack of diversified workforce in order to access a globalised market. Hence, broadening the knowledge and expertise base in organization has been recommended by Al-Karaghouli et al., (2000) noting: 'suffice it to say, the involvement of the widest range of stakeholders is advisable' as few people may not have the required knowledge base so is diversity a clear advanctage. Table 2.3 shows the period 2003 - 2007 representing the boom era to the recent recession. Here, it is evident that annual requirements increase for two successive years and began to fall steadily with the same happening in requirements due to expansion. The cumulative skills requirements however shows a significant increase in demand for skill manpower, a condition which was soon to be affected by the recession.

Table 2.3: Labour Demand between 2003 - 2007

	2003	2004	2005	2006	2007
Labour Supply	1,928,615	1,887,015	1,843,343	1,801,013	1,758,653
Labour Demand	2,045,897	2,101,328	2,137,879	2,174,938	2,209,998
Cumulative Requirement	117,281	214,314	294,537	373,901	450,346
Annual requirement	85,301	97,033	80,223	79,365	76,444
requirement due to Expansion	43,458	55,432	36,551	37,058	35,061
Requirement due to supply side	41,842	41,601	43,672	42,306	41,384
factors					

Source: Construction Industry Training Board (2003).

The data shows an annual labour requirements aggravated by the expansion in construction output yet the industry still relies on its traditional pool of labour which, according to, for example, Ahmed, *et al.*. (2008) still predominantly remains British white young male.

As a result, the need for the industry to rely on non-traditional groups, such as BME people to make-up for the projected shortfalls of all categories of workers (table 2.2) to be inclusive and diverse in terms of recruitment, progression and retention is imminent which also brings it to respond to the legal and social pressures to ensure equality. Again, the levels of requirements for the skilled and qualified workforce in the construction industry have created an extensive load on the labour market to match the demand in the number of skills requirement. Thus, the participation of BMEs in the construction industry is vital in terms of meeting the industry's demand for labour and the shortfall of skills which creates strong opportunity for BME people to take advantage of the current skills shortage. However, this does not appear to be the case as BME consultants and contractors still continue to face barriers that limit their chances to take advantage of the growth in the construction based industry (Steele and Todd, 2005).

CABE (2005) commissioned a report on Minority Ethnic Representation in the Built Environment Professions on a research by the Centre for Ethnic Minority Studies at Royal Holloway, University of London, which sought for answers to the many questions and attempted to explain the barriers facing black and minority ethnic (BME) professionals pursuing a career within the built environment. Figure 2.6 presents a model on the helping and hindering factors of BMEs representation in construction.

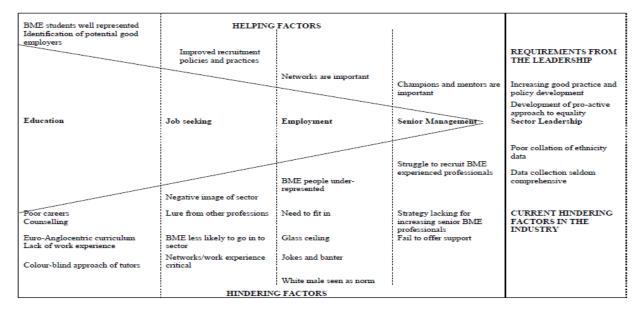


Figure 2.6: BME Helping and Hindering Factors into Construction Employment Source: CABE (2005).

The model above highlights the key issues either helping or hindering access to and progression in the industry for BMEs is unveiled. Here, attempts are made at the various stages of the process from education through job seeking and employment to senior management with the helping and hindering factors at each stage well outlined. Additionally, the report calls on professional bodies, large employers and sector organisations to develop clear policies on equality and diversity and implement action plans for sufficient monitoring. The report also calls on employers to review their current recruitment policies and procedures, building on existing best practice, with the aim of making the sector's recruitment processes more inclusive. The foregoing highlights the need for diversity to harness the potential of minority groups to the construction industry, which is covered in the next section on the advantages of diversity.

2.6.3 Benefits of diversity

The preceding section have stressed that competitive advantage can only be achieved through the efficient utilisation of employees of all types and at all levels a call echoed by Pathirage *et al.* (2005) that valuable human and knowledge resources will be wasted unless organisations make better use of these prime resources. Despite a range of targeted initiatives, the profile of the construction industry workforce has shown little change over the past couple of decades (Sang and Powell, 2012) even in the face of a declining labour pool. Therefore, as a sector where Britain has a strong competitive edge, the capabilities for rapid new development and a potential for unlocking great wealth for the UK economy (Guthrie, 2013), construction stands to benefit

from diversity and equal opportunity of employment. The fundamental starting point must be to ensure that balances of different types of people are recruited into an organization and in recent years the construction industry has begun to attempt to redress the imbalance in its workforce with targeted action aimed at promoting workforce diversification and providing a workplace environment conducive to their long-term employment (Loosemore *et al.*, 2003).

The UK response was the setting up of an industry-backed task force to explore equality issues in order to improve the representation of minority groups (CIB 1996) as an inclusive workplace is one that values individual differences (Kossek, *et al.*, 2011). Also, as Bagilhole (2009) suggests recognising peoples' different needs, situations and goals removes the limitations to what they can do or can be. Therefore, in 1996, an industry-backed taskforce was established to explore equality issues in the UK construction industry followed by the launching of a diversity toolkit in 2000 to help organisations improve their equal opportunities practices (Sang and Powell 2013). This attempts to increase diversity and overcome the disadvantages that minority groups encounter, made it necessary to influence the attitudes and preconceptions society and to introduce and implement legislation to prevent discrimination (ibid). This happens to be the case in most developed countries where legislation has been introduced in an effort to reduce these disadvantages. Dedicated commissions have also been created to promote equal opportunities issues and safeguard the interests of underrepresented groups (e.g. CRE).

Additionally, a considerable amount of publications on how to manage diversity effectively are continuously made available by both government and specialist interest groups like the Department of Trade and Industry (DTI) on workforce diversity, e.g. the workforce diversity 'toolkit' produced through DTI's 'Respect for People' initiative (Rethinking Construction 2000), tools to support good equal opportunities and diversity practices by an initiative called 'Change the Face of construction' and the like. The Equal Opportunities Commission and Commission for Racial Equality have also published tools and checklists for the same purpose. These offer construction companies guidelines to follow in order to create a fair and equitable workplace and are equally applicable to other countries.

The benefits of diversity are too attractive to miss in any organization and so if its adoption is slow and application ineffective, some strong force could be militating against its implementation. The following sections consider such predominant issues in institutional cultures and their implications for the representation of minority groups.

2.7 Factors Affecting the Representation of BMEs

As indicated in Figure 2.6, a number of helping and hindering factors account for BMEs uptake in construction. So, as a justification for this study, the latter forms the basis for this research and factors to be explored include culture on the basis of actions and attitudes, religion and language and these are discussed in detail below.

2.7.1 Culture

According to Schein, (1992) culture surrounds us all. Cultures are deep seeded, pervasive and complex (ibid). Furthermore, culture has been proposed as the way in which a group of people solves problems and reconciles dilemmas (Trompenaars & Hampden-Turner 1998). It is generally the way of life characteristic of a people and has also been said to be how things are done in a locality (ibid). People's cultural traits are shaped by the various institutions they come into contact with, the culture of which has made them. Every institution has its own unique culture which is what identifies it from the rest, giving it its unique characteristics.

As has been indicated in section 2.2.6, the UK construction industry is characterized by a dominance of white British male culture, prevalence of word-of-mouth recruitment and tendering practices resulting from, persistent perceptions of racism, lack of implementation and monitoring of equal opportunity policies. Juxtaposed with this is the BME culture which requires that these cultural traits of the industry are streamlined to take on board minorities. Culture, as a result is the most influential factor when issues relating to BME integration and hence employability are under consideration for the various aspects of cultural dimensions tend to shape a person's language, attitude, beliefs, religious practices, drive to work, ad infinitum. Additional potential reasons include the culture of immigrants which some of the British White population may consider to be threatening resulting from the difference between cultural norms, religion, attitudes and behaviours to which some White British people may view as being attempts to replace their own culture in their country (Ahmed *et al.*, 2008).

From the foregoing, it can be concluded that the cultural orientation of a person forms the basis of his/her behaviour and this determines their perception of other cultures and the world around them. This in turn is what determines the success or otherwise of such people when they move to other locations where the way of life is different from their own. This, therefore, brings into focus the discussion of the various aspects of culture ranging from large societal cultures and

national cultures to the ways in which particular organizations and institutions do things. These aspects are discussed in detail below.

2.7.2 Societal and National Culture

The first aspect of culture is taken in a broader sense and considers the characteristically unique beginnings of lifestyles of a particular group of people which have moulded their ways of doing things, which characteristics define them as a society. These lifestyles are manifested in sets of shared attitudes, values, goals, and practices that characterize the group and when bordered in defined boundaries results in the classification of nations constituting a particular society or group of societies. Hofstede (1980 & 1997) defines national culture as 'the collective mental programming' of the people of any particular nationality. He suggests that people share a collective national character which represents their cultural mental programming which in turn shapes the values, attitudes, competences, behaviours, and perceptions of priority of that nationality. Also, Fukuyama, (1995) defines it as an 'inherent ethical habit' which consists of an idea or value, or of a relationship. These ideas, values, and relationship patterns constitute the 'ethical codes' by which societies regulate behaviour as they are nurtured by repetition, tradition, and example which are reinforced through images, habits and social opinions (Morden, 1999).

Furthermore, the influences of national cultures have been said to shape strong value systems resulting in shared values, preferences, and behaviour of population groups which differ widely between countries (Katz, 2005). The term 'national culture' can therefore, be misleading as it is also the case between different subgroups within a country that it may only be referring to part of the people in that given country an example in this case being that of Hefstede's generalisation of UK culture whereas in fact it is made up of distinctive cultures of the four constituent countries. National culture has been conceptualised by Hofstede (1980, 1997) which he treats as implicit; core; systematically causal; territorially unique; and shared. Like organizational culture (Cameron & Quinn, 2005; Peters & Waterman, 1982; Schein, 1985) national culture has been extensively researched (Hall 1990; Hofstede 1980, 1998, 2005; Trompenaars, 2003).

It can be said that cultural orientation, as a result, forms the basis of the behaviour of people and this determines their perception of other cultures and the world around them. So, it is important to stress that, unique and shared characteristics known as cultural traits identify a group of people from others. Therefore, in order to perform creditably; there is the need to learn new values, attitudes and a general way of doing things in characteristically different environments as some

learned practices may need to be unlearned. Additionally, it is ethical that difference is acknowledged and recognised as a diverse way of life. This forms the basis for tolerance so that a process of adaptation and mutual coexistence can take place; a process known as acculturation.

Acculturation, according to (Berry, 2005), is the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups. Subsequently, in order to understand individual behaviours leading to the discriminating culture in construction, it is important to also understand the different cultures that come into contact in the industry. This process of examining cross-cultural contexts (Berry *et al.*, 2011) which results in acculturation is shown in figure 2.7 which reinforces the acculturation process with the example of the two culture-level phenomena, referred to as the society of origin (A) and society of settlement (B), and their respective features after cultural transformation resulting from their contact in (A and B). In order to understand the process, the characteristics of the individuals involved must be established before the process to allow an appropriate comparison of the degree of voluntariness (Berry, 2005). Figure 2.7 shows the general framework for understanding acculturation.

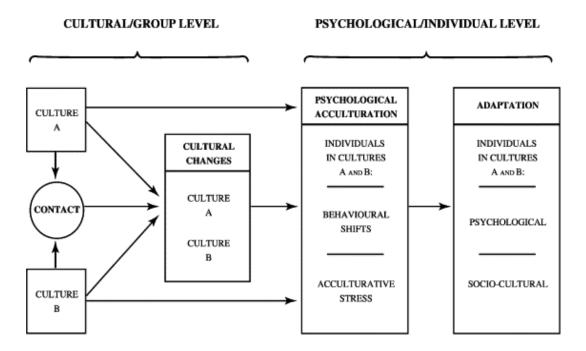


Figure 2.7: The Acculturation Process

Source: Berry (2005).

The characterisation of individuals inferred above brings Richmond (1993) to argue that migrants can be arrayed on a continuum between reactive and proactive, with the former having exclusionary motivating factors generally negative in character, and the latter having enabling factors generally positive in character which migration motivation refers to as push/pull factors.

Ergo, as the factors above bear on the actors performance in construction organizations, it is worthy of note that the numerous professions that come together to complete a particular project each exhibits unique cultural traits which differentiate them from the others. Therefore, for one to be part of such a group, it is important that such traits are learnt through the laid down processes and procedures. Notwithstanding, there is the need to recognize that inherent differences exist between individuals and groups and it is only on the basis of such recognition that there can be mutual coexistence and teamwork for the attainment of common aims.

2.7.3 Occupational culture

Cultures arise among groups of individuals who share similar ideologies and forms of expressing those ideologies in speech and behaviour (Trice, 1993). Employees who practice the same profession tend to band together into occupational communities, draw their identities from the work they do and proceed to share a set of values, norms and attitudes which collectively form a part of the culture of that occupation (van Maanen, 1984). As these employees from a particular occupation work towards the organisation's common goal, their distinct ideologies accentuate the behaviour that works best within the context of their occupation (Guzman *et al.*, 2004). Over time, each subculture within an organisation may manifest its own beliefs and practices that distinguish it from other groups in the organisation justifying Trice's (1993) assertion about the assumption that an organisation is homogenous in nature, although it may contain numerous subgroups that manifest variations of cultural forms and ideologies. In their study of organisational culture, Brockmann *et al.* (2009) upon comparing the cultures of construction and manufacturing use the words professional and industry cultures as synonyms which brings into focus Schein's definition quoted below:

"The pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems." (Schein, 1990:111- in Pfister, 2009)

This has been said to be applicable to organizational culture as well as occupational culture. Yet Brockmann *et al.* (2009) note, that there are different forces at work coining either an occupational or an organizational culture.

Outside as well as inside pressures form occupational culture in a similar way to organizational culture. The practices of engineers are formed by environments such as apprenticeship, technical school, university, work, and of course also by organisations with a cultural influence of professions (Mackie 1988). While considering the three frameworks set by Hofstede (2005), Riley & Clare-Brown (2001), and Woodward (1965) the occupational culture of civil engineers and mechanical engineers were evaluated and found to be distinctively different as were their organizations, their management, and their technology. Therefore, cultural change is only possible with changes in the respective environments where they operate as figure 2.8 presents.

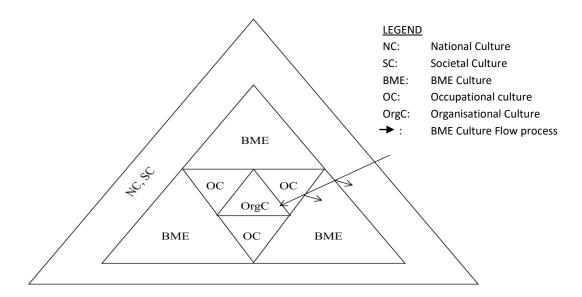


Figure 2.8 Enculturation Process of BMEs into Construction Organisations

The above model shows the cultural flow process of BMEs from their individual external cultures into the various cultures of the host nation, its occupational and organizational cultures and the processes of absorption and rebounds. As BMEs enter the host nation, the whole array of cultural perspectives impact on both the host ant the hosted with resultant acceptance or rejection.

The foregoing has considered, inter alia, the institutions involved in the formation of the unique practices characteristic of a profession which forms the basis for the ways actors and participants behave and do things. As these are what brings to bear in their performance in organizations, it is

worthy of note that, as already been mentioned in section 1, the numerous professions that come together to complete a particular project each exhibits unique cultural traits which differentiate them from the others and that for one to be part of such a group, it is important that such traits are learnt through the laid down processes and procedures. Notwithstanding that occupational culture tends to be generally universal, differences tend to show from between nations and organizations resulting in a level of uniqueness about this whole process.

The next subsection considers organizational culture. People are employed in organizations or even if self-employed work for organizations, a reason for which the culture in such organizations is very important if BMEs are to progress here, and for this reason this aspect of the study was discussed in-depth.

2.7.4 Organizational culture

Despite different definitions of organizational culture, there is a consensus among organizational researchers that it refers to the shared meanings or assumptions, beliefs and understandings held by a group. More comprehensively, Schein (1992) defined organizational culture as a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think and feel in relation to those problems. A similar definition proposed by Deshpande & Webster (1989) expresses it as the pattern of shared values and beliefs that help individuals understand organisational functioning and thus provide them with norms for behaviours in the organization. Cameron & Quinn (1999) propose that what differentiates successful firms from others is their organizational culture since the ability to understanding organisational culture is the basis to examine what goes on in organisations, how they are ran and improved as suggested by Schein, (1992). Most organizational scholars and observers recognise that organizational culture has a powerful effect on the performance and long-term effectiveness of organisations. With the worldwide globalization trends, special attention has been given to the study of organisations and their cultures. Empirical studies of organisational culture have been carried out across various countries and industries (Hofstede, 1997; Trompenaars & Hampton-Turner, 1998; Cameron & Quinn, 1999), yet not much has been done in this area relating to the number of published studies in project-based industries such as construction (Zhang, & Liu, 2006; Ankrah & Langford, 2005; Low & Shi, 2001).

In fact, the extensive study of organizational culture convinced Ankrah & Langford (2005) to emphasize a need to become more aware of the importance of this phenomenon and its impact on organizational performance in the construction industry. Furthermore, globalisation and access to international markets entry (Low & Shi, 2001) as well as the fragmented nature of the industry (Hillebrant, 2000) are major reasons for the growing importance of organizational culture in construction. It is a well-known fact that international construction firms have faced many problems due to conflicts, confrontations, misunderstandings, and the differences in ways of doing business with other cultures (Gould & Joyce, 2000). On the other hand, conflicts between different project participants are assumed to be influenced by the cultural orientations of the stakeholders (Phua & Rowlinson, 2003). Thus, the study of cultural issues should be addressed when considering the globalization of construction markets. This said however, it is important to stress that organizations that have developed within similar environments usually have similar cultures and related mindsets with regard to ways of doing business.

An extensive body of knowledge that deals with organizational culture among which is Hofstede (1997, 2005) have proposed a variety of its dimensions and attributes that has been very influential in studies in the field drawing on a large sample of 116,000 employees of IBM in 72 countries. It identified four dimensions of culture which were used to differentiate between cultures: power distance, uncertainty avoidance, masculinity/femininity individualism/collectivism. In addition, Hofstede (1997) also identified the process/results oriented, employee/job oriented, parochial/professional, open/closed system, loose/tight control and normative/pragmatic dimensions of culture and according to Sodergaard (1996), these dimensions have been adapted and applied in studies of organizational culture extensively. Other notable studies carried out comprehensively into organizational culture have been that of Trompenaars & Hampton-Turner (1998), who conducted an in-depth research into the attitudes of 15,000 managers over a ten-year period in 28 different countries and proposed five cultural dimensions namely: universalism/particularism; collectivism/individualism; neutral/affective relationships; diffuse/specific relationships; achievement/ascription.

This kind of systematic classification of a multitude of dimensions called typologies are usually considered as an alternative to provide a simplified means of assessing cultures which are used extensively in the studies of organizational culture. Examples of such typologies include Handy (1993, 1995) who identified the club, role, task and person typologies, and Quinn (1988) who

identified the market, hierarchy, adhocracy and clan typologies of culture. The need to measure organisational culture is stressed by its importance in the long-term effectiveness of organizations in line with which a range of tools have been developed and applied in industrial settings. These tools are the means to examine employee perceptions and opinions about their working environment yet only a limited number including the Competing Values Framework (Cameron & Quinn, 1999) consider the values and beliefs that inform those views (Scott *et al.*, 2003). The international perspective of such tools is seen in Maloney & Federle (1990) who analyzed the cultural elements in American engineering and construction organizations using the competing values framework.

Also, with the help of Handy's organizational culture and Hofstede's national culture frameworks, Rowlinson (2001), after analyzing the cultural dimensions and typologies developed in the literature by Ankrah & Langford (2005), investigated the cultural aspects of organizational change in the construction industry and proposed a new measurement tool highlighting the cultural variability between organizations on construction projects. In addition, Oney-Yazıcı *et al.*, (2005), upon reviewing literature concluded that despite the growing importance of organizational culture in construction research, there are few cross-cultural, empirical studies which they attribute to the difficulties of conducting research in several countries characterised by a multiplicity of cultures.

Thence, the above discussion of organisational culture highlights the variability of culture/practices between organisations on construction projects. It reinforces many authors' works on the diversity of cultural practices within organizations across nations and societies and the impact of such practices on organizational performance in construction. Additionally, globalisation and access to international markets as well as fragmentation of the industry are major reasons for the growing importance of organizational culture in construction. It is a well-known fact that international construction firms have faced many problems due to conflicts, confrontations, misunderstandings, and the differences in ways of doing business with other cultures. On the other hand, conflicts between different project participants are assumed to be influenced by the cultural orientations of the stakeholders (Dainty *et al.*, 2012)

a. UK Construction Industry Organisational Culture,

The UK construction industry has been viewed as being both hierarchical and fragmented by Barthorpe *et al.* (2000) sharing strong characteristics with adhocracy organisations as outlined by Cameron & Quinn (2005). These fragmentations include the many sole traders, small businesses and differing job roles, that are often short term and contractual in nature and exist within manual, managerial and/or professional roles where there is a greater focus upon financial rather than people management issues and concerns (Dainty *et al.*, 2007). The inherently masculine culture that is dominated by White males is maintained in this fragmented and highly competitive organisational climate with poor levels of communication and this in turn negatively impacts upon public perceptions of the construction industry (Latham, 1994). Therefore, knowledge diversity and effective communication (Al-Karaghouli et al., 2013), should form a basis for the industry's practices especially in procurements and human resource management.

The vast majority of companies consist of small and medium sized enterprises (SMEs) that are constantly vying for short-term and one-off contracts, with a focus upon taking on subcontractors to save on costs, rather than investing in and supporting permanent staff. This type of highly competitive and unsupportive culture acts as a deterrent for entry into the industry by both women and BMEs (Gale, 1992). Also, Dainty and Bagilhole (2005) have stressed on the small number of large companies that exist within the industry, with very few directly employing permanent staff. Moreover, in view of these companies rather having remarkable record for applying diversity and equal opportunity policies and programmes, there is bound to be little success in addressing the problem of the underrepresentation of minority groups. Such issues have led to concerns about the diminishing drive to the training approach adopted for potential entrants to an industry. There are mainly two types namely which is either 'production' approach or 'training based' approach and as the former is less organised it does not easily yield to monitoring and scrutiny. It is therefore popular with small firms. The mode of skills training has a direct influence on the supply of labour. The UK, for instance, has a less formal training scheme reliant on apprenticeships comparable to most southern European countries, like Spain and Italy which contrasts with those of the USA and most northern European countries like Holland and Denmark (Byrne et al., 2005).

The fragmentation of the UK construction sector means that it has many trades, small businesses and different, numerous roles which make monitoring difficult compared with other Western

European counterparts (ibid). The television programme namely, *Cowboy Builder* is a pointer to this fact where contracts resulting in shoddy work and uncompleted projects, especially of house repairs for vulnerable landlords have gone unmonitored only to be checked through a television team. If such grotesque acts, visible and measurable in space and time, go unpunished, at least for considerable lengths of time, the scale of the difficulty in monitoring the many trades and their cultural practices and numerous ways of doing things especially, as this relates to employment issues is somewhat evident.

Despite public commitment on the part of sections of the industry towards equality and intolerance of racism, including racist 'jokes' and banter, the latter continue to be part and parcel of the culture of the construction industry (CEMS, 1999; CABE, 2005). One study highlighted that ethnic minority staff are usually unaware of the rights that protect them from racial or religious harassment in the workplace (ConstructionSkills, 2007) and as a result resign to tolerating racial banter or avoid it altogether by leaving the industry (CABE, 2005). Stopping casual racism has been noted to stem usually from individual intervention by managers, colleagues or friends rather than company policy.

2.7.5 The Impact of Language on Representation

Language, a word derived from the Latin word *lingua*, is a system of symbols for encoding and decoding information (Baepler, 2003). Probably, the correlation between culture and language even precedes classical civilization as the ancient Greeks, for example distinguished between civilized peoples and Barbarians - *Bárbaros* meaning "those who babble", literally translated as those who speak unintelligible languages (ibid). The many different unintelligible languages spoken by different societies have been an underlying basis for cultural differences compared with other less obvious cultural traits. A direct connection between culture and language has been established by some German romanticists of the 19th century such as Herder, who saw language not just as one cultural trait among many but rather as the direct expression of a people's national character (Anderson, 1983).

Consequently, the majority of BME people arrive in the host countries with languages and national characters other than what is in local usage while hoping to be able to communicate at a level comparable to their host nations' counterparts. This does not only pose a challenge, but also affects the way their employers and colleagues on a job react to them. Language has

therefore been seen as a major barrier to the uptake of BMEs in the industry (Ahmed, *et al.*, 2008; Cabinet Office Strategy, 2002; Construction Skills Network, 2009; DTI 2007; Gale & Davidson, 2006; CABE, 2005). In their neighbourhoods, immigrants tend to rely on their native language since many of them live separately from the host society. They therefore communicate more with their mother tongue in everyday life and as a result, tend to be isolated because other people fail to understand them.

In this regard, education and training of human capital defined as a sum of educational qualifications; skills, knowledge and experiences of a person which acts as a main determinant of labour market outcomes is brought to bear as Ethnic minority groups with significant variations in terms of education and training. On average, Indians, for example have higher levels of literacy, numeracy and skills than their White counterparts. In Ahmed, *et al.* (2008), it was found that the average level of educational achievement of ethnic minorities exceeds the adult national learning achievements of the British White cohort. However, some groups of Pakistani and Bangladeshi backgrounds on average experience lower levels of educational attainment. For example, 37 percent of these ethnic groupings are at level 3 in the national qualification framework (the equivalent of two or more A-levels) compared with 46 percent of their White counterparts (Shields and Wheatley Price, 2003). Although, a greater number of ethnic minorities face difficulties in English language which affects their social and economic integration it has however been found that immigrants with fluent English earn about 20 per cent more income.

Language is also an important driver of social capital, which according to Coleman (1988) is importance to the family and its children's educational outcomes. In fact, Platt (2005a) stresses the direct correlation between the success of future generations and their family characteristics which has also been confirmed by Amato (1998). Additionally, Coleman (2011) implied in this regard that social capital can be measured in terms of the strength of the relationships, which, of course, depends on the physical pressure of members and on the attention given by adults to the young. Coleman (2011) found children's academic abilities were influenced by family networks and their communication skills. The next section looks at the impact of religion.

2.7.6 The Impact of Religion on Representation

Again, like language in the preceding section, religion also has a direct correlation with culture. Among several definitions of religion, the free online Dictionary.com (30/5/09) offers a more

comprehensive one as a set of beliefs concerning the cause, nature, and purpose of the universe, especially when considered as the creation of a supernatural agency or agencies, usually involving devotional and ritual observances, and often containing a moral code governing the conduct of human affairs. Religion has been known to pose a disadvantage as a particular group's faith or religion affects their performance in the labour market. Alternatively, disadvantages may be faced by a faith group due to the presence of prejudice and stereotypes that may exist about that faith group and may reflect in people's negative attitudes towards that group. A combination of these factors may exist where Muslims are concerned and may in part explain their low levels of labour participation, which may be identified as the 'Muslim Penalty' (Berthoud & Blekesaune, 2006).

However, the relationship between religious groups and employment outcomes are not simple. Despite overall high Muslim unemployment rates, Indian Muslims have higher employment rates than Sikh men a reason for which religion has been said to be simply a proxy for other factors determining employment, like education and fluency. However, it has been found that the odds of being unemployed do vary significantly with religion (Brown, 2000). Even after controlling for a range of factors, Sikhs and Indian Muslims remain almost twice as likely to be unemployed as Hindus and Pakistani Muslims are more than three times as likely to be unemployed (ibid).

Additionally, a study of construction in the North West of England found BMEs, particularly those of Asian or Muslim heritage, were seen as the representatives of their community suggesting that being Asian and Muslim forms the biggest potential barrier to acceptance by British society (Ahmed *et al.*, 2008). Other evidence indicates that Asian Muslims find it difficult to discuss religion or religious practices such as fasting or some news items such as the Iraq or Afghan Wars or terrorist incidents without attracting criticism (ConstructionSkills, 2007). Ethnic minority managers often feel the intense pressure of scrutiny not to be seen to show preference to their own ethnic minority colleagues (Caplan & Gilham, 2005).

In effect, religion has been an underlying divisive force in many instances and this has resulted in the host nations reacting in a hostile manner towards, Muslims, for example. The recent attempts to attribute terrorism with Muslims after the bombings in the US, the UK and Woolwich incident have worsened the ill feelings, a situation which requires the understanding of the religion concerned. Also, earnings seem to have a direct correlation with religion and these are but few of

the factors that serve rather as disincentive to the attraction of BMEs into the industries where such practices are a norm. The next section summarises the key findings from literature review.

2.8 Key Findings from the Review of Literature

This section highlights the findings from the literature review with a focus on the main research problem in order to help realise the objectives of the research. These findings include the following:

- This chapter has highlighted the skills base of the construction industry and aided the assessment of the skills requirements for which reason the issue of discrimination needs to be taken seriously. The industry is anticipated to experience problems in meeting its skills requirements, and the need to recruit from non-traditional sources is critical.
- The characteristics of Atkinson's firm model distinguish core group and peripheral groups constituting primary labour market and secondary labour market who pursue functional and numerical flexibilities respectively.
- In the employment function, recruitment and selection are the defining moments of diversity and EO polices, yet as noted the majority of construction employers have very poor records. It is characterised by construction's culture of word of mouth recruitment and other informal modes.
- The UK construction industry is very fragmented with Micro and SME firms forming the majority of employers consisting of over 90 percent yet large companies are those that are known to do well with diversity programmes with SMEs having poor records of diversity. Also, training has been found to be an essential ingredient for change yet training and orientation are limited for the same reason. As a result, new entrants are left at the mercy of old and seasoned staff who continue to perpetrate the usual cultural practices of construction hence change is difficult to come. In addition, the nature of skills training has a direct influence on the supply of labour.
- the nature of construction jobs make them unattractive therefore if these other practices are prevalent in construction organisations, then the engagement level of employees, especially those who do not 'fit in' are diminished to a level so low that they can be pushed out at the slightest provocation or leave themselves at the least attraction

elsewhere. Here, employees are characterised by being benevolent or entitled and are motivated by different reward levels which determine whether they stay or move on in reaction to certain stimuli. Hence the need to apply integrated people management policies and practices as the key to employee satisfaction and engagement.

- As noted above, people management policies and practices are crucial to job satisfaction. It distinguishes between job- and employee-centred managers; the combination of which qualities on the continuum determines how well an organisation or industry performs. And as indicated, construction managers tend to lean towards job-oriented people management policies and practices and especially as most jobs or assignments are project based, time and resource bound and must be completed on schedule and within budget.
- The construction industry has a substantial share of most countries' GDP and is a very significant employer. The global distribution of construction output and employment shows that more construction output compared to labour is concentrated in the developed world and vice versa in the developing world. Construction is a multi-skilled industry requiring several types of employees from technical and managerial to unskilled labourers. Even in recessions, some particular skills tend to be in short supply.
- Diversity has been seen to have enormous benefits especially in modern globalised markets yet helping (drivers) and hindering (barriers) factors impinge on construction's diversity and EO programmes which make it difficult to tap such potential and the benefits associated with it. These drivers and barriers stifle the growth of BMEs in the industry upon entry through progression and retention.
- Culture has been seen as defining the character of an entity and determining how it functions. It operates at different levels; national/societal (overall), occupational (professions level), and organisational (level of the firm) which determines how companies/firms do their things. The multicultural perspectives of the industry and the stakeholders engaged in it have been brought to the fore.

2.9 Chapter Summary and Conclusion

The chapter has reviewed literature by recognising the potential benefits of workforce diversity and accepting the intensity of the challenges of harnessing this especially for an industry like construction which is placed in the unfortunate position of having a bad image. The need to diversify its recruitment base has been explicitly outlined where the areas needing redress as well as the policies needed to be put in place to address these issues have also been discussed. It has been explained that there is a concentration of a higher percentage of construction output in the developed world and vice versa with respect to construction employment with the accompanying economic consequences. The numerous professions brought to bear on the industry and the skills requirement have been underscored along with the effects of current global economic downturn that has caused the industry's dismal outlook. The importance of the need to train at this time of the economic cycle has been stressed as following downturns, growth in the economy can be characterised by serious shortages of labour. The next chapter looks at the BMEs minority group and the issues of diversity and EO, which pertains to their underrepresentation in the industry.

CHAPTER 3

WORKFORCE DIVERSITY AND EQUAL OPPORTUNITY IN CONSTRUCTION

3.1 Introduction

The previous chapter has put the study in context by reviewing relevant literature on the human resource needs of the construction industry. This chapter uses the findings here as a guide to further explore literature for the nature and the context of the underrepresentation of BMEs. In this way the chapter helps to delineate the knowledge gap by justifying the need for the study. Here, the previous literature review focuses on the theme 'BME underrepresentation in construction'. It begins with a justification for the research and focuses in on the factors responsible for BME inclusion to guide the development of the subthemes to be further explored and tested in the subsequent empirical data analyses.

3.2 Ethnicity and Ethnic Origin

Characteristically, there are many aspects of difference from which ethnicity results which together gives the background of people in a country and in the UK these factors are socially and politically important. Such factors as race, culture, religion and nationality, which impact on a person's identity and how they are seen by others have continue to define the treatments that people receive. As people identify with ethnic groups at many different levels they may see themselves as British, Irish, Asian, Indian, Punjabi, Scottish etc., at different times and in different circumstances. Because ethnicity is often treated as a fixed characteristic, it allows data to be collected and analysed as well as programmes targeted at particular people. In a study of social class systems, Deji (2011) found that race and other groupings can influence the association of particular ethnic groups with class statuses which is common in many societies result from conquest or internal ethnic differentiation. A ruling class is often ethnically homogenous and particular races or ethnic groups in some societies are legally or customarily restricted to occupying particular class positions, which ethnicities are considered as belonging to high or low classes, varies from society to society. A distinction often made is that of ascribed status verses achieved status (Deji 2011). A definition is attempted in the next section.

3.2.1 BME Definition

Black and Minority Ethnic (BME) also referred to as Black Asian and Minority Ethnic (BAME) groups are usually classified by the methods used in the UK census, which requires people to

indicate to which of 16 ethnic groups they feel they can identify with as outlined in the UK ethnicity makeup below. Either of these broad references have been taken to refer to an umbrella term covering all the characteristics of race, religion and culture of the population of a location or country that are seen as defining groups of particular ethnic backgrounds as Africans, Asians, Caribbeans and other groups as covered under the Race Relations Act. The Black and Minority Ethnic Community Services of West Sussex Council (2007) explains that someone who is said to belong to an 'ethnic minority' is therefore anyone who would tick any box other than 'White British' in response to an ethnicity question on a census form. Thus, across England and Wales, 12.5% of the population had ethnic minority background, according to the 2001 census (ONS, 2001). For easy reference the UK Home Office (2011) refers to 'whites' and 'non whites' classification, while recognising the cultural and ethnic diversity of the country.

Also, in a research into the 'Review of Social Landlords' Implementation of the Black Minority Ethnic (BME) Housing Action Plan for Wales', the Welsh Assembly Government (2005) discovered that many organisations had failed to define the term BME and those that attempted to rather gave many different descriptions as no agreed definition of the term BME was commonly in use. Gill (2002) used the term to refer to people of colour and in the main, of African, Caribbean, Asian, Middle East and South East Asian Descent (Somerville & Steel, 2002). However, Rochdale Metropolitan Borough Council has come up with a comprehensive but succinct definition of the rather cumbersome process of others describing it:

"The term Black and minority ethnic (BME) is used to describe people who belong to Black or other minority ethnic group and who, due to their colour, racial or ethnic origin, share a common experience of direct or indirect discrimination in the United Kingdom. It includes Irish people and other White Europeans e.g. Italians and also includes refugees and asylum seekers and those with leave to remain status. It also covers gypsies and travellers and those from the Accession 8 countries e.g. Poland" (Rochdale Council, 2008:11)

This is, therefore, a working definition which perfectly suits the purpose of this study although other more general definitions have been given by other authors. Bulmer (1996), basing his definitions on group identity, described an ethnic group as a collectivity within a larger population having real or putative common ancestry, memories of a shared past, and a cultural focus upon one or more symbolic elements which define the group's identity. These he outlined as kinship, religion, language, shared territory, nationality and physical appearance while further noting that members of any ethnic group are conscious of belonging to the group (Bulmer 1996).

Further afield, one of the few literature available on explicit explanation of the phenomenon however, is the Canadian census of 2001, which described BMEs as visible minorities and continues to define 'visible minorities' as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour". And the Australian ethnic make-up is however more blunt on ethnicity and rather uses place names and country of birth or nationality to identify citizens and migrants. Nowhere on the household form are the words 'ethnicity' or' minority' ethnic group used by the Australian Statistician in the Australian Bureau of Statistic's Census of 100 years i.e. the 1911 - 2011 Census. Also, the classification white, black or Asian does not feature in their study of attitudes towards racial and ethnic minorities in Australia; a country whose immigration policy has been admired by many other countries. This said however, a series of reports have shown, some minority groups in Australia suffer extreme forms of persecution at work and in public places (Poynting & Noble, 2004; Forest & Dunn, 2007; Berman *et al.*. 2008).

Although some level of definition has been attempted, it has still not been possible to clearly outline the boundaries of the term for which reason it therefore was satisfactory to conclude that no more efforts should rather be wasted on trying to find a suitable definition of who a BME is or may not be, but rather continued with the research having been convinced that the foregoing has put the subject in context. Believing that the empirical study would yield further views and thoughts on the subjects, it was worthwhile to move on to consider rather the ethnic composition of the UK bearing in mind that the post war reconstruction effort to bring in more labour has seen the population of BMEs in UK grow exponentially. For the purposes of this research therefore, BMEs were classified based on all ethnic minorities who view themselves as such to seek protection under the race relations act and as assigned in the census data as non-White British. This is so because, just under a decade ago Irish people shared the same classification with blacks in respect of jobs they could apply for when Irish and blacks were competing for the same jobs although they are Caucasian and white for that matter, living in the same region (Wray 2006).

3.2.2 The Make-up of Ethnicity in the UK

According to the 2001 census, 92% of the UK population was White, which included significant non-British White minorities such as Irish people. By 2050 as many as 1 in 5 of the UK population will be from an ethnic minority. This compares with 1 in 10 in 2000 as BME groups now account for 73% of the UK's total population growth, due to differences in fertility rates and

immigration according to an official source quoted by the British National Party [BNP] (2013). As indicated in the Parliamentary Office of Science and Technology on Ethnicity and Health postnote (ODPM 2005), BME populations are concentrated in urban areas, particularly in deprived areas, where they make up a much bigger share of the population. This is particularly visible in major urbanised centres like Hackney, Haringey, Tower Hamlets in the South East in London and Gorton, Harpahey, Longsight in the North West in Manchester. However, the distribution of BME groups in the UK is currently changing, and they are becoming less geographically segregated. For example, with greater affluence, a recent trend has seen some Pakistani families move out of the inner city areas to more spacious suburbs of Manchester. This trend has witnessed the movement in South Manchester from Longsight and Levenshulme to more suburban areas like Cheadle, Chorlton and Heaton Mersey. Due to the high level standard of properties in some of these suburbs, the Pakistanis who live there tend to be of later generation with successful and mostly professional careers. The abandoned areas are generally filled with newer immigrants from places like Iran, Afghanistan and Poland (Finney & Simpson, 2009).

Therefore, the UK is likely to become more multi-ethnic in the future. BME groups now account for 73% of the UK's total population growth, due to differences in fertility rates and inward migration (POST, 2007). Almost half a century after settling in the UK the majority of the Black and Minority Ethnic population is still disproportionately concentrated in poor conurbations (ODPM, 2006) in deplorable conditions usually inner city areas according to Phillips (2002). The Parekh Commission (2000) while considering the 'Future of Multi-Ethnic Britain' commented that the current trend of population diversity meant that England was at the turning point of its history and went further to described Britain as a community, with multiple communities. (Pierson & Worley, 2006). In order to illustrate the composition of the various ethnic groups, and to help the definition of BME further, Table 3.1 has been culled out from the office of national statistics (ONS) census data (Calanzani *et al.*, 2013) in order to show the trend of growth of the ethnic population of the UK.

3.2.3 Population of the United Kingdom by Ethnic Group

As has been noted in section 2.2.3, the majority of the UK population in 2001, 54.1 million, were White amounting to some 92 per cent of the total with the remaining 4.6 million (or 7.9 per cent) people belonging to other ethnic groups. By 2011, the population stood at 56.1 million with foreign-born alone accounting for 13.4 percent (Coleman, 2011). In the previous census, migrants

from the Indian sub-continent (Indian, Pakistani and Bangladeshi) made up about half of the minority ethnic people (ONS, 2001). Those of Caribbean and African origin generally referred to as being of Black origin, contributed about a quarter of the total minority ethnic population with the Chinese and Other Ethnic background migrants whose origins connect with a very wide range of countries adding up to about half a percent each. According to the Home Office (2007), the UK was seen at the time as being very diverse ethnically, racially and culturally giving rise to the need for a diversified approach to governance across the country. This diversified approach hence yielded departments dedicated to the specific needs of these communities notable among which are the Race and Equality Commission and the Immigration and Nationality Department. Table 3.1 and figure 3.1 show the increments during the decade between the two censes.

Table 3.1: Population by ethnic group in England in 2001 and 2011

Main Group	Subgroup		2001		2011
		Number	(%)	Number	(%)
White	English/Welsh/Northern Irish/British	42,747,136	87.0	42,279,236	79.8
	Irish	624,115	1.3	517,001	1.0
	Gypsy or Irish Traveller		N/A	54,895	0.1
	Other White	1,308,110	2.7	2,430,010	4.6
Mixed/Multiple Ethnic group	White and Black Caribbean	231,424	0.5	415,616	0.8
	White and Black African	76,498	0.2	161,550	0.3
	White and Asian	184,014	0.4	332,708	0.6
	Other mixed	151,437	0.3	283,005	0.5
Asian/Asian British	Indian	1,028,546	2.1	1,395,702	2.6
	Pakistani	706,539	1.4	1,112,282	2.1
	Bangladeshi	275,394	0.6	436,514	0.8
	Chinese	220,681	0.4	379,503	0.7
	Other Asian	237,810	0.5	819,402	1.5
Black /Black British	African	475,938	1.0	977,741	1.8
	Caribbean	561,246	1.1	591,016	1.1
	Other Black	95,324	0.2	277,857	0.5
Other Ethnic Groups	Arab		N/A	220,985	0.4
_	Any other ethnic group	214,619	0.4	327,433	0.6
All Minority Ethnic Groups		6,391,695	13.0	10,733,220	20.2
Total	All ethnic groups	49,138,831	100	53,012,456	100

Source: ONS in Calanzani et al. (2013)

The proportion shown in table 3.1 known as 'All Minority Ethnic Population' (except 'other white') who make up the visible minority ethnic population, offers the following breakdown in a 2009 ONS survey analysis, which is graphically presented in a pie chart in figure 3.1. Indians were the largest of these groups accounting for some 50% of the total which figure has been said to have increase by a further 12% in 2008 (ONS), followed by Pakistanis, those of Mixed ethnic backgrounds, Black Caribbeans, Black Africans and Bangladeshis. The remaining minority

ethnic groups each accounted for less than 0.5 per cent of the UK population and together accounted for a further 1.4 per cent (ONS 2009).

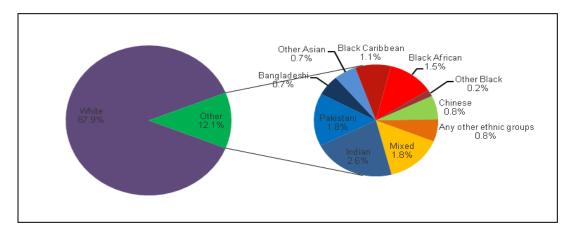


Figure 3.1: The population of England and Wales by ethnic group Source: ONS (2009).

As indicate in figure 3.1 above, around half of the non-White population were Asians of Indian, Pakistani, Bangladeshi or other Asian origin with a further quarter as Black comprising Black Caribbean, Black African or Other Black origins. About 15% of the non-White population were from mixed ethnic backgrounds and a third of this group were from White and Black Caribbean backgrounds. There were almost 691,000 White Irish people in Great Britain accounting for some 1 per cent of the UK population. The ten year period between the censuses of 1991 and 2001 saw the number of people who came from an ethnic group other than White grow by 53 per cent between, 3.0 million in 1991 and 4.6 million in 2001. This has been attributed to high birth rates and immigration (BNP, 2013). As figure 3.1 and table 3.1 show, the non-White population grew from 7.1% to 12.1% a margin of about 60%. The breakdown of the total ethnic minority population as per regions particularly concentrated in few geographical locations is as given below:

- London (45%) which is 29% of the resident population.
- West Midlands (13%),
- The South East (8%),
- The North West (8%), and
- Yorkshire and the Humber (7%).

Therefore conducting this study between the two locations of London and the South East and the North West with 45% and 8% of the total BME population respectively seems a good choice of

sample sets to afford the opportunity to compare the highly concentrated centres to one of the least concentrated regions for BME people. The population of England and Wales was estimated to be 56,170,900 in mid-2011(ONS, 2012). The next section looks at the classification of BMEs.

3.2.4 Classification of BME People in the UK

Black and Minority Ethnic (BME) People: An 'Ethnic group' refers to people of the same ethnic origin or nationality with 'a long shared history and a distinct culture'. While 'Ethnicity refers to the invisible quality, or sense of being, which comes from the shared ethnic or cultural connection. Black and Minority Ethnic is a term used to describe anyone who is not from white or Caucasian origin. These include people from mixed parentage families and anyone who originates from a country outside Europe. However, there are many different terms used to describe ethnic diversity some of which have drawn a lot of controversy.

There is also some debate as to which groups should be considered 'ethnic minorities'. Sometimes the term is taken to mean all groups except the three white categories used by the government, i.e. in the census ('White – British', White – Irish' and 'Other White Background'). While at other times 'ethnic minority' is understood to be all groups except those in the 'White – British category (Rochdale Council, 2008) in section 2.1 above. However, this should also sometimes include Scottish and Welsh people, as well as Irish, as being members of minority ethnic groups in the UK for which reason, in England, the term BME is thought to include all ethnic groups who are not white English.

Furthermore, ethnic groups are defined on the basis of the Office for National Statistics (ONS) 2001 census data categories as were collected for each member of the household. At the highest level of detail, there were 15 categories to which individuals were allocated as follows: White British, White Other, Mixed White and Black Caribbean, Mixed White and Black African, Mixed White and Asian, Other Mixed, Indian, Pakistani, Bangladeshi, Other Asian, Black Caribbean, Black African, Other Black, Chinese and Other ethnic group,

For the purpose of this study and the link between BME and safety issues such as discrimination, hate crimes, victimisation and racism however, the term BME includes all ethnic groups that are not 'White British' though it also includes 'White Irish' as indicated in section 3.2.1. where a definition of the term BME was given to encompass other white minority groups in the UK as

well (see Rochdale Council, 2008). Table 3.2 illustrates the distribution of the different ethnic groups by sex and younger age profile in percentages.

Table 3.2: Ethnic groups in the LFS household datasets, 2004-2008

Ethnic group (percentages)	All	All	Men	Women	Children
	individuals	adults			Under 16
White British	84.8	85.8	85.6	86.1	80.9
Other White	5.1	5.8	5.9	5.8	3.5
Mixed White and Caribbean	0.4	0.1	0.1	0.2	1.1
Mixed White and African	0.2	0.1	0.1	0.1	0.4
Mixed White and Asian	0.3	0.1	0.1	0.1	0.8
Other Mixed	0.2	0.2	0.1	0.2	0.5
Indian	2.0	1.8	2.0	1.7	2.3
Pakistani	1.6	1.2	1.2	1.1	2.8
Bangladeshi	0.6	0.4	0.4	0.4	1.3
Other Asian	0.7	0.7	0.7	0.7	0.8
Black Caribbean	1.0	0.9	0.8	0.9	1.2
Black African	1.2	1.0	1.0	1.0	2.2
Other Black	0.1	0.1	0.1	0.1	0.2
Chinese	0.4	0.5	0.5	0.5	0.3
Other	1.4	1.3	1.4	1.3	1.7
All groups	100	100	100	100	100

Source: ONS (2009)

Also, Table 3.3 shows the average ages across the different groups. It also shows (in column 2) the median age – in other words the age at which half the group are older and the other half younger. The latter four columns of the table show the groups broken down into bands and the proportions of each group falling into those bands. The table further illustrates how most of the minority groups have a younger age profile than the White British majority. This is especially true for those in the mixed groups, where, except for the 'Other Mixed' category, half of them are children. The Pakistani, Bangladeshi and Black African groups are also concentrated at the younger end of the age distribution. By contrast, nearly a quarter of the White British population are aged 60 or over.

Table 3.3: Age distributions across the ethnic groups

	Average Median		% by age band, row percentages			
Ethnic group	Age (yrs)	Age (yrs)	aged 0-15	aged 16-29	aged 30-60	aged 60+
White British	40	40	18	16	42	24
Other White	39	36	13	24	44	20
Mixed White and Caribbean	16	13	57	26	15	2
Mixed White and African	19	14	50	22	25	3
Mixed White and Asian	18	12	54	23	20	3
Other Mixed	23	19	42	23	30	5
Indian	33	31	21	24	44	11
Pakistani	26	24	33	27	34	6
Bangladeshi	24	21	38	27	30	5
Other Asian	31	31	22	23	48	7
Black Caribbean	35	36	23	17	44	16
Black African	26	26	33	22	41	4
Other Black	28	27	35	17	41	7
Chinese	32	29	14	37	42	7
Other	30	30	23	26	44	7
All groups	39	39	18	18	42	22

Source: ONS (2009)

Shown in table 3.4 are the differences in family types and family sizes across the different ethnic groups. It shows that single people made up over a third of White British families but were more common among most of the minority groups, partly due to the different age structure of the groups. Pakistani, Bangladeshi and Indian families were less likely, however, to be single person families. Instead around two-thirds of families for these groups were couple families either with or without dependent children. Lone-parent families made up around a quarter of Mixed White and Black Caribbean, Black Caribbean and Black African families. This compares with an average across all groups of one in ten families. The table shows that average family size was lowest among the Chinese, while nearly half of Bangladeshi families had four or more people.

Table 3.4: Family type and average family size by ethnic group

	Family type, row percentages				Family size		
	Single	Couple, no	Couple,	Lone	Average	Families	
Ethnic group	person	dependent	dependent	parent	family	4+people	
		children	children		size		
White British	36	35	20	9	2.2	16	
Other White	45	30	18	7	2.0	13	
Mixed White and							
Caribbean	42	8	21	29	2.2	17	
Mixed White and							
African	44	12	23	21	2.2	21	
Mixed White and							
Asian	43	21	22	14	2.2	19	
Other Mixed	48	18	19	15	2.0	12	
Indian	30	30	33	7	2.6	28	
Pakistani	24	19	45	11	3.2	43	
Bangladeshi	20	14	52	14	3.6	49	
Other Asian	40	21	32	7	2.3	23	
Black Caribbean	41	14	16	28	2.1	16	
Black African	44	9	25	22	2.4	24	
Other Black	43	13	23	21	2.3	21	
Chinese	56	21	17	6	1.9	13	
Other	43	18	28	11	2.3	22	
All groups	37	33	20	10	2.2	17	

Source: ONS (2009)

Table 3.4 shows the nature of the family sizes by ethnic group of the UK population, which is an indication of the view that the minority groups' population have a rather younger age profile proportionally. Again, Lievesley (2010) put forward projections shown in table 3.5 that a significant percentage of the white population is ageing which he forecasts to be 17.5 percent by 2016 and 20.2 percent by 2026 for the White British population that will be over the pension age.

Table 3.5 – Ageing profile of all ethnic groups in England and Wales (2016 and 2026)

Ethnic group	2016			2026		
	Poj	Population		Population		% aged
	(% of total)		65+	(% of total)		65+
White British	44.916.749	(78.6)	17.5	45.300.442	(74.3)	20.2
White Irish	503.503	(0.9)	32.3	432.873	(0.7)	35.9
Other White	2.448.220	(4.3)	8.3	2.998.347	(4.9)	10.7
Mixed - White and Black Caribbean	555.381	(1.0)	1.0	773.642	(1.3)	1.1
Mixed - White and Black African	219.529	(0.4)	1.9	311.324	(0.5)	3.2
Mixed - White and Asian	508.806	(0.9)	2.2	725.221	(1.2)	2.7
Other mixed	450.885	(0.8)	2.3	653.349	(1.1)	2.8
Indian	1.789.111	(3.1)	7.5	2.199.270	(3.6)	10.6
Pakistani	1.309.696	(2.3)	3.9	1.701.099	(2.8)	5.8
Bangladeshi	561.296	(1.0)	3.1	756.559	(1.2)	4.2
Other Asian	477.642	(0.8)	6.7	623.593	(1.0)	9.6
African	1.220.923	(2.1)	3.3	796.168	(1.3)	13.4
Caribbean	706.575	(1.2)	10.0	1.682.274	(2.8)	6.6
Other Black	143.157	(0.3)	3.1	174.683	(0.3)	5.7
Chinese	662.350	(1.2)	4.6	900.015	(1.5)	7.9
Other ethnic group	692.759	(1.2)	4.6	961.728	(1.6)	7.1

Source: Lievesley, N (2010)

Overall, the BME groups have been shown to have a younger age structure than the majority White British population, as emphasised in table 3.5 by Lievesley (2010) that in general by 2016 the minority ethnic population will have a younger population than the majority White British group. The foregoing statistics therefore confirm a higher population growth trend for BME families (section 3.2.2) which currently has, and is projected to have a relatively younger age profile.

3.3 Discrimination

Discrimination in employment and occupation takes many forms, and occurs in all kinds of work settings. It entails treating people differently because of certain characteristics, such as race, colour or sex, which results in the impairment of equality of opportunity and treatment. In other words, discrimination results in and reinforces inequalities. The freedom of human beings to develop their capabilities and to choose and pursue their professional and personal aspirations is restricted, without regard for ability. Skills and competencies cannot be developed, rewards to work are denied and a sense of humiliation, frustration and powerlessness takes over.

The elimination of discrimination at work is central to social justice, which lies at the heart of the International Labour Organisation's mandate (ILO, 1998). It underpins the concept of decent work for all women and men, which is founded on the notion of equal opportunities for all those

who work or seek work and a living, whether as labourers, employers or self-employed, in the formal or the informal economy. The elimination of discrimination is an indispensable part of any viable strategy for poverty reduction and sustainable economic development. It is commonly reported that immigrants are still disadvantaged after controlling for human capital and even after adjusting for host-country characteristics (ILO Sectoral Report, 1998). The most frequently mentioned explanation is that immigrants are preferred less by the employers, or, in other words, they face some form of discrimination in the labour market.

3.3.1 The origins of prejudice and discrimination

Prejudice and discrimination are, unfortunately, an integral part of the human experience and their manifestations are ever-present in our daily lives, on the world's stage, and in our professional experiences (Fishbein, 2002). He further stresses that:

'Prejudice and discrimination have an evolutionary basis, rooted in the nature of primate and human subsistence groups. Although the existence of cultures is also evolutionarily based, the particular culture in which individuals grow up and mature plays a significant role in determining the values assigned to the various groups. Members of certain groups become the targets for prejudice and discrimination. As with other cultural values, norms, and beliefs, prejudice and discrimination have to be learned.' (Fishbein, 2002: 37)

According to Loosemore et al. (2003), prejudice has an inherent cognitive component that performs an important adaptive function for people and is a natural and inevitable response to the increasingly uncertain and culturally diverse world in which people find themselves. Indeed, research indicates that the behaviour is so natural that it can often be activated automatically without conscious awareness, even among people who embrace egalitarian beliefs (Devine 1989). Until relatively recently, racism i.e. prejudice based on race, has had scientific justification from biological determinists who argued that behavioural, social and economic differences between human groups based on e.g. race, class and sex arose from inborn biological distinctions. These theories were based on the natural selection ideas of Herbert Spencer and Charles Darwin and, later, on the now discredited science of eugenics. They developed during the eighteenth and nineteenth centuries and lent intellectual justification to the imperialist expansion of many European countries. Indeed, the emergence of psychology during this period also contributed to these theories through research which sought to use measurements of physical characteristics such as skull size and shape as proof of the superiority of European (male) brain (Hannaford, 1997). These ideas have now been discredited by genetics, which has shown that the concept of race has no basis in biology and that racial categories are largely arbitrary. For example, it has

been found that there is more genetic variation within most racial groups than between them (Phinney, 1996).

Genetics has shown that people are far less variable than was once thought and it would seem that externally visible physical features such as skin colour only have relevance to an individual's worth when a society arbitrarily loads it with differential social value (ibid). Nevertheless, the nineteenth century notion of biological superiority has proved to be resilient in some sectors of society, where it remains a highly salient political and social construct. One such instance appears to be the construction industry, which has particularly poor reputations for representing and protecting the interests of minority groups (Caplan *et al.*, 2009).

It is therefore not surprising that the industry has been characterised as a British male bastion as such prejudicial behaviour find their foundations in the dual processes of ethnocentrism and stereotyping which result in discrimination and harassment, where one group is treated (physically, emotionally and /or economically) unfavourably, unjustly and unequally compared to another, and therefore feels oppressed, devalued and intimidated (Hollingsworth *et al.*. 1988). Such behaviour is now controlled by legal provisions in most developed countries. Discrimination can take a number of different forms namely direct discrimination, indirect discrimination and harassment and tokenism. The next sections briefly looks at these and related treatments that may be seen as such.

3.3.2 Direct and Indirect Discrimination

Lack of ethnic parity in employment (Crawford *et al.*, 2010) also known as significant ethnic differences at work has existed in the UK for several decades (Blackaby *et al.*, 1999; 2002; 2005; Cabinet Office, 2002; Heath & Cheung, 2006; Berthoud & Blekesaune, 2006) and amounts to gross discrimination. Discrimination can be either direct or indirect. Direct discrimination occurs when a person is treated less favourably than another person on grounds of sex, race, gender, age, ethnicity, religion and so on. An example of direct discrimination is the practice of placing job advertisements, which directly excludes people of particular characteristic like age, sex, ethnicity or religion without any justifiable reason. On the other hand, indirect discrimination occurs when an employer applies the same treatment to a person as any others but that it is unlikely for one or more of these persons to comply with the treatment. Indirect discrimination may seem fair but discriminates in its application and may be detrimental to such persons.

An example of indirect discrimination is advertising for people with minimum height limits, which indirectly discriminative against people of a particular background who are characteristically shorter. Where the treatment is because of a legitimate occupational requirement to effectively function in a role, it may be justifiable to do so (Sang and Powell, 2013). However, care must be taken in such treatments as the development of new technology has made it feasible for the application of tools to perform certain jobs that may otherwise have been impossible by certain groups of people.

However, certain practices in some countries although may appear discriminatory are legitimised. This results from attempts aimed at correcting past mistakes, for which purpose legislation is adopted to encourage and provide training for a group of people to improve their representation in particular activities or sectors. Examples may be positive action or affirmative action, which is applied in respective countries to achieve particular results. In Australia and the United States, affirmative action is practiced while it is seen as discriminatory in the UK where positive action is a kind of substitute aimed at achieving similar results. Project managers are known to operate with considerable autonomy in terms of recruitment, management and development of their staff on project sites (Chan and Kaka, 2007). Caution is, therefore, sounded that they must take on responsibility for ensuring that direct and indirect discrimination are avoided as the grapevine and the word of mouth recruitment that characterise project level operations (Druker, et al., 1996; Clarke & Hermann, 2007; Ness, 2010b) renders it more susceptible to allegations of discrimination. Loosemore et al. (2003) further advise project/site managers to scrutinise work practices and recruitment policies, and consult with HR managers in order to monitor their workforce and ensure that their teams are representative of the organisation as a whole and are offering appropriate opportunities for all.

3.3.3 Harassment in Employment

Harassment also called victimisation, intimidation or bullying results from repeated and irrelevant references or innuendo to a person's characteristics amounting to banter, jokes, verbal or written abuse to create a hostile or humiliating environment on the sufferer. Harassment is known to be more difficult to detect or prove than discrimination because of its intangible nature as the treatment does not necessarily result in a loss or injury like lower pay, poorer working conditions, disciplinary action, dismissal, transfer or failure to promote or train.

According to Ansari and Jackson (1996), there are several causes of harassment in employment which an effective equal opportunities policy must take account. These may be based on Race, ethnic origin, nationality or skin colour; Sex or sexual orientation; Religious or political beliefs; Willingness of the individual to challenge harassment leading to victimisation; Membership or non membership of a trade union; Physical, mental or learning disabilities; Ex-offender status; Age; Actual or suspected infection with HIV. Since any of these factors can be used as a basis for intimidation and bullying by the dominant group, site supervisors owe it as a duty to these people to ensure that such practices are not perpetrated against them (Toor and Ofori, 2011). Another factor responsible for workplace discrimination is tokenism which is addressed below.

3.3.4 Tokenism at Work

In the application of positive or affirmative action policies, members of underrepresented groups face the common problem of being seen as 'token' employees representing their group rather than individuals who attained their position based on merit with equal rights (King *et al.*, 2010). Consequently, they may be associated with negative stereotypes and become victims of ridicule and discrimination (Renzetti & Curran, 1992). Tokenism also leads to what Kanter (1977) termed 'boundary heightening', where the workers of the dominant group exaggerate the differences between them and the 'token' employees. For example, in construction, Muslims may be excluded from informal networks of which membership is essential for career enhancement by organising social events that do not revolve around the dominant culture, such as drinking after work. It is therefore the duty of the project manager to create a greater level of inclusion of non-traditional entrants in all the activities of his project.

3.3.5 The Economic and Social Costs of Discrimination in Organisations

Britain is now a more diverse society; ethnically, racially and culturally, than ever before as over the centuries, the contributions of people who have come to live here have enriched the country (CRE, 2007). Immigration and ties with other countries have resulted in a dynamic economy with more jobs, access to crucial skills and new ideas, better public services and a richer cultural life which encourages thriving places where a fear of difference is replaced by a shared set of values and a sense of purpose and belonging. The Government's Strategy to increase racial equality and community cohesion through the Equality and Human Rights Commission has made strides in reducing perceptions of race discrimination and creating more cohesive communities, tackling racism, extremism, promoting inter-faith activity and a shared sense of belonging.

In spite of all these efforts, racial discrimination is still prevalent at the workplace especially in construction where the workforce is generally young, white and male (Caplan *et al.*, 2009). Incidents of racial discrimination and harassment has characterised the industry and this can have a negative impact on the victim, as well as the workplace and the society in which they occur. For the individual, they often cause great anxiety, stress, reduced self-confidence, compromised health and a decrease in motivation to participate in the labour force, as well as early job termination, limited career progression and inappropriate training opportunities. In the workplace, racial discrimination can deprive the employer of the most able candidate. Moreover, racial discrimination and harassment can cause tension, conflict, absenteeism, high turnover and low productivity (Sweeney *et al.*, 2009). Ultimately, the impact on society of racial discrimination and harassment is a loss of productivity that damages the growth potential of the British economy and further engenders the social exclusion of ethnic minorities.

The Construction Industry Training Board (CITB)'s Skills Foresight Report (CEMS, 2002) forecasted that for the period 2002–6 some 40,500 new recruits were needed; equivalent to 8,100 per year, for the construction industry in just London alone, while nationally the estimate was 76,100 more staff if the industry was to keep pace with growth targets. However, this was at a time when the industry was experiencing severe recruitment and retention problems. According to a report by the CITB on the Skill Needs Survey (CITB, 2002) which contacted 470 construction companies from across the UK, 79 per cent of participating companies experienced difficulties recruiting trained staff and this figure had increased from 76 per cent recorded for the previous three-month period. Furthermore, nearly two-thirds of companies had had long-term vacancies. The survey also found evidence those skills shortages were seriously impacting on the business capacity of the sector, with 24 per cent of companies reporting that they had been unable to bid for contracts or had had to refuse a contract due to a shortage of skilled staff. The figure for London, where BMEs are highly concentrated was considerably higher at 38 per cent. This impacted on SMEs, especially sole traders as they were unable to gain contracts due to such skill shortages that slowed down the progress on project sites. The incidence of sole traders in the construction industry is proportionally one of the highest in the UK, having some 87% of construction companies with a 41% share of employment and a 24% share of turnover, compared to large enterprises which have a 17% share of employment and 34% of total turnover (DTI,

2007). Thus, construction can, in theory, provide an important avenue of economic mobility for BME people (Duncan & Mortimer, 2005).

While, it might be expected that the BME-SME sector would be in a strong position to take advantage of this avenue with such decreased capacity within the general construction sector is a dilemma. Certainly, this does not appear to be the case for available literature reveals that BME businesses suffer greater problems than their white counterparts, both in setting up and growing (Feagin & Imani, 1994). Research, which has been undertaken both in the USA (Waldinger & Bailey, 1991) and the UK (Harrison & Davis, 1995), indicate that the informality which exists in employment within the construction industry enable the problems faced by BME businesses to be exacerbated within the industry. The informal nature of the industry, which is based highly on social networks, serves to exclude outsiders and perpetuate the existing workforce which is predominantly white and male. BME contractors and consultants, as a result, still experience discrimination, limiting their opportunities to benefit from the growth in construction business as noted by Steele & Sodhi (2002). The types of discrimination experienced generally relate to discriminatory procurement practices which actively exclude BME SMEs in favour of larger mainstream companies; a general lack of transparency in the pre-qualification requirements and contractor selection process; and a general lack of appreciation of BME SMEs and their requirements.

It is, therefore, without doubt that Britain is now a more diverse society that needs to continuously rely on the contributions of its diverse population. However, racial discrimination is still prevalent at the workplace and construction has been notoriously characterized as having a workforce that is generally young, white and male (CCI, 2008). Incidents of discrimination and harassment has characterised the industry. Even though the industry experiences severe recruitment and retention problems, it still persists with its culture of discriminating in employment.

3.4 Diversity and Equal Opportunity Policy (EOP)

The Equality Review couples equal opportunity with diversity and notes that an equal society protects and promotes equal real freedom and substantive opportunity to live in the way people value and could choose, so that everyone can flourish (Burchardt and Vizard, 2007). Individual and group differences account for the characteristics that make diversity infinite. Therefore,

taking diversity to mean the multiplicity of characteristics that combine to make us individuals, risks producing a definition so broad as to become meaningless (Heneman *et al.*, 1996). On the one hand, searching for a definition that can be operationalised in the form of organizational policy makes it necessary to narrow the definition in order to focus policy efforts. On the other hand, a broad conceptualization of diversity has the capacity to recognize not simply individual diversity, but also the heterogeneous nature of diverse social groups within the workforce (Liff, 1999), for example minority ethnic groups that form the focus of this study. To this effect the definition adopted for the purposes of discussion in this study for developing diversity policy within organizations was based on Kirton (2003) as one which locates the diversity debate in the categories of gender, ethnicity, age and disability as these demographic characteristics strongly influence employment outcomes. That said, the overlapping and sometimes fluid nature of these categories is recognized though it is strongly based on ethnicity.

In their statements of philosophy and approach regarding workplace diversity, Gardenswartz & Rowe (2012) show that commitment to creating organizational environments should welcome and include everyone while diminishing and excluding no one. Organizations must endeavour to create organizational climates permeated with respect and dignity as places where healthy, resilient and productive people have opportunities to flourish.

Also in a study, Booth *et al.* (2012) conducted a large-scale field experiment to measure labour market discrimination in Australia, a country whose immigration policy based on a points system has been admired and adopted by other countries, including New Zealand and the UK and one quarter of whose population was born overseas. In it they cite this quote to illustrate the impact of stereotyping and stigmatisation in respect of racial discrimination:

"After completing TAFE in 2005 I applied for many junior positions where no experience in sales was needed — even though I had worked for two years as a junior sales clerk. I didn't receive any calls so I decided to legally change my name to Gabriella Hannah. I applied for the same jobs and got a call 30 minutes later."

(Gabriella Hannah, formerly Ragda Ali, Sydney (in Booth et al., 2012:1))

Therefore, in measuring ethnic discrimination, economists have relied on how labour market outcomes across ethnic groups compare as in the above case. Yet, Booth *et al.*, (2012) assert that this method may not provide an accurate answer for if an individual's ethnicity is correlated with some unobserved productive trait, then differences in economic outcomes reflect more than just discrimination. It is therefore worthy of note that the study of labour market outcomes is

associated with the problem of unobservable characteristics of ethnic minorities while in the analysis of social attitudes, the problem stems from unobservable biases in the reporting of ethnic attitudes (Arrow, 1998). It is, as result practicable to assert that in both cases, field experiments can help solve the unobservable problems by creating a context in which all other factors except ethnicity can be held constant. Furthermore, in a context where the participants in a study can be made unaware that they are being studied or where the circumstances prove difficult for the participants to provide a socially acceptable response, it is more likely that the outcome will provide an accurate measure of racism than with more traditional approaches. The strengths of field experiments of this type are that they are randomized experiments that establish causality and provide strong evidence for the existence of discrimination. This said, however, explanations of employer motives generally require other methods of study just as explanations to why some particular ethnic groups might be discriminated against more than others (ABS, 2009). The next section is on diversity and EO in construction.

3.4.1 Workforce diversity and equal opportunities in construction

Recognising the problem of diversity and equal opportunity in the 1990s in the construction industry, a combination of factors resulted in increased interest in this perceived lack of equality and diversity (Loosemore *et al.*, 2003). This resulted in several studies like the Latham Review (1994), the Committee on Women in Science, Engineering and Technology (1994), the Macpherson Report (1999) and the Race Relations (Amendment) Act (2000) being undertaken or applied. Furthermore, for the first time, the Royal Holloway Report (CEMS, 1999) on the underrepresentation of ethnic minorities in the construction industry was produced as the first in a body of research set to accumulate in subsequent years. This was deemed an imperative on both economic and ethical grounds given the numbers of ethnic minorities in the population and the numbers of pupils as well as students training and studying construction and the built environment subjects in further and higher education and their relatively low representation in the construction industry being recognised as a problem. However, despite public statements of positive intent, equal opportunities policies and diversity action plans, the construction industry has been unable to effect major change in relation to equality and diversity (Caplan *et al.*, 2009).

The concept of diversity and equal opportunity recognises that there are differences between people, which if harnessed can create a more productive, adaptable and creative work environment, where people feel valued and talents are fully utilised (Worman, 2005). The

process of globalisation, demographic change and workplace reform are making equal opportunities and workforce diversity two of the most pressing issues in modern industrial relations. This reflects the change in organisations due to the change in the global economy and global information society noted as being of utmost importance in decision making of today businesses (Furlong and Al-Karaghouli, 2010). In the UK workforce diversity in the construction industry is particularly poor, and as companies become increasingly aware that in a highly competitive labour market hampering recruitment to under half of the population is likely to severely restrict their growth and future development (Loosemore *et al.*, 2003). They continue by citing countries like Australia, where workforce diversity is particularly high, on the realisation that companies are recognising that this is a potential resource that has not been harnessed effectively.

As indicated earlier, construction, rather unfortunately has one of the worst public images of all industries accounting for the reasons why construction is facing so many challenges with regard to needing to diversify its recruitment base. The industry has been known to be synonymous with stress, unreliability, high cost, low quality, chaotic working practices, and dirty and dangerous work environment (Harris Research Centre, 1988; Ball, 1988). The realisation of the problem has resulted in recent drives to improve the industry's image through recruitment campaigns targeted at schools, colleges and minority groups, and has benefited from the success of the children's programme 'Bob the Builder'. Furthermore, Loosemore et al. (2003 note that professional institutions are withdrawing accreditation from many courses to force the demand and supply curve in their favour (). However, these strategies may do little to improve the situation if the industry cannot be portrayed as well paid, professional, safe, clean, caring, technologically advanced and innovative. Effective education has been prescribed as the key to bringing about this change, while bemoan the scantiness of construction books or journals and other treatise that address the issue with any rigour (ibid). If people understand the value of diversity and the challenges of managing it, then the industry can do better in dealing with the issues related to this underrepresentation. Kandola & Fullerton (1998) have outlined the differences between equal opportunity and diversity as shown in table 3.5.

Table 3.6: The difference between diversity and EO

Equal Opportunity	Diversity
Externally driven from outside the organisation	Internally initiated from within the organisation
Driven by legislation	Driven by business needs
Focused on improving the numbers of underrepresented groups	Focused on improving the work environment
Concentrated on reactively addressing problems	Concentrated on proactively taking advantage of opportunities
Assumes assimilation	Assumes pluralism

Source: Kandola and Fullerton (1998)

The main differences in equal opportunity and diversity are outlined above. The concepts are often used interchangeably although they are different in their driving principles. It shows that a company must have an EO and diversity policy in order to have a balanced approach to this increasingly important area of SHRM and to harness this potential. For this reason, countries and institutions have legal frameworks and commissions to deal with issues in this respect. The next two sub-sections expand on the mandate and remit of such programmes.

3.4.2 The Legal Framework for Diversity and Equal Opportunities.

It is rather unlikely that legislation in itself can used to get rid of discrimination. However, an important legal framework outlawing it is in existence, and breaching it has severe statutory penal measures. The United States for instance has many federal and local laws dating back to the Civil Rights Act, 1964 which was to result in the provisions of affirmative action policies. Australia and most countries also have similar legislation. In Australia lists a number of such pieces of legislation covering Racial Discrimination, the Human Rights and Equal Opportunity, Racial Hatred, Workplace relations and so on with dedicated federal legal provisions. In the UK the introduction of such legal framework dates back to the mid 1960s with the Race Relations Acts of 1965 and 1968, later replaced by the Race Relations Act 1976 further amended in 2000. The entire array of such discrimination laws have been replaced with the Equality Act of 2010 with the primary purpose of codifying the complicated and numerous set of Acts and Regulations, which formed the basis of the legal framework outlawing discrimination in the UK.

It is without doubt that legislation plays a valuable role in defining and outlawing discrimination against particular groups however statistical evidence over the past decades have shown that it is particularly an ineffective vehicle for influencing people's attitudes (Loosemore *et al.*, 2003).

They further stress that Influencing attitudes is a very slow process and cannot be done coercively, and it is important to note that in most cases the law merely sets out minimum standards of performance on equal opportunities.

The lack of records by employers of minority groups in employment (Chevin, 1995) has also been cited as a major problem. Construction employers have been known to exhibit a 'minimalist' approach to equal opportunities, defined as a base-level commitment to its principles with little effort towards their practical implementation. A survey (CIB, 1996) has rendered as erroneous construction companies claim to be 'equal opportunities employers' as their interpretation of this statement differed immensely.

3.4.3 Equal Opportunities Commissions

In many countries, the job of eliminating discrimination and promote equality of opportunity and diversity is overseen by groups who usually operate independent of any influence from government or the private sector. In addition to representing individuals in discrimination cases at industrial tribunals or law courts, they also help to review legislation in this area. They may also instigate formal investigations, issue a non-discrimination notice or, even obtain an injunction order from a court of law to institute changes in behaviour or action.

In advanced countries, they may be well resourced to institute and promote research and educational initiatives on matters within their remit to advice appropriate bodies on initiatives as well as to produce a code of practice to guide the promotion of equality of opportunity and diversity in employment. In order to assess the efficacy of equal opportunity policies, they engage in the monitoring of the selection process and constantly review the effects of certain personal decisions and practices that may not be commensurate with the provisions of the equality and diversity code of conduct. There may also be a requirement for employers to keep records of the breakdown of job applications of useful appointees, as well as of staff seniority within their organisations. This data is useful for investigators if a candidate complaining of discrimination challenges an employer. For example, in the UK, the Equality and Human Rights Commission and Commission for Racial Equality recommend that ethnic and sex monitoring information be kept separate from job application forms or curricula vitae in the selection process. They also prescribe that the names of candidates should not be made available for shortlisting and the interviewing process as they may point to the sex or racial origin of candidates. To manage diversity and ensure a parity of opportunities for their employees and potential employees,

Loosemore *et al.*, 2003 note the valuable support that such commissions for equal opportunities provide for companies and project managers. The next couple of sections look at the strategies aimed at addressing the issues through, for example, government policies and initiatives as these.

3.4.4 Positive Action

The UK Equality Act 2010, through the Discrimination Law Review (DLR) of the Government Equalities Office uses this terminology to refer to the context of employment that permits selection of a candidate from an under-represented group, so long as he or she is not less qualified compared to other potential candidates from the dominant group. The Equality Act does not allow positive discrimination or affirmative action i.e. an employer cannot try to change the balance of the workforce by selecting someone for a job mainly because they are from a particular racial background, as this would be considered discrimination incurring legal consequences. Selection must therefore be based on merit as all applicants must be treated equally. This said, however, employers can take positive action based on the intent to ensure that people from previously under-represented groups can compete on a level playing field without being disadvantaged by any means. However, it is not legally binding for employers to take positive action, but they are entreated under Section 37 (1) to embark on positive action training initiatives.

Thus, positive action entails a set of measures that aim to prevent or overcome past and current discrimination. A lack of applications from a selection of the community may not necessarily be due to unfair recruitment and selection practices. Yet, this is inevitable as a result of past experience so in order to achieve the objective of widening diversity, positive action may be required to encourage applications from specific groups who may need to be equipped with the skills they need to compete equally on a job market. However, positive these initiatives can only make a difference if workplace practices working to eliminate discrimination already exist.

Positive action works by recognising past discrimination or disadvantage where people from certain minority groups may not have fully realised their potential and as such lack the requisite qualifications and experience to be eligible for particular jobs. Hence, positive action allows for targeted training programmes and encouragement where it can be demonstrated that at any time in the previous 12 months there were no persons from such groups in particular roles. It is also applicable where the proportion of people from that racial group in employment in that sector is unrepresentative of that racial group in the entire population. Through such encouragement

people who are underrepresented in particular works can take advantage of the job opportunities. Examples include explicit encouragement in recruitment advertisement, mentoring, support networks, open days, career fairs and ready information to BME dominated institutions.

However, encouragement does not include actually providing the opportunity to do the work neither does it include a decision to recruit a person because they come from an underrepresented group since equality of opportunity must be demonstrated at the point of recruitment. Therefore training people to fit into particular work in the form of, for example, trainee posts and outreach training, classes in CV preparation, interview and assessment skills and the like where such trainees cannot be paid a salary but rather can be offered training allowances are permitted by law. Positive action programmes implementation can counter the trend of discrimination identified by the Commission as more prevalent in recessions and in the private sector (Wood *et al.*, 2006).

3.5 Justification for Diversity and Equal Opportunity in Construction

Loosemore *et al.* (2003) unanimously agree that whilst there is a strong ethical reason for taking equal opportunities seriously, it is the commercial argument that *wins the day*. The commercial issue for the construction industry, according to them, is whether companies can compete successfully if all groups of people are not represented in the workforce and treated as equal. With the global construction market forecast to grow by 70% by 2025, Britain is now in a global race for growth and jobs, and cannot afford to be left behind (Fallon, 2013). However, the challenge remains as to how project managers can be convinced about globalisation and the increasingly competitive business environment and the need for organisation to become heterogeneous groups consisting of diverse workforce in order to tap a wider range of abilities, experience and skills. Corporate social responsibility should also be a concern for companies by being representative of their communities (Ansari & Jackson, 1996).

However, the key driver for many construction companies is likely to be the lack of the availability of requisite skills in the construction industry as this makes traditionally underutilised groups such as ethnic minorities an attractive pool of potential expertise. The construction industry is in competition with other industries for the best people and any perception that it does not provide an equal opportunities environment will encourage further cohorts of good ethnic minority recruits to take their talents elsewhere (op cit). Thus in keeping to its culture of white

male dominance, the industry continues to ignore the issue of diversity and equality at its own peril.

The peril of skills shortages referred to above is further exacerbated by the problem of declining population of the dominant white male who is fast aging, an increasing tendency of younger people to stay longer in higher education and the attractiveness of careers in other industries, sectors and professions. These were attributable to construction's traditional image for low pay and poor working conditions, the changing nature of skills requirements, extreme fluctuations in the construction market, the growth of self-employment, industry fragmentation and the decline in apprenticeships and training resources. These characteristics have led to the advice by Dainty *et al.* (2004) that recruiting from a wide pool of talents and skills helps to address the recruitment difficulties and in turn the skills shortages. However, they envisage that in many developed countries the industry faces an impending 'demographic time bomb', based on the trends in the population of its recruitment base. The industry, therefore, faces recruitment problems from its traditional source of labour of white males in their late teens (Gurjao, 2006)

The UK faced aggravated problems with skills shortages resulting from the rapid rise in construction activity in the late 1980s preceding the recession of the early 1990s (Agapiou *et al.*, 1995). As a result, the post recession growth of the late 1990s and early 2000s, couple with the problem an ageing population, worse image, terrible publicity, a continued ignorance of training needs and changing technologies, suggests that skills shortfalls are likely to be even more acute in the future (Dainty *et al.*, 2004). They therefore stressed the urgent need to ensure that the industry is seen as an attractive place to work by valuing and treating employees equally. This was seen as imperative for all companies operating within the industry in order to halt the leakage of skilled employees to other sectors as well as attract new entrants.

Other research investigating the proportional representation of some demographic groups and their influence on the functioning and effectiveness of teams and workgroups have supported these arguments favouring diversity and EO. This has shown that there are tangible performance benefits attributable to balanced workgroups. Ely & Thomas (2001), for example, identify two benefits of workforce diversity, both of which are relevant to construction. Firstly, they claim that workforce balance encourages better performance from those in the minority. This argument is supported by the belief that proportional representation will have positive benefits if barriers such a stereotyped perceptions could be removed to allow people to contribute their optimum potential.

The second argued that diverse teams perform more effectively than those composed of traditionally dominant groups thus supporting the justification by many proponents of diversity that balancing workgroups can have tangible benefits for team performance. a case in sight being the pioneering work of Hofstede (1980) which found that people from different cultures vary along four main dimensions: masculinity/femininity (assertiveness, aggression and attitude towards women), individualism/collectivism (the value of group membership and personal relationships), power distance (acceptance of power inequalities and authority) and uncertainty avoidance (the degree to which people are threatened by ambiguity and uncertainty). For example, people from highly individualistic cultures may operate less effectively in teams than people from collectivist cultures. However, this may not be exclusively so as some individuals may behave extraordinarily independent of group influence.

Therefore, finding a solution to this potential problem has stimulated a response strategy from both government sources and the industry to embark on image-enhancing initiatives aimed at raising the profile and status of the sector, skills certification and employment schemes, and specific marketing campaigns aimed at broadening the industry's appeal beyond its traditional recruitment base (Loosemore *et al.*, 2003). However, the caution is sounded about linking diversity to project outcomes in relation to its controversial nature as minority groups may well bring different perspective and styles. Ely and Thomas (2001) warn that the necessary conditions, likely consequences and overall performance implications have yet to be proven for which reasons the barriers hindering diversity should be well taken account of. The next section is preoccupied with these barriers.

3.6 Barriers to Diversity and Equal Opportunity of BME Representation in Construction

The forgoing sections have sporadically considered some barriers in the way of diversifying the construction industry. This sections attempts to bring it all into one place in a comprehensive review. The problem of diversity is ubiquitous and ever present in most countries around the globe; be it the Indians in Canada, Blacks and Latinos in America or Aborigines in Australia, although some countries have been praised for their diversity programmes. For example, in Saudi Arabia 30 percent of the construction workforce is foreign, and in Australia and Singapore the figure stands at about 80 percent which presents managers with an array of potential problems, from communications, through conflict and safety to discrimination (CIDB, 1998; MLSA, 1998). Indeed, these countries have traditionally relied mainly on immigrants for the supply of labour to

some sectors like construction. Thus, in terms of employment participation, it may appear that construction is not discriminating against immigrants. Yet, Loosemore et al. (2003) caution against over reliance on statistics as instances of discrimination and concern over the underrepresentation of Indigenous Australians (Aboriginal Australians and Torres Strait Islanders) in the workforce resulting from The Australian government's past policies of cultural assimilation have been reported. The barriers accountable for this are therefore deep-rooted and pervasive, and are discussed in more detail under culture and employment practices in the next section.

3.7 The UK Construction Industry's Culture and Practices

This section examines construction's ingrained culture as to assess the inherent unwelcoming practices of the industry towards minority groups. Primarily, prejudice is accountable for the lack of diversity and equality (Fishbein, 2002), and is rooted and pervasive resulting from systematic assumptions about the inherent superiority of certain groups and the inferiority of others (Gridley *et al.*, 2012). It is based on difference in race, culture, ethnicity, national origin and descent (Thompson, 1997). Grounded in two forms of human behaviour- ethnocentrism and stereotyping, it is central to human cognitive processing in a majority of cases. This arbitrary social categorisation and stratification is usually based on salient and physically identifiable features such as age, colour, appearance, disability, gender, race, ethnicity and social statues (Uher 2004).

The unpleasant and negative image of the industry itself also poses an unwelcoming problem. Much of existing research tends to paint a fairly bleak picture of employment practices and industrial relations in the construction sector, often depicted as an informal, casualised and even cavalier approach to the management of people with long working hours (Lingard *et al.* 2008; Townsend *et al.*, 2011) and high rates of health and safety incidents (Loudoun, 2010). As has been noted in chapter 3, construction has, as a result, gained a perception of being a relatively low-status industry with hard and inflexible working conditions and a persistent *laddish* culture in a white, male dominated environment (Caplan *et al.* 2009). This rather bad image of being characterised with stereotyped male values and building site mythology adversely affects the recruitment of potential employees from outside the traditional cohort. This results from the stereotypical and ethnocentric tendencies implicit in the activities of the industry's dominant group. Despite public statements of positive intent, equal opportunities policies and diversity action plans, the construction industry has been unable to effect major changes in relation to

equality and diversity. Hence, the importance of workforce monitoring, targets and compliance has been misunderstood by construction companies, and so hesitate to set equality targets. Monitoring of ethnic origin has been attempted by some organisations, but monitoring practice is still far from being effective.

The business case argument shows that construction is under-utilising the skills and talents of the UK population resulting in decreased organisational efficiency and effectiveness and so should become more innovative and adaptable by drawing closer to and satisfying its customer base. However, the claims have not been totally convincing and as yet have not shown marked results in addressing the under-representation of ethnic minorities across the construction industry. As a result, the industry's practices continue to foster such strong perception that ethnic minorities face rejection at the recruitment and contracts offices of construction firms due to ingrained racism and exclusionary practices.

Definitions given to ethnic minority groups and how their cultural practices in the form of languages, religions and different lifestyles are perceived by the majority population as inappropriate and inferior in itself is a barrier very difficult to surmount. Such perception of being different, threatening and inferior enjoins people to rely on a variety of defence mechanisms to protect themselves from unacceptable internal impulses and threatening environmental circumstances where such negative internal impulses, personal internal conflicts and inadequacies are projected in an arbitrary way on to minority groups (Eagly & Chaiken, 1993). They further add that such behaviour is often reinforced by the mass media, which plays an increasingly important role in moulding and reinforcing attitudes towards other nationalities (ibid). Again, Wood (1997) cautions the influence of the media in an increasingly busy world where most people completely depend on media reports for insights and knowledge and, to be newsworthy, social comparisons tend to be oversimplified, exaggerated and caricatured (Uher & Loosemore, 2004) thereby playing a powerful role in influencing difference in cultural groups and the value placed on each certifying them as valid and legitimate. Such acts further reinforce racial tendencies and fuel the discriminatory practices as they are seen to be justified.

The incidence of overeducating among BMEs has been cited in the UK and some of the reason given as responsible include delayed access or complete lack of access to employment hence the need to continue once education believing the problem to as a result of minimal or lack of skills

(Rafferty *et al.*, 2008; Lindley, 2007; Battu *et al.*, 2004). This is instanced by the fact that there is a far higher proportion of BMEs in college training than in employment, reinforcing the recurring theme of an under-utilisation of talent in construction. Ethnic minority students are, in different proportions, well represented in most built environment courses at further and higher education (Ahmed *et al.*, 2008). Notwithstanding, BMEs are underrepresented in construction employment or usually concentrated at the lower rungs even though a recent study found that a postgraduate degree in land and property management significantly increases the probability of gaining graduate level employment (Devaney *et al.*, 2012).

The teaching and curriculum at colleges and universities have somehow also posed as a barrier to BME initial entry into construction jobs. Significant numbers of ethnic minority students on construction courses fail to either complete their course or seek employment outside the industry (Missa and Ahmed, 2010; Caplan *et al.*, 2009; Briscoe, 2005). Although overt discrimination seems virtually nonexistent in both higher and further education settings, it may, however, be that giving greater prominence to non-Western approaches the curriculum and instruction would benefit BME students who may want to draw on their community backgrounds. Next are the attitudes, expectations and support given by staff in colleges and universities where they fail to understand the level of antipathy or even antagonism and hostility faced by BME students in their encounters with the construction industry. Without sufficient care, this failure can turn into an underestimation of students' competencies. BME students cite difficulties in finding work placements and a lack of faculty help in overcoming this difficulty (Caplan *et al.*, 2009, Ahmed *et al.*, 2008). As a result, BME students emphasise the importance of mentoring schemes and positive role models in helping to overcome this difficulty.

Finally, career services at colleges and universities do not usually have tailored programmes aid at BMEs in order to help them overcome the many huddled they face. Schools and the careers service generally lack awareness of the sector's career opportunities. There is little consistent evidence that pressure to reject a career in construction is any stronger in the ethnic minority communities than in the general population (ibid). In addition, as it is the culture of construction, chance and informal methods like word-of-mouth play the main role in informing pupils and trainees of possible employment opportunities. Therefore, these failings by the careers counselling and education services seem to disproportionately disadvantage BME students.

3.7.1 Recruitment and Selection in Construction

The exclusionary practices affecting BMEs in the recruitment process which has resulted in the low level of ethnic minority representation in the industry compounds the cultural perception of an unwelcome environment for ethnic minority people. Also, as white dominated firms continue to replicate a white workforce BMEs, lack the networks to overcome the barriers to their applications for work experience placements, apprenticeships, jobs and contracts. As a result, recruitment procedures and practices are yet to result in improving BME representation in the workforce although there have been some examples of positive initiatives to tackle the issue of underrepresentation. Official paths and procedures in both recruitment and securing contracts are undermined by word-of-mouth recruitment and the use of approved lists of potential contractors. Therefore, there has been little change in procurement arrangements in spite of public bodies' legal duty to promote race equality. These traditional procurement methods and the use of approved lists have been cited as discriminating indirectly against ethnic minority contractors.

There is broad acceptance of the case for diversity by industry leaders but the implementation of equality and diversity policies usually happens in large companies (Caplan *et al.*, 2009). These companies are alone in their view that there should be a strong focus on ethnic diversity in apprenticeships and helpful guidance (Black Training and Enterprise Group, 2010a and 2010b) from the National Apprenticeship Service. However, in view of the fact that the industry consists, largely, of micro and SMEs who account for some 90 per cent of the job market outcomes, diversity practices seem quite gloomy. Recruitment practices are captured in the next section.

a. Recruitment Procedures and Practices

It has been found in a study by CABE that, while procedures are improving, the interview process itself could be rather 'hit and miss' in relation to equality issues (CABE, 2005). Official paths and procedures in both recruitment and securing contracts are undermined by informal practices that contradict equality and diversity policies. Word-of-mouth recruitment practices and information about contracts – including the practice of having an 'approved list' (which requires contractors and consultants to apply to be suppliers) – tend to exclude ethnic minority companies (Lockyer & Scholarios, 2007; Byrne *et al.*, 2005; Steele & Sodhi, 2004). By accessing new recruits through the social and business networks of existing employees, it is much more likely that new recruits to the on-site construction workforce will mirror existing workers (ConstructionSkills, 2007; Byrne *et al.*, 2005). Until recent programmes by ConstructionSkills

and others, there were few examples of positive initiatives to tackle the issue of underrepresentation of ethnic minority applicants to the industry. For example, while 32 per cent of construction companies gave recruitment presentations to schools, only 14 per cent made presentations to schools with high ethnic minority populations (CEMS, 1999).

Furthermore, recruitment events failed to take sufficient account of the views of students or recently appointed employees about the recruitment process. A study of housing associations showed they do not use their economic and social power through investment in construction and maintenance work to promote equality in recruitment or contracting (Steele & Sodhi, 2002). The report found a 'general lack of appreciation among housing associations of the importance of employing BME contractors and consultants from both an equal opportunity and a business perspective' (Steele & Sodhi, 2002, p. 151). Miller & Tuohy (2007) have identified the need for targeted recruitment for professional and trade roles, including those at lower salary levels.

Prior to the current recession, there was a perception that ethnic minority employees were losing opportunities within the North West construction sector because of the increased use of experienced migrant labour, particularly in firms requiring entry level, that is, first job, wages (ConstructionSkills, 2007). However, there is also evidence of discriminatory practices towards prospective entrants with overseas educational and vocational qualifications which are not recognised within the UK construction industry and which may affect visible minorities as well as overseas white applicants (CCI, 2008). It is unclear to what extent this has hampered ethnic minority construction workers who are already living in Britain. According to Somerville & Sumption (2009), evidence from past recessions shows that migration flows are only partially sensitive to economic conditions. White immigrants' unemployment rates reduce over time to the level of the white UK population (Somerville & Sumption, 2009).

There is some evidence that the focus of employment discrimination in the construction industry – in terms of exploitation, disparities in pay, health and safety, and other terms and conditions – has shifted from ethnic minority UK citizens to migrants, especially those from the EU (Moriarty *et al.*, 2008). However, concern has been raised that the recession that started in 2008 would adversely affect ethnic minority employees and other minorities the hardest (Trades Union Congress, 2009): it may have particular impact on minority groups in the construction sector,

who are often already excluded from word-of mouth information about opportunities. The next section covers the contribution of procurement to help diversity.

b. Procurement

Procurement is one of the economic means of empowerment and provides varied sources of employment yet traditional procurement methods discriminate indirectly against ethnic minority contractors and consultants. The use of approved lists of contractors and consultants is still a standard method of selection, but it is very difficult for new contractors - where BMEs may get a chance - to get onto these lists and little has been done to update them or ensure greater diversity. Another popular recruiting method is repeat business where contracts are offered to people who have already undertaken work for an organisation in the past (Duncan & Mortimer, 2007). This is particularly the case for contracts over specific thresholds which have to be advertised through the Official Journal of the European Union (OJEU) to adhere to European procurement rules and pushes out new BME Micro and SMEs as a result of excessive bureaucracy.

Although local authorities have a legal duty to promote race equality, this has not yet impacted on procurement policies. The study of Welsh housing shows that the impact of local government ethnic minority housing strategies on procurement processes has been minimal, suggesting that equality is considered of little relevance to local procurement processes although respondents to a study by Duncan & Mortimer (2007) felt that the client's role was crucial in ensuring that race equality is promoted. However, unless contractors are also willing to promote race equality, it is difficult to enforce any policies but for now, only larger projects invoke the formal tendering procedure in an organisation. Duncan and Mortimer found that contracting organisations expected contractors and consultants to adhere to equal opportunities policies but in most cases did not supply copies of the relevant policies and procedures. Similarly, most organisations did not have equality policies or procedures relating to procurement, nor did they regularly review procurement policies.

3.7.2 Experiences in the Workplace

Should BMEs be lucky to overcome the many huddles or take advantage of one of the informal sources of recruitment to gain entry, the issue of discrimination at the workplace raises its ugly head here. As a result, the BME worker is always fighting to fit the mould to gain recognition or may be pushed out. BME workers report examples of racial discrimination ranging from name-

calling and banter to physical intimidation. Professional staff have referred to the withholding of professional benefits or opportunities such as training opportunities, promotion prospects and overtime and as a result, they fail to Progression through the ranks to managerial levels. This has led BME to professionals to perceive a 'glass ceiling' to progression, and companies do not have strategies to bring about change in ethnic minority representation at senior levels, or even beyond entry at graduate level. Also, BMEs have a strong perception that they need to work harder than their white counterparts to obtain recognition and progress in their organisation. While levels of support and guidance for ethnic minority staff have gradually improved over the last decade, ethnic minority professionals still find that they are not supported by their managers to develop and progress to the same degree as their white colleagues.

Worst of all is the project managers' failure to promote good race relations, which has an untoward and untold effect on the prospect of the BME to be retained in the industry (Loosemore, et al., 2003). It is common for pressure to be put on ethnic minority staff to conform to a white 'norm' or 'fit the mould' (Caplan et al., 2009). Although much has changed, the 'culture' of the construction workforce still amplifies feelings of difference and of being 'other' for those who do not and will never share such a culture. Despite public statements from sections of the industry about equality and intolerance of racism, jokes and banter, these persist within the construction industry culture.

Unfortunately, in contrast to other sectors, the construction industry has not harnessed the cultural perspectives and influences of different groups. All the evidence points to an assimilationist attitude which largely ignores the need of different groups, expecting them to adapt to the dominant industry, organisational or national culture (Loosemore & Al Muslmani, 1999; Loosemore & Chau, 2002). However, current thinking in equal opportunities seeks to value diversity explicitly, to adapt to it and use it to generate improvements in work performance and team effectiveness. Still, it should also be noted that linking group diversity to project outcomes is controversial. Our understanding of the behavioural dynamics of diversity is still in its infancy, and, although women and ethnic minorities may well bring different perspectives and styles, it is believed that it is necessary to involve all groups in the process for a comprehensive uptake.

3.7.3 BME Exclusion in UK Construction

The construction industry, according to Clarke (CITB, 2005) has been described as 'trapped in a cycle of exclusion'. The most important reason cited by the industry for the low representation of ethnic minority staff is an inability to attract sufficient new ethnic minority entrants. This is assumed to be due to construction's unpopular image as tough, heavy and dirty, and therefore a 'macho' masculine domain (Steele & Sodhi, 2006; Ahmed *et al.*, 2008). In addition its image has suffered because of an undervaluing of its contribution to the economy generally, within the media and by the public and this has resulted in the low level of ethnic minority representation, coupled with adverse experiences in the industry thus compounding ethnic minority people's negative views of construction. Thus resulting in lower ethnic minority recruitment than might otherwise have been the case for which reason the ethnic composition of the industry remains unrepresentative (Caplan *et al.*, 2009).

Research into the barriers BMEs face in the industry (CCI, 2008; Ahmed at al., 2008; CEMS, 1999) has also found that barriers limiting access for entry include a lack of support networks and nepotism that tends to favour those looking for jobs with prior existent family-based links thus having a family member in the industry is a key reason for joining it. As was noted above, potential ethnic minority entrants do not have these links to the same extent as white students as their primary and major sources of information about the construction industry are school careers officers, family and friends, and newspapers. Therefore, considering the limited network base of BME college trade trainees, they are likely to experience exclusion when looking for work experience; a critical step in establishing the professional contacts, which will assist them to secure employment after graduation (Byrne *et al.*, 2005; CEMS, 1999).

Also, employer reluctance to take risks by employing or providing a placement to someone who does not fit the traditional stereotype of a construction worker is a crucial exclusionary practice (ConstructionSkills, 2007). Additionally, employers generally detest the potential legal consequences of a future accusation of racism or harassment and this may make them reluctant to recruit people from ethnic minority backgrounds (ConstructionSkills, 2007). Similarly, ethnic minority trainees and graduates who apply for work, particularly long-term work, encounter particular difficulties. White-dominated firms continue to exclude ethnic minority applicants inadvertently or otherwise, using subtle discrimination and issues of being able to fit in to give

white candidates the edge over their ethnic minority counterparts, in relation to either recruitment or progression on the job (CEMS, 2002; CABE, 2005).

Retrospectively, a number of studies over the years have reported that ethnic minority graduates are less successful in gaining employment in the construction industry than their white counterparts (CABE, 2005; Briscoe, 2005; Minority Ethnic Construction Professionals and Urban Regeneration (MECPUR, 1996). This results in they being twice as likely to be unemployed, half as likely to be offered employment in their year of graduation, and needing to make more applications before attaining interviews, despite being more highly qualified than their fellow graduates (MECPUR, 1996). White graduates are generally likely to receive a high rate of response to applications from firms and find the interview process positive, whereas ethnic minority people – particularly if they have an easily identifiable ethnic minority name (CCI, 2008) or accent (Hill *et al.*, 2005) hence reporting a poor experience in terms of response, result and feedback. Ethnic minority candidates report very little feedback from companies and find recruitment agencies unresponsive (CEMS, 2002). Some find that the interview is largely about social interests, which tend to exclude those from minority cultures (CEMS, 2002). In all this, things were to take a dramatic turn, which meant very bad and gloomy conditions in the construction industry, a condition that is considered in the subsequent section.

3.8 Current Issues Resulting from Economic Downturn on Employment

It is without doubt that the world economy is experiencing a severe economic downturn as GDP growth slowed down sharply in 2009 in major economies like the US, Japan, Britain and the Euro zone (Brunello, 2009). The expected trend would have been to shed employees and their training yet according to Caballero and Hammour (1994), recessions are times of 'cleaning up', when outdated or unprofitable techniques and products are dismissed and new technology adopted as during recessions, the flows out of employment increase and the flows into employment fall. The intensity of these flows have a direct correlation with age (Blanchard & Gali, 2010) as in the US, young workers experience the highest increase in outflows and the highest decline in inflows whereas old workers are less likely to exit although they experience a substantial decline in employment inflows (Blanchard & Diamond, 1990). In many European countries and in Japan, where employment protection legislation and practices shelter permanent employees from redundancies, the brunt of employment adjustment in the recession falls on reducing recruitment, especially of the young (Gielen & van Ours, 2005). On the one hand, the cleansing role of

recessions calls for investing extra organizational capital inclusive of training while on the other, training incidence are known to be highest among young employees (Bassanini *et al.*, 2007).

There is a widespread consensus that investing in skills can both play a major part in meeting the recession and in building a higher skill post recession economy. For example research by Kluve (2006) has shown that the great majority of active training programmes do have a positive effect on helping workers get new and better jobs. Time spent at work during recessions becomes relatively less valuable with respect to time spent at school and in workplace training as a result of individuals and firms shifting their efforts from production to retooling their skills and updating their organizational capital. Enrolment in schools increases and training intensity, both in the classroom and on the job, rises.

Global attempts at redressing the issues have seen relentless efforts from governments, other state institutions and civil society. In Europe, for example, the Commission has called for a package of stimulus measures worth some 1.5% of GDP, including skills measures to improve training (Brunello, 2009) while on the other side of the Atlantic Obama's manifesto included a series of radical and explicit pledges to create flexible education accounts that workers can use to provide retraining assistance for workers in sectors of the economy vulnerable to dislocation as well as expand and fully fund apprenticeship programs to help workers get credentials and skills (Obama, 2008). Many state-wide initiatives have been announced funded through the stimulus package announced by the Obama administration, including support for low skilled workers. In a recent study of apprenticeships in the US construction industry, Bilginsoy, (2003), examined how the cancellation and completion rate of apprenticeships vary with the business cycle, measured by the state unemployment rate. In the US, apprenticeships have traditionally played a much smaller role in the training of labour than in Europe, partly because the institutional arrangements required to ensure incentive compatibility have been lacking although firms don't fail to deliver training and individuals do not quit before the end of the training scheme (Elbaum, 1995). Apprenticeship schemes last between three to four years and are mainly prevalent in the construction industry.

According to the Industry Training Federation (ITF) of New Zealand (2009), the importance of skills and training in economically tough times is not something that is only of interest locally but internationally, it is a recurring theme as other Governments announce packages to address rising unemployment to provide a stimulus for the economy. This is evidenced by The Rudd

Government of neighbouring Australia's effort at making investment in human capital a key plank of addressing the economic crisis - to the tune of \$A155 million (\$NZ196.5 million) over the next three years. This is in an effort to avoid the reduction in apprentices that occurred in the last downturn of the early '90s by introducing incentives for employers to keep training, when the temptation in tough times is to reduce that investment. In building projects supported by the Rudd Government's 'Jobs Plan', preference is being given to employers that demonstrate commitment to taking on and retaining apprentices (Nana *et al.*, 2011). Furthermore, funding of \$A145.6 million is being provided to ensure completion of apprenticeships that would otherwise be terminated due to job losses. Additional funding of alternative pathways is being provided to help apprentices complete their training in non-workplace settings while the Council of Australian Governments has set a target of 90 percent participation in education and training for Year 12 students by 2020, currently about 75% for younger people.

In Singapore the unveiling of the Skills Programme for Upgrading and Resilience, which provides funding to employers to upgrade worker's skills or defer retrenchments has been hailed a good move towards bracing for the odds as well as preparing for the upturn. The Government is spending \$S5.1 Billion to help companies avoid layoffs, has cut the company tax rate from 18% to 17% and is subsidising wages, and increasing public sector hiring. Acronyms, such as 'BOOST, SPUR, BUILD, YES! and PREP-UP' have been used to uplift this effort (ITF, 2009).

Bringing it closer home to the UK, 'ConstructionSkills', the UK-wide Sector Skills Council for the construction industry established in 2003, works to deliver a safe, professional and fully qualified construction workforce (SkillBuild, 2009). Despite the downturn in the industry and wider economy, training has never been more important, as firms need the skills to compete for the work currently available and to respond to an upturn when it happens. As a result, firms are encouraged to enter SkillBuild to enable them to demonstrate the quality of their staff and in turn help apprentices to develop their skills. Furthermore, the Pre Budget Report (PBR) for 2009 announced that the Department for Innovations, Universities and Skills (DIUS) would add a further £79M *Train to Gain* funding to the £258M already made available to help provide skills support for those facing redundancy. PBR also announced that government funded construction projects would consider making it a requirement that contractors have a proportion of the workforce as apprentices in addition to the previous announcement that all the planned future £350M increase in Train to Gain funding would fund a short term package to help SME

employers in the downturn. In addition, an extension to the Jobcentre Plus rapid response service to help job seekers with a skills assessment and training and an extra £1.3Bn for DWP over two years to deliver "effective support for the unemployed", some of which includes help with training. This brings the PBR to conclude that the recession has been the basis for the accelerated government's move to this more strategic approach (TUC, 2009)

In a previous study of the UK experience with recessions, Felstead and Green, (1996), examined the impact on training of the recession of the early 1990s, using data from the Labour Force Survey and in their descriptive analysis reported a decline in the total number of apprentices from 367,000 in the spring of 1989 to 312,000 in the spring of 1992, a decline which stood at 15 percent and dealt a serious blow to the skills shortages which needed addressing in times of upturn which is always inevitable. Therefore, Felstead *et al.*, (2011), sound the caution that training programmes should receive the required impetus for accelerated growth. The next section covers the findings from the second part of the literature review.

3.9 Key Findings from Literature Review

- Britain is more diverse and needs to rely on the contributions of the entire population.
 Immigration and ties with other countries have resulted in a rather more dynamic economy and a richer cultural life, which encourages thriving places where the fear of difference is supposed to be replaced by a shared set of values and a sense of purpose and belonging.
- Ethnicity and ethnic origin has been found to have a strong influence an individual's performance in an industry. This is controlled by the perception held by players in that field. Where BME has numerous definitions and interpretations depending on who wears the lens, dealing with such perceptions seems an already difficult task. Sometimes, BME refers to everyone not classed as White British. At other times, it includes all other Whites.
- The chapter has shown discrimination as embedded in the real fabric of human society and every human endeavour at varying levels. It can be direct or indirect and takes many forms including harassment and tokenism. It has economic and social consequences for perpetrators, costs that can be enormously detrimental to the global operations of a firm on today's competitive economic and commercial scene.

- Diversity and Equal Opportunity policies (EO) and practices operate in construction with limitations, which make it ineffective as well as inefficient. The industry, as a result, is missing the benefits offered by such practices especially in this modern day of globalisations and the associated economic benefits. Although there is a legal framework and EO commissions whose remit and mandate are supposed to address such issues, their impact seems quite ineffective even in the face of positive action, as affirmation action policies are illegal in the UK. Such difficulties result in adding to the already many barriers that are rather more difficult to surmount even in the face of the many drivers that are meant to expedite the smooth functioning of these drivers of diversity and EO.
- Although some improvement has been noted, discrimination is still rife at the workplace and
 recruitment and selection in construction have been notoriously characterized by a culture of
 stereotyping. This has resulted in the composition of a workforce that is generally young,
 mainly white and predominantly male; a culture, which persists with the industry even in the
 face of serous skills shortages as it excludes minority groups like BMEs.
- It has been noted that stereotyping characterises the industry and ignorance leading to the understanding of BME cultures worsen their engagement in the sector. Although a number of policy initiatives have been introduced for redress, the impact has been minimal.
- Discriminatory practices have been reported elsewhere in other countries, yet the
 international picture is quite different as most developed nations exhibit different
 characteristics of ethnic minority representation. For example Australia, Singapore and Saudi
 Arabia have high ethnic minority representation in construction that is more than
 representative of the wider population.
- A number of initiatives relating to collaboration have been introduced to address the problems causing this underrepresentation of BMEs, but they have also had limited impact. For, while it might be expected that BMEs would be in a strong position to take advantage of the decreased capacity within the general construction sector from anticipated skills shortages; this does not appear to be the case from literature. As available literature has revealed that such gross underrepresentation of BME employees affects their businesses as well. BME businesses are doing no better, as the culture of the award of contracts is also detrimental for BME businesses. In addition, the cultivation of favoured contractors who are more likely to

be white as well as the repeat contracts award system have been seen to be disadvantageous to the involvement of minority groups.

• It has been found that investing in skills is a sure means to minimising the impact of the recession and completely coming out of it. There is widespread consensus that the investment in skills can both play a major part in meeting the recession and building a highly skilled post recession economy and minority groups remain a strong sustainable source of labour supply in the face of an aging labour pool that has been the main source of supply. These findings therefore formed the basis for a conceptual framework as presented and discussed below.

3.10 Initial Conceptual Framework

This section presents the initial conceptual framework based on the review of the available body of knowledge (chapters 2 and3). A conceptual framework is a written or visual presentation that: "explains either graphically, or in narrative form, the main things to be studied – the key factors, concepts or variables - and the presumed relationship among them". (Miles & Huberman, 1994, p.18). Also, Yin (2009) adds that the framework illustrates the main concepts pertaining to the study, their interrelationships and the context within which the concepts and interrelationships are applicable. As a structure of what has been learned to best explain the natural progression of a phenomenon that is being studied (Camp, 2001), it is based on previous studies, theoretical and conceptual analyses, and theories that exist in the literature. Literature helps researchers frame the problem, support the claim, synthesize the knowledge base, and thus create a need for the study. The logical chain of reasoning used to support the argument of a research study is illustrated in the identification of the problem, assertions, and knowledge claims (Knobloch, 2010).

Therefore, the initial conceptual framework was developed based on the key issues and concepts identified through the literature review and the knowledge base of the researcher of the phenomenon. The primary objective of this research was to explore the underrepresentation of BMEs in construction. In this research, the conceptual framework (figure 3.2) served as a basis of understanding, and as a result was refined after the empirical studies based on the new knowledge gained from the employer interviews and the employee survey. The final framework acts as a guideline for employers and other stakeholders who wish to engage more BMEs in construction and to human resource management organisations to help address the phenomenon. The initial framework, depicted in figure 3.2 illustrates the overall understanding and purpose of the research.

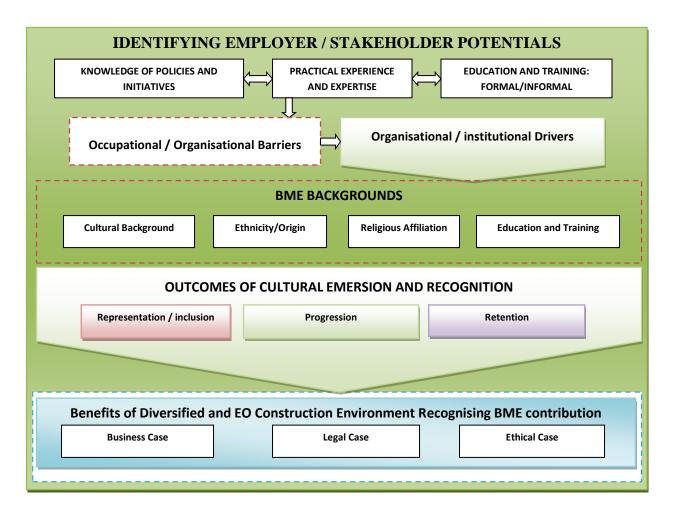


Figure 3.2: Conceptual Framework for the representation of BMEs on construction

This framework outlines the need for a proportional representation of BMEs in construction. It shows the influence of factors such as knowledge of policies and initiatives, experience, training benefits of diversity and so on. As the connecting arrows indicate, the factors are not mutually exclusive and therefore are interdependent. The factors influencing the contributions identified in the initial conceptual framework (figure 3.2) were investigated further with employer interviews and the employee survey for further confirmation. The framework also suggests that the contributions made by BMEs can bring benefits to the entire UK construction industry.

From figure 3.2, it can be noted that the initial conceptual framework was based on the main findings gathered from literature on the basis of which any specific contributions or benefits were identified when these issues were tested and elaborated upon using the empirical evidence (chapters 5 and 6). The interviews as explained in section 5.3 served the purpose of identifying the subtheme classifications under which factors influencing the contributions of BMEs and

benefits of diversity to the industry were explored. Accordingly, the final conceptual framework was refined using the knowledge obtained from the empirical studies based on the inductive approach. The refined conceptual framework developed following empirical studies has identified the classified factors influencing the benefits and need for diversity, the levels at which contributions can be made and those who will benefit from them. Accordingly, the proposed framework reveals these factors at different levels, with peculiar emphasis on the beneficiaries (see figure 7.1). The next section summarises the chapter and draws it to a close.

3.11 Chapter Summary and Conclusion

This study is underpinned by the theory that is based on how best the construction industry can better understand BMEs and their orientation and cultural practices to encourage their engagement through employment, progression and retention in the industry. The literature review at this stage has helped to explore the current state of the art of the level of BMEs involvement and their limitations in the industry. Also, it helped in identifying the research gap and in constructing the initial framework. This facilitated the unveiling of the barriers they face in order to help delineate the factors that will help drive their inclusion through a more robust investigation to aid proposals aimed at finding lasting solutions to resolve the problem. In effect, the nature of the problem warrants the used of mixed methods research through the use of interviews of employers in the industry and a questionnaires survey of employees whose views helped to contextualise the experiences that BMEs face in finding employment and staying on in construction; steps which are further expatiated on in chapter 3.

It has therefore been established that along with the working population in most countries who have become increasingly diverse, the UK construction industry must tackle the prospect of embracing the opportunity to enhance its creative and productive potential. The industry must appear attractive as a career option for potentially new entrants from underrepresented groups, in this case BMEs, in order to take advantage of the skills, talents and varied perspectives of a balanced workforce. The next chapter looks at the methodological process of the research.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

The literature review sections in chapters 2 and 3 have indicated the extent of the problem under study, which is the underrepresentation of BMEs in construction. The underlying factors have been noted as being initiated by human elements and their interactions. This chapter therefore describes the research design and methodology appropriate for exploring these aspects of the problem by first presenting the design and subsequently the philosophy, approach, methodology and techniques adopted. It presents the research paradigm continuum and emphasizes the relationship of specific research methods to specific paradigms, and especially for the mixed methods strategy and the two techniques of data collection, qualitative and quantitative methods used in this study. It finally considers issues bothering on validity and reliability and proposes triangulation as a commensurate remedy.

4.2 Research Design

This section covers the main research models that influenced the decisions that were taken to adopt the mixed method design as indicated in the introduction. It presents Crotty's (1998) four research design elements; the 'nested approach' (Kagioglou *et al.*, 2000) and the 'research onion' (Saunders, *et al.*, 2012)

The first model is Crotty's (1998) research design elements (Table 4.1) are based on four dimensions captured as epistemology, theoretical perspective, methodology and methods. According to him, the terminology used in research literature is confusing with epistemologies, theoretical perspectives, methodologies and methods "thrown together in a grab-bag style as if they were all comparable terms" (Crotty, 1998:3). He then prescribes that these terms represent distinct hierarchical levels of decision making within the research design process and so should be treated as such. Therefore, a researcher initially adopts a particular stance towards the nature of knowledge, which may be objectivism or subjectivism. This stance, which underscores the epistemology, underlies the entire research process and as a result determines the particular theoretical perspective adopted; be it positivism, post-positivism or interpretivism. The theoretical perspective, known to be implicit in the research questions, then prescribes the choice of methodology (e.g. survey, grounded theory, action research or ethnography). Finally, this

methodology or plan of action in turn informed the choice of research methods (e.g. questionnaires or interviews) applicable.

Creswell (2009), who bases his research process framework on Crotty's (1998) four research design elements, implies that these four decision making elements lead to a research approach which tends to be more quantitative, qualitative or mixed, primarily dependent on the researcher's initial stance towards the nature of knowledge. Table 4.1 outlines Crotty's research design elements with examples through the research process.

Table 4.1: Research design framework with examples based on Crotty (1998)

Epistemology	Theoretical perspective	Methodology	Methods or Techniques
Objectivism	Positivism Post-positivism	Experimental research Survey research etc.	Sampling, Measurement and scaling, Statistical analysis, Questionnaire, Focus group interview etc.
Constructionism	Interpretivism: - Symbolic interactionism - Phenomenology - Hermeneutics Critical inquiry, feminism	Ethnography ,Grounded theory Phenomenological research, Heuristic inquiry, Action research, Discourse analysis, Feminist standpoint research etc.	Qualitative interview, Observation: Participant and Nonparticipant, Case study, Life history, Narrative, Theme identification etc.
Subjectivism	Postmodernism Structuralism Post structuralism	Discourse theory, Archaeology Genealogy, Deconstruction etc.	Auto-ethnography, Semiotics Literary analysis Pastiche Intertextuality etc.

From the foregoing, it is evident that Crotty (1998) omits a fifth dimension 'ontology' from the research process. He however asserts that epistemology and ontology are mutually dependent concepts and therefore should not be separated in the research process: "to talk about the construction of meaning (epistemology) is to talk of the construction of a meaningful reality (ontology)" (Crotty, 1998:10).

The next model, which is also hierarchical, is the research methodology 'nesting' (Kagioglou *et al.*, 2000). Much like the research 'onion' (figure 4.1) but with fewer rings this 'nested approach' concept, has in its outer ring the research philosophy, which is said to guide and energize the inner research approaches and research techniques (Kagioglou *et al.*, 2000). Again, the essence of a guided process from a wider knowledge base narrowing down to specific data collection methods characterizes the research process. This model is significantly helpful in the understanding of the next research model.

The final model to be discussed, which technically prescribes a process that is also very similar to the two preceding ones, is the research 'onion' (Saunders *et al.*, 2012). This model presents the entire research process as an "onion" (figure 4.1), where the research process is considered as a journey to the centre by which the researcher goes through several stages as the layers mark important milestones for achieving the research aim ultimately. This research process is illustrated in figure 4.1.

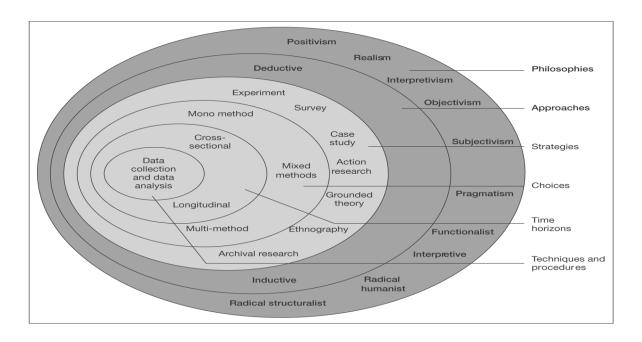


Figure 4.1: The Research 'Onion' (Source: Saunders et al., 2012)

The research onion shows how research is characterized by philosophy, which entails important assumptions about the views one holds of the world which assumptions underpin the research process from philosophies to techniques and procedures adopted for a study. Thus, it is important to evaluate such assumptions properly, as they determined the course of the research. In order to generate an appropriate alignment between objectives and the research methodology, a clear understanding of the constituent elements of the research methodological process, and their interaction, is essential. Therefore, based on the clarity it offers this research adopts the research 'onion' (Saunders *et al.*, 2012) to bring about this holistic and systemic approach. It encompasses the research philosophy on the outer ring through the research approach and strategies to the appropriate research techniques, which spell the end of the journey by achieving the aim. For this reason, the following sections describe the research paradigms continuum following which the

layers of research philosophy, approach, strategy and techniques/methods of the research onion (Saunders, 2012) will be addresses.

4.3 Research Paradigm Continuum

This section serves to define the paradigm continuum and the relationship of specific research methods to paradigms, especially for the two research techniques (interviews and questionnaires survey) used in this thesis. Popularized by Kuhn (1970), paradigm refers to a global view that guides decision-making, which encompass one's view of the nature of reality and of knowledge, its origins and foundations (Greene & Caracelli, 1997). Paradigms are primarily underpinned by their philosophical nature, and may be specified by their ontological, epistemological, and axiological tenets. For researchers, paradigms inform the research questions that are chosen in the process of data collection, analyses and interpretation. Logical positivism, post-positivism, and interpretivism are examples of paradigms, which may be considered on a continuum (see Figure 4.2).

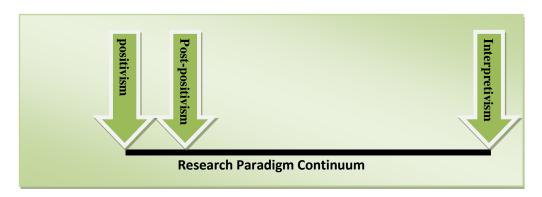


Figure 4.2: The Research Paradigm Continuum (adapted from Bertzner, 2008)

Anchored to one extreme end of the continuum is logical positivism, which was introduced by the French philosopher August Comte (see Yu, 2006). Logical positivism holds the view that truth is represented by measurable, naturally occurring phenomenon. In fact, logical positivism asserts that for phenomenon to exist, it must be measurable. It uses this as proof of existence, so if a phenomenon cannot be measured, then it does not exist (Potts, 1998). Moreover, logical positivism argues that all naturally occurring phenomenon can be broken down into measurable moments, which when considered together form the basis of existence of the whole phenomenon of interest in order to generated *truth* (Bertzner, 2008). Logical positivist researchers therefore, use deductive reasoning to generate theory from which specific hypotheses evolve and are tested.

Inferences from experiments are then used in constructing theory to generate laws governing nature (Yu, 2006; Benofske, 1995). The use of quantitative techniques is common, especially in the use of surveys in the field of diversity and equal opportunity in employment however, contemporary researchers universally agree that logical positivism consists of numerous irreconcilable fallacies (Oswald, 2003; Reichardt & Rallis, 1994a).

Next on the continuum is post-positivism which is a softening of the logical positivist position and asserts that truth may be discovered, and is best understood through objectivity, standardization, deductive reasoning, and control within the research process (Yu, 2006). Causality remains the prime objective of post-positivist research paradigm, and is established by research design, statistical hypothesis testing, and energetically assessing alternative possible explanations for findings (Bertzner, 2008). Post-positivist research is characterised by precision, generalizability, reliability and replicability, and experiments in the physical sciences are best suited to this where inferences from findings can be tested for internal and external validity, reliability, and objectivity.

The third and final research paradigm to be considered here, which is located on the opposite end of positivism is interpretivism. In its extreme form, interpretivism contends that reality is constructed and that no universal truth exists (Fellows & Liu, 2009). This implies the assertion of the existence of multiple truths based on a researchers' view of the world. Interpretive research thus illuminates researcher's views and experiences. Through such processes, truth is best understood by the closeness of the researcher to the participants in their natural settings and through critical subjective and inductive reasoning (Creswell, 2003; Smith & Heshusius, 1986). Interpretive approaches emphasize thick description, and utilize the researcher as the chief instrument in data collection and analysis (Van Manen, 1990; Bertzner, 2008). Interpretive research paradigm prioritizes the philosophical concepts of epistemology, ontology and axiology to underpin the exploration of their inquiry (Aouad, 2013). As a result, specific methodologies, e.g. phenomenology, pragmatism, social interactionism, ethnomethodology, ad infinitum, may be aligned to defined paradigms (Creswell, 1998; Bednarz, 1985). In this case also, validity may be assessed by the credibility, transferability, dependability, and confirmability of findings as noted by Lincoln & Guba (1985). Furthermore, Bertzner, (2008) and Britten, (1995) outline the strengths of interpretive research to include a strong understanding of context, rich detail and flexibility to address emerging issues and is very much recommended in exploratory studies where the 'how' and 'why' of phenomena can be uncovered.

As described above, paradigm refers to a worldview that guides decision-making. Greene (2007) viewed paradigms to be primarily philosophical; however, Bliss (2008) argued that paradigms include a researcher's practical experiences and subjective predispositions. Despite the difference, both authors agree that paradigms dictate a comprehensive worldview that guides decision-making. This then brings into focus the two terms quantitative and qualitative referring to objective and subjective views of decision making. Different researchers use the terms quantitative and qualitative in fundamentally different ways. Creswell, et al. (2002) and Lynch (1983) for instance, described quantitative data as including numbers, whereas qualitative data include words, symbols, pictures and other nonnumeric data. Thus, the review of research design in the Social Sciences (Johnson & Christensen, 2000) as well as research evaluation (Patton, 2008) is based on this basic understanding of the two terms. However, a third dimension comes into play, which is mixed method research design. In mixed methods research, the concepts of data type, methods and paradigms are merged using quantitative and qualitative research designs. For example, a closed-ended survey conducted under a post-positivist paradigm would be referred to as quantitative, while an interview conducted under an interpretive paradigm would be referred to as qualitative (Smith, 1997). This use of the terms quantitative and qualitative act as a rough proxy for the concept of paradigm (Bertzner, 2008). Greene (2007) alludes to the undefined way in which the terms quantitative and qualitative are used to reflect the broad nature of mental models which she described as "a set of assumptions, understandings, predispositions, and values and beliefs with which all social inquirers approach their work" (p. 12). The models are determined based on a wide range of factors including educational and professional experiences and personal beliefs and values.

Therefore, across (and within) disciplines there are varying views of what research is and how this relates to the kind of knowledge being developed. Paradigms guide how decisions are made for carrying out research. For instance, Guba (1990) cites the example of selection committees using a judgemental paradigm. Through a careful review of available literature in any field of study the paradigms commonly applied in the subject of inquiry are discernible through the methodology usually adopted and could serve as a guide for future studies. Also of interest are the methods, also known as techniques (Creswell, 2003). Methods are most commonly defined

simply as strategies for collecting data, such as interviews, surveys, participant observation, literature review, and so on (Collis & Hussey, 2009; Greene & Caracelli, 1997). It is therefore a combination of these factors that determine how research is positioned on the paradigm continuum (figure 4.2) the next section covers the philosophical underpinnings that guided the positioning of this study on the continuum based on the research onion (Saunders, *et al.* 2012).

4.4 Philosophical Assumptions and Beliefs Underpinning Research Practice

Research philosophy refers to epistemological, ontological and axiological assumptions and undertakings that guide an inquiry in a research study, implicitly or explicitly (Pathirage *et al.*, 2008). According to Easterby-Smith *et al* (2008) for the researcher to clarify and recognise the appropriate research design for a study a good understanding of research philosophy is essential. Saunders *et al.* (2012) identify epistemology, ontology and axiology as the three main components embodying the philosophy of research. Epistemology also referred to as the 'theory of knowledge' deal with what constitutes acceptable knowledge in a field of study (Saunders *et al.*, 2012; Collis & Hussey, 2009). It is about the nature of knowledge and how it is produced and underscores the relationship between the researcher and the subject. Ontology refers to assumptions about the nature of things, the nature of reality and axiology deals with value judgments (Saunders *et al.*, 2012). These three concepts are further explained in the ensuing paragraphs.

Epistemology can be shown as a stance on a continuum between positivism and inerpretivism (Saunders *et al.*, 2012; Collis & Hussey, 2009; Bertzner, 2008). The former is based on the view that scientific knowledge is the only valid form of knowledge (Burns, 2000). In this way, emphasis is placed on the role of discrete and distinct steps on the path to knowledge as the best way of discovery. The underlying basis for this philosophical stance assumes that the social world exists externally, and that objectivity should be the yardstick for measuring its properties rather than subjectivity, and that research can be undertaken, to a far extent, in a value-free manner (Saunders *et al.*, 2012). On the other hand, interpretivism as an epistemological stance recommends the need for the researcher to understand the distinction between humans in their role as social actors by stressing the difference between research among humans as social beings as distinct from that among inanimate objects (Saunders *et al.*, 2012).

The two ideologies are however closely related with their midpoint identified as pragmatism (Denzin & Lincoln, 2003) marked by the doctrines that the meaning of conceptions is to be sought in their practical bearings, that the function of thought is to guide action, and that truth is to be tested pre-eminently by the practical consequences of belief. This research studies the employability of BMEs in the construction sector. Here, it is important to assess how recruiting organizations respond to the issues involved in the recruitment, retention and progression of BMEs and how they adopt methods to improve their conditions. The nature of the research questions puts this study epistemologically in a middle position rendering it pragmatic as shown in figure 4.2.

Ontology, which deals with the nature of being, identifies a study as being socially constructed and only understood by examining the perceptions of the human actors, or external and objective to the researcher (Sexton, 2007; Collis and Hussey, 2009). As this research involves quantifying numbers with particular experiences and perceptions, both subjective and objective issues come into play for which reason it again takes a middle position of the two extremes on the ontology spectrum. Interviews and surveys, as a result, stood out as a justifiable strategy (Figure 4.3) for the study thus adopting a pragmatic research paradigm.

Again, Saunders *et al.* (2012) identify **axiology** as a branch of philosophy that studies judgments about values that assess the role played by a researcher. In this research, this was seen as quite influential and dominant as the participant's views affected the research techniques used and the way in which the results of the study were interpreted. It can, therefore, be said that the study is more value-laden as shown by the red dotted oval in Figure 4.3.

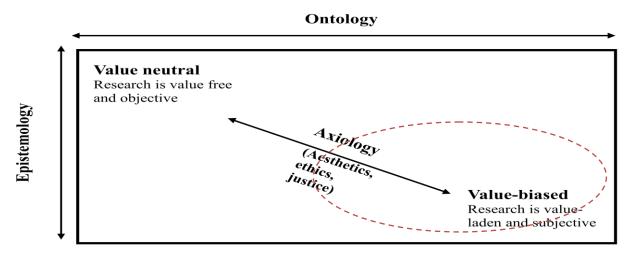


Figure 4.3: Philosophical stance of the research adopted from Sexton (2007)

The research paradigm and philosophical assumptions presented in section 4.3, figure 4.2 and in this section contributed to positioning this study on the philosophical continuum. As indicated, this research leans towards the interpretivist paradigm; the ontology i.e. nature of reality is realism, the epistemology i.e. knowledge acceptance is subjectivity and the axiology i.e. value judgment is value laden. Based on these therefore, the mixed methods design, otherwise called triangulation of strategies, methods and data was adopted. Creswell, (2009) identifies three types of mixed methods designs which may be fixed and/or emergent. Fixed mixed methods designs entail the use of quantitative and qualitative methods that are predetermined at the start of the research process whereas emergent mixed methods designs come about due to developments during the research process because one method is found to be inadequate (Morse & Niehaus, 2009; Bazeley, 2009; Teddlie & Tashakkori, 2009). As this study was fixed with respect to time and resources, the fixed mixed methods was deemed appropriate. The next section looks at the research approach.

4.5 Research Approach

Generally, research has two approaches which have been identified as deduction and induction i.e. theory testing and theory building (Anderson, 2009; Saunders *et al.*, 2012). The deductive approach to reasoning and theory development is where theories are developed and refined through a process of testing established generalizations. This is done by applying a process of logic to an entity thought to be true after which a theory is derived, and then tested out in an empirical way in different situations, conditions and contexts, on the basis of the evidence of which the theory can be provisionally confirmed, amended or discarded altogether (Gill &Johnson, 2010).

On the other hand, however, the inductive approach starts at the level of practice. Through a process of observation over a period, it is possible to establish some general propositions about the nature of what has been observed and in this way, a theory is generated. Thus, the process begins with a relatively clean sheet. Behaviour or facts are observed, and on the basis of this a generalization or theory about what is happening and the reason for this can be developed. Actually, a theory can, after it has been generated inductively, be further developed through empirical testing in a deductive way (Anderson, 2009). These processes are illustrated in figure 4.4 where both approaches are based on practical reality as researchers may either operate deductively by gathering data to see if existing theory is confirmed or by starting with a rather

clean sheet and gathering data in order to build theory to explain the evidence that have been gathered referred to as theory testing and theory building respectively. In any case, these two approaches could be combined in one study as with this one where the after the deduction process, induction was used to populate the revised conceptual framework.

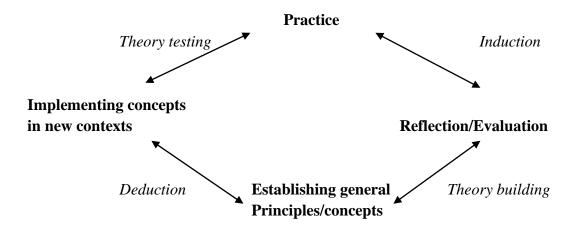


Figure 4.4: Deductive and Inductive Reasoning (Source: Anderson, 2009)

Predominantly, a choice has to be made as to the approach to be adopted (Saunders *et al.*, 2012; Robson, 2002) as indicated in figure 4.4. Characteristically the two approaches represent ends of a continuum rather than a hard-and-fast distinction. At an earlier stage in the definition of the research, theory helps with the design and subsequently the choice of approach to be employed (Saunders *et al.*, 2012). In this study, either the inductive or deductive approach could be used but the 'deductive approach' is more attractive in that there is plenty of literature indicating potential cause of BME employee underrepresentation which therefore made it possible to test out the extent to which these causes apply to these employees. But afterwards, as indicated earlier in the section, it was necessary to still use induction in reporting the findings from the empirical studies which then confirms the cyclical nature of some research processes. This is demonstrated in figure 4.5 as recognized by Robson (2002), Easterby-Smith *et al.* (2004), Saunders *et al.* (2007) in Anderson (2009).

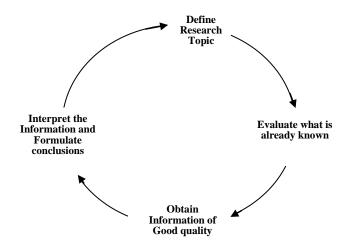


Figure 4.5: Components of the research process (Sources: Anderson, 2009)

As shown in figure 4.5, the process begins through a cycle with the definition of a research topic and evaluates what is known, obtains information of good quality and interprets the information to formulate conclusions. Thus, this study is predominantly confirmed as being deductive in nature.

Therefore, Creswell's (2009) identification of three research approaches; quantitative, qualitative and mixed methods; a classification which is also used by Saunders *et al.* (2012) to denote "research choice" helped to design the study. This research followed the mixed methods research process and therefore conflated methodologies; an approach called triangulation, which cuts across the qualitative-quantitative divide. In fact, according to Anderson, (2009) and Creswell, 2009, this approach permits the interaction and overlaps between the various approaches. The next section looks at the next layer of the 'onion', which is research strategy.

4.6 Research Strategy

There are various research strategies with distinctive characteristics available to a researcher. In business and management studies, the common ones include case study, experiment, survey, action research, grounded theory, cross sectional studies, longitudinal studies, ethnography, archival research and participative enquiry (Collis and Hussey, 2009; Saunders *et al.*, 2012; Easterby-Smith *et al.*, 2008). However, no single strategy can solve a particular research problem, hence a combination of these have been recommended in mixed methods application (Caracelli and Greene, 1993; Creswell *et al.*, 2003; Greene, 2007; Mertens, 2003; Morse and Niehaus, 2009; Teddlie and Tashakkori, 2009; Bazeley, 2009). This research adopted multiple

strategies through literature review and, semi-structured interviews and questionnaires survey for triangulation.

Research strategy provides the overall direction of the research including the process by which the research is conducted (Remenyi *et al.*, 2003). Furthermore, Saunders *et al.* (2012) mention that an appropriate research strategy has to be selected based on the research questions and objectives, the extent of existing knowledge on the subject area to be researched, the amount of time and resources available, and the philosophical underpinnings of the researcher. Yin (2003b), on the other hand, recommends three conditions for the selection of a particular strategy, which are the type of research questions, the extent of control an investigator has over actual behavioural events and the degree of focus on contemporary or historical events.

Also, the various research strategies largely overlap and so it is important to consider the one most suitable for a particular study, an idea both Yin (2003b) and Saunders *et al.* (2012) acknowledge. The strategies adopted in this study are briefly described in section 4.7 alongside the rationale for selection among the many available.

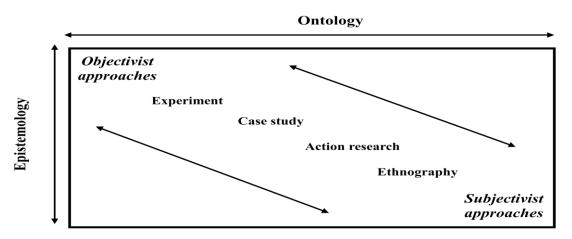


Figure 4.6: Summary of Research Position adapted from Sexton (2007)

4.7 Alternative Research Strategies

Although, there are several research strategies as outlined in figure 4.6 above which can be considered for use in this research, only a limited number were particularly applicable. A research strategy like experiment is not applicable to this study as the researcher does not have any control over the phenomenon being studied. This is because experimental studies attempt to manipulate independent variables to observe behaviour of the dependent variables (Collis and Hussey, 2009), a situation which is not applicable in this research.

In addition, ethnography requires the researcher to generate understandings of culture through representation of what is called an *emic* perspective, or what might be described as participant observation. The emphasis in this representation is thus on allowing critical categories and meanings to emerge from the ethnographic encounter rather than imposing these from existing models contrasted with an *etic* perspective which refers to a more distant, analytical orientation to experience. This immersion in a setting, becoming part of it in order to understand the phenomenon being studied (Easterby-Smith *et al.*, 2008) cannot be applied to this study as the researcher is outside of this context and therefore was seen to be inappropriate.

As a research method, Grounded theory emphasizes the generation of theory from data by operating almost in a reverse fashion from traditional research whereby it begins with data collection through a variety of methods (Glaser & Strauss, 1967; Allan, 2003). It seeks to develop a theory from the systematic examination of the phenomenon (Strauss & Corbin, 1990; Bryman, 2008) and as this research seeks to explore real-life phenomena through the use of existing knowledge, grounded theory is unsuitable for the study.

Action research, also known by many other names, including emancipatory research, action learning, and contextual action research, entails 'learning by doing' where a group of people identify a problem and do something to resolve it (O'Brien, 1998). It aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously (Gilmore *et al.*, 1986). Thus, there is a dual commitment in action research to study a system and concurrently to collaborate with members of the system in changing it usually in a desirable direction. This process requires the active collaboration of researcher and client, and therefore stresses the importance of co-learning as a primary aspect of the research process. So, it is apparent that it cannot be used because it is applied in real situations, rather than in contrived, experimental studies, a primary aim of solving real problems.

Also, it is often the case that those who apply action research are social change activists trying to mount an action campaign, or, more likely, academics who have been invited into an organization or any other domain by decision-makers aware of a problem requiring action research for solutions, (Sarantakos 2005). It is collaborative (Smith 2007) and involves dialogues, participatory decision-making, inclusive and democratic participation and the maximum participation and representation of all relevant parties (Vidich & Lyman 2000).

In spite of all these characteristically befitting attributes of action research to this study it was also considered not feasible because of the structure and the stratification as well as the multitudinal nature of employment in the construction industry vis-à-vis the engagement of BMEs in the industry at present. In like manner, the case study and other research strategies were considered and rejected. The issue of anonymity and trust was also critical for the respondents and so their individual participation was thought to be fundamental to the study as employees would not be comfortable to give information about employment in a setting that involved more than themselves. Finally, replicability issues were extensively considered and it was realised that the interference of the researcher in this process would make it difficult if not impossible to achieve this. Therefore, this research inclines towards interpretivism and undertakes a deductive approach and so took on an initial literature review. The 'survey strategy' which is usually associated with the deductive approach (Saunders *et al.*, 2012), and positivist philosophy (Collis and Hussey, 2009) was also considered. Therefore, the study adopted a mixed methods choice (Saunders *et al.*, 2012) and so used questionnaires survey mainly for the purpose of triangulating the qualitative study based on interviews. The next layer called research 'choice' follows.

4.8 Research Choice

The next layer of the research onion to be considered is *Choice* (Saunders *et al.*, 2012) a perspective, which is unique to them. Creswell (2009) identified three research approaches; quantitative, qualitative and mixed methods; a classification, which is also used by Saunders *et al.* (2012) to denote "research choice". In any study, choices have to be made in the research process, which Saunders *et al.* classify into mono method, mixed method and multi method. In other word, a researcher can adopt a single method (mono method), mix two methods (mixed method) or several methods (multi method) method for a study from various methods of research available. Predominantly, a choice has to be made as to the approach to be adopted (Saunders *et al.*, 2012; Robson, 2002). At an earlier stage in the definition of the research, theory helps with the design and subsequently the choice of approach to be employed (Saunders *et al.*, 2012).In mixed method, the researcher adopts generally two methods such as qualitative or quantitative research methods. In this study of the underrepresentation of BMEs the researcher adopted mixed methods as choice.

4.9 Time Horizons

Saunders *et al.* (2012) also captured Time Horizons as a milestone in their onion. Here the time limit for the completion of a research study is explained. There are two types of time horizons: cross sectional or longitudinal. A time limit is usually fixed for the completion of any task or activity and is influenced by several factors. In a cross sectional study, the time is predetermined for data collection, data analysis, and other completion of the research whereas a longitudinal study is not constrained by a fixed deadline although milestones may be set for stages in the process. Behavioural studies usually conducted in longitudinal methods, as it needs longer time for observation. Studies of particular phenomena in specific space and time are usually cross sectional while those investigating to initiate change and development e.g. action research are longitudinal (Saunders *et al.*, 2012). In this study for a PhD, the time horizon adopted had to be cross-sectional and had to be completed within a specified timeframe like any academic exercise.

4.10 Research Techniques

Research Techniques, also called research methods, are said to involve specific instruments, such as self completion questionnaire, structured/semi structured interviews and the like and are described as 'techniques' for data collection (Bryman, 2008). This study uses semi-structured interview techniques for data collection and has been applied in construction companies in the North West and London and The South East Regions of England. This strategy is adopted in order to establish the source of the problems. This is because according to the literature review, these problems exist on different magnitudes in either of the two locations being studied (Ahmed et al., 2008; CCI, 2008; Byrne et al., 2005; CEMS, 1999). As an empirical inquiry that investigates contemporary phenomena in real-life contexts which can also be historical as put forward by Eisenhardt & Graebner (2007) it is seen as suitable to use interviews to collect qualitative data for analysis. Additionally, (Collis and Hussey, 2009; Yin, 2003b) describe a variety of methods that is used to explore a single phenomenon in a natural setting in order to obtain in-depth knowledge thus ascribing the use of mixed methods for a study by encompassing both qualitative and quantitative research data. Thus permitting the possibility of merging research techniques in one study in order to help to obtain in-depth knowledge with regard to a particular phenomenon, which in effect allows the approaches to be triangulated for validity, reliability and robustness.

Furthermore, documents, archival records, direct observation, participant-observation, and physical artefacts have been identified as some of the available methods for data collection (Yin 2003b). It has been observed that limiting a study to a single source of evidence may impinge on its validity and reliability as well and that it also can encompass various quantitative data collection techniques which improved robustness. Therefore, a multi-method design was used, consisting of a combination of qualitative and quantitative methods of research referred to in literature as triangulation. Triangulation gives researchers a clearer view on all the aspects of the phenomenon that is being investigated.

Literature was extensively reviewed in order to identify the underlying research problem in its true context and nature after which 22 semi-structured interviews were conducted. The interviewees' selection (detailed in sections 5.2.1; 5.2.4) was based on the use of purposive sampling which was later supported by snowball sampling during the recruitment process as respondents were difficult to access. Hitherto the main interviews, 2 pilot studies had been carried out in either location aimed at getting the fundamental themes in order to find professional answers to the questions raised. Although the interviewer in this technique had some established general topics for investigation, this method allowed for the exploration of emergent themes and ideas (Bertzner, 2008) rather than relying solely on concepts and questions defined in advance of the interview. Semi-structured interviews are conducted on the basis of a loose structure consisting of open ended questions that define the area to be explored, at least initially, and from which the interviewer or interviewee may diverge in order to pursue an idea in more detail (Britten, 1995). Semi-structured interviews were used because they permit further exploration of emergent themes and ideas rather than solely relying on the initial concepts and questions that were defined before the interview.

Interviews are known to give way to bias, a common limitation that has been well acknowledged though this can be checked if techniques are properly used and monitored (Bryman, 2008; Burke & Miller, 2001; Yin, 1993). To counter this problem a third data collection method, which is questionnaires survey, was also used aimed at adding rigour and substance to the data collected from the interview as well as to eliminate any bias that the interview technique might bring about. 200 and 400 questionnaires aimed at both employers and employees respectively had equally been distributed in the two locations under study, but as the response rate was very discouraging, the whole process was discarded and reviewed with the questionnaires restructured further still

even after the pilot process. It therefore became necessary to restart the whole process on a clean sheet, this time monitoring closely in order to increase the response rate. At this point, the questionnaires survey was restricted solely to employees and those in similar roles.

As a result, the 'snowball sampling technique' was used this time. Snowball sampling, also referred to as chain referral sampling, chain sampling or referral sampling (Goodman, 1961; Leming, 1997; Von Hippel et al., 1999; Heckathorn, 2002; Salganik & Heckathorn, 2004; Castillo, 2009) is a non-probability sampling technique that is used by researchers to identify potential subjects in studies where the subjects are difficult or otherwise impossible to access as 'birds of a feather flock together'. This sampling method, which works in the form of chain referral, is normally used if the sample for the study is very rare or is limited to a very small subgroup of the population. After observing the initial subjects, the researcher asks for help in recruiting respondents with similar traits who may fit the sample frame (Castillo, 2009). The process is much like asking your subjects to nominate another person with the same trait as your next subject who is then observed by the researcher, assessed as fitting the sample and then selected for the study. The exercise continues in similar manner until sufficient number of subjects have been obtained. Thus, the sample group grows like a rolling snowball and as the sample builds up, enough data is gathered to be use for the research. This sampling technique is usually used in hidden populations, which are difficult for researchers to access like drug users, sex workers, ex convicts and the like. However, in this study it can be said that though the sample does not fit the description of a hidden population, due to the legal implications of the subject of study, an issue raised by many a respondent, it was seen as the only possible means of recruitment as other forms of inducement could not be used. As sample members may not be selected from a sample frame, snowball samples are subject to numerous biases, as respondents with a wider network are more likely to be recruited into the sample although it is also possible to use the process to recruit from a particular sample frame.

In fact, it was widely believed that it was impossible to make unbiased estimates from snowball samples, however, a variation called respondent-driven sampling has been shown to allow researchers to make unbiased estimates from snowball samples under certain conditions (Leming, 1997) thus rendering valid and reliable results. Having considered the various stages of the research onion (Saunders *et al.*, 2012), the next sections are devoted to triangulating the methodology for reliability and validity and the methodological process of the study.

4.11 Triangulation

Triangulation results from the application of different methods of data collection strategies for qualitative research. As these strategies may suffer from some common methodological shortcomings, their distinct characteristics may also result in individual strengths which compensate for valid and reliable results. According to Brewer and Hunter (1989), the concerted use of different methods compensates for their individual limitations and exploits their respective benefits. It has also been noted that the use of supporting data may possibly be obtained from documents to provide a background to, as well as, help to explain the attitudes and behaviour of participants and to verify particular details that have been supplied by them. Also, any opportunities to examine any documents referred to by informants during the actual interviews should not be missed especially where these can shed more light on the behaviour of the subjects under scrutiny (Shenton, 2004).

Triangulation may also involve the use of a wide range of informants through varied data sources. By this, it is implied that individual viewpoints and experiences can be verified against others and, ultimately, a rich picture of the attitudes, needs or behaviour of those being studies may be constructed based on varied contributions as confirmed by Van Maanen (1984) who urges the exploitation of opportunities "to check out bits of information across informants". Such corroboration, may, for example, take the form of comparing the needs and information-seeking action described by one individual with those of others in a comparable position. The purpose of such corroboration does not serve to confirm the accuracy of people's perceptions or true reflections of a situation but rather to ensure that the research findings rightly reflect people's perceptions irrespective of what they may be. Therefore, corroboration helps to convince researchers that their findings will be seen as credible (Stainback & Stainback, 1988).

In the same way as employing data sources can involve the use of a diversity of informants for triangulation, a range of documents may also be used as source material for instance those relating to the study but are produced externally. Also, should it suit the purpose, site triangulation may be achieved by the involvement of informants from several different institutions for a single study in order that the effects of particular local factors peculiar to one organisation on the study can be minimised. If similar results emerge at different sites, findings will have greater credibility and thus pass the validity and reliability test.

And finally, sampling a range of people in different organisations can be used to provide the diversity that underpins Dervin's (1983) concept of "circling reality", which is seen as the necessity of obtaining a variety of perspectives in order to get a better, more stable view of 'reality' based on a wide spectrum of observations from a wide base of points in time-space. This study satisfies this criterion by relying on different respondents from different construction organisations who were snowball sampled. This is made possible by the process of subcontracting now very prevalent on construction sites. As many different employees of different companies converge to execute a project, the opportunity to make contacts is enhanced, thus making it possible and allowing the opportunity of discrimination in selection based on the researcher's criterion considering the size of the sample frame.

4.12 The Methodological Process of the Study

This section seeks to outline the process through which the methodology for the study has been undertaken to address the research questions. Methodology refers to an overarching research strategy or design, a plan of action, a process that can be used to attempt an understanding of the world. It can simply be said to be a means of providing the basis to make stepwise and informed decisions about how research should be conducted. Remenyi *et al.* (2003) describe methodology as the "overall approach to a problem which could be put into practice in a research process, from the theoretical underpinning to the collection and analysis of data". Collis and Hussey (2009) also summarized the forgoing definition as the "overall approach to the entire process of the research study" giving it as the definition of research methodology. There is a difference between methodology and methods. A methodology can be quantitative (tends to be oriented by objective epistemology) or qualitative (tends to be oriented by constructionist epistemology) while methods encompass the techniques or tools for data collection e.g. questionnaires and interviews.

There are mainly three recognised *choices* for conducting research: quantitative, qualitative and mixed methods research encourages researchers to use multiple approaches to collecting and analysing data within a single study, recognising the limitations of using a single method. Despite this, a number of controversial issues and debates such as the paradigm-method fit issue and the "best" paradigm issue have limited the widespread acceptance of mixed methods research. Nonetheless, it is the researcher's task to examine the specific contingencies and make the decision about which research approach, or which combination of approaches, should be used in a specific study (Migiro and Magangi 2011).

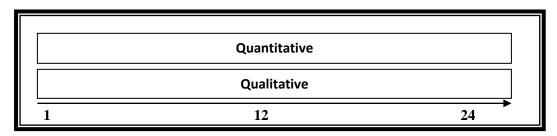
Several authors, (e.g. Creswell 2009; Easterby-Smith 2004; Trochim, 2006) describe the process or the research journey by a researcher to resolve a research problem as the methodology which can include the researcher's theoretical position. Many methodological paths, e.g. survey research, ethnography, experiments, grounded theory, action research can be undertaken (Crotty, 1998), by a researcher depending on the kind of research to answer the research questions. Other authors (e.g. Sarantakos, 2005) classify these theoretical principles basically into qualitative and quantitative methodologies.

Research can also be said to be causal, comparative, exploratory, explanatory, descriptive, theory-testing, theory building, action research and so on (Anderson, 2009; Sarantakos, 2005). Considering the respective strengths and weaknesses of these strategies (Collis and Hussey, 2009, Saunders *et al.*, 2012) as given in section 4.8 above, this research takes a mixed methods approach and mixed strategies in a process of triangulation. As a result and basing the argument on the advice of O'Brien (1998), the comparative, exploratory, explanatory, theory-testing, theory building, methodological paths have been adopted to help arrive at more robust conclusions. This direction, it was believed, would go beyond the limits of descriptive research in the analysis and help to establish why the problems persist.

Therefore, the research approach adopted involves the use of mixed methods, which encompass the use of both quantitative and qualitative data collection techniques. The former would give an idea of the numerical strength of the views and experiences of respondents on the issues being studied while the later would adopt the semi-structured interviews in order to delve deeper into the themes that run through the issues raised especially as have been revealed through the review of literature. The parallel research approach where the techniques are used side-by-side (figure 4.7) is adopted. This contrasts with the sequential research approach where quantitative and qualitative methods are used one after the other (figure 4.6) which is usually applied in longitudinal studies (WBI, 2007). Again, this decision was influenced by time and resource constraints.



Figure 4.7: Sequential Research Approach (Source: World Bank Institute, 2007)



Months

Figure 4.8: Parallel Research Approach (Source: World Bank Institute, 2007)

Hence, data was collected qualitatively for the pilot study and the main study using semi structured interviews from construction employers (project/site managers and supervisors). Of the 22 interviews 7 were conducted in the North West of England while the remaining 15 were conducted in London and the South East. Additionally, 75 questionnaires were received back from respondents which covers the quantitative part of the survey research prior to which a further 2 questionnaires had been piloted in either location. Here also, 28 and 47 questionnaires were received from the North West and London and the South East respectively. In all 200 questionnaires had been distributed equally in both locations. Prior to all these steps, 2 unstructured interviews in each region had been organised from which notes were taken to feed into the design of both the semi structured interview questions and the questionnaires for the survey.

The sources of data collected are shown in table 4.2 under the sub headings: 'literature review', 'semi structured interviews' and 'questionnaires' which justify the triangulation strategy adopted, a method generally called mixed methods which is further expounded on in the next section under research techniques. Table 4.2 shows how the research objectives were achieved in relation to data source. For example, it shows that research objectives 1, 4 and 5 which deal with BME perception of the construction professions and their involvement and engagement and the

barriers and difficulties they face in the industry are considered respectively both nationally and internationally through the review of relevant literature while objectives 2 through to 5 addressing the identity and perceptions of BMEs, initiatives addressing their employment, retention and progression barrier are investigated using the semi structured interviews and the questionnaires tools.

Table 4.2: Data Sources for achieving Research Objectives

Research Objectives	Source of Information/Data Collection Method				
	Literature Review	Questionnaires	Semi-Structured Interviews		
Research Objective 1	$\sqrt{}$				
Research Objective 2					
Research Objective 3					
Research Objective 4					
Research Objective 5					

It can be observed that some of the tools for data collection overlap in helping to address the issues being investigated. This implies that some of the information collected, in fact, confirmed what had already been collected and thus increased the robustness of the results as well as the validity and reliability of the information gathered.

Also, of interest, is the breakdown of how this information was collected which is given in a tabular format below. In table 4.2 the criteria for selecting interviewees and the mode and focus of the interviews are shown and are further considered at length in chapter 5.

Table 4.3: Breakdown of Interview questions on general content and themes

Interviews	London and South East England	North West England			
Number of	26 interviews in total: (4 unstructured pilot interviews, 22 main interviews)				
Respondents	15 Employers and Supervisors	7 Employers and Supervisors			
Selection	Construction and related industry employers: Project Managers, site				
Criteria	managers, Site Supervisors etc.				
Mode	Semi structured interviews				
Interview	Demographic information and background of respondents.				
Themes	Perception of ethnicity and BME background and their characteristics				
	leading to stereotyping in the industry.				
	Discrimination and different forms of it and how it impacts on employment				
	in the industry				
	Roles and significance of migrant workers in respect of filling the ageing gap				
	and their general contribution.				
	Characteristics of BMEs, ethnicity, race, religion and language and their				
	attraction to specific industries as a distraction from construction skills and				
	employment.				
	Recruitment processes and the characteristics of the potential employee.				
	Underrepresentation and relationship with barriers and obstacles BMEs face.				
	Experiences of employers and BMEs encounters and the effect of legislation				
	Legislation and implication for the players in construction.				
	Strategies to enhance inclusion				

4.13 Validity and Reliability

The issue of validity and reliability has been raised in the preceding Section 4.10. A study is said to be valid and reliable if the findings from it can be applied in comparable situations to yield similar results; a process which has been said to be concerned with the integrity of the conclusions that are generated from the research (Bryman 2008). For instance, Guba and Lincoln in Trochim (2006) proposed four criteria for judging the soundness of qualitative research and explicitly offered these as an alternative to more traditional quantitatively-oriented criteria. The four criteria which are Credibility, transferability, dependability and confirmability are thought to better reflect the underlying assumptions involved in much qualitative research.

Again, this research, as has already been noted above has some reliability and validity issues to resolve. Although reliability is a concept used for testing or evaluating quantitative research, it is an issue for debate in qualitative research as well (Golafshani, 2003) and corresponds to Guba and Lincoln's (1985) dependability criteria which according to them is about the quality of the findings without which it will be difficult for any inquirer to convince his audience that his

findings are worthwhile. Basing the argument on the accuracy of the research technique in the data collection process, Cano (2005) justifies reliability while Golafshani, (2003) tries to ensure reliability in qualitative research through the examination of trustworthiness.

Therefore, basing the validity argument on the criteria proposed by Guba and Lincoln's (1985) validity corresponds to credibility and transferability which they assign to internal and external validity respectively. External validity is concerned with the extent to which the findings of one study can be applied to other situations (Merriam, 1998) whiles the positivist researchers criteria defining internal validity ensure that a study measures or tests what is actually intended (ibid). Merriam further posit that the qualitative investigator's equivalent concept, i.e. credibility, deals with the question, "How congruent are the findings with reality?" Validity is said to be a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects and rather not a fixed or universal concept (Winter 2000). Trochim (2006) raises two more dimensions; objectivity and confirmability which further strengthen the debate on the validly of a study, a view Cano (2005)also holds by asking if the methods used in a study are appropriate for the research questions and objective and thus measures and explains what it originally sets out to measure. The next section covers the ethical concerns and approval process for the research.

4.14 Codes and Policies for Research Ethics

Given the importance of ethics for the conduct of research, bodies adopt specific codes, rules, and policies relating to research. As Salford University takes this seriously, it is a requirement that before staff and students can embark on any study of a research nature an ethical approval has to be obtained. This is to help address the ethical principles that various codes address and these include although not limited to Honesty, Objectivity, Integrity, Carefulness, Openness, Respect for Intellectual Property, Confidentiality, Responsible Publication, Non-Discrimination, Legal framework among others (Shamoo and Resnik, 2009).

Accordingly, all participants had to sign a consent form before their involvement in this research. Respondents were informed that they would remain anonymous and all information provided would be kept confidential. The consent form further sought the approval of the respondents to allow the use of all information gathered for the sole purpose of this research. To this effect, data

protection issues were addressed and covered the security, personal data, storage of data and final deletion of stored data which were assured to be dealt with in the manner outlined below:

- Security of data- All forms of data will be sorted, encrypted and stored on a password
 protected computer to be accessed only by the research team. This computer is protected by
 the University of Salford Firewall and Malware.
- Personal data No identifying personal information will be collected and any direct quotations will be kept anonymous.
- Storage of data Hard copy data will be stored in a locked cabinet only to be accessible solely to the research team. Digital data, such as interview recordings, will be deleted following transcription and when triangulation is completed.
- Data deletion all data will be deleted by the researcher six months after the publication of the PhD.

Based on the foregoing, the University's Research Ethical Committee granted the approved, an extract of which is attached as appendix D with reference number REP10/088. These concerns were therefore taken seriously and respondents' rights were rigorously guarded in the process and beyond in strict conformity with the terms and conditions of the ethical code of conduct based on the approval granted. The next section summarises and concludes the chapter.

4.15 Chapter Summary and Conclusion

This chapter has presented the research design and methodology adopted in this study through a hierarchical review of research methodologies by giving and explaining the research philosophy, approach and techniques of data collection. Based on a mixed methods study, the author has decided to choose appropriate approaches and techniques from both positivist and interpretivist paradigms and the triangulation of different methods is adopted for robustness of the findings. In this way, the chapter accorded the author the opportunity to present useful information about the course of this research in order to set a springboard from which this study was to proceed. The development and actual execution of this research are given in detail in subsequent chapters. This is done through a discussion of excerpts from the semi-structured interviews (chapter5) and questionnaires data analyses (chapter 6) to steadily progress to the research findings in order to answer the research questions as given earlier in chapter 1. This way, the objectives and ultimate aim of the study were achieved.

The discussion in Chapters 2 ande3 charted the course of general Human Resource Management and BME underrepresentation with respect to the development of diversity and equal opportunity policies through legislative provisions and accompanying political debates and further considered progress that has been made through those processes. However, in seeking to explore current equal opportunity policies and practices in construction, the findings in Chapter 3 showed that, taken together with available statistical data, there are existing researches, which support the theoretical arguments put forward in Chapter 1 in stating the research problem of the underrepresentation. This helped to establish the design of the methodology of the study and informed the selection of Qualitative and Quantitative methods in Chapters 5 and 6 respectively by allowing qualitative accounts to flesh-out descriptions provided by employers to be further tested through a questionnaires survey. The next chapter looks at the quantitative data collection and analysis.

CHAPTER 5

QUALITATIVE DATA ANALYSIS

5.1 Introduction

The previous chapter has discussed the methodological process adopted in this study and to proceed, this chapter presents the first part of the empirical study with the findings. It reports a systematic follow up of the study from the data collection to the findings of the field investigation and analysis. Here, the suitability of the methodological process for this research as mentioned in chapter 3 is reported and put to test and the interview questions are reviewed so that the emergent themes can be noted and assessed in order to delineate any resultant patterns of interest. Primarily, the chapter will consider the main technique of data collection i.e. semi structured interviews. It will also address the propositions to guide the process of answering the research questions to address the objectives.

5.2 Qualitative Data: Interviews

This section covers the process of the interviews for empirical data collection and all the possible considerations that are connected with it. It further discusses the formulation of the purpose and plan of the design of the study recognising the stages of the interviewing process (Kvale, 1996). Here, the sample set is described along with the mode of selection and justification. Because of the lack of standard techniques or rules for qualitative research interviews (Kvale 1996) advance preparation and the expertise of the interviewer are seen to be very crucial in the process. There are, however, standard choices of techniques to be adopted at the different stages of an interview investigation process.

Semi-structured interviews were employed to allow the capture of the qualitative essence of the UK construction industry perception primarily through open-ended questions. Open ended questions typically do not permit predetermined answers and therefore findings may result from a variety of different answers to the same question. In this case, content analysis is considered suitable to reduce answers to 'manageable' and 'meaningful' categories (Gilham, 2000). This research, employed content analysis for analysing the responses qualitatively.

5.2.1 The Sample Set

Interviews from UK construction employers and other stakeholders responsible for employees were analysed. The sample set covered a wide range of the UK construction industry

stakeholders comprising contractors, developers, consulting firms and others. The sample set was selected from construction companies in the North West Region and London and the South East Region of England. The main basis for the selection was that participants must be in employment in construction in roles involving employee selection or supervision and control or in any processes leading to recommendation for selection. This meant that they would have knowledge of the process of recruitment and selection and the policies and procedures entailed here. It did not matter if they had worked with BMEs before or not. This is also as a means of assessing the general views of those who have and have not dealt with BMEs before. The aim is to introduce the employment of BMEs, encourage the practice and assess the general perception across managers of different ethnicities in the two localities under consideration.

5.2.2 Pre-Test and Pilot interviews

The pilot study covered two respondents from each of the study locations totalling four at this preliminary stage. These respondents were chosen randomly, although purposively based on the criteria for selection (section 5.2.1). At this stage, questions on the details of the companies and the positions held were asked but as respondents refused to answer them including basic information of any BMEs employed, it was decided that such questions be dropped. At this point it was not necessary to use companies with BME profiles as any of these companies, whether they had BME employees or not on their staff list would help the course of this exercise. This decision was reached because each one of them was a potential employer for the inclusion of ethnic minorities.

Two interviewees from construction companies in either location were seen as potentially capable of providing significant insight into the contextual nature of the study. Furthermore, it is worth noting that this selection was kept very informal using unstructured interviews at this early stage as this could help to give more insight into the themes, wording and outline to provide input into the development and design of the main interviews with the draft serving as its basis. The next section therefore covers the main interviews.

5.2.3 Main Interviews

Following the pilot interviews the main interviews were expected to be successful, producing interesting results. This is because the pilot phase, it was believed, had helped to produce the much needed background information. It had also been made abundantly clear that the interview

technique was the right tool to be used. This was because had they been questionnaire, the respondents could have ticked any answers, avoided certain questions or even decided not to fill them in altogether, or even still enter any information however irrelevant to the question; as in fact happened at the earlier stage in the quantitative data collection. Therefore it was possible during the 22 interviews (appendix B) organised, based on the improvements from the pilot interviews, to gather very rich qualitative data the focus of which is set out in the list below. The data collected covered the following areas, which served as the propositions to be tested in this part of the study using qualitative semi-structured interviews. They were based on two main factors in direction relation to the way the data was collected and analysed as the Nvivo analysis (section 5.3) shows:

- The push factor or barriers, i.e. general perception of discrimination as it relates to ethnicity and race and its specific implications for industry through, for example, racial jokes and banter.
- The consequences of a diminishing workforce in construction due to the very high age profile of the main employees, irrespective of the current economic climate which has marred the situation.
- The economic significance of the migrant worker who forms the underlying fabric of the BME community.
- The pull factors or drivers i.e. the attraction from other industries, and how this impacts on the representation of BMEs.
- The employment process and expectations from the potential employee and the role of the factors advancing or limiting the representation of BMEs.
- Strategies for employment, experiences of employers, BME encounters and legislation as factors that help or inhibit the inclusion, progression and retention of BMEs.
- And above all any other factors that enhance the process to be improved and those hindering it to be reviewed and addressed.

Semi-structured interviews technique was noted to be best suited for this kind of study using content analysis tools like Nvivo for the analysis and it is exactly what was applied in this research.

5.2.4 Profile of Interviewees

The respondents were chosen base on purposive sampling (chapter 4). Purposive sampling helps to focus on particular characteristics of a population that are of interest, which best enables

answering the research questions. The type used here is homogeneous sampling as the units selection was based on the similarity of their characteristics which is of particular interest in this study. The choice of the 22 professionals interviewed (Table 5.1) was based on the criteria of the expert opinions they held in the field of construction employment and recruitment in order to aid the understanding of the nature of the problem of BME underrepresentation.

Table 5.1: Profile of Interviewees

Location	Location: London and the South East Region						
RT#	Position	Age	Sex	Religion	Ethnicity	Education	Profession
RT 2	Site Manager	25-30	M	Atheist	White British	Dip	Mech. Engineering
RT 3	Site Supervisor.	Over50	M	Muslim	Black African	Sch. Cert.	Plasterer
RT 4	Project Manager	below25	F	Not disc.	Asian Brit.	Degree	Project. Management
RT 5	Site Manager	25-30	F	Not disclose	Black African	Diploma	Project. Management
RT 6	Site Manager	41-50	M	Christian	Black African	Diploma	B. Tech.
RT 9	Project Manager	Below25	F	Muslim	Bangladeshi	Degree	Management
RT 10	Site Supervisor.	31-40	F	Muslim	Pakistani	Diploma	B. Tech.
RT 11	Company Manager	41-50	M	Hindi	Asian	Degree	Project. Management
RT 13	Site Manager	31-40	M	Christian	Black African	Degree	Estate Mgt
RT 16	Supervisor	31-40	M	Christian	Black Caribbean	Diploma	B. Tech.
RT 17	Site Supervisor	41-50	M	Christian	Black Caribbean	Diploma	B. Tech.
RT 18	Project Manager	41-50	M	Christian	White Polish	Diploma	Building Services
RT 19	Manager	41-50	M	Christian	White Polish	Diploma	Elec. Eng.
RT 21	Manager	41-50	M	Hindu	Indian	Degree	Elec. Eng.
RT 22	Deputy Director	41-	M	Atheist	White British	Diploma	Process Eng
Location	n: The North West						
RT 1	Head of Dept.	31-40	M	Agnostic	White Irish	Postgraduate.	Planning
RT 7	Site Supervisor	Below25	F	Atheist	White British	Degree	Q. Surveying
RT 8	Project Manager	25-30	M	Atheist	White British	Degree	Project. Management
RT 12	Project Manager	25-30	M	Muslim	Pakistani	Degree	PMI
RT 14	Site Supervisor	31-40	M	Agnostic	White British	Diploma	Q. Surveying
RT 15	Project Manager	25-30	M	Christian	White Scot.	Degree	Planning
RT 20	Project Manager	Below25	M	Agnostic	White British	Degree	Project. Management

As can be seen from table 5.1, none of the respondents was directly recruited from HR departments. This results from the nature of construction projects (as noted in section 2.4.2c), which are often physically located well away from head office where HR departments are based, thus empowering line mangers to act with even more autonomy than their colleagues in other industries. Therefore, HRM departments act in an advisory capacity to line management who retain control of the staff within their work group, project or department drawing on specialist advice when required (Mullins, 1999).

For the sake of anonymity and confidentiality, as shown in table 5.1, the study adopted the use of representative descriptors to refer to the respondents. For this reason, they are referred to as Respondent 1 (RT1) to Respondent 22 (RT22) and as divided into two groups based on the two regions studied. All respondents were given the same weighting as each had to answer the same set of questions and also because it is assumed that they all have the same level of influence in

either directly employing or recommending employees for employment, and especially, employees from BME backgrounds.

5.3 The Use of Nvivo 8/9 in the Process of Analysis

As indicated in chapter 4, this study, to a large extent, used snowball sampling to recruit respondents for the data collected. Therefore the issue of validity and reliability was crucial and particular attention had to be paid to this. As a result, in the interview process, member checking was done on the interviews and the respondents verified the accuracy of the transcript through a hand written transcript in shorthand soon after each interview. Member checking is when data, analytic categories, interpretations and conclusions are tested with members of those groups from whom the data were originally obtained. This can be done both formally and informally as opportunities for member checks may arise during the normal course of observation and conversation. Typically, member checking is viewed as a technique for establishing the validity of an account. Lincoln and Guba (1985) posit that this is the most crucial technique for establishing credibility.

For the analysis, content analysis was done using the computer programme Nvivo 8 to code the themes from the interviews into nodes. Themes already substantiated were hierarchically coded under tree nodes while those that arose in the process were put into free nodes to be later rehoused into tree nodes or discarded depending on their significance level. The hierarchical structure of the tree nodes meant that broad themes were broken down into sub themes which if organised properly could be mapped into a tree structure showing the relationships and the links between them. Figure 5.1 shows a snapshot of what the structure for this research looks like.

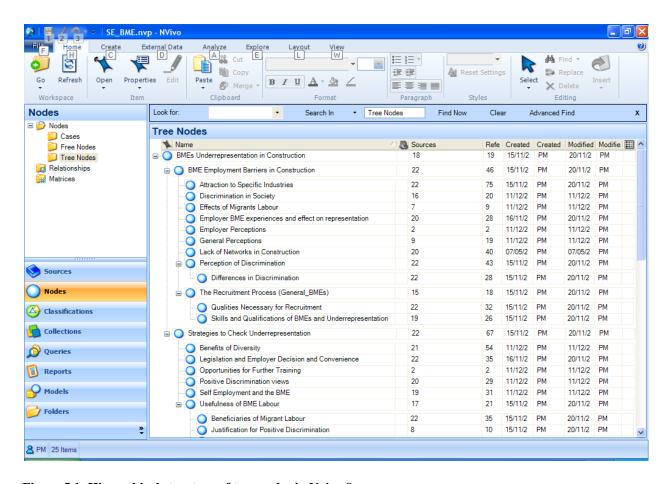


Figure 5.1: Hierarchical structure of tree nodes in Nvivo 8

From the structure shown above in figure 5.1, 'BMEs Underrepresentation in construction' is coded as the parent node with all the other nodes falling under it. This implies that it is the main theme for this study to which effect all the other themes have to be placed in a way that well expounds the relationships and impacts. This way, as already indicated, a tree structure could be organised around this theme and graphically presented to give a visual presentation of the links between themes. This process is also shown in the illustration below where figure 5.2 shows the parent node branching into two other nodes 'Benefits of diversity' and 'BME Employment Barriers in Construction' as children who in turn branch out into more children.

As shown in figure 5.2, the hierarchical nodes go up to a maximum of five levels in one case, four in the majority of the nodes down to three in one instance. This shows the complex relationship between factors classified into drivers and barriers that impact on the main issue of BMEs Underrepresentation in Construction. As a qualitative tool for data analyses, Nvivo helps to code references to a particular theme. The weight of the reference, the strength of the words

used, emphasis, and the number of references give a pointer to the importance attached to the issue by the respondents.

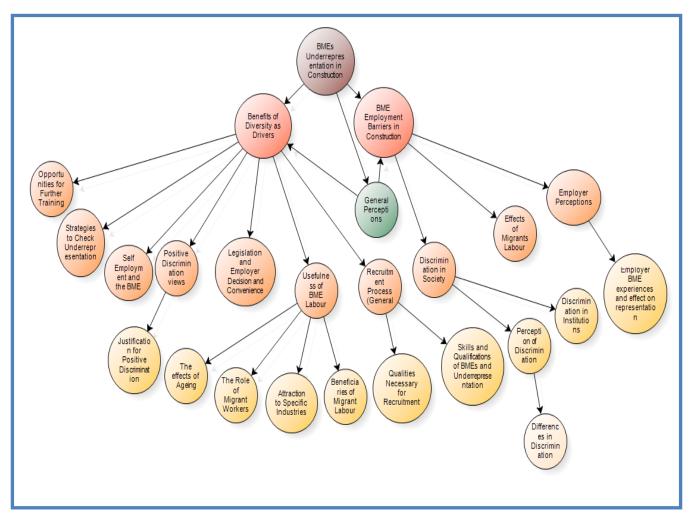


Figure 5.2: Hierarchical tree structure of nodes in Nvivo 8 in this study.

Although figure 5.2 above gives a graphical presentation of the situation, figure 5.1 rather gives detailed sources and references and a click on each opens the source of the actual text used in that particular instance pointing to the respondent's comments.

As a result it can be observed that under the node 'Benefits of Diversity as Drivers' 21 respondents (all except one) made comments that impacted on this theme in 54 references; likewise, 22 respondents, i.e. all of them could be referenced under the theme 'BME Employment Barriers in Construction' with 45 references. The subtheme 'Attraction to Specific Industries' i.e. drivers, commands quite a higher number of references from all 22 (sources) respondents at 75 referenced quotes. This gives an implication that a lot was said about the theme and so raises the concern that it is an interesting phenomenon worthy of being followed closely in order to check

the barriers facing BMEs in the sector and to advance the drivers too. This is by no means a step to reduce this research to a quantitative technique of analysis but rather a pointer to the fact that more was said about this theme. What was said is rather what qualitatively points to the results that were of interest to this study in order to address this situation.

Consequently, using Nvivo as a tool for analysis is very useful in organising the data captured in the interview process into themes and subthemes in order to draw out excerpts to demonstrate the richness of the information received and put them into context. Additionally, the themes and sub themes in the hierarchical format help further analysis by showing the relationships between nodes thus pointing to the effects of each attribute on the others. In this way, the interdependency of the questions explored can be outlined and convergence, overlaps or intersections and divergence, variance, deviation or disparities relating to the views and opinions of respondents as they influence the problem being studied can be noted and efforts to correct them well enhanced. This hierarchical nature of tree nodes in this data analysis tool is therefore very useful in showing these relationships.

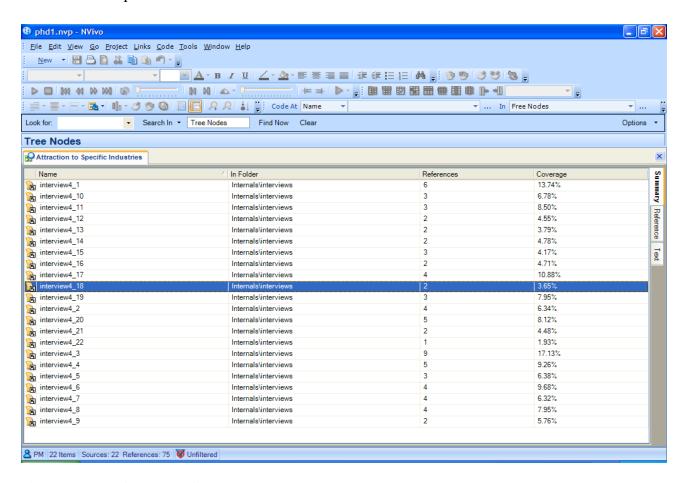


Figure: 5.3: References of the most dominant theme 'attraction to specific industries'

Therefore, the theme 'attraction to specific industries' in this respect is seen to be the most significant pull factor drawing to it most BMEs. Could it then be that BMEs themselves, in spite of all odds, are the cause of their underrepresentation? Figure 5.3 above gives a snapshot of this most dominant theme by giving a tabular representation of the interviewees, the number of references in each of the cases and the percentage coverage of the references in respect of each particular interview. Also, Figure 5.4 looks at the impact of four themes on the parent 'BME underrepresentation in construction' by critically considering the actual comments of the respondents in this respect which were looked at using the representative descriptors RT1 to RT22 as given in section 5.2 in these cases, the sign showing the linkage between the themes and the references are left in place to indicate the sources behind them.

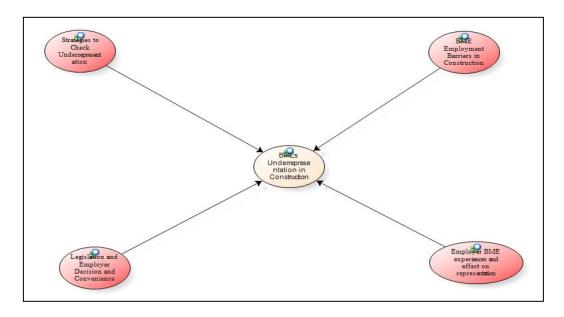


Figure 5.4: Categorisation of themes in Nvivo 8

As shown in figure 5.4, in reference to figure 5.2, these four major themes, some of which have subthemes as well strongly impact on the subject of study based on the *sources* and *references* (figure 5.1). These themes explain in detail the impact of the legislation as it influences employer decisions, the barriers BMEs face in this respect and the strategies open for ameliorating the problem. All of these are reported in respect of practical experiences of both the employers and BMEs alike as reported by the respondents using content or textual analysis. Section 5.4 looks at these themes in relation to the comments by the interviewees.

5.4 Main Interviews Findings Based on the Categorisation of Themes

The previous section has considered the analysis of the data collected in Nvivo 8. This section will assess the factors that emerged as being responsible for the underrepresentation of BMEs in construction by considering the barriers inhibiting entry and then the drivers that will encourage BMEs themselves and other stakeholders to address the problem. It has been reported that all free nodes were re-housed under the tree nodes structure, which implies that no other theme as identified was a stand alone; they all had been brought into the mainstream and their impact and relationship on the subject shown, as a result. In this light, this section will explore further the contents of the interviews results through a qualitative analysis as noted in section 5.3. In addition, as noted earlier, a degree of importance will be accorded to the frequencies of occurrences of interviewees' responses however, the rich nature of the qualitative data will be given dominance. This exercise will rely on the consideration of specific cases and references and the findings that result from them. As noted from the hierarchical tree relationship in figure 5.2, the two main themes resulting from the general underrepresentation theme, which underpins the aim of this research, are Benefits of Diversity and BME Employment Barriers under which the rest of the themes were grouped to further explore, explain or justify the findings. In addition, figure 5.5 gives a screenshot of the barriers and drivers in Nvivo 9 for clarity.

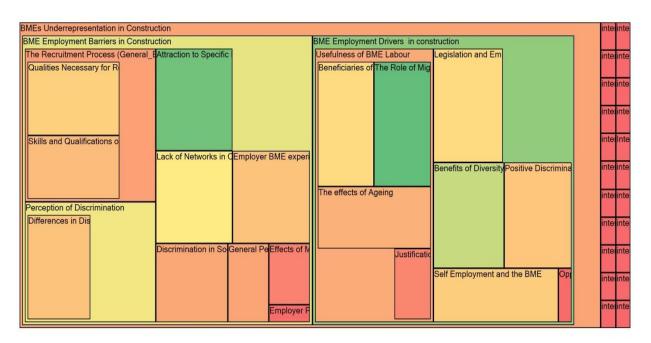


Figure 5.5: BME Employment Barriers and Drivers (based on items coded in Nvivo 9).

As shown in figure 5.5, the nodes covered the main themes and subthemes of the study. The figure shows the barriers on the left and the drivers on the right and this arrangement determined the basis for discussion. The area of each theme (node/sub node) corresponds to the references made to it and thus the significance of that particular factor to the subject being studied. The next section covers an overview of these themes under the main node.

5.4.1 BMEs Underrepresentation in Construction

The issue of BME underrepresentation has been covered at length in literature in chapters 2 and 3. This subsection further explores the issue qualitatively though the responses by the interviewees. Here, RT10 from his exposure of reality at, for example, the Olympic site appeared unconvinced and had this to say: *I don't think BMEs (is that right?) are. Have you been to the Olympic site? How many Polish people are there? They are whites but minorities as well as, in fact, a dominant group there.* Likewise, RT 11, failed to agree by these comments: "BMEs are well represented. Maybe black people aren't but other non-English UK ethnicities are well represented in construction". Majority of the respondents, especially the other whites confirmed this through their own experiences and observations in other construction companies. The incidence of over education among BMEs has received a lot of coverage in employability and labour studies on ethnic minorities and this study is no exception as the literature (Chapter 3) shows.

Again, literature points to over education of BMEs citing lack of early employment opportunities as the reason. This was, as a result, further tested qualitatively. While opinion was divided, the experiences of respondents recounted covered the grounds as follows: Of course, I don't believe BMEs lack the necessary skills and qualifications. I believe they are represented on more construction programmes than their white counterparts in relation to their population (RT4); "You must have somebody, someone must recommend you personally. How I got in, I do not want to comment"; (RT5): "If it is skills it is rather not the case. I see more people with qualifications and skills. Still on this same skills issue RT12, believed that "Ethnic folks don't lack skills or qualifications. They are just not wanted in most cases". Therefore, they base the excuse on this although others can learn on the job". However, contrary to what has been put forward above, still other respondents remained convinced that the underrepresentation is much to be blamed mainly on the lack of skills and training comparable to that of the UK. This said, however, the lack of practical training and work experience has been noted as a strong contributor to entering the job market in general and construction is no exception. Therefore, where this is not possible,

the level of education training and skills may not be of much significance.

Lacking certainty, RT 13 uses his circumstances to agree with the view that BMEs have a high representation not only in construction employment but also in training, the latter of which is strongly confirmed by Ahmed *et al.*, 2008 and Caplan, 2009. This view was captured as: "Here, there are more of us but I am not sure about elsewhere. I also had a short course in BTech and there were many ethnic minorities like me so I do not think we are underrepresented".

Others, like RT 14 would sit on the fence and not vouch for any position until they were convinced and so expressed uncertainty about the situation. He however conjectured based on what anecdotal evidence and literature have both confirmed that it would be surprising if it were the case in the statement: "I'm not sure as I have no evidence to prove but considering the fact that their training is not tailored to the UK market initially, that comes as no surprise. You see, not many minorities try and taking the ratio of those that do, they may proportionately be representative of their share of the population" (RT14).

The definition of who a BME is has received enough coverage in chapter 3. The common notion of they being tagged with the skin colour and hair texture is debunked by RT 15, who although a Scott sees himself as a minority in England. This issue poses a lot of misunderstanding with several white non-British people thinking that they cannot be classed as BME. Even then, the common believe that they are well represented in the industry nurtures the belief that they are not BMEs. RT 18, while rejecting that Eastern European are BMEs stressed the fact that black people are well underrepresented and noted: Me, I not see plenty black people, you see, but plenty Polish, Czech, Slovak, east European people plenty here in construction. All of them BMEs? Then I don't stay with your view. Should all of these be classed as BMEs, then it is wrong to think of them as underrepresented. Recalling, the comments by RT1, this view is buttressed by the argument that a Dutch boss may not be seen as a BME, why then should an Eastern European be seen as one. However, the definition of BMEs (chapter 2) classifies Irish, who are next door to the UK among them and even as in the case of RT15 who is Scottish and believes to be BME. Furthermore, RT 19 agrees with RT 18 and comments: I see people, English people, I see, some people, I see Polish people. Some do rubbish. Polish people a lot, sometimes only Polish people. English people, yeah, more too but you don't ask people on a site where they come from but then continues by casting some doubt on the inclusion of other ethnicities, especially other whites, by

relying solely on visual sense to delineate visible minorities with the view that people are not questioned about their ethnicities on site.

Regional differences on the subject are brought to bear as RT2 raises the incidence of high concentration of particular ethnicities other than British in certain known companies especially in London and the South East region by the following observation: 'I am not aware of this view but then some companies in construction have more ethnic minorities than whites, oh yeah! I'm sure. Yeah, very sure. Look on the other side of where we are, I mean the guys doing the refurbishment works. I'm sure they are all, all 7 of them Asian and on top of this they speak a language different from English'. This raises an important phenomenon that has evolved and either has eluded authors or somehow, attention has been detracted from it. Particularly so is the issue of English or Irish people concentrating in jobs elsewhere, especially in the North West region. Although, this does not appear to be a new occurrence. Naturally, particular ethnicities have been associated with particular professions as has been noted by RT1 who, as an expert in the field of planning has a lot of credence to his views. However, such developments encourage the gathering of pockets of homogenous people in certain industries and companies. Again, RT18, a Polish BME, points the way to communities as sources of seeking employment as has been noted in the drivers for BME representation (section 5.4.3).

Polarisation of views even in the matter is an issue with some good number of BMEs in the cohort of interviewees thinking and confirming underrepresentation and over education while on the contrary, non-BMEs believe the direct opposite accusing BMEs for lacking appropriate employability skills, training and expertise. As RT21 bets with his penny that "They are underrepresented; it's true, you know, there are quite a few on some projects". The contradiction is then seen in RT22's remarks "I don't think they are. Around here they are everywhere. The Polish have taken over, generally Eastern Europeans. Maybe it is true they occupy the lower ranks but that boils down to skills and qualifications, I believe they are found wanting here" and continues thus "I don't think so. Lazy people always point accusing fingers. As they say, the bad workman ..., you know? They don't want to train and so always blame their tools. Indians are everywhere. What about that. They are BMEs as well, aren't they?". The last comment then confuses the whole argument as to the understanding of the definition of BMEs with RT22 suggesting Indians are not or else would not give them a different treatment from the general BME cohort. This also buttresses the finding, based on the respondents studied, that clusters of

ethnicities are forming in particular professions and organisations.

While disagreeing with the notion of lack of qualification and training, RT17 looks at the whole issue from a different perspective and suggests self employment as the best option for BME. He had this to say: I don't think so, ..., where I did my diploma, the college had loads of black guys but where are they? No jobs, you'll in most cases, like I've done, you must start something yourself. RT15 believes this: I see myself as a minority here in England as well and, ave, we are underrepresented in construction but I don't share the view that it is because we lack the necessary skills and qualifications. Some migrants are more qualified than their bosses yet do the unwanted jobs. Over-education of BMEs has also received wider coverage by several authors with the suggesting that the lack of job opportunities for ethnic minorities has the resultant effect of keeping them longer in education. This said, however, they are still not guaranteed better job opportunities even with the higher levels of education and training they receive in institutions and in most cases gaining apprenticeship and practical training even is a major hurdle. They, therefore, end up longer in education and into jobs for which they are over qualified by which time their age may be a disadvantage as in keeping with the conditions and strains of certain professions. When the issue of lack of skills and training among BMEs was raised in a question to RT3, he had this to say: Are they? I thought you explained that the Polish were also BMEs? And Asians too? Maybe, elsewhere they are, but not here; there are plenty people, ethnic minorities in Universities and colleges learning construction courses, like my two children, so I do not think skills and qualifications are a problem.

However interestingly RT 8, hits the nail right on the head, by hinting the possibility of preferential treatment and discrimination in employment by: "I think it all depends on the composition of each community one recruits from; e.g., as you said you are studying the South East also, can we recruit from there if we only have local jobs here in the north?" In this case, proximity is used as the deciding factor. This is confirmed by RT 7 who had this to say, although conclusively he thinks that BMEs have groups that are even overrepresented: "As mentioned, not many, if at all, do I know in my place of work, but then according to the statistics, I learn there are more ethnicities in the London area. And if the Polish are considered among BMEs, how can you say they are underrepresented?" With this backdrop, having considered the issue of underrepresentation in a broader picture, the subsequent sections A and B will continue to

exhaust the arguments through the various factors under subsections based on the appropriate themes shown to be responsible for the phenomenon in the various nodes in Nvivo 8 (section 5.3).

5.4.2 BME Employment Barriers

In line with section 5.4.2, this section explores the barriers inhibiting the entry of BMEs into construction. The subject matter of employment and engagement has been considered at length in chapter 2 under the review of literature. Here, the views of respondents will shed more light on the issue. For this purpose, the comprehensive references relating to 'BME employment barriers in construction' have been extracted. This theme was exhaustively reviewed by the respondents with all 22 of them giving 46 references implying an average of two references each and in some cases (e.g. RT 11) three references. The content and the context of such references will form the subject of discussion on the various factors. Table 5.2 shows the breakdown of the significance attached to the various factors as barriers to BMEs representation in the industry.

Table 5.2: Barriers to BME representation in construction

Nodes / Sub nodes	Sources	References
Barriers to representation	22	46
The recruitment process and qualities of the potential employee	15	18
Societal discrimination	16	20
Institutional discrimination	12	21
Perception of discrimination	22	43
Effect of migrant labour	7	9
Employer / general perception of recruitment	11	21
Employer/BME experiences' effects on representation	20	28
Lack of networks in the industry	20	40
Lack of skills and qualifications	19	26
Attractions to specific industries	22	75

Table 5.2 lists the factors identified by respondents as barriers to representation. The subsequent subsections will consider them in further detail based on the references.

a. The Recruitment Process and 'Qualities' of the Potential Employee

In the literature review in sections 2.4.1c, 2.6.1 and 3.5, (chapters 2&3), it was acknowledged that although only a small number of employees are on fixed-term employment contracts in the UK construction sector, a large share of the workforce consists of self-employed workers without employees who work for companies on a contractual basis. As a result, companies in the sector tend to be smaller and family owned. Therefore the impact of such companies could be phenomenal in the recruitment of employees as well as the award of contracts. It is on the basis of this that the issue of how vacancies are filled was given such a level of prominence. A variety of experiences featured during the interviews from RT11 "Vacancies are advertised as widely as possible while considering budget constraints. Applicants are screened based on their CVs and qualifications". But RT12 has a different experience: "most of the guys I supervise got here through one person or another". They were referred by others... The main problem, to me, is racism. If they are well represented at higher levels of construction education, why are they not being equally well represented in apprenticeships, placements and jobs? If you go into companies that have ethnic minorities at the higher rungs, such companies tend to be minorities dominated too and specific minorities as well. Moreover, evidence in this study has shown empirically that the lack of opportunity to gain experience is a hindrance and BMEs, in fact, get better opportunities with BME led companies.

This dichotomy in the process of recruitment between employers, based on a continuum from formal processes reliant on merit in more overt and transparent case and personal referrals in a rather covert manner tells of how very unregulated and unorganised the industry, especially the micro to small sectors happens to be, and considering that the big companies are always subcontracting to these ones on whom direct recruitment rests gives an idea of the difficulty involved in changing the situation. This section has considered the barriers faced as noted in the coding process and will continue through the next subsections to further assess the issues raised among others on the individual subheadings.

As noted immediately above, RT14 insists on: 'We base it all on merit. If you qualify you send in a CV, get shortlisted for interview and if you prove yourself capable, you get picked. Every position is widely advertised in Job centre plus, online and in newspapers'. RT4 and RT9 in unison confirm similar practice for one group of employees, the manual workers '... for the manual staff it is usually by referrals from fellow employees and other known people. Trust is

key as you cannot leave people you cannot trust with material that cost a lot so we prefer people whose backgrounds are, at least, known to someone we also know or can easily check' (RT 9) and for the technical and managerial staff another treatment who whose jobs are advertise widely at the Job Centre plus and local advertising media for certain key positions but the routine jobs are usually as a result of personal referrals on this remark 'We give site managers the opportunity to recruit people they can easily get on with'

Legal provisions and mandates and policy initiatives on inclusion have been shown to impact on changes of this nature in communities and the underrepresentation of BMEs is no exception. As has been noted in the literature review (sections 3.4.2 and 3.4.4), in the United States, affirmative action has gone a long way in improving the representation of minority groups in several institutions however, such direct practices are not implementable in the UK for which reason it is not possible to directly engage BME or any other minority group with they going through the normal selection process. In this regard, RT 1 remarked: we never use positive discrimination as no circumstance here justifies it and we are an equal opportunity employer. Therefore, all positions are advertised for applications with résumés, applicants are then vetted through a thorough selection process and successful ones interviewed. However, evidence shows, as in the American case above that unless conscious efforts are directly applied positively to address the issue it will be difficult to address. Section h on 'networks in the industry and access to internship and training into jobs' further elaborates on the reasons why this is the case.

The qualities a potential employee must exude to get employed was remarked on by several of the respondents. RT 13 has suggested a practical approach where potential employees must demonstrate their ability and are usually put on trial or probation while stressing that management is family based. In addition, RT 17 stresses commitment, competence, expertise, experience, and other qualities but insist on the reliance on references '... preferably from known guys'. RT19 shares similar view while RT18 confirms same noting hard work and desire to work while outlining this reason: ... when working for team, I am the leader, on top of me is Nick, on top of me, my top boss, when my people do something wrong, after not this people have problem, I have problem (RT 19).

b. Societal Discrimination

The issue of discrimination in society came under intense scrutiny in the literature review in chapters 2 and 3. The incidence of this in society was crucial to assess the possibility of it

happening in other societal subsets like industries and for that matter in construction. This was in effect put to test in the interviews to obtain the perceptions of participants on the topic. As usual, RT1, in his professional capacity gave a well balanced view recognising that although legal provisions were in place, enforcement was difficult as the legal onus was on one to prove 'he who alleges much prove'. He went further to raise more factors like older people not being exposed to the issue of diversity, having less contact with the rest of the world and harbouring suspicion risked discriminating against foreigners. Asked about the same issue on legal provision on societal discrimination RT11 retorted: 'It doesn't, not in any way. What I believe is that it is very hypocritical. You need to prove a lot which is very difficult if not impossible to prove discrimination. But then I think it is the fact of life. Discrimination happens everywhere so, instead of dealing with it, I think we must learn to cope with it, then try to live with it ... even stunted plants struggle to compete ... furthermore, two respondents had the following to add: You are racist to me, I am racist to you, it is the fact of life' (RT21) and: 'I am not offended by being treated the same way here, according to a BME site manager. Now I have realised it hurts, yes it hurts ... here it is better because they tell us we have rights, only it is difficult to follow the procedure. But for me there is no need anyway' (RT3). Merely resigning to the conviction that this is natural, although fact, seems to be a defeatist tendency and complacent, a disincentive to act or discourage others from exercising such rights, especially when such people are themselves in positions of authority as employers, managers and supervisors all of whom are responsible for employees. In fact, the majority of the respondents either overtly or covertly, in one subtle way or another ignored this issue.

c. Institutional Discrimination

On the issue of Institutional Discrimination, the tone was similar although a distinct difference was noted here in respect of monitoring, as these were close environments guided by rules and regulations, more precisely a legal frameworks easier to enforce than in the general society. In fact, here the usual word confirmed in literature came up in RT20's rendition of what colleagues called racial jokes at work as follows: 'Banter, as it is called, but I don't think it helps to bring out the best in the victim as it leaves a tense environment'. Furthermore, the issue was given an incredible breadth of treatment in the quote 'Clearly, if someone engages in discrimination, racial or otherwise in an organisation they could lose their jobs or be sanctioned ... I'm gonna let it go because I can't do much about it' (RT1). In most cases, this action did not appear to have been effective in the interviews with most of the respondents who thought it must not be treated

seriously contrary to this singular interviewee who happens to have come from a more formal sector, an institution of higher learning.

Cognizant of this however, treating others differently on ethnic grounds, known as racial discrimination in organisations (chapter 2) was seen by many respondents as being controlled for reasons outlined in the following quotes: I don't see much except that one is easily monitored, that's the one in organisations (RT10); I think organisational discrimination is controlled and targeted due to monitoring while the other is blunt, not caring who is targeted (RT11); Discrimination in organisations is hush hush but out there anybody can do anything for it is difficult to trace them (RT13); ... one is subtle, covert, concealed because it can have consequences easily while the other is difficult to pin down, to proof and to admonish (RT14). In all of this it was obvious on the walls on construction sites, on the toilets and other hidden places that banter, the calling of names and other discriminatory practices were commonplace, more so in these places than was on the wall in cities and communities. However, RT3 indicates that at work, people try to treat colleague BMEs nicely, especially when one is known to them while accepting that it is not unusual as it is natural in every society. At this point, he goes further to hint that clusters are being formed in companies depending on the ownership and management. While decrying the want for statistics he claims, in his view, that the situation is a lot better with the level of BME employees and BME owned construction companies.

Considering the age of RT3 (over 50) and belonging to the second generation with immigrant parents it is not surprising that he has a considerable length of experience which justifies a good means of comparison, thereby entrusting on himself the opportunity and confidence to make such comparison and assert a reasonable level of improvement of the situation. it is however disheartening how he thinks about the normality of such conditions in society and organisation and worse still comparing it to the animal world. This loses him the point and the level of confidence that can be placed in his judgment, especially in this regard. A point of recalcitrance is raised when RT 7 posit that organisations are more formal places and as such behaviour is somewhat controlled however, some individuals do things that may be out of place and would do them anyway wherever to whoever, yet, hinting that immigrants are general treasure hunters seeking better life and that when their homelands get better, 'as in the case of the Chinese', they tend to go back except for a small number, probably, the ones who are very much well

established and well integrated, a level of bias is raised and the stand of this respondent can be deduced with regard to discrimination against BMEs.

In consonance with RT1 and many others RT5 stress that in organisations people are circumspect in their actions and raises the issues of the difficulty associated with proving discrimination '... but you also know that you need to prove, you need evidence for everything therefore it is difficult to tackle this issue' but then without needing evidence such claims would have grown out of proportion as every littler action could have spelt lengthy litigations. Therefore, in tandem with RT1, it is better to spare organisations this problem to save an even worse situation. A different twist was brought up when a distinction is made by RT 8 while noting the significant difference in societal and institutional discrimination: It is rather more difficult in organisations as the consequences are easily measurable, anyway. ... Maybe BMEs from the developed countries may have other qualities they will bring to add to what we have but this cannot be given a blanket description. In her distinction, she acknowledges the difference between BMEs from more advances nations who might bring more to the host then the general majority originating from poor nations. However, the irony still remains that ignorant as it may sound, people higher in authority recognise some individual and collective contribution of some of the members of the latter category.

d. Perception of Discrimination

Perception has a quite a considerable amount of control over action and reaction. Peoples' views, by and large, have a good level of impact on their behaviour and the way they tend to treat others and the environment around them. Such perception is controlled a lot by the level of knowledge, experience, relationships and many a factor. Therefore, when RT1 raises such issues and blames older people for it, it comes as no surprise. This is what was asserted: older people would have views that differ from younger people ... down to lack of education, not meeting people from different ethnic backgrounds ... not coming into contact with so many people from ethnic backgrounds, or making friends ... lack of trust ... I believe all of this stem from the very negative perception that people may have about ethnic minorities. For example, the culture of other ethnicities is not known as much as that of Travellers in Ireland and so they suffer the worse of this kind of discrimination (RT1). Yet on a whole a good many respondents believe that the issue is in dispread.

This said, however, none agree that discrimination is nonexistent and the same factors are noted for the incidence of such menace plaguing society and businesses. A good number of quotes apply here but one that is catching and worth the deliberation are those by RT11, 13 and 21: Very! Society is very discriminatory. It is needless to say ... The main one, to me, is racism. If you go into companies that have ethnic minorities at the higher rungs, such companies tend to be minorities dominated too and specific minorities as well. (RT11): Yes, surely. People won't just take you on a job because of your accent or colour ... The main issue is racism. I suffered a lot before getting the job because they never trust you can do it. They, I mean some employers and in my case most white people. I remember being told I had an Indian mind and could never work here but I have lived to prove this man wrong (RT13); Yeah, very discriminatory, they are very racist ... When I worked for a white company, a British and English company, I was always paid less than the white person who had less qualification and responsibilities than me (RT21).

Again, while agreeing with the consensus, RT14, points the blame on the source of immigration noting that generally it is poverty that is the underlying characteristic of the majority of BMEs as their home countries are poor; further throwing in the issue of lack of training on entry and failure by BMEs to engage in further training to better themselves remaining stuck with what they get initially and so are to blame for their conditions.

In all of this however, it is worth the while that efforts are aimed at stemming the tide and working at reducing discrimination wherever it may be found. even to the majority of the BME respondents in the cohort, it was simply accepting the *status quo* with some even alluding to the incidence of discrimination in their own home countries and communities as in this quote: "... for me it is normal ... Back home in my country we look down on people from the northern part and call them names. We also expect them to do our menial jobs ... it is human nature ..." (RT3).

Diversity has been hailed to bring in benefits in technological, managerial and personal knowhow, in literature (chapter 2) and in this qualitative study. Amid the advantages of diversity as being exposed to new ideas, cultures and perspectives to help individuals to reach out intellectually and gain a clearer view of their surroundings by slowly breaking down the subconscious barriers of ethnocentrism and xenophobia thus encouraging employees to be more well-rounded members of society in today's process of globalisation, RT8 still asserts that diversifying is the key and cites the Chinese culture and architecture as being what could bring value in these comments: "... Maybe, the Chinese, with their outstanding architecture like the Bird Nest Stadium could, you

know, but I never considered them as BMEs, I mean Black; you know that they are a very strong economy".

In sum, it is worth noting that the perception of discrimination seems insurmountable for even after having explained the definition of BME to respondents before the start of the interviewing process, some respondents stubbornly persist with the view that economically advanced citizens of any country could not be seen as BMEs. Such, lasting perceptions are thought difficult to break and still needs the attention of governments, policy makers and individuals in society at every level in a concerted effort

e. Effects of Migrant Labour

It will be recalled that the International Labour Organisation (ILO) has outlined the trend for the mobility to labour based on economic factors. Such factors are based on the concentration of resources in the two major divides of advanced and less advanced nations where the latter has more of labour and less of capital while the opposite is the case for the former. The tendency for shifts in such resources, particularly labour across boundaries based on the forces of demand and supply is therefore the determining factor influencing the flow of these resources. In this regard, it is necessary to consider the effects of migrant labour in both the originating countries and the destination countries. Hence, the literature review cited instances of deficiencies in labour in Canada for the winter Olympics on one hand and in home countries of Poland and Belarus where migrants left in drones to Western Europe and elsewhere causing labour shortages on the other.

Therefore, when the question was asked about the effects and the beneficiary of BME labour, the respondents' reaction differed in respect of the originating and receiving destinations of such labour. RT6 a BME site manager had this to say: "we work hard and more in attempts to postpone our enjoyment to a later date in the hope that we'll make money". In the same vein, RT9 thought the originating countries had to act to stop the unprecedented level of labour mobility from their countries. This is what was raised: "It is the exporting countries that need to think about how to discourage it but this is difficult especially considering differences in standards of living". The effect of such loss of labour on nation building and cost of health care and resource provision aimed at the retirees on their return from over were also raised by some respondents as incomparable to the remittances received from overseas from migrants.

On the contrary, although RT 14 did not agree that migrants have an effect on local construction labour and neither do they bring any benefits: 'I don't think they do. What qualities? Their ways of construction are different from what is here', the fact still remains that it is an isolated case of thinking for the evidence is overwhelming in both cases on the London Olympics site and elsewhere in the claim of RT21 in these remarks: 'A lot of them have lost their culture though but I'll never change my culture although I'm British ... From the point of view of the Olympic site, I know guys who have gone there for jobs and they have been refused only for Polish guys to go into same jobs after them. The catch is; once you speak Polish, you have a job. While Canada was cited as having experienced labour shortages when it hosted the winter Olympics, in London, the polish and other BMEs made is easier by providing abundance of it.

However, the negative side of this is noted by RT3 who acknowledged it as an easier way to recruit noting this as good for the industry now, in the short term. Nevertheless, the effect of this, the downside, is that they (migrants) may act concertedly. This is what was uttered: '... they can also leave in their numbers in the same manner depending on what happens, they can plan, yeah plot and do a lot of things together, good or bad, but here it is usually good, beneficial ... I think, from what I see, in construction because of the way we employ; by word of mouth, people usually, people of similar characteristics happen to find their way into a company'. Where such actions are positive, it is to the advantage of the company concerned. The problem is where such actions become detrimental yet as has been noted in section 5.5.1 by RT4, migrants leave only to be replaced by hauls of them as immigration policies are usually altered to control entry.

f. Employer and General Perception on Recruitment

As has been noted in section *d*, perceptions play a very strong role in peoples actions and reactions for which reason the way employers view BMEs generally and their cultural practices particularly are of eminence in considering how best to improve their representation. The employment process has also been exhausted in section *a* where some of the barriers inhibiting entry into the industry were extensively considered. Throughout, informal recruitment practices have been noted confirming literature findings (section 3.9). Therefore, affecting the perception of employers and the general perception about BMEs positively will go a long way to encourage representation. In perceptions as: '... generally they are good initially, especially the first generation, the recent arrivals' (RT 22). Such a perception may influence the decision of employers, especially as a micro enterprise and sole owner, in recruiting particular people. In

effect, the issue is aggravated as the micro and SMEs account for over 95 percent of the industry's workforce where change can effectively take place.

Again, RT1 among the respondents especially as noted from RT1, there was the general perception of associating particular ethnicities with particular jobs or professions. Examples cited here were Germans and engineering and Polish and construction. It is, as a result, not surprising that discriminating in favour of particular ethnicities in respect of certain jobs may be rampant among employers. The problem is as legislation does not generally permit this, other ways are improvised to circumvent the issue to favour recruiters and their aspirations of solely deciding on who to employ. Therefore, formal practices like 'all *positions are advertised for applications with résumés, applicants are then vetted through a thorough selection process and successful ones interviewed'* (RT1) may only be on paper and not in practice.

There is, among contractors the perception that some particular group of employees could offer cheaper labour and in times such as these, with the economic meltdown where everyone is looking to cut costs comments like what was given by RT5: 'The dominant one that comes to mind is the Polish. At least they offer cheaper workmanship for most contract jobs' could not be ignored in awarding jobs to contracts especially. Such perception would also normally influence the recruitment process. With anecdotal evidence suggesting that informally, labour is recruited, especially unskilled labour, for well below the minimum wage, it is to the disadvantage of BMEs to gain formal entry into construction.

The idea that BMEs will definitely leave employers in limbo one day, also restrict the open perception to recruit them for certain sensitive positions requiring specialist training and commitment. In the following quote RT7, suggest this among others that the usual role for them is into routine jobs where they perform regular functions devoid of innovation: "None specific, I think. They do what is expected of them. After all most of them come from places with different styles of construction most of which may not be suitable here ... I know there are more Chinese people in restaurants and you're asking about BMEs' underrepresentation in construction which, looking at my place of work, seems to be the case".

Therefore, it is not uncommon to associate particular people with certain job roles especially when they are usually found to be performing such functions for which reason RT 8 comments as below has a lot of significance: *Maybe BMEs from the developed countries may have other*

qualities they will bring to add to what we have but this cannot be given a blanket description ... you see Blacks in the cleaning industry most of the time but I do not think it is the industry that attracts them. I believe they find them easily accessible and in some cases others use some industries as a stepping stone to gain qualifications and a living to enter new ones (RT8). Although, as noted in the preceding quote it may not be their fault as they find it easier to gain access into such jobs, the perception is easily formed and they are tagged to such industries. As a result, it becomes very difficult to dissociate them from it especially when employers see them doing almost the same thing most of the time as has been noted with builders cleaning and Black people in construction.

g. Employer - BME experiences' effects on representation

Experience has been shown to be the major means of gaining entry into most construction jobs. This is demonstrated by the requirement for most construction programmes to incorporate internships at varying levels which is generally seen as the springboard from which potential and novice employees gain hands-on experience comparable to tacit knowledge which cannot be taught in a classroom environment. In the literature findings (section 3.9), it was observed that BME students experience unprecedented difficulties in gaining internship places which restrict their access to construction jobs. Again, apprenticeships are also known as the breeding grounds for trainees to enter into various positions on the job. Consequently, it was necessary to test for this experience with those employers who have had the opportunity to work with BMEs in various capacities. As a result respondents were asked about their experience with BMEs which yielded the following responses: They are very nice people, in most cases and will do a lot with very little especially the new arrivals, they don't insist on too much (RT10); I should say they are committed to their roles more because they have double commitments and so for most, the motivation is money. They must take care of themselves and family here and extended family and relations back home. (RT11); They are selfless, generous hearted, hardworking with a tad bit of martyr going on I think. Very dedicated to work because their main source of livelihood for themselves and family both here and abroad (RT12); They are generally hard working, actually over working themselves to make more money. For the majority of them, the motivation is the pay. They are ready to work odd hours, overtime, in harsh conditions with little protection etc etc, you get what I mean (RT13).

It can be noted that throughout the foregoing quotes it was common to note the financial satisfaction as the main motivator and for that matter commitment to perform their roles. This is a pointer to the fact that, having all these commitments in the earlier states of their life, BMEs, especially the first generation tends to ignore training initially until when it may be late and so may be stuck with their roles. It may also be the case that BMEs may see their presence as temporal and so decide to concentrate on making as much financial gain as possible. Yet, in Ahmed *et al.* (2008) and CCI (2008), it was found that they usually are more represented in formal construction education than their white counterparts. It is therefore the case that, although they may be stuck with the easily accessible jobs, they still take on training seriously and so end up in formal education where access is mainly by merit compared to apprenticeship and practical training.

Although missing the point of the question, this Polish respondent raised a very important issue. Yes and no because when we need this job, for example cleaning, no problem but when we need proper job, people need to have experience; UK experience because it's a completely different standard and regulation ... No problem, me no problem. My people, good (RT19). Job applicants are expected to have the right experience but BMEs are, as has been noted in literature and thus far in the qualitative part of the empirical study, generally denied of this opportunity. How then are they expected to make it into the industry? Every employer stresses the need for the right experience before recruiting into roles. Consequently, it is not surprising that those who get the opportunity to gain access into apprenticeship and internship potentially are the ones to take on the jobs in the industry. This may be one of the major contributing factors causing BME underrepresentation in construction.

In a number of cases, instances of antithesis have been noted to be unavoidable and these have happened along ethnic lines. While RT18, an Eastern European, thinks that knowing too much English will make an employee talk too much, RT 7, and English project manager thought otherwise and stress the need to adapt in her quote: '... they do what is expected of them. After all most of them come from places with different styles of construction most of which may not be suitable here, I believe, and as such learn what they have to do at work here ... If you go to Rome, you must do what the Romans do. Why should people get opportunities just because they look, or are different? You must speak English to work here, if that is the condition, then it stays so. People must learn to adapt. Ergo, it hints the issue of different treatment by different

employees and for that matter the level of discrimination asserted by some of the respondents, especially the ethnic minority ones. It also justifies the forming of clusters of ethnicities in the industry and companies studied based on their ownership and management as noted in sections 5.4.1 and 5.4.2c.

h. Lack of Networks in the Industry

The next major barrier raised is the lack of network for the BME community in the construction industry. Several respondents referred to the fact that is recruitment is through staff and other known people who bring in relations and friends. The following quotes by respondent RT10 and RT12 respectively confirms this: "I think in construction, it is best if you know somebody to introduce you. It makes it easier. I remember when I first came here, a friend brought me to my first job" (RT 10) and "most of the guys I supervise got here through one person or another. They were referred by others but all my colleagues, and people I've referred have been rejected, almost all." (RT12). This factor happens to be a prevailing one running through the comments by many of the respondents. As a result, the usefulness of networks in the industry is highlighted with RT10 observing: "I think in construction, it is best if you know somebody to introduce you. It makes it easier. I remember when I first came here, a friend brought me to my first job which was, of course, cleaning. We tried to call it names, like 'floor engineering', 'vision engineering' etc so we'll feel good about it. He throws in the argument that this factor is not called into play only within construction, but also the cleaning industry, which forms a subset of construction e.g. builders cleaning. Whatever the case, the issue remains that where someone directly introducing you to the job, you always have the opportunity to progress in it.

The whole problem of underrepresentation revolves around a fulcrum of factors which determine who enters and remains in the industry. This important process is mainly controlled by forces on which only recruiters have direct control over. Therefore, the respondents were asked about the recruitment process of employees, which yielded a medley of responses some of which confirmed literature findings (section 3.9) while others were stark revelations; completely new findings. The process was observed to have been grouped dichotomously under two divides: the first being those who recruited 'informally', relying on personal referrals as noted in chapter 3 in literature and the second group basing their selection on 'formal' procedure and on merit through formal advertising, screening, interviewing and so on to completion the process of selection into roles. The intent is not to quantify responses here but to note variety and content for which reason

the following quotes have been extracted for analyses: "As far as I am aware, colleagues bring in friends and relations" (RT13); "Here, most of the guys are known. They have one or other link with someone inside" (RT15); "We inform workers and they bring their friends. We always have contact telephone numbers of people looking for work" (RT16); Through known guys. I believe it is the only means to recruit hardworking buddies without increasing staff turnover" (RT17).

In fact, the issue of personal referrals featured so strongly here that the issue of nepotism and cronyism put forward by Ahmed et al. (2008) and Caplan et al. (2009) in chapter 2 receives ample confirmation. Even the Polish employer who would later assert that his selection programme is based on experience only seemed to have lost sight of the fact that elsewhere among the wider population, somebody more qualified and experienced could be found and acknowledges this: We take people for trial. Friends, colleagues, workers bring them. They work, we see, if good, they stay. When asked about the problems of qualification and language he further noted: I no think so, no. You see, sometimes people difficult to speak English but work is not speaking. Maybe if know language too much plenty talk. A little English to tell what to do, you see, enough, that's enough' (RT18). The issue of 'problems with language' is further confirmed by RT2 (British employer) I don't think so. Never particularly so. Maybe the only problem will be accent of some of us, British: English, Scottish, welsh, Irish ... all the others. But believe it or not we all have the same difficulty. There are times I don't understand other British people when they speak.

This does not spell all gloom for those without favourites in the industry though, as there were still some who believed that merit was the basis and that the formal process was applied at every level of recruitment process however, the question still remains as to genuineness of such views. Here too the following were noted: We base it all on merit. If you qualify you send in a CV, get shortlisted for interview and if you prove yourself capable, you get picked. Every position is widely advertised in Jobcentre plus, online and in newspapers. Training, qualification and experience were the catchwords here but then the consciousness of justifying the involvement of BMEs in other low skilled jobs, even in construction suggests concealment and lack of outright forthrightness as noted in the following quotes: ' ... merit of course, yes. Their [BMEs] training, as I have just mentioned does not conform to that of the UK. Also, most end up in bogus and menial jobs and don't bother about training and I don't see that as their fault anyway, I don't

blame them. They must survive right from the start on their own and you can only do so much with so little (RT14).

Summing up, it is worth noting that the industry is segregated. Maybe the big companies may be doing things differently although it is not evident from this study. However considering that the industry is over 95% made up of small firms, it is here that change can take place. There are, of course, barriers and noted by RT9 in justifying the case of 'nepotism and cronyism' in the recruitment process ' *I have raised the issue of trust and commitment but how can someone trust a stranger or get to know how committed they are without giving them a chance?* But the question still remains as to how one can prove their expertise and experience in a job role, if they are not given the chance in the first place. This confirms the fact of 'birds of a feather flocking together'(RT3) and hence the formation of clusters of ethnicities in particular job locations but in this case, the issue of trust and commitment, qualities which hint a level of engagement as discussed in chapter 2 being given as the reason.

i. Lack of Skills and Qualifications

It all starts with RT1 reiterating the cultural limitation BMEs face on local knowledge alongside formal training but then this comment raises a lot of contention in that although there is agreement amongst some of the respondents, the majority disagrees. This is what RT1 noted: "... some of them may suffer from lack of knowledge, education and familiarity with local issues. Er, but then if you have work experience in the appropriate field, it does not matter your race, being Asian, Black or White..." but then, RT10 turns the entire argument on its head by throwing in a completely new dimension "I usually employ based on expertise and experience. I normally advertise on the internet. We are a very small company and so known people also refer people to us". In fact, it worth remembering that the majority of BMEs come from less advances nations and for that matter lack this exposure. Recruitment based on the technological knowledge, local cultural practices like visits to the Jobcentre plus, the use of CSCS card etc are factors that militate against the first generation of BMEs. However, these tend to lose weight with the later generations as they are well immersed on the local culture as they grow in it. Therefore, with the trend of underrepresentation continuing with them, it is justifiable to stress that the factors responsible rather rest somewhere else.

Here, the educational level, the knowledge and expertise as well as the experience base of BMEs was called to question and is put in doubt. RT1 contends that some of 'them'- (BMEs), may

suffer from lack of knowledge, education and familiarity with local issues and goes on to say that if one has work experience in the appropriate field, it does not matter what race, being Asian, Black or White, a job could be obtained in construction a point also confirmed by RT10, RT4, RT8, RT14 as signified by this quote: "I don't think so . Lazy people always point accusing fingers. As they say, the bad workman ..., you know? They don't want to train and so always blame their tools. Indians are everywhere. What about that. They are BMEs as well, aren't they?"(RT22) But then the issue of the 'Indians are everywhere' is rebutted by the argument that the industry is dominated by the majority white groups and if Indians happen to be the majority among the minority and also dominate in the area in some parts, then it is right to say that it all boils down to the level of influence i.e. having to know somebody in order to gain employment in the industry.

Additionally, related to the issue of the lack of training is that of language which was also seen to be a problem but then again a rebuttal by RT18 had this effect: "I not think so, no. You see, sometimes people difficult to speak English but work is not speaking. Maybe if know language too much plenty talk. A little English to tell what to do, you see, enough, that's enough."(RT18) Therefore, the issue of language is given series of dimensions based on who is considering the situation. Alluding to scanty English as a means of getting employees to stay focus on their duties is how RT18 sees limited language skill as an advantage for believing that 'work is not speaking'.

j. Attraction to specific industries

The literature review has outlined the presence of BME groups in specific backgrounds in some cases in particular industries. The norm has been that generally, certain nationalities are associated with some professions as RT1 posits that he tends to associated some nationalities with some professions, citing engineering and Germans; *Germany has a strong engineering background*. *I do not know what to associate the British, what do I associate the British with, the British? A range of different things.* The Irish experience with the Polish people, he notes, is to associate them with construction work, plumbing, bricklaying, general construction work. However, there seems it is certainly a perception issue in as much as other people may have other or similar views based on their experience, if they work in an industry that picked on nationality issues, it could have both positive and negative consequences; positive consequences in so far as a group or an entity is associated with something good where it is very much positive, trustworthy and competent in a particular area, in such a high value area such as construction. On

the other hand, if they are associated with something negative as a low value industry, because of the perception, for example, anybody doing a particular job that does not require much skill to do.

Therefore, the trend needs to change, especially with good access to education, as BMES are thought of as lacking in education and technical knowhow. In this respect, RT1 claims: *I think possibly, some of them may suffer from lack of knowledge, education and familiarity with local issues. Er, but then if you have work experience in the appropriate field, it does not matter your race, being Asian, Black or White. Also, it is the case that due to the composition of its labour force RT11 identifies some industries to have easy access to particular groups of people and does not see the problem as stemming from lack of education. He further acknowledges the presence of very well educated graduates in jobs, which, with all due respect, he does not mean to undermine but that are generally regarded as low skilled. It is the case that, for the sake of ease of access, most BME may end up in jobs and find it difficult to shift later due to the economic burden that would subsequently be imposed upon them in a number of varied ways.*

Section 5.4.2 has considered the barriers faced as noted in the coding process and will continue through the next subsections to assess further the strategies (drivers) for improvement based on the issues raised among others under the individual nodes delineated from the interviews in the content analysis using Nvivo 8.

5.4.3. Drivers for BME Representation

The foregoing has looked at the barriers inhibiting entry into the industry for the respondents studied. This section therefore reports on the drivers found as possible remedy to the problem of underrepresentation. Tactically, the question about drivers for representation was asked at the concluding stage of each interview to assess the strategies for BME representation in the industry. Somehow, it was very efficient as effort was not spared by those respondents committed to make a point. Under this theme, the underlying reason for BME underrepresentation seemed to have been exhausted and so attempts were being made to solicit suggestions for possible solutions. Most of what was said here was based on answers already given for the causes of underrepresentation. In fact, for most, it was more of an opportunity to summarise what they had contributed to the issue at stake. In other cases, it was an attempt at redefining the problem and suggesting possible solutions. An attempt was made to capture some of the salient issues as strategies for possible resolution of the problem in the subsequent subsections. Table 5.3 shows the breakdown of the respondents' references to specific issues under the various themes.

Table 5.3: Drivers to BME representation in construction extracted from Nvivo 8.

Nodes / Sub nodes	Sources	References
Strategies for representation	22	67
Legislation and employer convenience	22	35
Benefits of diversity	21	54
Employer/BME experiences' effect on inclusion	20	28
Opportunities for further training	22	32
Positive discrimination: views and justification	20	29
Role and significance of BME labour	17	21
Effects of aging of the stereotypical white young male	22	23
Skills and qualifications	19	26
Self-employment and BME Representation	19	31

a. Legislation and employer convenience

The issue of legislation in employment and especially in the discrimination and minority issues has been dealt with exhaustively in chapter 2 under the review of literature. However, it seems to still raise controversies considering the content of the empirical findings where on the whole it seemed impracticable. Almost every employer avoided or tried to avoid trouble by reiterating their law abiding status and upholding the law in all dealings, yet it still was evident that some of these pronouncements were rather faked. If this is possible in a study of this nature where anonymity and confidentiality are assured, what then will the situation be like in a real case scenario? Yet in all this, there were still other respondents who boldly called the legal framework on discrimination to test by highlighting the problems of implementation. Below are excerpts and references discussed to bring forth the import of the situation being discussed.

Basically, it is claimed that the law could do little to save the situation as a result of the processes it entails. Interviewee RT11 sees it as 'very hypocritical' as there were too many things, evidences, exhibits etc one has to provide in evidence, 'as the onus is on one to prove with evidence' most of which evidence is very difficult if not impossible. In fact the heading of this theme was influenced by RT15 who saw the translation of the written word into practice as 'difficult and unattractive' which is then believed to impact on the convenience of the employer.

This is also affirmed by RT17 '...your best bet is with other BME people... even here there is still a problem... discrimination is everywhere except on paper maybe.'

The issue of recruiting respondents for this study has been dealt with earlier in section 3.6 where it was indicated that snowball sampling had to be relied on for the exercise. Therefore certain issues had been left to lie and were to be given attention only when the respondents hinted them. One such issue was that of the visa status of immigrants. As the majority of BMEs at one point in their lives here have had to grapple with the unpleasant situation of legalising their status, considering all the difficulties, inconveniences and embarrassments associated with it, it had been treated with 'let the sleeping dogs lie' attitude. Yet, RT16 alluded to this by the statement: '... I believe people fear for losing their jobs and will do anything to keep them... do people even know the law and how or where to get help? And most of our workers, for example, don't qualify for help from the citizens' advice bureau, nor legal aid and they cannot afford legal fees'. (RT16) Therefore, it is difficult if not impossible for the majority of BMEs to attempt seeking redress through the law. The issue of isolating an individual at work even after such a situation has been dealt with legally, according RT2 stressing that 'no man is an island' could even increase the level of job turnover at work due to the fact that man is a social animal and can never flourish under such circumstances. Positive discrimination has been noted as one of the possible solutions where employees from minority groups could strongly improve their representation in the industry but policies and implementations are very difficult to effect in these situations.

Legislation has been an instrument for controlling factors of production especially controlling labour supply in several economies. To this effect, legislation can be effective in influencing employer decision and controlling their convenience in the selection process. In fact, due to their small nature most constriction companies use informal recruitment channels in their selection process. This results in repeating the cycle of further engaging the typical young white male thus ignoring the benefits diversity brings.

Although, legislation is in place to check fair recruitment practices, some respondents believe that not much is done to enforce this. RT11 blames racism at the workplace and questions the minimal representation of BMEs in apprenticeships, placements and jobs even though they are well represented at higher levels of construction education. Furthermore, he was quick to point out that companies that have ethnic minorities at the higher rungs tend to be minorities dominated too, and specific minorities as well and challenges this as the unofficial truth, which is evident in

most companies. For example, RT 13, and Asian BME site manager (now working for and Indian construction firm), after being told in his early career, he was incapable of plumbing work comments as follows: 'The main issue is racism. I suffered a lot before getting the job because they never trust you can do it. They, I mean some employers and in my case most white people. I remember being told I had an Indian mind and could never work here but I have lived to prove this man wrong'.

On the part of BME employees themselves, RT11 observes that not much can be done in the form of redress and describes the legislation thus when questioned about what provisions the law has in ensuring that ethnic minority are able to challenge discrimination at work: 'It doesn't, not in any way. What I believe is that it is very hypocritical. You need to prove a lot, which is very difficult if not impossible to prove discrimination. But then I think it is the fact of life. Discrimination happens everywhere so, instead of dealing with it, I think we must learn to cope with it, and then try to live with it'. Finally, resigning to the status quo and accepting that discrimination should be taken as natural and coped with is rather pathetic.

b. Benefits of Diversity

Diversity has been hailed as a smooth ingredient for economic and technological growth in respect of the cultural diversity that it brings to bear on institutions that adopt it. The benefits of diversity have received extensive treatment in the literature review and its findings in chapter. Therefore, testing it here in the empirical section of the study has been to affirm what is known as a fact the world over, although, as with every condition it is not without its disadvantages. The general benefits of diversity was therefore noted here by the first respondent to outweigh the disadvantages: "... the best and biggest cities tend to be ethnically diverse and the best example is NYC ... in the modern economy, eh, things move quickly, and as you can't wait to train people to satisfy demand, you need migrant labour" (RT1). This view seems far too obvious to place any doubts on, as the cited examples stare us all in the face. However, the significance of this to the subject of study which is the representation of BMEs in construction was further explored.

As has been noted, there were those strongly in favour of diversity who spared no chance at justifying its benefits to the industry. RT10, for example observed: *In construction, they (BMEs) diversify the culture and style of how construction happens and what is produced. E.g. Mosques on a nation's cities skyline ... They come with their culture and so diversify the industry in many*

ways ... The Indians, for example, have brought in a lot of capital and Polish labour is also an instance.

Multiculturalism is brought to the fore on the issue of diversity and its benefits honed by RT11claiming that unless the global economic conditions change in favour of every country, which is very unlikely, diversification is inevitable. A well-balanced multicultural perspective is seen as good and construction is no exception as migrants bring a different culture, different dimension and ways of doing things into the industry, which is evidenced by the construction of numerous cultural buildings, religious places of worship. Attention is drawn to how the UK is well diversified, at least in some areas, and so inclusion based on such features is seen to help the representation of all sections of the UK society as some areas of the UK are very multicultural. RT12 attests to this in the statement: 'With diverse backgrounds and experiences and cultures there is more ways of doing things' while RT13 also adds: they can introduce different ways of doing things ... Look! I believe, in order to diversify industries to forestall and prevent a complete breakdown of some sectors, conscious efforts should be made to diversify the workers in those industries if not all'.

Furthermore, as had been noted in literature in chapter 2 by the international labour organisation (ILO) labour will always move to where resources abound, confirming the principle of macroeconomics on the dynamics of the demand and supply of labour. the presence of continental eastern European if referred to by RT15 when he said: "Imagine how many Eastern Europeans, especially Polish that moved here to fill the gap, leaving in their trail gaps at home that required others from elsewhere to fill ...". Interestingly, a whole new dimension is alluded to when the need for labour to take up unwanted jobs as well as do them cheaply is made by these remarks: Yes, they are prepared to work harder and longer hours irrespective of pay levels, are more committed maybe as a result of their reliance on the income they make here as, for example, the Polish people do, always reducing a quote in order to take the job (RT16) and you need them to do the jobs the English people don't wanna do ... They change the face of the culture of construction and they also work for less and thus provide cheap labour and cheap source of revenue in taxes ... Yes, where their presence is seen as significant, they should be encouraged to do so. They can learn for as it stands now, for most, integration is not an issue; it is the money since they see that as impossible (RT17). Yes, indeed for some this is the case and it rather should be mainstream institutions concerned about integration to make it happen. The analogy is

drawn about immigrants without bank accounts and carrying money around strapped to their bodies which could have been better invested in banks. Additionally, religion, which most migrants are noted for, helps to improve morality and commitment as well as tolerance and help conflict resolution.

Globalization in today's world has meant that it is not possibly, as has been noted in literature (sections 2.7.4 and 3.9) to be competitive on the world stage without taking advantage of a diversified workforce. Again, world trade has made it imperative that production is aimed at locations of higher demand for optimum gains and as indigenes may not know what is demanded overseas a diversified workforce could help companies to achieve knowledge of other markets and target production to such demands.

c. Employer - BME Experiences' Effect on Inclusion

The purpose of this section includes ascertaining whether primarily employers and BMEs themselves understand who BMEs are and their characteristics in order to be in a better position to define their dealings with them. The findings of the interviews reveal that not only do majority ethnic members not understand the definition of BMEs but also the BMEs themselves. In the literature review, attempts had been made to define this but even here views had differed. Likewise, during the empirical data stage it was thought to be those who are physically visible as in darker skin and different, darker and coarser hair texture.

In addition, the issue raised by RT15, who, although white and British himself, feels discriminated against and thinks the case of discrimination is prevalent and efforts should not be spared at addressing it. It therefore implies that, relocation in different parts of a country would easily make any citizen a minority and hence liable to being subjected to discrimination. RT15 had this to say "I see myself as a minority her in England ... aye we are underrepresented in construction. And further continues that he does not share the view that BME underrepresentation is a result of lack of the required skills and qualification suggesting that "some migrants are more qualified than their bosses yet do the unwanted jobs" and further comments: 'primarily, anything to counter discrimination, to keep it well in check ... given the opportunity, people can perform so what is the justification for excluding ... races claiming it is as a result of the lack of skills and qualifications. I have met several African and Asians who are very learned and still don't end up in the right jobs'. (RT15)

Therefore, it is confirmed that the problem is endemic, and requires comprehensive treatment as it does not seem to stem from one source but rather takes all kinds of forms. Comparable to this issue of discrimination is that of clusters and community belongingness through which jobs are advertised and labour recruited. Confirming this is RT19 who says that whenever he is contacted for jobs, he refers people to their communities. This is what he had to say: '...no job, I tell, I tell them, in this country a lot of peoples have communities and any contact from this community'. English people as well community, but different groups community. You must be inside a community. Any country has it, Greek people one community, Polish one community ...if your community big here you have advantage e.g. Indian community big so big advantage (RT19).

The first strategy suggested by RT1 bordered on consultation and was in fact not seen as a definite strategy but rather a means of soliciting the views of other stakeholders on finding the strategies for the solutions being sought for. This is what RT1 had to say: '...the most important issue here ... is consultation which must be part of the input into what strategies to be formulated in this respect. With consultation both the discriminator and the discriminated can render their submissions out of which the whole process is well informed for the necessary advice and action... this way inclusion is encouraged'(RT1). From the foregoing, the suggestion is not a solution per se, but rather the beginning of a process for soliciting for the solutions from an alleged perpetrator and consequently the sufferer of the act being perpetrated. This however suggests the magnitude of the problem and the seriousness it requires for dealing with it as no possible solution seems readily in sight. Like any other social phenomenon it is complex in nature and delicate in dealing with due to the possible dimensions it could take.

In fact, most of the issues raised here bordered on the ones coded and discussed in section 5.5.1 on the barriers faced by BME for this problem. Issues bordering on the many networks one commanded in the sector accounting for major inclusion strategy and the problem of discrimination ethnically thus alluding to racism were rampant. It therefore was notably clear that people had taken sides and those who favoured the BME inclusion predominantly were on the offensive suggesting that there should be more BME led companies whose leadership could also employ the kith and kin and members of their kind who they can trust and whose commitments could be unwavering hen engaging them in way to encourage optimum output for their investments in the sector.

d. Opportunity for further training

Several British government strategies and initiatives have been launched to increase racial equality and community cohesion by working with businesses, local public services and communities notable among which includes 'Qualifying the Workforce' initiative. This initiative attracted enormous support in relation to the Certified Training Achievement (CTA) scheme and the Construction Skills Certification Scheme (CSCS). Additionally, the CITB's scorecard remained effective in driving improvements across the industry sector by aiming to improve the diversity of its recruitment. Through the Managing Agency, its target for the recruitment of women and individuals from ethnic minorities was achieved with positive outcomes from local collaborative projects aimed at securing work experience, apprenticeship and employment for minority and disadvantaged groups. Although, the CITB notes better industry performance, it still has concerns about diversity targets especially with the quality of data provision. There were also improved achievements of NVQ/SVQ Level 2 and Health and Safety performance (chapter 2).

It is in this regard that training, and especially practical training in the form of apprenticeship and internship becomes critical to the process of BMEs engagement in construction to improve their representation. It has been alleged in the literature and in the empirical studies that BMEs' education and training, because, it is not tailored to the UK training especially in respect of the construction occupational culture and form, they face difficulties in gaining access. Asked about the process of recruitment, RT 14 noted that it was entirely based on merit and was widely advertised while expressing doubt at BME eligibility to apply in these words: ... their training is not tailored to the UK market initially ... Their training, as I have just mentioned does not conform to that of the UK. More training and education. That's what I believe, as they are found wanting in this respect most of the time, something must be done to encourage them but I'm not sure what.

The issue of training is true to some extent but the incidence of employing minorities usually in BME managed companies, some of whom may not even have the basics of the English language let alone learn the local culture, as recognized by RT13 is brought to bear here. If these BME employees were not to function well their respective companies may not continue in business yet a number of these were in existence especially in the London and the South East region. It was clear from such findings that the major ingredient for engaging the BME or for that matter any employee is to give them practical training on the job irrespective of the amount of formal

education or training they have received. It is in respect of this that RT21 noted that one has to wait patiently on any job and gain the necessary expertise before putting conditions on the entitlements, for example, a better remuneration . RT 21 When I worked for a white company, a British and English company, I was always paid less than the white person who had less qualification and responsibilities than me, and it's the fact. And when I gained experience and marshalled the job, ..., I demanded more and they did not give it so I left.

Empirical evidence in the cases dealt with in this research shows that, a good number of staff members, some at high rungs and doing extraordinarily well go to their positions not because they know beforehand what they had to do but that they were given the opportunity to train on the job and retrain after they had obtained it. Such training as learning on the job is a prerequisite of every job/position irrespective of how much formal education and training on has else orientations would not have been the first activity on any job. Also, the stress of employees on experience proves the fact that the best way to do a job is to learn while doing it. This, RT7 confirmed by: 'a colleague of mine with whom I got this job knew someone in this company through whom we were taken on internship and later on offered the positions we have now after which I have been given the chance to further my studies part time'. Therefore, the problem of lack of training and qualification observed by some of the respondents (see section A-VII) could be dealt with if the goodwill to give BMEs the opportunity of gaining access to jobs, practical training and apprenticeship to gain the specialist skills required.

e. Positive Discrimination: Views and Justification

Although there is no legal provision noted from literature for employers to apply affirmative action in the UK, positive discrimination (chapter 2) was justified. Therefore, equal opportunity and diversity approaches relating to ethnicity and race, gender, disability, religion, age. Employers through various government initiatives receive assistance in specific conditions to encourage under-represented groups to apply for training and jobs, although there is no direct assistance to put such people at a remarkable advance over their counterparts and affirmative action does. Additionally, company image and the moral and legal requirement have been noted to be markedly effective in driving changes in this respect where justification based on pure business case have proved less effective.

Additionally, although the private sector is not obliged to develop equality programmes, it may be affected by the signing of contracts with public authorities and other government institutions, which may demand equal opportunity clauses and monitoring systems and procedures. The construction industry is heavily dependent upon SMEs (see Chapter 3). However, SMEs (who own most of the construction industry skills) cannot afford to invest within individually advanced developments. They often rely on (largely national) trade associations to look after their medium to long term interests, whilst focusing upon more short-term improvements due to time-scale and financial constraints.

Literature has it that those construction companies, which attract and retain a diverse workforce often do well with issues relating to ethnic minority groups. These companies try to be the most desirable ones in recruiting and retaining good quality people. Some managers do not immediately see the relevance of equality and diversity approaches if they can find sufficient labour to meet their short-term urgent needs. Cultural diversity can be considered both a production amenity and a consumption amenity, and in both cases, it can be either positive or negative. As a productive amenity diversity can have a positive impact on wages, as a culturally diverse workforce may contribute skills and problem-solving abilities that are complementary to those of natives. The interaction between culturally diverse workers might therefore foster innovation and productivity, with a consequent positive impact on wages, focused on the business case for equality and diversity within the construction industry and state that it remains a poorly understood concept by managers while at the same time being difficult to quantify. Businesses usually establish drivers that may be used to respond to industry.

It is worth mentioning that firms tend to respond more to legislation rather than adopting equality and diversity plans. Legislation placed an increased responsibility on employers to act in a non-discriminatory fashion at all stages of the employment process. Yet, the most influential of the respondents RT1 even failed to agree with positive action in the following comments: Unless that is a specific role that somebody has to fill, I don't see any justification. Er, I am aware of a friend of mine who works with the City Council in Leeds Bradford in the planning authority who was taken onto a job advertised for an Asian planner. If an Asian person will trust an Asian planner more, especially, if they haven't been treated well in the past, you know, then it can be done but still I don't believe it is fair. Anybody could have been employed based on merit, and checks put in place to ensure they deliver based on a laid down criteria, but such is life, some exceptions must be allowed at times. We never use positive discrimination as no circumstance here justifies it and we are an equal opportunity employer (RT1). It is therefore evident that

affirmative action-like policies commonplace in the USA is practically improbable her in the UK. What seems practical, however, is the common practice of the dominance of ethnicities in locations determining who fills vacancies as the quote above rightly suggests.

f. The Role and Significance of BME Labour

Attention has been drawn to the aging profile of the white population of the UK and for this reason it made a lot of professional sense when RT1 notes the role and usefulness of BME to the local economy noting: They collect the taxes, receive overseas investments with no strings attached, a massive injection of foreign capital and labour... Initially, they have to learn due to differences in practices and legislation etc but they bring a wider and much richer experience to the industry.

Therefore, the contribution of BMEs in the form of taxes and investments to the host country is a lot of benefit. Although it has been argues that they also take jobs from the local population, there is the consensus that they cover for exceptional talent and also for jobs the local population would not do. To this end, RT 17 acknowledges as follows: 'you need them (BMEs) to do the jobs the English people don't wanna do: cleaning industries, carers, hospitals, because the local population don't want those jobs. The consequences are that should other countries become more attractive to migrant workers, those industries will suffer... They change the face of the culture of construction and they also work for less and thus provide cheap labour and cheap source of revenue in taxes ... Yes, where their presence is seen as significant, they should be encouraged to do so. They can learn for as it stands now, for most, integration is not an issue; it is the money since they see that as impossible' (RT17).

The comment was made that BME get more benefits for their presence in the host nation, but to this RT 19, and Eastern European BME has this to say: when thousands and thousands of people like that come, this country is rich. Only people who work legally government is happy. When you live here, you spend money here, money round and round, yeah, in circulation and you bring in more money than you take out. Additionally, RT 2 affirms this claiming that the host country gets revenue from taxes of all kinds that help to build the country's infrastructure; the roads, railways, bridges and again praises the flexibility of BMEs as they work more and odd hours and so can help get work done to help meet targets.

g. The Effects of Ageing of the Stereotypical White Young Male

The demographic composition of the UK population as ageing has gone down in records and has been noted as a worrying trend in both the findings of literature in Chapter 2 and the recent 2011census data. Through RT1's expert opinion as a planner still in academia and having been involved in several research his comments were noted to be very significant: *young workers are needed to pay taxes. So, if the workforce reduces the number of pensioners increases disproportionately and that has very serious consequences, well, in the long term. Yes, surely. If the old dies out who takes over? It is the outsiders, immigrants.*

Although disagree with the demographic findings, RT11 while initially agree that 'Any aging community needs replacement continues by positing: '... but who says construction has an aging workforce? The whole world is our workforce so young workers are always in waiting somewhere'. It is however, debilitating that efforts are wasted on stressing the need for BME inclusion in the industry as a sustainable workforce that could soon become the livewire around with the entire industry would operate. By denying this minority group who, according to forecast (Leeds Study) are to account for over a quarter of the UK population in the next four decades, practical training, internship, apprenticeship etc to increase their competence is rather a worrying trend requiring urgent attention.

In addition, globalisation has caught on with the entire countries of the world and although RT12 thinks: There are always people from elsewhere. The immigrant workers will always come'. It seems that is far too short sighted. There seems to be more places attracting labour in all forms than there was a few years back due to the trend of growth in global economies in recent times. Therefore, to assume that the trend of labour mobility will remain the same for year to come is far too naïve. Therefore, there should be the need for a conscious effort aimed at retaining and attracting labour especially in the industries where they will be needed in future especially by improving the underrepresented groups like the BMEs whose age profile is quite young and can retain a sustainable supply of labour. As RT15 notes the consequence is already here for had it not been the recession, it would have been impossible to fill the many vacancies from the decade of growth in construction prior to 2008.

h. Skills and Qualifications

The assertion of BMEs lack of skills and qualifications in literature (chapter 3) was put to the test for the same literature review lay claim to the issue of over education among BMEs, the main

cause ascribed to lack of access to employment hence the need to stay longer in education. As an expert in academia, RT1's views were taken to be very creditable and it all starts with him reiterating the cultural limitations BMEs face on local knowledge alongside formal training but then this comment raises a lot of contention in that although there is agreement amongst some of the respondents, the majority disagree. This is what RT1 noted: "... some of them may suffer from lack of knowledge, education and familiarity with local issues. Er, but then if you have work experience in the appropriate field, it does not matter your race, being Asian, Black or White..." but then, RT10 turns the entire argument on its head by throwing in a completely new dimension "I usually employ based on expertise and experience. I normally advertise on the internet. We are a very small company and so known people also refer people to us". In fact, it is worth remembering that the majority of BMEs come from less advanced nations and for that matter lack this exposure. Recruitment based on the technological knowledge, local cultural practices like visits to the Jobcentre plus, the use of CSCS card etc are factors that militate against the first generation of BMEs. However, these tend to lose weight with the later generations as they are well immersed in the local culture as they grow in it. Therefore, with the trend of underrepresentation continuing with them, it is justifiable to stress that the factors responsible rather rest somewhere else.

Here, the educational level, the knowledge and expertise as well as the experience base of BMEs was called to question and is put in doubt. RT1 contends that some of 'them'- (BMEs), may suffer from lack of knowledge, education and familiarity with local issues and goes on to say that if one has work experience in the appropriate field, it does not matter what race, being Asian, Black or White, a job could be obtained in construction; a point also confirmed by RT10, RT4, RT8 and RT14 as signified by this quote: "I don't think so. Lazy people always point accusing fingers. As they say, the bad workman ..., you know? They don't want to train and so always blame their tools. Indians are everywhere. What about that. They are BMEs as well, aren't they?" (RT22) But then the issue of the 'Indians are everywhere' is rebutted by the argument that the industry is dominated by the majority white groups and if Indians happen to be the majority among the minority and also dominate in the area in some parts, then it is right to say that it all boils down to the level of influence i.e. having to know somebody to gain employment in the industry.

Additionally, related to the issue of the lack of training is that of language which was also seen to be a problem but then again a rebuttal by RT18 had this effect: "I not think so, no. You see, sometimes people difficult to speak English but work is not speaking. Maybe if know language too much plenty talk. A little English to tell what to do, you see, enough, that's enough."(RT18) Therefore, the issue of language is given series of dimensions based on who is considering the situation. Alluding to scanty English as a means of getting employee to stay focus on their duties is how RT8 is limited language skill as an advantage for believing that 'work is not speaking'.

While disagreeing with the notion of lack of qualification and training, RT17 looks at the whole issue from a different perspective and suggests self employment as the best option for BME. He had this to say: I don't think so,..., where I did my diploma, the college had loads of black guys but where are they? No jobs, you'll in most cases, like I've done, you must start something yourself. RT15 believes this: I see myself as a minority here in England as well and, aye, we are underrepresented in construction but I don't share the view that it is because we lack the necessary skills and qualifications. Some migrants are more qualified than their bosses yet do the unwanted jobs. Over-education of BMEs has also received wider coverage by several authors with the suggesting that the lack of job opportunities for ethnic minorities has the resultant effect of keeping them longer in education. This said, however, they are still not guaranteed better job opportunities even with the higher levels of education and training they receive in institutions and in most cases gaining apprenticeship and practical training even is a major hurdle. therefore, end up longer in education and into jobs for which they are over qualified by which time their age may be a disadvantage as in keeping with the conditions and strains of certain professions. When the issue of lack of skills and training among BMEs was raised in a question to RT3, he had this to say: Are they? I thought you explained that the Polish were also BMEs? And Asians too? Maybe, elsewhere they are, but not here; there are plenty people, ethnic minorities in Universities and colleges learning construction courses, like my two children, so I do not think skills and qualifications are a problem.

i. Self-Employment and BME Representation

The final issue to be considered here is that of self-employment which featured under this theme a lot with respondents thinking that it is the shortcut to remedying the situation. With 19 sources and 31 references, it can be said that respondents felt the need to discuss it. Through self-employment, BMEs or anyone else would not need to seek employment from some other person

or company, in which case the problem seemingly would have been dealt with. But that also comes with its own challenges as the problems of start-ups for new business will have to be dealt with before any further steps can be taken. Even here, will the problems faced in seeking employment not feature when one has to solicit for credit from financial institutions and other agents where the same factors militating against their employment are bound the raise their ugly heads? Whatever the case, the solution sought for must be a lasting one and not ad hoc only for same problems to feature sooner or later.

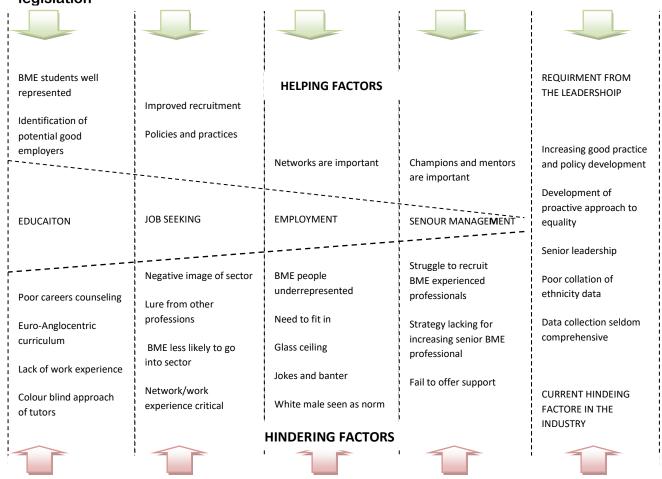
In Section 5.4.2a, and in sections 2.4.1c, 2.6.1 and 3.6 (literature review - chapters 2 and 3), it was acknowledged that although only a small number of employees are on fixed-term employment contracts in the UK construction sector, a large share of the workforce consists of self-employed workers without employees who work for companies on a contractual basis and who are equivalent to employees but often without the same level of protection. As a result companies in the sector tend to be larger than the EU average and, as in Sweden, large companies account for about 22% of employment in the sector compared with the EU average of 12%. Therefore, the impact of such organisations could be phenomenal in the recruitment of employees and the award of contracts. It is because of this that the issue of how vacancies are filled was given such a level of significance. A variety of experiences featured during the interviews from RT11 'Vacancies are advertised as widely as possible while considering budget constraints. Applicants are screened based on their CVs and qualifications. Successful ones get to interviews ... we surely cannot respect this cumbersome process for every vacancy. Lower positions are filled in a simpler manner particularly based on recommendations' and RT12 'most of the guys I supervise got here through one person or another. They were referred by others but all my colleagues, and people I've referred have been rejected, almost all. The main problem, to me, is racism. If they are well represented at higher levels of construction education, why are they not being equally well represented in apprenticeships, placements and jobs? If you go into companies that have ethnic minorities at the higher rungs, such companies tend to be minorities dominated too and specific minorities as well. It is the fact which may not be told officially but look around ... Yes, there are hurdles one hardly gets over to find a job and to get over them, eh! I don't know how but maybe in an ethnic minority dominated company BMEs will do better'.

This dichotomy in the process of recruitment between employers, based on a continuum from formal processes based on merit in open case and personal referrals in the other tells of how very unregulated and unorganised the industry, especially the micro to small sectors happens to be, and considering that the big companies are always subcontracting to these ones on whom direct recruitment rests gives an idea of the difficulty involved in changing the situation. It was, as a result, well thought out when RT17 notes: Yes, surely, no bobs, no contacts when you employ yourself. Your best bet is with other BME people, you get me? Indians, Asians generally, Caribbeans, Africans etc. Even here there is still a problem. It's tough man, discrimination is everywhere except on paper maybe.

5.5 Chapter Summary and Key Findings

The main subsection 5.5.1 has broadly looked at BMEs underrepresentation and further considering the issues raised in the interviews through content analysis in to broad sections 5.4.2 and 5.4.3 for barriers responsible for underrepresentation and drivers (strategies) to help BME representation in the industry respectively. The model (figure 5.6) adapted from CABE, (2005) has helped to consider a good number of the factors raised at the literature review stage and the qualitative part has further explored the situation empirically.

Opportunities for training **apprenticeships** interest in construction related jobs **liaising** with promoters of BME inclusion in construction vocational/career development in construction related jobs building confidence/trust though networks and supervisors legislation



Religion culture length of Stay/generation level of education visas/right of stay language

White dominance lack of information institutional barriers trust in the system consultation fatigue

Figure 5.6: Helping and Hindering Factors Reviewed (excerpted and modified from CABE, 2005)

The model above shows the main themes (section 5.5.1) that were captured into the model adapted from the Commission for Architecture and the Built Environment (CABE), 2005 from the interview findings. The model on what CABE describes as helping and hindering factors where the factors on either side are outlined and their effects in the process graphically represented and colour coded to indicate this effect. The figure shows the stages from *education* through *job seeking* and *employment* to *senior management*. The model shows this effect as the involvement of BMEs narrows down within the movement along this process as their

representation dwindles down.

The interview sought to investigate the process of BME representation in construction through these stages as outline in the model above. Figure 5.7 outlines the process of the interviews and the outcome in a graphical format to assess the inclusion of the factors resulting from the findings in the final framework developed.

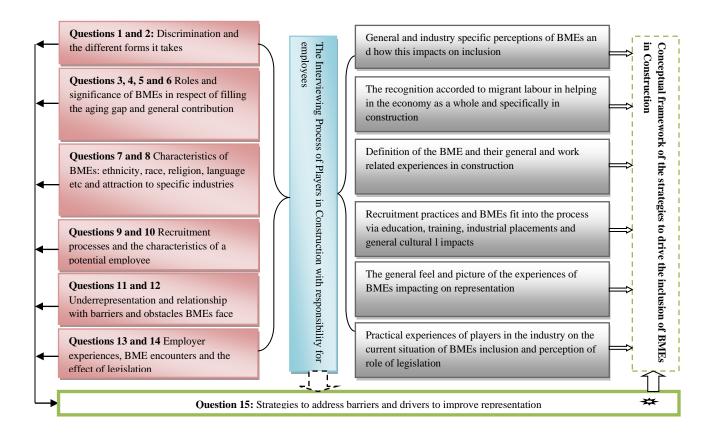


Figure 5.7: outcome of interview processes

Figure 5.7 captures the overall scheme adopted in this study in order to emphasise on the critical issues. With the main aim being the development of a strategic framework to address the current state of BMEs employment in the construction industry, the strategies as captured from respondents are given in the green box underneath which inputs into the final framework in the dotted green box to the right. This was done through assessing the barriers they face in order to define the appropriate strategies.

This chapter helped to establish the main research aim, which is to develop a strategic framework to advance the representation of BMEs in the construction industry. It introduced the research

propositions that guided the process of the study at this stage. To achieve this, pilot interviews were conducted followed by the main semi structured interviews with respective players in the field who have roles in the employment of BMEs. The chapter has also presented the findings of the pilot interviews, which helped shape the structure of the main semi-structured interviews. The main interview findings were categorised into one of several themes as have been indicated in the analysis using Nvivo 8 content analysis. The qualitative analysis saw the main and recurrent themes that emerged placed under nodes, which helped in extracting the relationships between the themes and the responses from the interviewees. The main themes were discussed and outlined as either of two sets of factors: hindering factors (barriers) or helping (drivers) factors. Several findings emerged at this stage of the study which can be summed up below as follows.

- BMEs are generally underrepresented in construction, an industry that is segregated. Maybe the big companies may be doing things differently although it is not evident from this study. However considering that the industry is over 95% made up of small firms, it is here that change can take place. There are, of course, barriers, several of which have been outlined, but the question remains as to how one can prove their expertise and experience in a job role, if they are not given the chance in the first place. Contrasting to the barriers are drivers which factors help to attract BMEs into construction jobs, however they do not seem to be effective in implementation.
- The issue of the informal recruitment practices based on word of mouth has been confirmed as prevalent in the industry hence the formation of clusters of ethnicities in particular job locations. The issues of trust and commitment, qualities which hint a level of engagement have in some instances been given as the reason for this state of affairs.
- In a number of cases, instances of antithesis have been noted to be unavoidable and these have happened along ethnic lines. While, an Eastern European manager thinks that knowing too much English will make an employee talk too much, an English project manager thought otherwise and stressed the need to adapt to local culture. This casts doubt over the issue of lack of training, qualification and knowledge of the local culture as being responsible for BME underrepresentation. Therefore, the finding that BMEs generally lack exposure to the industry and are rarely given a chance on a level playing field as compared to others who are given the opportunity to learn on the job seem a lot more credible. However, contrary to what

has been put forward above still some respondents remained convinced that the underrepresentation is much to be blamed mainly on the lack of skills and training commensurate with that of the UK. This said, however, the lack of practical training and work experience has been noted as a strong contributor to entering the job market in general and construction is no exception. Therefore, where this is not possible, the level of education training and skills may not be of much significance.

- Another major finding was that of attraction of BMEs to specific industries. It was asserted that it is not uncommon to associate particular people with certain job roles especially when they are usually found to be performing such functions most of the time. As to whether this constitutes a problem, would also be based on other findings. Although, it was noted that the ease of access into such industries, resulting from either the lack of labour supply or because of the ready network of characteristically homogenous people (usually BMEs in such roles), it was worthwhile that conscious efforts are made to make construction attractive in similar manner if the labour supply of the industry is to be secure, especially due to the demographic trends of the groups of ethnicities in the UK population. It was therefore necessary to address the issue of the perception of tagging ethnicities to particular industries. The difficult to dissociate them from it especially when employers see them doing almost the same thing most of the time will mean that they may stand little chance of gaining entry.
- Another point worthy of note is the confirmation of the issue of BME over education of BME resulting for staying longer in formal education due to the lack of job availability which was also a the major findings in literature. Not only was is confirmed here that BMEs were notably represented on most of the construction programmes at the various level in the academic realms yet failed to make it into employment or even apprenticeships. The issue of finding placement for training on the job was also highlighted giving the magnitude of the problem as gargantuan and endemic on several fronts. suggestion that this requires a concerted effort to deal with sounded very welcoming for the definition of the problem and its delineation was seen to be difficult on its own due to sever disagreements, although this will serve as a major step towards solving the problem. Among other factors, self-employment, in order to increase BME ownership of construction companies was seen as a major step forward. In any case, there has to be the will to act on all fronts.

The findings at this stage have highlighted what employers views are qualitatively and it will be commensurate to assess further the view of employees who have undergone the process of recruitment using a different method in the mixed study process. The basis for this is the need to further explore the findings from this part of the study. The preoccupation of the next chapter will therefore be guided by a quantitative research design. Therefore, unlike this part of the study the next chapter will randomly select units from the population of construction employees in the study location to create a sample with the intention of making generalisations using statistical inferences from that sample to the population of interest.

CHAPTER 6

QUANTITATIVE ANALYSIS

6.1 Introduction

This chapter is composed of the data collection process, which covers the sample size selection, the questionnaires and the quantitative analyses of the data as well as the conclusions drawn. Earlier in chapter 4 it was indicated that the quantitative study has a complementary purpose of triangulation. With the interview findings, it is intended that the questionnaires will help to improve the validity of the research through further contribution to the data from both BME and non-BME employees in construction. This is because of the fact that it is only through investigating the experiences and views of the *employers* (interviews) and those of the *employees* (questionnaires) that the true picture can immerge as literature (chapter 3) indicates that the two groups have divergent interests. This is the case because, as employees are the sufferers of a selection process for any vacancy that gets filled, they are the ones best placed to tell the story. One would have thought that it would be appropriated to solely collect evidence from the BME employees for a true picture but then according to the methodology (chapter 4) triangulation is the best means of obtaining valid evidence.

6.2 Data Collection Tools: Questionnaires

Drawing on both the literature review (chapter 3) and qualitative study (chapter 5), it had become evident that construction employees are very numerous and diverse and a questionnaires survey would be better place to gather a cross sectional view of the respondent base. Each questionnaire had a brief description of the research focus attached to it and the questionnaires had satisfied all ethical requirements stipulated by the University's ethical committee from which ethical approval (section 4.14) had been sought prior to the empirical part of the study and especially for the purposes of data collection. A total of 200 questionnaires were distributed with 100 in each location. The response rate has been low even with the use of snowball sampling. Unlike the interviews, respondents could not complete the questionnaires straightway and in most cases had to return them by post, collected in person on their instructions or have had to return them to a specified person in the snowball process. As indicated in the tabular analyses below, the questionnaires achieved a very low response rate totalling 37.5% overall with 28% in the NW and 47% in London and the South East. The results are captured in table 6.1.

Table 6.1: Regional Distribution of the Questionnaires

Region		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NW	28	37.3	37.3	37.3
	SE	47	62.7	62.7	100.0
	Total	7 5	100.0	100.0	

The low response rate in part is attributable to the current unhealthy economic climate which has created a high level of apathy and apprehension to matters of research in employment and research in general. People would usually enquire of the benefits, and in all cases, financial benefits that would accrue to them as a result of taking part and straight away showed disinterest when they found there was no reward of any sort for this. This in part gives a high level of credence to the study and adds to its robustness because it strengthens the argument that those who took part in it did so genuinely of their own accord without any influence as happens in some research of this nature and for that matter the responses would reflect this genuineness and the real situation on the ground. On the whole, the questionnaires were given to people at work on construction sites although they could, through snowballing pass some of the questionnaires on to their colleagues and relations in other companies. Whatever the case, it was always stressed that the respondent had to fit the description of the sample set as given above in this section.

The anonymous questionnaires were targeted at construction employees both in SMEs and large companies a copy of which is attached as appendix B. Rather than distributing the questionnaires indiscriminately, construction companies were identified using mainly the construction firms listed in the UK directory at www.ukdirectory.co.uk which were contacted by phone before the initial visit. This, in some instances, led to references to other companies in the referral chain for the survey exercise. The questionnaire is divided into six sections which are analysed based on the objectives and research questions and are usually directly linked with either the literature findings or inference from the interview data collected or both. The analysis is then conducted descriptively at the initial stage and then inferentially, the findings of which are presented and then summarized.

6.2.1 Outline of the Questionnaires

The questionnaire has 6 sections as follows:

Section A: Profile: This part gives the profile of the respondent, their age, gender, religion and ethnicity. The sections ensures that the ethics of research are adhered to by gathering such information that justifies the participation of the respondents, e.g. under aged people and to get a wide scope of the ethnicity and educational level of the respondents. Here, questions about participants' religion, ethnicity, migrant descent and generation are included in order to check if truly such factors influence their inclusion and participation orientation based on their own views or those of their employers. An instance being the level of involvement of third generation BMEs in the industry compared to the first or second generation BMEs.

Section B: About Your Education: This section has the main of exploring the level of education of the respondent, their specialism and background and whether this is construction related and if s/he has undergone placement and how easy it was in finding such placement. It further attempts to find out who arranged the placement and whether the individual was still in employment or the answers were retrospective. This will help analyse the views and opinions of each of the respondents in the various educational brackets to review the impact of their level of education and other forms of exposure to the industry in relation to other factors in order to assess their impacts.

Section C: About Your Employment: Here, the whole process of interviewees' employment background and current state are solicited, their role and whether they have had experience outside the industry. The duration of their role is also highlighted and their views on the employment, retention and progression and their training needs as well as future prospects and past experiences are also sought after.

Section D: About Training on the Job: This section is very short and is solely dedicated to the placement and general training needs of participants. It is intended to investigate whether initial involvement in the industry through placement and furthermore training while on the job helps to improve the level of attraction to and participation in the industry.

Section E: About Equal Opportunity on Your Job - This part looks at the availability of consultation and grievance procedures dedicated to discrimination offences as well as experiences that impact the BMEs inclusion and their perspective on the whole process.

Section F: Promotion and Progression on Your Job - This part is on the steps taken toward the involvement of ethnic minorities in the industry and whether any policies are in place to facilitate this process and in addition the effectiveness of such procedures.

It is anticipated that this will reveal the current state of BMEs representation in the industry. It is further expected that a series of relationships and correlations would emerge from the findings of the questionnaires in order to attempt a ranking of the barriers and drivers for the inclusion, retention and possible progression of BMEs in construction. This way the very exigent factors could be identified and the appropriate steps needed to attempt to remedy the situation taken. The use of the SPSS software has been seen to permit the compilation of large amount of statistical data in order to analyse them for meaningful patterns and outcomes. Therefore, this software was used to analyse the variables that have been compiled in order to run identifiable tests that could yield results worthy of application to the whole process on BMEs inclusion.

6.3 Reliability Test

Reliability refers to the consistency of a measure where a test yields the same result repeatedly. For example, if a test is designed to measure a trait, then each time the test is administered to a subject, the results should be approximately the same. In any research, maintaining validity and reliability is of utmost importance. Unfortunately, it is impossible to calculate reliability exactly, but it can be estimated in a number of different ways. In measuring constructs, questionnaires should be designed based on items used to form a scale in order to have internal consistency and should measure the same construct (Shuttleworth, 2009; Streiner & Norman 1989). Such items should be correlated with one another. Internal consistency reliability is a measure of how well a test addresses different constructs and delivers reliable scores.

Hilton *et al.*, (2004), emphasises the need for a questionnaire to be consistent in measuring any construct it is designed for which is the basis of any reliability test. A quantitative researcher attempts to fragment and delimit phenomena into measurable or common categories that can be applied to all of the subjects or wider and similar situations, it also involves the "use of

standardized measures so that the varying perspectives and experiences of people can be fit into a limited number of predetermined response categories to which numbers are assigned".

Tronchin (2006) asserts that it is not possible to calculate reliability exactly stressing that it is only estimated instead which is usually an imperfect endeavour. Tronchin (2006) further identifies four *general classes of reliability tests*, each of which estimates reliability in a different way as follows:

- Inter-Rater or Inter-Observer Reliability: Used to assess the degree to which different raters/observers give consistent estimates of the same phenomenon.
- **Stability or Test-Retest Reliability:** Used to assess the consistency of a measure from one time to another.
- Parallel-Forms Reliability: Used to assess the consistency of the results of two tests constructed in the same way from the same content domain.
- Internal Consistency Reliability: Used to assess the consistency of results across items within a test.

6.3.1 Internal Consistency Reliability (Cronbach's Alpha in SPSS 16).

Cronbach's Alpha (CA) is an estimate of the internal consistency associated with the scores that can be derived from a scale or composite score and reliability is important because in the absence of reliability it is impossible to have any validly associated with the scores of a scale that is why it is important to do this analysis before doing any analyses on any data especially where scores are combined together. CA helps to determine whether it is justifiable to interpret scores that have been aggregated together.

Cronbach's alpha which is an internal consistency reliability test, according to (Shuttleworth, 2009; Yu, 2005), is one of the most important ways of measuring reliability. The Cronbach's Alpha test does not only average the correlation between every possible combination of split halves, but it allows multi-level responses. For example, a series of questions might ask the subjects to rate their response between one and five. Cronbach's Alpha gives a score of between zero and one, with 0.7 generally accepted as a sign of acceptable reliability. The test also takes into account both the size of the sample and the number of potential responses. A 40-question test with possible ratings of 1-5 is seen as having more accuracy than a ten-question test with three possible levels of response. Cronbach's alpha generally increases when the correlations between

the items increase and vice versa for which reason the coefficient is also called the internal consistency or the internal consistency reliability test.

Generally, the alpha coefficient ranges in value from 0 i.e. completely unreliable to 1 i.e. completely reliable and a score of 0.70 or higher is recommended for a reliable test. It is most commonly used when you have multiple Likert questions in a survey that form a scale. (Laerd Statistics 2013, Reynaldo & Santos 1999). Therefore, SPSS 16 was used for the computation of the Cronbach's alpha for the multi-point (scalar) items of the questionnaires and the result is as illustrated in Table 6.2 and Figure 6.1.

Table 6.2: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.760	.750	3

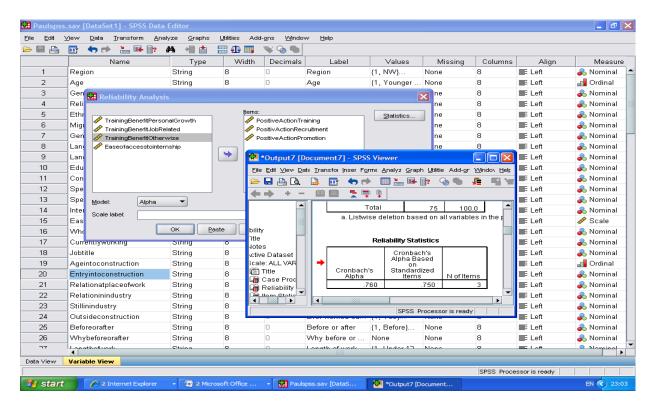


Figure 6.1: SPSS 16 Screen Shot of Reliability Test Using Cronbach's Alpha.

Table 6.2 shows the Cronbach's Alpha as 0.760 which justifies the internal validity and reliability of the questionnaires which also demonstrates the dependability and trustworthiness of the research for the purposes of repeatability. The next section analyses the questionnaires.

6.4 Questionnaire Analysis

Figure 6.2 indicate the distribution of the respondents to the two regions in the study. As can be seen, 37.3% of the respondents were from the NW while the majority at 62.7% were from the SE region.

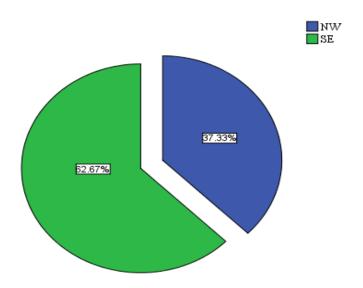


Figure 6.2: Respondents distribution

As will be seen later in section C and figure 6.4 this distribution had been as a result of the majority of the respondents in this area being of BME backgrounds themselves. Also, as confirmed from literature in section 3.2.3 the population of the SE has a disproportionately large percentage of the BME population in the UK.

6.4.1 Respondents' Profile

This section accounts for the general profile of the respondents with the aim of investigating the relationship between the data collected and the ages, gender, religion, ethnicity and migrant descent and generation of the respondents. By so doing the influence of the characteristics of the respondents on the participation, inclusion, retention and progression in construction is assessed. It further explores the respondents understanding of their ethnic identity and the impact this has on their employment in construction.

The responses in relation to the profile questions asked are captured in Table 6.3. All respondents ticked their gender, age bracket, ethnicity, religion and migrant descent and while only one declined to state their gender, as many as 26 participants intriguingly declined to state the generation they belonged to even though each had been explained. These characteristics of their profile are further analysed in the following sections (6.4.1 A-D).

Table 6.3: General profile of respondents

	-	Age	Gender	Religion	Ethnicity	Migrant descent	Generation
N	Valid	75	75	75	75	75	75
	Missing	0	1	0	0	0	26

a. Gender:

As indicated in table 6.4, the sample of respondents is mainly male dominated whereby 74.7% of the respondents were male with only 24% being females. On the whole only 1 participant failed to answer the question. Therefore, the analysis will not make a distinction between male and female responses.

Table 6.4: Distribution of Respondents by Gender

_	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1.3	1.3	1.3
Female	18	24.0	24.0	25.3
Male	56	74.7	74.7	100.0
Total	75	100.0	100.0	

b. Respondent's Age Distribution

Information relating to participants' age profile was collected in order to comply with the ethics of research to prevent vulnerable individuals like under aged people from taking part. This data also served to ascertain if any part of the sample set under investigation had age implication on participation. The details are illustrated in Table 6.5 which shows the age range of the respondents. It reveals that most of the respondents were over the age of 50 at 28% of the 75 participants while the least were in the 41-50 category. The age range of 18-25 comes second after the over 50 which interestingly conflicts with the finding in literature that the age profile in construction is aging. However, it must be noted that literature also said that BMEs have a younger age profile and with the majority of the respondents coming from the London and South East region where most of the BME owned companies had participants of younger profile this interesting phenomenon is not surprising.

Table 6.5: Age Distribution of Respondents

	Age	Frequency	Percent	Valid Percent
Valid	18 - 25	18	24.0	24.0
	25 - 30	12	16.0	16.0
	31 - 40	14	18.7	18.7
	41 - 50	10	13.3	13.3
	Over 50	21	28.0	28.0
	Total	75	100.0	100.0

Also, a correlation analysis of the age profile of the respondents with their ethnicity reveals quite interesting patterns as indicated in figure 6.3 which further presents the same information in a tabular format in order to bring out the agreement between the findings of the quantitative study and those of the literature review.

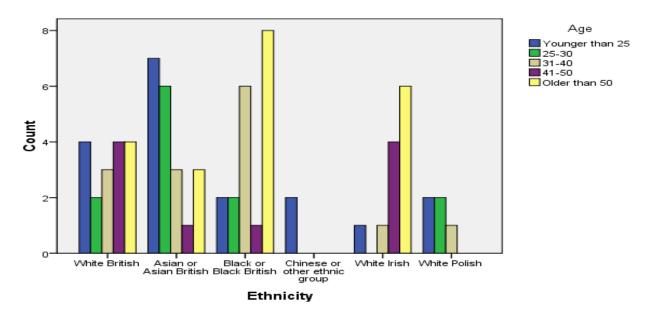


Figure 6.3: Cross-tabulation of Age and Ethnicity

The breakdown of the cross-tabulation of age and ethnicity has been shown in figure 6.3. On it the mean age is shown as skewed towards the older age profile in White British and White Irish. However, Black or Black British shows quite a sizable number of older age profile which in fact stems from the high involvement of those involved in builders cleaning and decorating, a trade which is predominantly taken over by this ethnic group who were noted to have an old age profile. Further analysis of the data in these categories reveal this in details where the professions of those involved are given but as the data on professions / roles are not comprehensive it is not easily evident.

c. Ethnicity

One of the notable findings from the literature review in chapter 3 is the marked ethnic diversity of BMEs in the UK with London noted as the most diverse city on earth. Again, literature and the interviews (chapter 5) had revealed that ethnic minorities are underrepresented in construction and that among the various ethnicities, differences exist based on the numerous cultural and ethnic characteristics of BMEs. It is therefore worthy to take into account such factors in order to further investigate their impact. Table 6.6 show the ethnicity categorization of the participants of this survey; the classification adopted as in the literature was based on the Equality Act 2010 as amended but due to the size of the respondent base, some of the closely related ethnicities have had to be grouped together as some recorded no score while others were very low on average as are represented in the table with their corresponding frequencies and percentages.

Table 6.6: Frequency and percentage of respondents' ethnicity

	-	Frequency	Percent	Valid Percent
Valid	White British	17	22.7	22.7
	Asian or Asian British	20	26.7	26.7
	Black or Black British	19	25.3	25.3
	Chinese or other ethnic group	2	2.7	2.7
	White Irish	12	16.0	16.0
	White East Europe	5	6.7	6.7
	Total	75	100.0	100.0

From the table 6.6, it was worth noting that whites, other than white British also share common characteristics with the other BMEs as defined in the literature review in section 3.2 and so would be clustered together for analysis. This is because, although on a different scale, their experiences match those of the other ethnic groups. It is significant to note that as a minority, two of the ethnic groupings were more than the white British.

It has also been revealed in table 6.6 that the majority of the respondents were people of 'Asian or Asian British' background. This is interesting as generally it would have been expected otherwise, as noted in literature. However, a detailed analysis of the data taking into account other factors like mode of employment suggests that the representation in this case has been hyped as a result of the inclusion based on family and other relationships especially in the case of the Asian community. As Chinese were hardly ever represented, they were put together with 'other ethnic background' as shown in figure 6.3. The table shows three dominant ethnic groupings being

White British, Asian and Asian British and Black and Black British with White Irish following closely. This dominance had been as a result of a larger respondent base in the London and the South East region as demonstrated earlier in section 6.4.1. As indicated, the true picture emerges when the analyses take into account the professions of the respondents. White East Europeans and other white backgrounds are also not well represented in the survey. This was basically due to the language barrier taking into account the time constraint, but the few surveyed, as may be recalled from the interviews analyses in chapter 5, seem to represent the views of the majority as demonstrated by the body language of those who had the survey translated to them. Although a limited number in this category wished to have taken part, they rather would request their colleagues to fill in the questionnaires for them; an exercise which was considered could yield to biases in the results.

Another important finding was the ethnicities of the respondents based on the two regions of the NW and the SE. This is shown in the bar chart in figure 6.4.

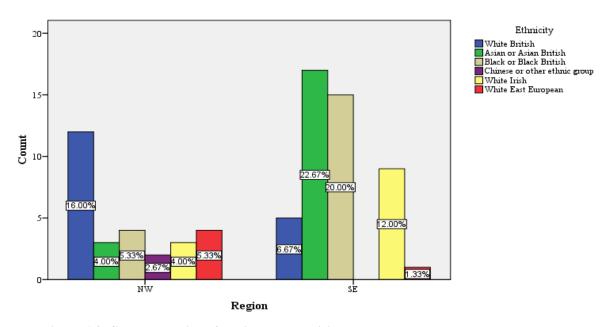


Figure 6.4: Cross-tabulation of Region and Ethnicity.

As can be seen in figure 6.4, the two regions show different characteristics in terms of the respondents that were recruited. In the NW there were more White British at 16% of the total respondents compared to all the rest among whom the highest were White East European and Black and Black British both at 5.33%. On the other hand, London and the South East (SE) Region shows significantly high numbers of BME respondents at 22.67% for Asian and Asian British, 20% and 12% for Black and Black British and White Irish respectively.

Therefore, figure 6.4 confirms that the response rate was higher in the SE region where a total of 47 respondents returned the completed questionnaires while the NW region yielded 28 responses, that is, just over half of the former. This phenomenon is attributable to the fact, as it emerged, that the majority of the respondents in the SE region were themselves ethnic minorities who felt this was an opportunity to make their voices heard although such assurance was never implied. Yet still a larger majority declined to participate in the study altogether.

An interesting finding resultant from ethnicity based on the correlation between the two main variables (*Relations in industry* and *mode of entry into construction*) in both regions, as indicated in table 6.7, shows that strong networks in the industry is a determinant of the opportunities open to any potential employee.

Table 6.7: Cross-tabulation of Relation in industry*mode of entry

Resp	ondents	Relation in	indus	try	Total	
Regi	Region			Yes	No	l l
NW	Mode of Entry into		1	-	2	3
	construction	Job Centreplus	-	2	-	2
		Newspaper advert	-	1	1	2
		College Career advisor	-	-	5	5
		Direct application	-	1	4	5
		Recommended by a friend	-	5	3	8
		Recommended by a relative	-	2	-	2
		Other	-	-	1	1
	Total		1	11	16	28
SE	Mode of Entry into	College Career advisor	-	1	2	3
	construction	Direct application	-	-	1	1
		Recommended by a friend	-	13	6	19
		Recommended by a relative	-	21	3	24
	Total		-	35	12	47

This is evident in table 6.7 as the indicative of this evidence is the many employees in the two locations especially in the SE who gained employment through relations and friends.

d. Respondents' Religion

It has been noted in literature (sections 2.7.6 and 3.3.4) that religious practices play an important role on the construction site especially when, Muslims for example have to pray several times in a working day and close early on Fridays for prayers. Therefore, in this study it was attempted to ascertain the severity of barriers posed by religion in contribution to the underrepresentation of BMEs. Table 6.8 captures the religious profiles for the respondent base for this study. Also as indicated in literature, quite a significant number, 9.33% of the respondents failed to disclose their religion. The implications of this will further be analysed in the discussions section of the main thesis.

Table 6.8: Respondents' religion by count and percentage

		Frequency	Percent	Valid Percent
Valid	Christian	34	45.3	45.3
	Muslim	11	14.7	14.7
	Hindu	7	9.3	9.3
	Buddhist	6	8.0	8.0
	Atheist	5	6.7	6.7
	Agnostic	5	6.7	6.7
	Prefer not to disclose	7	9.3	9.3
	Total	75	100.0	100.0

e. Ethnicity & Religion:

The profile of the sample showed that 22.7% were white British while the rest were from various ethnic backgrounds. Although literature has put the percentage of White British in construction as disproportionately high, in this study, the 'Asian or Asian British' and 'Black or Black British' samples were both higher at 26.7% and 25.3% respectively. Although this does not reflect the reality in the entire industry, considering the percentages of the regional distribution of the respondents between the SE (62.7 %) and the NW (37.3 %) and also taking into account that some 47% of the London population is generally BME, the case is justified. Furthermore, as it will be explored later, the companies sampled had higher ethnic representations of particular groups. Therefore, combining the ethnic groups for any analyses in this case would mar and

gloss over the true issues at stake hence the need to investigate the representations in the industry based on the patterns in the locations. These data are presented in figure 6.5 where the religious orientation of participants are also analysed. The correlation analysis of the respondents religion and ethnicity is given below in which Christians are the largest group followed by Muslims. A cross tabulation of the two factors ethnicity and religion yields the graph in figure 6.5.

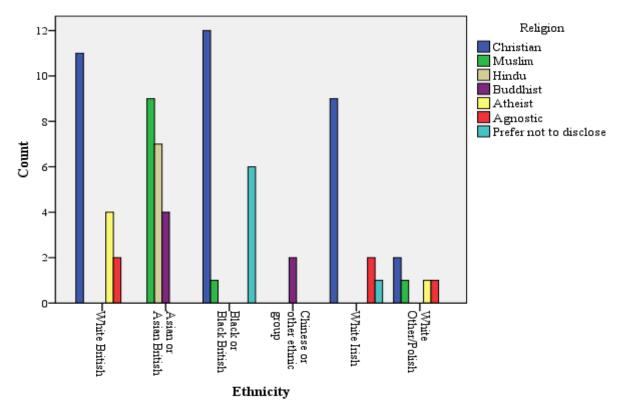


Figure 6.5: Distribution of Employees by Ethnicity *Religion

It can be observed from figure 6.5 that with the exception of the two Asian groups of Asian and Asian British and Chinese or other background, Christians accounted for the largest number of respondents in each of the ethnic groupings. It may be recalled from literature (section 2.7.6 and 3.3.4) that other than Christian religious practices, for example Muslims' are underrepresented in the industry and that some practices do not act to favour inclusion as, for instance, the number of times of prayers plus the Friday Prayers of Muslims interfere with work schedules which other employers and managers may frown upon.

f. Migrant Descent and Generation of Respondents

The questionnaire required participants to classify themselves, in the first instance in question A4 under migrant descent (table 6.9) and in the second under three sets of generations of first, second and third (table 6.10). The findings are shown below.

Table 6.9: Breakdown of respondents' migrant descent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	47	62.7	62.7	62.7
	No	28	37.3	37.3	100.0
	Total	75	100.0	100.0	

Following on from table 6.9 on the migrant descent of the respondents, their generation was also sought. This is important as analyses here helped to determine how subsequent generations fare in construction. The results are shown in table 6.10.

Table 6.10: Breakdown of respondents' generation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -	26	34.7	34.7	34.7
First generation	20	26.7	26.7	61.3
Second	21	28.0	28.0	89.3
Third	8	10.7	10.7	100.0
Total	75	100.0	100.0	

As shown in table 6.10, the first classification of generation referred to people who were born outside the UK; the second referred to the direct descendants of the first and the third group ascribed in the category those whose parents originate in the country by birth. This question was aimed to ascertain if membership in each of the categories of people impacted on the prospects of involvement and possible engagement in the industry. It would further explore their perceptions of themselves and the industry being studied in relation to other issues raised in other section of the questionnaires. Such results, for example, a cross-tabulation with 'access to and perception of training at work', 'offer of employment and mode of application' would yield interesting results. This, as a result, would give an idea of the trend in the various ethnic groupings and their involvement in the industry to help arrive at general conclusions as to the level of the BME involvement based on their own perceptions and of other stakeholders.

g. Level of Education

The entire section B of the questionnaire had the preoccupation of ascertaining language use and competency and the level of education of the respondents upon entry as well as retention and progression thereafter. Questions B2 and B3 asked about the educational qualification attained upon entry into the industry and the existing qualifications held respectively with the intent of ascertaining the level of training support in the organisation. This was done in order to further explore the literature findings which blamed BMEs for lack of and/or low level of education, training and experience as the major contributing factor to their underrepresentation in the industry. Figure 6.6 provide details of the levels of education of the respondents in the survey for all the 75 individuals surveyed as this question achieved a 100 percent response with the majority having obtained higher education certification in the region of 72 percent and over. This aspect of the respondents profile will be further analysed carefully later in this study to establish any relationships between level of education and other factors that influence the inclusion of BMEs in construction employment.

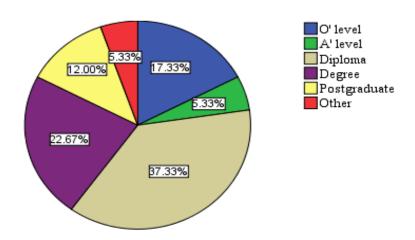


Figure 6.6: Distribution by level of Education

The results show that about 23 percent of the population sampled holds GCSE and A-level qualifications, while 37 percent hold a diploma with another 35 percent holding a degree or higher qualification. A small number, about 5 percent however either had other qualifications or did not want to disclose this. The results also show minimal distinction between the ethnicities and the level of education. However, comparatively more of the Non-BME group seems to have construction related qualifications within the ethnicity results (70 percent). Although the Chinese have a score of 100 percent, this represents a very small fraction of the total respondents. The

Asians had the least within ethnicity results (40 percent) but as will be noted later, they play quite a significant role in the industry irrespective of this fact. On the whole, however, BMEs have a larger share of the respondents having construction related degrees (82.7 percent) compared with 16 percent of Non-BME and 1.3 percent non-response as shown in table 6.11. Here also, the inter-regional responses show a bias which is very significant in this study as a result of the varying levels of concentration of BMEs in the regions.

Table 6.11: Ethnicity and construction related qualifications

	Const	truction rela	ated qualifi	cation	
Ethnicity	Percent	Other	Yes	No	Total
White British	% within Ethnicity	5.9	70.6	23.5	100.0
	% of Total	1.3	16.0	5.3	22.7
Asian or Asian British	% within Ethnicity		40.0	60.0	100.0
	% of Total	-	10.7	16.0	26.7
Black or Black British	% within Ethnicity	-	42.1	57.9	100.0
	% of Total	-	10.7	14.7	25.3
Chinese or other ethnic group	% within Ethnicity	-	100.0	-	100.0
	% of Total	-	2.7	-	2.7
White Irish	% within Ethnicity	-	58.3	41.7	100.0
	% of Total	_	9.3	6.7	16.0
White Polish	% within Ethnicity	_	60.0	40.0	100.0
	% of Total	-	4.0	2.7	6.7
Total	Count	1	40	34	75
	% within Ethnicity	1.3	53.3	45.3	100.0

Further results analyses show that about 60 percent within the Asian ethnicity and 16 percent out of the total had no construction related qualifications. This has been noted as an interesting finding elsewhere in section 6.4.1 (E) that this ethnic group happens to have the largest number of construction employees in the sample in the SE region. On the whole, 45.3 percent had non-related construction qualifications out of which 5.3 percent were of non-BME background.

h. Language of respondents

Here, in order not to clutter the analysis, respondents were given the option to choose between English, their native or other language. It happens to be the first double-edged question grouping the responses to languages at home and at work for an indication of communication skills of the sample. The results showed that 69.33 percent of the respondents considered English to be their

main spoken language at work (table 6.12 and figure 6.7) while 28 percent and a further 2.67 percent indicated their native or other language respectively at their places of work. Tables 6.12 and figures 6.7 show the different categories of spoken languages at the workplace and at home.

Table 6.12: Languages Spoken at Work

		Frequency	Percent	Valid Percent
Valid	English	52	69.3	69.3
	Native	21	28.0	28.0
	Other	2	2.7	2.7
	Total	75	100.0	100.0

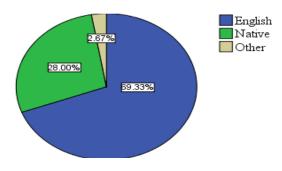


Figure 6.7: Languages Spoken at Work

Table 6.13: Language Spoken at Home

		Frequency	Percent	Valid Percent
Valid	English	44	58.7	58.7
	Native	27	36.0	36.0
	Other	4	5.3	5.3
	Total	75	100.0	100.0

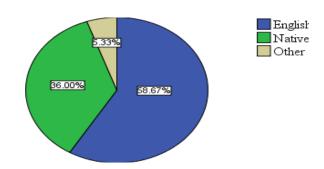


Figure 6.8: Languages Spoken at Home

As indicated in figure 6.8 and table 6.13, of the respondents that are BMEs that speak English at home, 58.67 percent of the BME respondents indicated that they speak English at home. It will later be observed, whether the medium of expression is perceived as a barrier to communication in the industry and could be a major cause of the problem of underrepresentation. The bar chart (figure 6.9) gives a clearer indication of this phenomenon and will help explain the situation better.

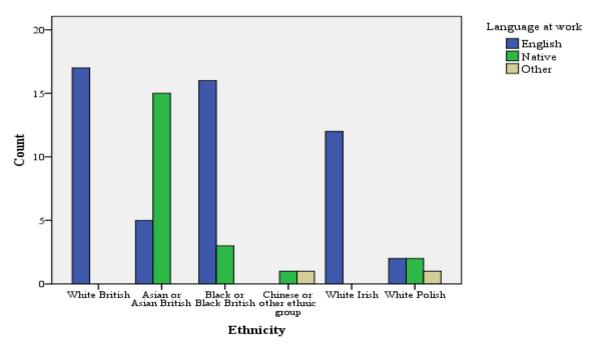


Figure 6.9: Graphical representation of ethnicities language at work.

From figure 6.9 the predominantly language at work fro and Asian or Asian British group is not English but Native language. How this is sustained, has only one reason; that relations and ethnic members are the main employees. Having taken note of this fact, the next section attempts to summarize the profiles of the respondents to permit the next stage of the analysis.

i. Summary of Respondents' Profile

The foregoing sections have considered in detail the sample set of the survey by reviewing their demographic information in order to assess their suitability for the study which, according to the findings above, has been verified. So far the section has been descriptive in nature delving a bit deeper in some cases, however, these will be critiqued later. It was seen from the ethnicity question that as many as 26 respondents comprising 36.7 percent failed to provide their generation even though every respondent gave their descent as being of migrant origin or otherwise. This interesting finding is attributable, possibly to the fact that either some generally did not have enough information of their ancestry or have lost any attachment to the immediate relations and so did not see the need for this. Furthermore, other participants did not identify with any of the ethnic groupings by ticking 'other background' through which means their sense of belonging to any class of ethnicity is undermined. Interestingly, those surveyed had quite a high

level of education as indicated (section 6.4.1-G) ruling out the possibility of any difficulty in understanding the questions.

6.5 The Impact of Perception on the Industry's Employment

This section describes the respondent's views about their relationships with other stakeholders and other prevailing factors in the industry and the impact these could have on BMEs chances of gaining employment. It therefore has the object of bringing into focus the experiences and information sources of these participants in order to aid an investigation of such sources as they relate to employment in their various outfits and to assess their interests and those of their employers.

The opportunities, educational and experiential questions overlooking the prospects respondents feel are open to them will form the basis for the questions here to probe and review any chances of employment, retention and progression of the BME in construction. Typical questions include 'are you currently working?', 'how were you recruited into construction?', 'do you have any relation in the industry?' and so on followed by further probing questions. Although some of the questions sound simplistic in outlook, they help prepare the group for further questions as well as minimise tension, especially considering the current economic climate where people don't seem happy and confident about their job security and prospects and the legal implication of the subject matter being studied. Questions of this nature will be analysed to ascertain the views held by industry participants about BME involvement. Cross-tabulated with the profiles of respondents (section 6.4.1), these questions will attempt to answer some of the issues raised in Chapter 1 with the aim of assessing if certain profiles fit the issue of potential employees in the BME category.

6.5.1 Recruitment into Construction

As noted from literature (e.g. section 2.6.2), employment in construction is biased in favour of young white British males. Furthermore, Caplan *et al.* (2009) and Ahmed *et al.* (2006), for example, found that BMEs generally have a younger age profile, the reason for which their involvement in the industry could guarantee a future secured enough for construction labour. This suggestion informed the opening question in section C and the subsequent ones here as well since finding out about respondents' employment status and their ages of employment was, as a result, helpful in confirming this literature finding through the questionnaires. Below is the frequency analysis of the responses where 'N' represents the number; 'valid' shows the number of the

people under study that answered the question and 'missing' represents the people that declined to respond to the question. From Table 6.14, it can be seen that all 75 respondents answered the question where 66 at 88 percent could be counted as answering 'yes' they were in current full-time construction employment as against 9 at 12 percent who answered 'no'. Figure 6.10 presents the same information in a graphically presentable and easily readable manner for ease of reference, a practice which was repeated for other results displayed.

Table 6.14: Respondents' employment status

		Frequency	Percent
Valid	Yes	66	88.0
	No	9	12.0
	Total	75	100.0

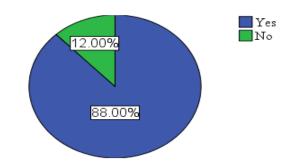


Figure 6.10: Employment status of respondents

The analyses in table **6.14** and figure **6.10** have shown the employment status of the respondents. Hence, this brings into focus the nature of the job being undertaken and the age of entry into construction. These are factors identified from literature as significant reasons also accounting for reasons why BMEs remain underrepresented in the industry. Therefore, the subsequent questions on job title and age into construction will be cross-tabulated with 'currently working full time' for results to see if there is a link between these factors in order to confirm literature or otherwise. The results are as shown in figure 6.11.

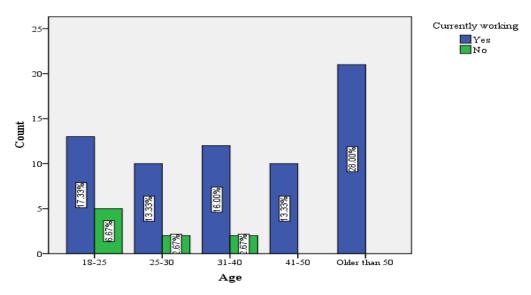


Figure 6.11: 'Age into construction' and 'currently working full time'

Figure **6.11** shows that the respondents who were not employed full time happen to be in the younger age bracket with the majority being between the ages of 18 and 25 years at about 6.67 percent compared with 2.67 percent in both successive young age groups as indicated above. Conversely, the majority of all the respondents employed full time at 28 percent happen to be older than 50 years confirming literature and the ageing feature of the industry.

Also, figure **6.11** shows the various job titles of the participants of the survey. The 'string' nature of the responses, as well as the non-uniformity in them meant that some of the jobs have been represented more than once as read by SPSS 16 as separate designations. However, it is without doubt that the professions involved here, considering the number of respondents, are numerous. It is, in effect, interesting to note that over 22 percent were presented as 'missing' in blue with a blank space in the legend. This resulted, in spite of the fact that these people have all replied as working which confirms the reluctance of respondents (see section 4.10) in giving further vital details, for example, about their roles in their place of work who resulted in the use of snowball sampling technique.

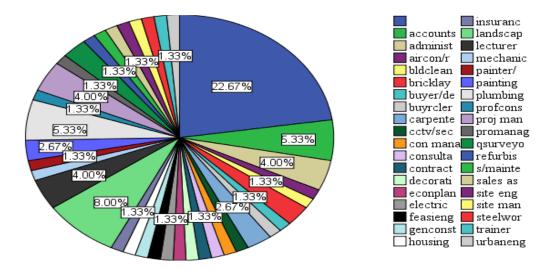


Figure 6.12: respondents job titles.

Whatever the reason, as shown in figure 6.12, quite a significant number of responses are missing at 22.67 percent. The implication and finding here may be that they may not happy or proud about their roles and therefore may feel uncomfortable and are not bold enough to report this despite having initially indicated that they are employed either full or part time. This is in spite of the indication given earlier that they are highly educated (Section 6.4.1-G). It is therefore the case that they could, with the slightest opportunity arising anywhere leave the industry.

As suggested earlier in this section, the age at which construction professionals enter the industry has been noted to be important in literature as it is said to have quite an aging workforce. The participants' ages upon entry, as can be seen in table 6.15 and figure 6.13, show that over 50% and a further 25% entered the industry at quite an early stage in their career at between 18-25 and 25-30 respectively.

Table 6.15: Age into construction

	Age	Frequency	Percent
Valid	Missing	2	2.7
	18-25	38	50.7
	25 - 30	19	25.3
	31 - 40	9	12.0
	41 - 50	7	9.3
	Total	75	100.0

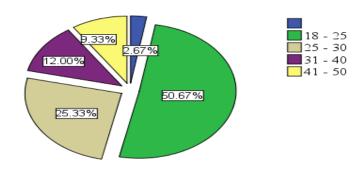


Figure 6.13: Age into construction

The finding, as indicated above suggests that it is important to attract construction professionals while they are young as this may be the age where their interests and their strength combine to boost their enthusiasm to give of their best and keep them highly engaged.

6.5.2 Mode of Recruitment

The mode of recruitment into construction is very crucial to BME representation, as noted from literature; it is the means for entry to the industry. To ascertain the sources of accessing construction employment, question C3 to C5 of the survey asked about modes of entry and whether employees had relations in: *a. their workplace* and *b. the wider industry*. Figure 6.14 captures the results. They show that 36 percent and 34 percent are recruited by means of colleagues and relatives respectively with both the Jobcentre Plus and Newspaper/ Internet advertisement accounting for a mere 2.7 percent each. This is quite intriguing and quite alarming as it contradicts the general norm of the main sources of recruitment. Studies in literature for example, Caplan *et al.* (2009) and Ahmed *et al.* (2008) note college and university career advisors have been influential in the process of recruitment into construction but unlike them, in this study, they only recorded 10.7 percent although they did better than the two very conventional sources of recruitment put together. There also have to be strong basis for this literature finding since direct applications usually have links with previous experience and confidence building of prospective employees through career advisors.

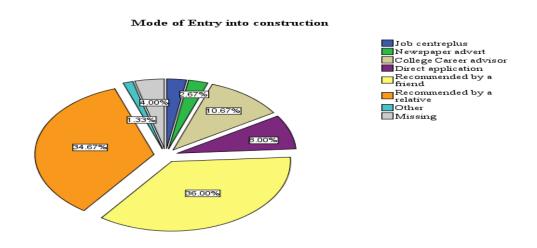


Figure 6.14: Sources of recruitment into construction

Figure 6.14 has presented the routes for entry into construction. Not surprising is the fact that 'recruitment through friends and relatives' had high responses, thus further supporting the earlier finding about the major sources of entry into the industry.

Again, respondents were asked about the factors that influenced their decision to join construction. They were required to rate their answers on a five point Likert scale of very influential to very uninfluential. Figure 6.15 graphically demonstrates the level of influential pull each of the factors has on the participants' decision to join the industry using the means of the various factors.

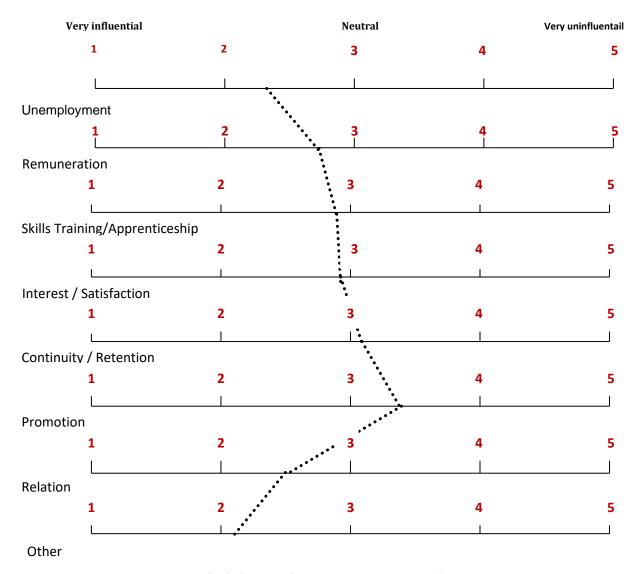


Figure 6.15: Average score for 'influential factors to join construction'

As can be seen above, participants were very much influenced by the lack of job availability in deciding whether to take up employment in construction. As noted elsewhere in section 3.8 this

finding justifies the signs of difficult times and hardships the respondents are faced with. Then follows the controversial finding; the notorious *relation in the industry*. Therefore, networking emerged again as a very influential factor when looking for work confirming the finding in the qualitative phase where it was the third most influential factor inhibiting BMEs, access to construction employment. This finding is therefore not unexpected; surprising however, is the factor *other* which unexpectedly pooled most of the weight compared to the others. It is worth noting that, although it was assumed that all the factors had been covered in this section of the study, it was not at all the case. There still remained issues that respondents thought should have been covered although they failed to write them in the space provided.

6.5.3 Prior Exposure to Construction and inclusion

This factor was tested in respondents prior employment history and apprenticeship/placement opportunities as according to literature (chapter 3) peoples earlier experiences within construction attracted and retained them or otherwise. Here, respondents were asked whether they had worked elsewhere and what attracted them back as covered by questions C6 after which their experiences are further solicited. Therefore, this section looks at the responses in terms of how the respondents' prior exposure to construction has helped to attract them back to the industry. Figure 6.16 and table 6.16 elaborately demonstrate the important of pre-exposing potential employees to construction especially in their earlier career life while recognizing the influence of apprenticeship/placement in fostering such exposure.

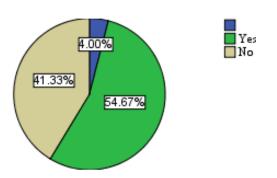


Table 6.16: worked outside of constructing

		Frequency	Percent	Valid Percent
Valid	Missing	3	4.0	4.0
	Yes	41	54.7	54.7
	No	31	41.3	41.3
	Total	75	100.0	100.0

Figure 6.16: Experience outside of construction

From the cross-tabulation (figure 6.17), it is evident that prior exposure helps inclusion into construction as 8 out of 9 *31-40* year olds have returned to construction as a result of that. Although in younger and earlier years, the respondents have recorded slightly higher margins.

The significance of this is predominantly seen in their later years. this phenomenon is demonstrated in figure 6.17 where the cross-tabulation shows this relationship in a histogram.

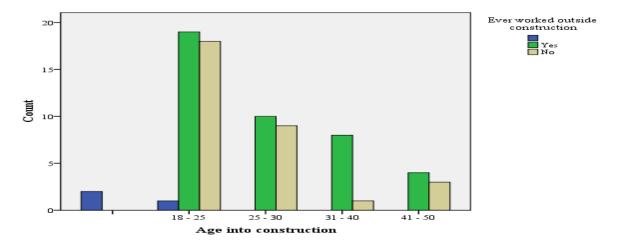


Figure 6.17: Age into construction * Ever worked outside construction

As shown in figure 6.17, in all age groups (except for missing), a significantly higher percentage returned to the industry. This finding is quite interesting as it suggests whether employees respond to the upward and downward economic trends of the industry in recessions by returning during bust and leaving in boom times.

Another important finding is the relationship shown in the mode of employment and employees return to the industry. Here, it is significant to note that friends and relations who have previously worked in the industry are more attracted back although around the same numbers have not had the experience as shown in table 6.17. Quite interesting, however, are both the 'college career advisor' and 'direct application' modes which percentagewise show quite high numbers of people with prior experience in the industry against those without it, at 75 percent and well over 80 percent respectively as the counts in the cross-tabulation show below. It has been noted in section 6.5.2 earlier that direct applications are highly influenced by career advisors and so the two phenomena in question are highly related. The need to attract BMEs into construction therefore should be seen to have better chances here than other modes of entry.

Table 6.17: Mode of Entry*Ever Worked Outside Construction

Count		Ever worked	Ever worked outside construction		
		Missing	Yes	No	Total
Mode of	Missing	3	0	0	3
Entry	Job Centreplus	0	2	0	2
	Newspaper advert	0	1	1	2
	College Career advisor	0	6	2	8
	Direct application	0	5	1	6
	Recommended by a friend	0	14	13	27
	Recommended by a relative	0	12	14	26
	Other	0	1	0	1
Total		3	41	31	75

6.5.4 Perception of BME Representation in Construction

Construction stakeholders' perception on BME representation in the industry is reviewed in this section in line with research question *b* and objective *b*. BME representation has been suggested in literature to bring varied benefits to the industry (see Ahmed *et al.*, 2008; Caplan, 2009). Further to this, the Centre for Construction and Innovation - CCI (2008) identified three aspects of representation of BMEs namely, inclusion/employment, retention and progression. In a hierarchical format these three factors have the initial employment forming the base and the starting point for any potential employee where their engagement and commitment lead to their better performance with the likelihood of being retained from where such performance is acknowledged through progression. As BMEs have been noted in literature as doing badly in these areas, these assertions were explored by asking the respondents what they thought of the current state of BME involvement in a five point Likert scale question outlining the factors extracted from literature (chapter 3) and the qualitative study (chapter 5).

The responses relating to the three areas are categorized into 'progressing, 'retrogressing', 'no change' and 'other'. The last option was necessary to accord respondents a fair chance of not been coerced into having to choose one of the other options if they did not know the current state or did not want to comment. The results are shown in Tables 6.18(a-c) and Figures 6.18 (a-c).

Table 6.18a: BME inclusion

		Frequency	Percent	Valid Percent
Valid		4	5.3	5.3
	Progressing	34	45.3	45.3
	Retrogressing	5	6.7	6.7
	No change	20	26.7	26.7
	Other	12	16.0	16.0
	Total	75	100.0	100.0

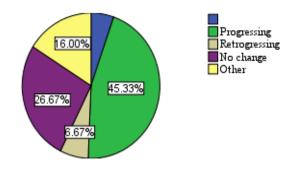


Figure 6.18a: BME employment

It can be seen from the table and figure above that as much as 45.3 percent of the respondents believed that BME inclusion through employment was progressive compared to a meagre 6.7 percent who thought it was retrogressive and quite a significant number at 26.7 percent thinking there has not been any change. A further 16 percent held 'other' views with another 5.3 percent missing. This is quite significant and somewhat shows the level of disinterest in commenting on the issue of BME involvement in the industry.

Again, the exercise was repeated for BME retention (table 6.18b and figure 6.18b) and the responses yielded almost the same results but slightly lower; this time with the 'other' option and 'missing' increasing by significant margins indicating a perception slightly negative compared to the initial 'employment'.

Table 6.18b: Perception of BME on retention

		Freque ncy	Percent	Valid Percent
Valid		8	10.7	10.7
	Progressing	30	40.0	40.0
	Retrogressing	6	8.0	8.0
	No change	17	22.7	22.7
	Other	14	18.7	18.7
	Total	75	100.0	100.0

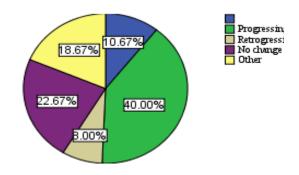


Figure 6.18b: Perception of BME on retention

Also, for the 'progressing' option, the results did not differ much as shown in table 6.18c and figure 6.18c. In fact the same percentage figures were recorded for 'no change' and 'missing' at 22.6% and 10.7% respectively in both results.

Table 6.18c: perceptions of BME progression

		Frequency	Percent	Valid Percent
Valid	Missing	8	10.7	10.7
	Progressing	32	42.7	42.7
	Retrogressing	5	6.7	6.7
	No change	17	22.7	22.7
	Other	13	17.3	17.3
	Total	75	100.0	100.0

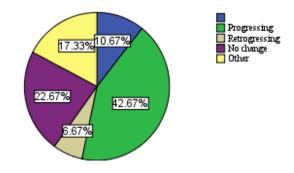


Figure 6.18c: perceptions of BME progression

The above results led to the next stage of analysis which is based on comparing the respondents' perceptions on these three aspects with the 'age upon employment' and 'generation' of the respondents. The results are discussed in section 6.5.5.

6.5.5 Effect of Mode of Recruitment on Inclusion, Retention and Progression

In their study, Ahmed *et al.* (2008) concluded that cronyism and nepotism was rife in construction and the effect of this on the processes through the employment cycle was a strong determining factor of who works in the industry. This aspect was captured by section C of the questionnaire where the views of respondents were solicited based on the three levels of employee participation. As indicated the mode of entry is crucial to this for which reason a simple cross-tabulation was done which revealed very interesting findings. The table and figures below show the results that emerged.

Table 6.19: Mode of Entry and Perception of BME's inclusion, retention and progression

Count		Perception of BME inclusion / retention / progression														
Mode of Entry	M	lissiı	ng	Pro	gres	sing	Retr	ogres	ssing	No	cha	nge	()the	r	Total
Missing	1	1	1	0	0	0	0	0	0	2	2	2	0	0	0	3
Job Centreplus	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
Newspaper advert	0	0	0	0	0	0	0	0	1	2	2	1	0	0	0	2
College Career advisor	0	0	0	3	3	3	3	3	3	2	2	2	0	0	0	8
Direct application	1	1	1	2	3	3	1	2	0	2	0	2	0	0	0	6
Recommended by a friend	1	4	4	15	10	11	0	0	0	8	7	7	3	0	5	27
Recommended by relative	1	2	2	14	14	15	1	1	1	3	3	2	3	6	6	26
Other	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1
Total	4	8	8	34	30	32	5	6	5	20	17	17	12	14	13	75

The cross-tabulation of the mode of entry into construction with the three levels of employee participation is as captured in table 6.19. The *total* row/column both show the similar figures as demonstrated implying that, but for little variations, the views held in this respect happen to be the similar for all the respondents who answered the three questions on the issues. Figures 6.18a-c graphically demonstrate the phenomenon in a rather vivid fashion for easy and more visual analyses.

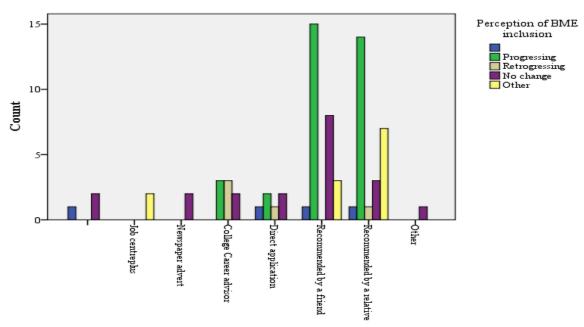


Figure 6.19a: Effect of mode of entry on inclusion

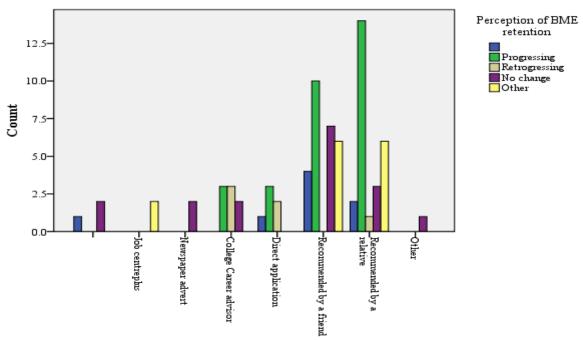


Figure 6.19b: Effect of mode of entry on retention

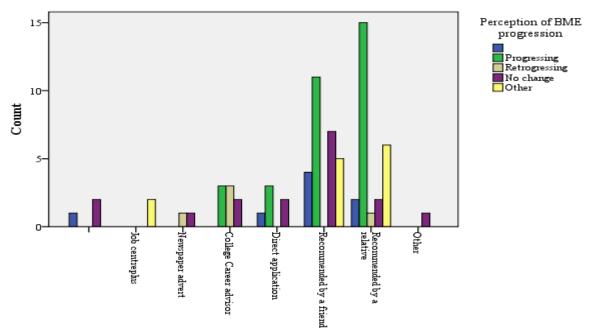


Figure 6.19c: Effect of mode of entry on progression

As demonstrated in figures 6.18a-c, the views held by the respondents indicate that at the inclusion level, 15 (20 percent) and 14 (18.66percent) of the participants representing 'recommended by a friend' and 'recommended by a relative' respectively agree with the view that progress has been made in the employment of BMEs into the industry. The results for the two other levels do not differ much as demonstrated in the figures above. But for one respondent recommended by a relative, another through newspaper advert and two others who used college

career advisors and being of the view that the BME involvement is retrogressing, the consensus had been that of positive improvement. The various views are as captured above graphically. The next section will continue by considering the relationship between the age of the respondents and BME representation.

6.5.6 Age into Construction's Influence on BME Underrepresentation

The age of gaining employment into construction by recruiting the youth through apprenticeship and job placements as captured in literature (Ahmed, *et al.*, 2008; CIC, 2008; Constructionskill, 2007; 2009; 2010) has been thought to be one of the very strong reasons for the respondents' perception of BME underrepresentation. To this light, this section presents the result of the cross tabulation which explores the relationship between what influence 'age into construction' has on BME inclusion in relation to their employment in the industry in line with the respondents belief. The survey shows that 17 of the 38 18-25 year old responses to question C11 (i.e. do you see the inclusion/employment of BMEs as: progressing, retrogressing, no change or other?) indicated the belief that there has been considerable progress and this has been the view for all the other age groups except for 41-50 and missing where the belief has been 'no change' or 'no comment/reaction' respectively. In sum, 34 of the 75 respondents making up 45.3% have this view. But both brackets of mature age groups (31-40 and 41-50) all believe that there has been changes either way with none recording 'no change' in the two categories. Figures 6.19(a-c) have detailed results for the relationship for the two factors.

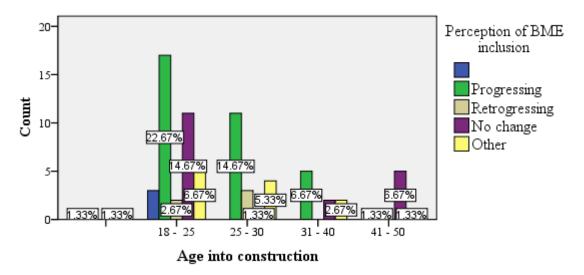


Figure 6.20a: Age into construction and Perception of BME Inclusion

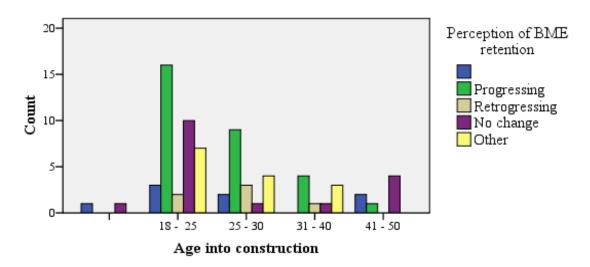


Figure 6.20b: Age into Construction * Perception of BME retention

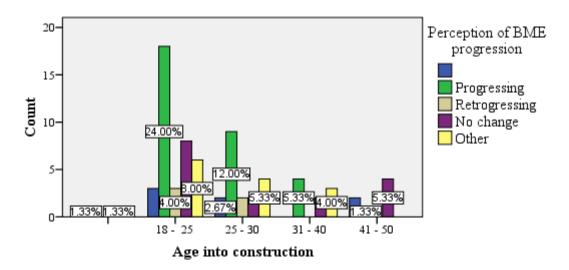


Figure 6.20c: Age into Construction * Perception of BME progression

The three figures 6.20a-c characteristically are similar and have a lot in common with the analyses in *section E* on the same factors related with '*mode of entry*'. The results show an asymmetrical curve that represents skewness towards the younger age groups. Interestingly, the younger age groups in this respondent base are positive about the inclusion, retention and progression of BMEs in the industry, a view which is indicative of their interest and willingness to play roles in it. It will be recalled that the majority of the respondents were from the SE region (section 6.4) and among them was a strong BME presence (table 6.6). Therefore, with this finding and with both literature and empirical finding that BMEs have quite young profile, it is fair to say that it augurs well for the industry should favourable conditions prevail for their involvement to be rife in all locations and at all levels.

6.5.7 The Impact of Generation on Perception of BME Underrepresentation

In order to know the impact of the generation of respondents on their perception of the industry the second part of question A4 is correlated with questions C11 – C13. Figures 6.20a-c capture the responses where it is identified that 26 respondents making up about 35 percent failed to give their generation. Of those who responded to the question, the majority at 38 percent felt that the inclusion of BMEs is progressing followed by some 30 percent who felt there had not been any change. These results compare very well with those in sections E and F on 'mode of recruitment' and 'age into construction' respectively. A good percentage i.e. 50 percent of first generation failed to give their perception of the industry's performance on BME inclusion. Naturally, the first generation would have experienced a lot to compare with and so stand in a better position to comment on this for which reason their comparatively high 'progressing' response at 50 percent shows the industry, though slowly, is changing in this respect.

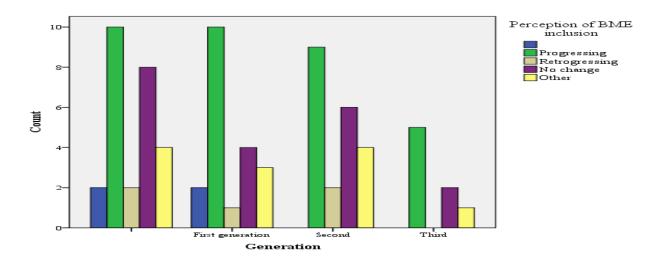


Figure 6.21a: Generation and BME inclusion.

The general consensus was that of an industry progressively changing towards the inclusion of BMEs as shown in figure 6.21a. The big margin of the respondents that fail to declare their generation though somewhat mare the results, however as their views conform to the rest of the respondents, it is evident that the general view is positive.

The results in the case of BME retention, although slightly different, still affirm the same general consensus of 'progressing'. Here the emphasis is on the failure of the first generation to comment on the issue at 27 percent. Again, one would expect them to have the reliable information having lived here long enough in most instances to tell the story although this may not be the case.

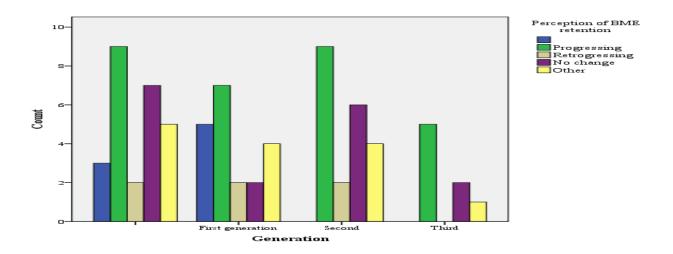


Figure 6.21b: Generation and the perception of BME retention

The phenomenon for the first generation reported above seems to have been repeated in 'progression' also. What accounts for this is however difficult to decipher, as it is unexpected that having participated well at the inclusion stage, they would decline to answer the two subsequent questions. Whatever the case, it may have been that they lacked the further information outside of their own experiences and are unlike the second and third generations who may have had their education and training mainly in the country and hence being in a better position to respond from different sources of information available to them.

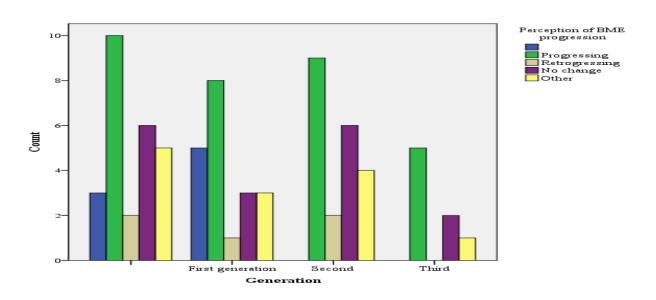


Figure 6.21c: Generation and the perception of BME progression

Generally, the trend has been the same in all three cases except, as noted in figures 6.21b and c based on the explanation given earlier. Age of enlightenment and literacy levels have gone up especially with their generation having spent almost all of their lives here where the young may have read the history and therefore are better placed than earlier generations who may not have had such a chance and were denied integration. In all the cases a good number of the respondents held other views with yet others thinking that BME involvement is on the decline except in the case of the third generation where in all three cases not a single one thought so. The next section will consider the barriers given in C10 in more detail.

6.6 Factors for BME Representation in Construction

This section assesses the barriers that were outlined and further tested in the questionnaires. As observed in literature and the qualitative studies, numerous barriers exist in the way of BMEs for entry into construction and even after that through progression, if they are not soon pushed out, and retention. These are examined closely in the following sections.

6.6.1 Drivers Motivating Entry into Industry

Literature has identified several factors accountable for BME underrepresentation in construction (chapter 3) In order to test how these affect the potential employee generally, it is important to assess the factors that influence entry into construction jobs (section 6.5). For this reason question C5c tried to test these factors in the questionnaires. Table 6.20 shows the influence the factors in C5 had on the decision of the respondents entering into construction. But for the 'other' options the responses had only one 'missing' which had only 39 out of the 75 responses. This implies that there don't seem to be very strong significant factors outside the ones listed that influence potential employees' decision to take construction jobs. This therefore suggests a rather comprehensive list of the factors being analysed here in which case it will be removed from further tests.

Table 6.20: Factors influencing employment

	Unemploy ment	Remune ration	Skills/ Training	Satis faction	Continuity	Promotion	Relation	Other
V. Influential	14	22	26	24	25	23	25	2
Influential	18	22	19	21	20	22	17	3
Neutral	13	13	9	13	15	13	12	14
Uninfluential	14	8	17	12	13	7	8	9
V Uninfluential	15	9	3	4	1	9	12	11
Total	74	74	74	74	74	74	74	39

From table 6.20, it is evident that almost all the factors are seen to positively influence the decision to enter the industry with the exception of 'other' as explained earlier. Again, the only surprising exception, especially at this time of the economic meltdown is for respondents to demonstrate a lack of fear for unemployment. The next section looks at the factors identified both in literature and empirical studies as responsible for BME underrepresentation.

6.6.2 Barriers to BME Representation

Similar to the multiplicity of factors accounting for employee motivation (section 6.6.1), several reasons also account for the underrepresentation of ethnic minorities (see Caplan *et al.*, 2009; Ahmed *et al.*, 2008; CABE, 2005). In addition, in the results of the interviews in section 5.5, RT22 and RT18 both agree that BME representation has a lot to do with the level of training and experience of the individual but also confirm that lack of networks asserted by RT10 and RT12 remotely count a lot. Thus they affirm that personal contacts are a strong contributing factor. With the awareness of this fact, this survey asked respondents about their contacts in their place of work and in the wider industry to ascertain if they themselves have encountered the experience or are aware of this fact through others' experience in order to establish the finding.

The BME, it has been noted in literature, faces a three tier hurdle through the career cycle i.e. initial employment, retention and progression. Since the first step bordering on underrepresentation determines the subsequent ones, question C10 sought to investigate the views of the participants on the issue through a 12 item five point likert scale question and the results are as shown in Table 6.20.

The descriptive statistics for the causes of BME underrepresentation is presented in Table 6.21. It shows a very high response rate as in almost all of the cases every respondent ticked an answer on the scale. With the option to remain neutral in all cases this is not unprecedented.

Table 6.21: Descriptive Statistics of factors contributing to BME underrepresentation

	N	N Minimum Maximum Mean		ean	Std. Deviation	Variance	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Access to Employers	75	1.00	5.00	2.2933	.16082	1.39277	1.940
BME Underrepresentation	73	1.00	5.00	2.1507	.17412	1.48765	2.213
Immigration Status	73	1.00	5.00	2.0548	.15096	1.28981	1.664
Experience/Apprenticeship	75	1.00	4.00	1.7876	.09917	.85887	.738
Cultural Barriers	75	1.00	5.00	1.9200	.12700	1.09988	1.210
Education/Language	75	1.00	5.00	2.6533	.14141	1.22467	1.500
Negative Image	75	1.00	5.00	3.7333	.15807	1.36890	1.874
Lack of Transparency	75	1.00	5.00	2.9733	.15419	1.33531	1.783
Religious Barriers	74	1.00	5.00	3.0811	.16185	1.39232	1.939
Discrimination/Racism	75	1.00	5.00	2.2267	.15834	1.37126	1.880
Lack of Networks	75	1.00	5.00	2.3200	.16237	1.40616	1.977
General Perceptions	75	1.00	5.00	3.8133	.15619	1.35261	1.830

Graphically, a summary of the average (mean) of the barriers to BME representation is captured in Figure 6.22 where work *experience/apprenticeship* is portrayed as the most important factor for finding work and *general perception* of the industry as the least significant if one was looking for employment.

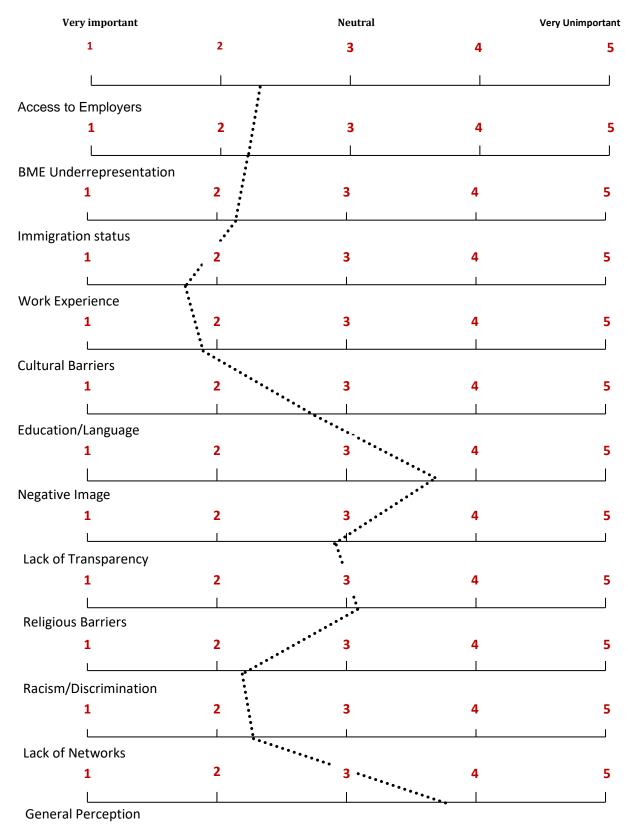


Figure 6.22: Average score for 'barriers to BME representation'

In figure 6.22, 'work experience' is shown as the most important factor to check underrepresentation as being on average the highest ticked reason on the scale while 'general perception' and 'negative image' of the sector both scored weak points as causes of the problem. As indicated the closer the mean is to one the more important the factor is and vice versa. Having considered these barriers, the next section will then explore the driving factors and barriers to assess the engagement of BME once employed in the industry.

6.6.3 BME Engagement

Knowing what the barriers causing BME underrepresentation are, as already gathered from literature (chapters 3 and 4), the qualitative study (chapter 5) and section 6.5.2 and the driving force behind their seeking employment in the industry (section 6.5.1), it then was necessary to investigate the level of engagement of BMEs in construction at this stage. This echoes the issue of engagement in employment that had been stated in objective *b* of this research and discussed in the literature review in section 2.4.2. In the latter case it was noted as being crucial to the inclusion, retention and progression of every employee and for that matter the BME in particular. As the questionnaires survey was not solely targeted at BMEs, it was necessary to find out based on the ethnicity of the respondents the BME engagement level.

Therefore, a cross-tabulation of the ethnicity profile and the selected factors based on figure 6.22 relating to the barriers to engagement was conducted. Also, in order to find out what barriers break the level of BMEs engagement in construction, question A3 on ethnicity was, as a result, correlated with these factors as captured in section C10 of the questionnaire. In addition, C10 gave the barriers as emerged from literature section 2.4.2, which can undermine engagement. As indicated in section 6.5.2, respondents were asked to rank these problems on a scale of 1-5, with 1 being 'very important' and 5 'not very important' on the basis of which these relationships were established. Table 6.22 describes how the respondents assessed these factors. For the sake of simplicity, the two responses on either side of 'neutral' were classed as one each into 'important' and 'not important'. In similar vein, the factors had been ranked in order of relevance based on the number of responses attributed to each of them. But for Education/Language (12 ticks), Lack of Transparency (12 ticks) Religious Barriers (16 ticks) all in the 'neutral' column, the relationship between the factors seemed rather quite elaborate with the highest score for each of the factors in a hierarchical order that is almost perfectly inversely related. The three most important factors identified are cultural barriers, work experience and immigration status while

the three most unimportant factors are *general perceptions*, *negative image* and *religious barriers*. The details are as shown in table 6.2.2.

Table 6.22: Factors Influencing BME Engagement

	Important	Neutral	Not important
Reason	_		•
Cultural Barriers	63	3	9
Work Experience/ Apprenticeship	63	3	9
Immigration Status	55	5	13
Discrimination/Racism	53	5	17
BME Underrepresentation	53	2	18
Lack of Networks	50	8	17
Access to Employers/Network	50	8	17
Education/Language	39	12	24
Lack of Transparency	30	12	33
Religious Barriers	27	16	31
Negative Image	19	1	55
General Perceptions	19	1	55

Considering the high level scores for the significance level with the minimum at 19 responses, it is evident that all the factors, as indicted in section 6.5.2, are of utmost importance in addressing the issue. It is worth noting that the current economic climate has a strong influence on these factors as, for example, the negative image is one of the least significant here. In times like these, what matters is an income to make ends meet; all other interests are however kept in check.

This section has concentrated on the descriptive statistics noting the characteristics of the respondents in relation to the combination of other factors tested in the questionnaires. These have touched on the barriers and drivers for BME inclusion and engagement. The next section then continues the analysis further to test the significance of the respondent base using inferential statistical methods.

6.7 Sample Distribution and Significance

This section explores the responses of the participants to ascertain whether they were based on random choices or they could be found to be dependent on other factors. Statistically, this is done by conducting a nonparametric chi square test, which analyses an association by tabulating two or more categorical variables in order to rule out the results as being based on chance using the null hypothesis (Ho). With this test, the null hypothesis is the assertion that the responses being tested are not related and the results are the product of random chance events which must be refuted

with a confidence interval usually set at <0.05 in social science. This implies a 95 percent certainty of rejecting the null hypothesis (Ho) to indicate that the responses were not randomly selected. The Chi Square statistic compares the tallies or counts of categorical responses between two (or more) independent groups and the tests can only be used on actual numbers and not on percentages, proportions or means and so must be treated with caution (Eck and Ryan, 2012).

Furthermore, the section concentrates on the analysis of the respondents' profiles which are tested against the responses to ascertain if there are any direct association between the two groups of variables. The subsequent subsections cover the significance of the parameters tested which determined their dependence in relation to the respondents profile information. This is done through the use of a non parametric test known as Kruskal Wallis analysis of variance. In order to aid a systematic investigation, the responses analysed are used as the dependent variables while the respondents' profiles are used as independent variables. In the case of the independent variable *Region of respondents*, the Mann Whitney U test is performed as it involves two groups only. Spearman's correlation coefficient is then used to establish correlations between variables that are measured on the ordinal scale and share a monotonic relationship between them. The findings and summary for the section are subsequently presented to complete this part of the analysis.

6.7.1 Choice of tests

Data are mainly of two kinds namely parametric and nonparametric. Parametric data follows particular rules and mathematical algorithms which are usually generated through experiments and are thus often designed to use parametric data tests for detailed conclusions to be drawn about the data. On the other hand, research that does not create parametric data is non-parametric and much research data in social science are of this form and still generates very useful information. There are very different parametric and non-parametric tests used in analysis, depending on the type of data you chose during the design. Table 6.23 captures the appropriate tests for the data used in this study, which are highlighted in bold in the nonparametric column.

Table 6.23: Choice of inferential statistical tests (source: Qualls et al., 2010)

Test Type	Parametric	Non-parametric
Correlation test	Pearson	Spearman
Independent measures, 2 groups	Independent-measures t-test	Mann-Whitney test
Independent measures, less than 2 groups	One-way ANOVA	Kruskal-Wallis test
Repeated measures, 2 conditions	Matched-paired t-test	Wilcoxon test
Repeated measures, less than 2 conditions	One-way, repeated measures ANOVA	Friedman's test

6.7.2. The Impact of Region on Respondents' Attraction to Construction

Regional differences in the uptake of BME employees has been noted and assessed by Caplan, (2009) and others in literature and confirmed in the qualitative and descriptive parts of this study. This section explores this further inferentially in order to assess the impact of regional differences on respondents' inclusion in construction. A nonparametric chi-square test was performed based on the parameters as shown in table 6.24.

Table 6.24: Chi Square Analysis for Factors Responsible for Attraction to Construction by Regions

Parameters	Chi-Square	Significance
Unemployment underlying interest in construction	1.000 ^a	.910
Remuneration as the basis of attraction	12.622 ^a	.013
Skills training specific to construction and eventual	21.676 ^a	.000
employment		
Interest in and satisfaction with the industry	16.946 ^a	.002
Continuity and stability as the basis for retention	21.946 ^a	.000
Promotion resulting in progression	14.649 ^a	.005
Relation in the industry	11.541 ^a	.021
Other factors not listed above	13.692 ^b	.008

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 14.8

Table 6.24gives the chi square and significance levels of the parameters being tested. With expected variable grouping frequencies of less than 5, the chi square goodness of fit test cannot be performed. Therefore, as indicated in the notes under the table, there are 0.0 percent of expected frequencies less than 5 and so the test is perfectly legitimate. It depicts participants answers as having been given based on their preferences except in the case of the variable *unemployment* where the *figure* .910 happens to be well over the significance level set at <0.05 thus implying limited variance in the responses. It was however noted that the current recession is a recipe for interest in employment irrespective of the condition and therefore responses are likely to follow such a pattern. The subsection then continued to check for either the retention or

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 7.8.

rejection of Ho for the distribution of respondents across categories of *region* using the Mann Whitney U test as shown in table 6.25.

Test

Independent-Samples Mann-Whitney U Test Sig.

.972

Decision

Retain the null hypothesis.

Table 6.25: Mann Whitney U test of distribution of categories across regions.

Null Hypothesis

The distribution of Continuity/stability is the same across categories of Region.

The distribution of Unemployment Bamples Mann-Whitney U Test

The distribution of Remuneration is Samples Mann-Whitney U Test

The distribution of Remuneration is Samples Mann-Whitney U Test

The distribution of Skillstraining is Samples Mann-Whitney U Test

The distribution of Skillstraining is Samples Mann-Whitney U Test

The distribution of Skillstraining is Samples Mann-Whitney U Test

The distribution of Independent Samples Mann-Whitney U Test

The distribution of Region.

Hypothesis Test Summary

The distribution of Promotion is the Samples Samples Mann-Whitney U Test

Independent-Samples Mann-Whitney U Test

Independent-Samples Samples Mann-Whitney U Test

Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 6.25 and figure 6.23 are the portrayal of the nonparametric test conducted using the Mann Whitney U test in SPSS 16. Although it was not intended to compare the two locations for any significant differences as confirmed by literature, it is worth noting that they share very similar characteristics. This is done by the retention of the null hypothesis in all cases but one using the parameters in C5 of the questionnaire to assess respondents' attraction to construction, as shown in table 6.25.

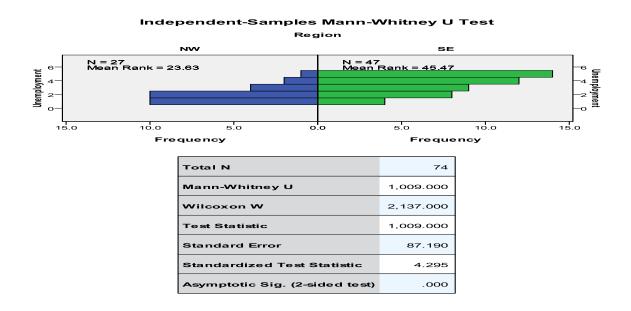


Figure 6.23: distribution of categories between Unemployment and Region

Figure 6.23 shows the rejection of the null hypothesis by reporting a significance value of .000 in the Mann Whitney test performed for the two groups of participants across the regions. However, in all other cases the null hypothesis is retained as shown in table 6.25 above and figure 6.24.

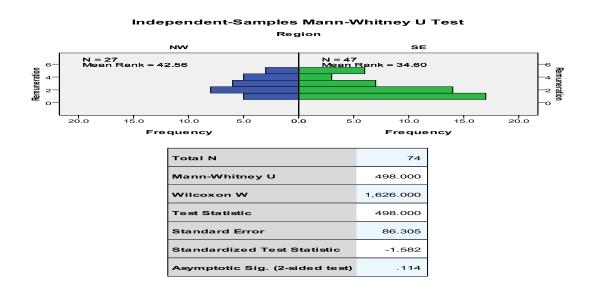


Figure 6.24: Mann Whitney U distribution of categories between remuneration and region.

As indicted in table 6.25 and figure 6.23 above the two regions share similar characteristics except for unemployment where the Ho is rejected. Certainly, considering the two locations in question, this fact is made evident by literature (chapter 2) and the qualitative study (chapter 5).

In addition, both sources note that the higher concentration of BMEs in the London and the SE Region of England, resulting from the attractiveness of such high urbanised locations to them as well as their affinity for proximity to relations, affirms this. However, the null hypothesis is retained for the other variables meaning that the two locations share similar characteristics using all of those parameters for this particular test conducted. Although this is the case, it rather is worth noting that the levels of similarity differ significantly across the variables. As shown in table 6.25, the continuity/stability variable, which involves factors leading to retention in construction, has a significance level of .972 while the remuneration variable has a significance level of .114 at an alpha level of .05. Therefore, the two p-values, although retaining the null hypothesis (Ho) being the two extreme cases show the extent of the similarities existing between the variables. Here, it indicates that although participants in both locations value remuneration, retention on the job is a more significant variable, a characteristic both groups hold steadfastly. In gloomy economic times as this, this finding is rather not unexpected as it is worth holding on to one's job irrespective of the level of remuneration or reward attached to it. As the Mann Whitney U test is only applicable to two groups, it can only be applied to the two locations. Hence, the tests for the other variables will be carried out using the Kruskal Wallis H test.

6.7.3 Interest in Construction Employment

The basis for respondents' views on BMEs interest in construction is explored in the questionnaires and in other parts of this study. This section inferentially tests the factors known to influence BMEs interest using The Kruskal-Wallis H test which is a nonparametric equivalent of the one-way analysis of variance and an extension of the Mann Whitney U test. It assumes the following about the data being analysed:

- All samples come from populations having the same continuous distribution, apart from
 possibly different locations due to group effects. They must be measured at the ordinal
 level and above.
- All observations are mutually independent thus; they must be independent variables consisting of two or more categorical, independent groups.

Its interpretation is based on the likelihood of obtaining a large value for H being purely on chance as between 0.05 and 0.01 - i.e. pretty unlikely, allowing the conclusion that there is a difference of some kind between the groups being tested. The test merely shows that the groups differ in some way and so there is the need to inspect the group means or medians to ascertain the precise difference. However, in these particular cases, the interpretation seems fairly

straightforward: considering the high values attained for the variables tested as shown in table 6.26 where religion is used at the independent and grouping variable for the parameters tested.

Table 6.26: Kruskal-Wallis test for factors for attraction based on religion

Parameters	Chi-Square	Significance
Unemployment underlying interest in construction	9.063	.017
Remuneration as the basis of attraction	4.724	.058
Skills training specific to construction and eventual employment	8.977	.049
Interest in and satisfaction with the industry	6.830	.037
Continuity and stability as the basis for retention	6.394	.031
Promotion resulting in progression	7.794	.025
Relation in the industry	8.451	.027
Other factors not listed above	6.063	.046

a. Kruskal Wallis Test, b. Grouping Variable: Religion

Table 6.26 gives the results of the Kruskal-Wallis test as values of Chi-Square in the form of probability values. Although SPSS 16 gives the descriptive statistics for the variables, they had already been covered earlier in the chapter and therefore are not particularly significant here.

Kruskal Wallis uses a table of critical Chi-Square values and significance to report results of an analysis based on a p value usually set at .05 in Social Science. In this way the null hypothesis that the responses were given at random is tested. By comparing the H values in table 6.26, it can be noted that values of Chi-Square as large as indicated in all cases except remuneration at 4.724 are likely to occur by chance only at 5 times in a hundred i.e. the H values above will occur by chance with a probability of less than 0.05 and so with such high values of H and significance levels lower than .05, it is even less likely that the results occurred by chance. Therefore, except in the case of remuneration, the test has revealed that there is a significant effect of the religion of respondents on the various roles in construction listed in table 6.26. The exercise is repeated using ethnicity of respondents as the grouping variable as shown in table 6.27.

Table 6.27: Kruskal Wallis test responsible for attraction based on ethnicity

Parameters	Chi-Square	Significance
Unemployment underlying interest in construction	9.544	.049
Remuneration as the basis of attraction	5.044	.011
Skills training specific to construction and eventual employment	2.761	.037
Interest in and satisfaction with the industry	5.523	.025
Continuity and stability as the basis for retention	5.004	.015
Promotion resulting in progression	4.059	.041
Relation in the industry	7.713	.037
Other factors not listed above	4.950	.022

a. Kruskal Wallis Test, b. Grouping Variable: Ethnicity

In table 6.27, the results show similar trends that are stronger as even remuneration is now shown to be affected strongly by ethnicity which removes the element of chance in the whole process. Therefore again the Kruskal-Wallis test revealed that there is quite a significant effect of ethnicity on the independent variables as table 6.27 demonstrates.

6.7.4 Respondents Views on the Causes of BME Underrepresentation

This section reviews the views of the participants on the factors that impact negatively on the inclusion of BMEs in construction. Table 6.28 captures the respondents' views on the issue based on the reaction to questions in section C of the questionnaire. With a significance level of well below 0.05, the tested parameters on the religion of respondents set as the grouping variable indicate that some of the responses were randomly selected while others were based on preferences.

Table 6.28: Kruskal-Wallis test for views responsible for attraction based on religion

Tested Criteria	Chi-Square	Significance
Access to Employers as basis of gaining employment	8.348	.024
BME Underrepresentation in construction	14.809	.022
Immigration Status in UK	16.156	.013
Access to Work Experience/Apprenticeship	13.799	.032
Cultural Barriers at the various levels	5.106	.035
Education/Language of BMEs	13.701	.033
Negative Image of the Construction Industry	9.645	.140
Lack of Transparency in the employment process	4.828	.566
Religious Barriers facing potential employees	37.911	.000
Discrimination/Racism against BMEs	9.293	.158
Lack of Networks for access to industry	13.256	.039
General Perceptions of construction	7.223	.031

a. Kruskal Wallis Test, b. Grouping Variable: Religion

The values of chi square and significance indicate, as in preceding sections (sections 6.7.1 and 6.7.2), that the null hypothesis of the responses having been given at random are rejected and that the participants' selection of their responses was based on choice and not done randomly. Therefore, the results can be seen as reliable, applicable to, and representative of the sample population. Table 6.29 portrays the same test repeated for the region of the respondents.

Table 6.29: Kruskal-Wallis test for views responsible for attraction based on location

Tested Criteria	Chi-Square	Significance
Access to Employers as basis of gaining employment	10.291	.001
BME Underrepresentation in construction	7.439	.006
Immigration Status in UK	1.251	.263
Access to Work Experience/Apprenticeship	.780	.377
Cultural Barriers at the various levels	.287	.592
Education/Language of BMEs	3.188	.074
Negative Image of the Construction Industry	6.572	.010
Lack of Transparency in the employment process	.585	.444
Religious Barriers facing potential employees	2.197	.138
Discrimination/Racism against BMEs	10.914	.001
Lack of Networks for access to industry	8.558	.003
General Perceptions of construction	12.841	.000

a. Kruskal Wallis Test, b. Grouping Variable: Region

It will be recalled that the descriptive statistics in section 6.4 indicated that respondents had locational advantage. Literature still confirmed this by indicating the tendency of ethnic minorities to drift closer to locations where their relations usual are located. Inferentially, considering the figures of chi square and significance levels above, the null hypothesis that this could happen at random is generally rejected. The responses relating to immigration status, work experience, cultural barriers, language and education, transparency and religious barriers all retain the null hypotheses of randomness. However, it is worth noting that, in the London and the south east region, the underlying factors that had been revealed in literature as being responsible for BME underrepresentation are violated. It was found, for example, that employees in some companies barely spoke English, and shared the culture and religion of their employers. Therefore, they could have given responses at random thereby hindering inference to the entire sample population studied. However, in other circumstances as listed in table 6.29, the hypotheses are rejected in which case inferences are possible to the sample population in this research. Table 6.30 accounts for the same parameters using ethnicity as the grouping variable.

Table 6.30: Kruskal-Wallis test for views responsible for attraction based on ethnicity

	Chi-Square	Significance
Tested Criteria	-	
Access to Employers as basis of gaining employment	42.051	0.015
BME Underrepresentation in construction	48.048	0.020
Immigration Status in UK	26.736	0.040
Access to Work Experience/Apprenticeship	13.365	0.003
Cultural Barriers at the various levels	14.416	0.051
Education/Language of BMEs	45.389	0.144
Negative Image of the Construction Industry	40.954	0.709
Lack of Transparency in the employment process	15.280	0.039
Religious Barriers facing potential employees	29.981	0.027
Discrimination/Racism against BMEs	36.697	0.000
Lack of Networks for access to industry	39.627	0.010
General Perceptions of construction	41.701	0.041

a. Kruskal Wallis Test, b. Grouping Variable: Ethnicity

Unlike in table 6.27, table 6.28 immediately above, shows nearly all respondents rejecting the null hypotheses for ethnicity. It can be observed that most variables have very high H values. The likelihood of obtaining such large H value purely by chance, is shown to be below 0.05 - i.e. pretty unlikely, implying that there was differences in the seven ethnic groups and in the responses they gave thereby rejecting the null hypothesis that the responses occurred by chance. This was necessary because it emerged from both literature (chapter 3) and the qualitative study (chapter 5) that the basis of the representation of BMEs in the industry is underpinned by their ethnicity. With a significance level set at 95 percent or a (Ho of <0.5) it implies that the responses were given based on preference and not at random. This implies that the level of participation in the industry is dependent on the ethnicity of the individual's exposure as outlined in the parameters above. For example, lack of access to employers, religious barriers, lack of networks in the industry, little or low levels of education etc. are factors that determine the level of participation of a person and that all these influence underrepresentation.

The foregoing section has explored two sets of parameters using Kruskal Wallis test to assess the significance of these parameters to mainly four independent variables namely religion, ethnicity and region of the respondents. In the majority of cases, the tests proved significant fro inferences to be permitted to the population. Further to this, the parameters were tested against the general profile of the participants. This follows in the next section.

6.7.5 The Effect of BME Employment on the Construction Industry

This section examines the effect of the employment of BMEs in construction through the general profiles of the survey respondents in an attempt to understand the reasons accounting for BMEs underrepresentation. The Chi Square analyses of the respective variables were used to demonstrate relationship with the profiles. It also answered the question whether the responses were based on random choices or preferences by significance levels of .05 or less. Already, the participants' responses have been shown to be dependent on their profiles generally to a level as indicated in earlier subsections in section 6.7, although cases where independence was exhibited were also remarkable. Kruskal Wallis ANOVA test was conducted to help reveal the interdependence of the barriers on the profiles. These are further explored in section 6.8 using spearman's correlation. Table 6.31 details the results compiled from the SPSS 16 analysis.

Table 6.31: Significance of Employment Barriers Dependence on Respondents' Profile

Profile	Location	Age	Generation	Religion	Level of	Work
Parameters	1				Education	Experience
Access to Employers	.001	0.098	0.254	0.024	0.053	0.014
BME Underrepresentation	.006	0.492	0.008	0.022	0.084	0.056
Immigration Status	.263	0.411	0.352	0.013	0.630	0.051
Work Experience / Apprenticeship	.377	0.632	0.214	0.032	0.097	0.039
Cultural Barriers	.592	0.524	0.412	0.035	0.119	0.013
Education / Language	.074	0.165	0.004	0.033	0.062	0.086
Negative Image	.010	0.086	0.096	0.140	0.042	0.325
Lack of Transparency	.444	0.215	0.510	0.566	0.556	0.714
Religious Barriers	.138	0.008	0.524	0.000	0.215	0.031
Discrimination	.001	0.251	0.001	0.158	0.006	0.021
Lack of Networks	.003	0.028	0.632	0.039	0.037	0.000
General Perception of the industry	.000	0.089	0.074	0.031	0.049	0.387

Table 6.31 shows that the participants responded to the majority of the questions based on their background although there were marked instances of non-dependence too. From the table, it can be seen that respondents' access to employers was dependent on their location/region, ethnicity, religion and work experience but not on age, generation or level of education. It will be recalled that Ahmed, *et al.* (2008) and CCI (2008) and Caplan, *et al.* (2009) all noted this as a problem facing BME construction students in the UK. Similar dependence on profiles of respondents can be observed in a number of the cases above. It is however significant to note certain unexpected peculiarities. For example, immigration status is not influenced by location, age, generation and level of education and only affects religion and work experience marginally. Also, level of

education, for instance, could not inform respondents to note education or language as a barrier to the industry. Relying on the findings above and noting location, Religion and ethnicity as important profiles in determining access to employment, these were tested further (section 6.8).

The sections above have further pursued the descriptive statistics inferentially and yielded the results shown in the immediately preceding sections. Instances of reconciliation and disagreements have been confirmed in cases based on previous findings in this study. The next section continues with the inferential statistics and concentrates on correlation analyses.

6.8 SPEARMAN'S CORRELATION

This section explores the association of some of the responses in the study by the use of the Spearman rank-order correlation coefficient. It is a non-parametric measure of the strength and direction of association that may exist between variables and is denoted by the Greek letter P or rho. The test is usually used for ordinal data as well as interval or ratio data for which the assumptions necessary for conducting the Pearson's product-moment correlation has been violated (Laerd Statistics 2012). It ranges from a perfectly negative association at -Ithrough 0 which indicates negative to nil association to Isignaling perfect positive linear association.

6.8.1 Respondents' Profile and Employment Processes

Throughout this study, a number of associations between respondents profile and other factors were identified. This included, for example, the incidence of easily finding a job in construction on the Olympic site if one was Polish, as noted by RT21 in the qualitative study. Thus indicating an association between nationality or ethnic background and access to employment in a particular industry or organisation. Furthermore, RT1 in the same study, through expert opinion based on his background, indicated a strong association between some national identities and some professions typically mentioning Germans and Engineering. This section further explores this association quantitatively to assess how well certain characteristics influence employment in construction. Table 6.32 shows the association between certain respondents' profiles and the process of inclusion, training, progression and retention.

Table 6.32: Respondents' profile and the employment process.

Respondents' profile	Employment process									
	Perception	of inclusion	Perception	of progres	sion	Perception of retention				
Statistic	rho	Sig**	N	Rho	Sig**	N	Rho	Sig**	N	
Region	108	.372	71	144	.240	67	237	.054	67	
Age	092	. 445	71	075	.546	67	.016	.900	67	
Gender	.157	. 191	71	.171	.165	67	.198	.108	67	
Religion	.017	.886	71	.124	.317	67	.050	.688	67	
Ethnicity	075	.536	71	139	.264	67	195	.113	67	
Migrant descent	.108	.372	71	.099	.424	67	.109	.382	67	
Generation	.006	.966	47	027	.861	44	079	.609	44	
Language at home	091	.451	71	082	511	67	186	.131	67	
Language at work	.215	.071	71	182	.141	67	236	.055	67	
Level of Education	013	.913	71	068	.586	67	127	.307	67	
Ease of access internship	.937	.015*	64	069	.601	60	161	.218	60	
Age into construction	.078	.520	70	.113	.367	66	.031	.804	66	

Table 6.32 shows the level of association existing at different levels in the employment process. Like other procedures based on ranks, Spearman's test is non-parametric and does not depend on the assumption of an underlying bivariate normal distribution with parameters or any other distribution. The null hypothesis assumes no association between the variables and thus conveys the purpose of the test: investigating possible association in the underlying population. Although there may be a level of rank correlation for the sample, the purpose of the test is to make an inference about the population. Therefore, reporting $\rho=0$ or any other figure may be confusing. It is, as a result, better to avoid a symbolic statement of the null hypothesis altogether and instead to describe the association qualitatively in the underlying population rendering Ho as the non-existence of association between the variables in the underlying population.

It is significant to note the lack of association between almost all the independent variables above with the corresponding dependent variables thus upholding the null hypothesis of no association. Surprising here are two variables worthy of note: education and language. Contrary to the common anecdotal evidence as well as most literature that these two variables associate positively with employment, progression and retention amongst the BME community, it is not the case. Whereas literature cites incidence of over-education of ethnic minorities, they are the ones suffering low employment rates. Notable here, however, is the variable *access to internship*, which shows a strong positive relation to employment although does not guarantee the further stages of progression and retention.

6.8.2: Conditions of Employment and the Perception of Equal Opportunity

Table 6.33 captures the association between variables on the conditions of employment and the perception of equal opportunity.

Table 6.33: Employment and perception of equal opportunity

Access to	Perception of equal opportunity									
	Positive	action in		Positive	action in		Positive action in			
	recruitment			promotio	n		training and retention			
Statistic	Rho	Sig**	N	Rho	Sig**	N	Rho	Sig**	N	
Unemployment	337**	.007	64	.145	.254	64	342**	.006	64	
High remuneration	.209	.098	64	009	.946	64	.229	.069	64	
Skills training	.135	.288	64	.071	.579	64	.080	.532	64	
Interest / satisfaction	.090	.477	64	009	.941	64	.059	.641	64	
Continuity / stability	.312*	.012	64	.172	.175	64	.289*	.021	64	
Promotion	.151	.235	64	.023	.854	64	.087	.492	64	
Relation in industry	.051	.690	64	216	.087	64	078	.539	64	

Again, as shown above the majority of the variables have no significant association. However, unemployment is seen as having a strong two tailed association with recruitment, training and retention although not with promotion thus indicating the significance of this condition in how negatively the issue of equal opportunity is perceived and so confirming both literature (chapter 2 &3) and the qualitative study (chapter 5). In addition, continuity shows a significant association with recruitment and retention noting the contrasting situation of those in long-term employment and those without it.

6.8.3 Barriers to Employment and Perception of Underrepresentation

This section looks at the perception of BMEs underrepresentation and the association with barriers causing this. Again, in this part of the analysis, the null hypothesis of nonexistent association is once again withheld for most of the variables confirming the assertion that the conditions of normality on one situation may not apply especially to ethnic minorities (chapter 3). Yet in this case also, and better than in sections 6.81 and 6.82, there seems to be stronger association with some of the variables.

Table 6.34: Barriers to Employment and Perception of Underrepresentation

Employment Barriers	Perception of BME underrepresentation									
	Inclusion			Progres	sion		Retention			
Statistic	Rho	Sig**	N	rho	Sig**	N	rho	Sig**	N	
Cultural Barriers	.057	.639	71	.015	.902	67	.004	.976	67	
Religious Barriers	.183	.126	71	.129	.297	67	.252*	.039	67	
Education and language	334**	.004	71	333**	.006	67	355**	.003	67	
Immigration Status	116	.337	70	139	.265	66	107	.391	66	
Discrimination	184	.124	71	253*	.039	67	405**	.001	67	

In table 6.34, education and language are strongly noted as having a strong two-tailed negative relation with the entire variables of the stages in employment even at a significance level of 0.01. This is a clear justification of the incidence of over-education among migrants who continue learning for lack of commensurate employment. It also points to the fact that the respondents do not see the variable as significant, confirming the finding in the qualitative study of employees who had hardly any English to express their thoughts let alone take instructions. Although, discrimination does not seem strong at the inclusion stage, the negative association is much more pronounced at the progression and retention stages. This may have resulted from the fact that those who formed the respondent base had jobs and so failed to perceive the difficulty of finding one having surpassed this hurdle. Realistically, they reported what the situation is to them, which happens to be more significant with retention, again confirming literature finding of high attrition of construction employees due to unfavourable factors especially for BMEs. Again, as literature confirms, religion poses problems of retentions due to practices that employers and job colleagues might frown upon like Muslim prayers and for there to be a significant relation between the religious barriers and retention is no accident. However, cultural barriers do not seem to have this problem to the same level.

6.8.4 Reasons for Underrepresentation and Views on Equal Opportunity

This section uses table 6.35 to delineate the basis for BMEs underrepresentation variables and how they relate to the views held by respondents on equal opportunity for ethnic minority groups. It tows the line of earlier findings in this section of the analyses as can be seen in table 6.35.

Table 6.35: Reasons for underrepresentation and equal opportunity views

	Equal opportunity views									
Reasons for	Positive	Positive action in recruitment			Positive action in			Positive action in		
Underrepresentation	recruitn				ion		training	and		
						retention				
Statistic	Rho	Sig**	N	rho	Sig**	N	rho	Sig**	N	
Lack of Networks	.156	.193	71	.180	.144	67	.335**	.006	67	
Lack of Transparency	.044	.717	71	.086	.488	67	.166	.181	67	
Negative Image	233	.051	71	216	.079	67	291*	.017	67	
Discrimination	.184	.124	71	.253*	.039	67	.405**	.001	67	
Education/Language	334**	.004	71	333**	.006	67	355**	.003	67	
Unemployment	.103	.394	71	089	.475	67	094	.451	67	
Remuneration	.162	.178	71	.156	.207	67	.141	.254	67	
Apprenticeship	.896	.004**	71	.097	.437	67	.083	.503	67	

In table 6.35, a significant finding is unveiled. Literature notes a high level of lack of attractiveness resulting from pay levels and uncompromising working conditions which is affirmed here. Although, narrowly, it debunks the notion of negative image at the recruitment stage but strongly shows a significant relation at the training and retention stages. Furthermore, discrimination and level of education/language show similar significance here as has been seen previously. Again, like ease of access to internship in section 6.8.1, the variable apprenticeship shows an exceptionally significant association at the recruitment stage but fails to sustain this at the next two levels.

6.8.5 Signals of Representation and Level of Engagement

This section considers the variables responsible for retention in the industry considering the level of satisfaction of the employee. Table 6.36 captures this association bringing out any significant factors worth noting.

Table 6.36: Factors of representation and level of engagement

Factors of representation	Condition and level of engagement								
	Access to	internship	View of	equal oppor	Interest / satisfaction				
Statistics	rho	Sig**	N	Rho	Sig**	N	rho	Sig**	N
Access to Employers	071	.573	66	088	.468	70	.060	.613	74
BME Underrepresentation	077	.536	66	079	.520	69	.063	.599	73
Lack of Networks	-153	221	66	227	.058	70	.209	.074	74
Lack of Transparency	093	.456	66	140	.248	70	042	.720	74
Cultural Barriers	.000	.998	66	119	.327	70	070	.555	74
Religious Barriers	014	.913	66	052	.668	70	.081	.495	74
Education/Language	094	.454	66	077	.525	70	137	.244	74
Negative Image	.055	.663	66	.037	.759	70	119	.313	74
Immigration Status	880	. 019*	66	131	.284	69	.010	.934	73
Discrimination/Racism	158	.206	66	076	.530	70	.258*	.026	74
General Perceptions	.135	.281	66	051	.673	70	-072	.543	74

In table 6.36, the null hypothesis of no association is maintained more than ever showing how low engagement levels (chapter 2) prevail among construction employees. The high level of turnover as noted in section 6.8.3 is therefore confirmed. However, there are two measures of significance with *immigration status* and *access to internship* and *discrimination* and *interest and job satisfaction* implying that these conditions impact on migrants and BME people in general.

6.9 Chapter Summary and Key Findings

This chapter has assessed the significance of the major factors that contribute to upholding sustainable levels of labour supply by reviewing the barriers hindering the inclusion of one of the proportionally underrepresented groups in UK construction and the drivers enhancing their uptake. It began with the descriptive statistics by considering the profiles of respondents in relation to the frequencies and percentages of their responses. The key findings are outlined below:

- On the age profile, it was observed that although there was an initial skewness towards a young age profile, a sharp rise with the majority of the respondents over 50 years confirmed the finding in literature that the UK has an aging profile and for that matter the industry's employees are fast nearing retirement.
- Construction stakeholders' perception on BME representation in the industry has been reviewed in this chapter. The three stages of representation of BMEs namely, inclusion, identified and noted as initial employment forming the base and the starting point for any potential employee where their engagement and commitment lead to their better performance with the likelihood of employee retention from where such performance is

acknowledged through progression. Bad performance of BMEs on all these fronts due to a lack of a level playing field has been further explored where the categorization into 'progressing, 'retrogressing', 'no change' and 'other' yielded a whopping 45.3percent who believed that BME inclusion through employment was progressive compared to a meagre 6.7 percent who thought otherwise.

- The assertion of nepotism and cronyism characteristic of the industry has been tested through the mode of entry where a simple cross tabulation revealed that 26.7percent think there has not been any change while 16 percent held 'other' views with another 5.3percent missing suggesting a level of disinterest in commenting on the issue of BME involvement in the industry.
- The age of gaining employment into construction through apprenticeship and job placements has also been demonstrated as one of the very strong reasons for the respondents' perception of BME underrepresentation. To this light, the chapter has presented the result of the cross tabulation which explored the relationship between what influence 'age into construction' has on BME inclusion in relation to their employment in the industry.
- The impact of the generation of respondents on their perception of the industry has been tested through a correlation of variables responsible. It has been identified that 26 respondents making up about 35percent failed to give their generation out of which the majority at 38percent felt that the inclusion of BMEs is progressing followed by some 30percent who felt there had not been any change. These results compare very well to those in sections E and F of the questionnaire on 'mode of recruitment' and 'age into construction' respectively. As many as half of first generation respondents failed to give their perception of the industry's performance on BME inclusion signalling their apathy.
- The general consensus was noted as an industry progressively changing towards the inclusion of BMEs with a big margin of the respondents failing to declare their generation which mars the results, however accepting their views as conforming to the rest of the respondents for which reason the general view is seen to be positive. The results in the case of BME retention, although slightly different, still affirm the same general consensus of 'progressing' with strong emphasis on the failure of the first generation to comment on

the issue at 27percent. The phenomenon for the first generation seems to have been repeated in the findings on 'progression' also.

- The three-tier hurdle in the career cycle of the BME i.e. initial employment, retention and progression has been reviewed. This was seen as crucial for their positive contribution to construction. Through a twelve item five point likert scale questions, the chapter sought to investigate the views of the participants on the issue thus reporting on the performance of the state of the art of BME at the three levels.
- The level of engagement of BMEs in construction was also investigated and noted as being crucial to the inclusion, retention and progression of every employee and for that matter the BME in particular. A cross tabulation of ethnicity and the selected factors relating to the barriers to engagement was conducted and presented to assess the level of BME engagement. The same exercise was repeated in order to find out what barriers break the level of BMEs engagement in construction by the use of a ranked scale of the problems. It was found out that cultural barriers and lack of work experience / apprenticeship were very important factors as opposed to negative image and general perception of the industry seen to be unimportant.

The corollary, of course, is that these issues contribute to economic inequality, which further impinges heavily on BMEs' economic activities among the socially excluded minorities with repercussions on equal opportunity measures. The general objective of equal opportunity with respect to positive action, here in the UK as affirmation action is illegal, has been found to be the promotion of socio-economic advancement of minorities to encourage social inclusion ultimately aiming to create substantive racial and economic equality by reducing racial group differences of occupation and income as well as other aspects of employment processes. This therefore takes into account macro-level economic issues focusing on factors such as education and training especially through internship and apprenticeship, employment and job mobility, class, ethnicity and labour market conditions for improved job provision and remuneration in order to examine the extent to which policies contribute to the broad purposes of equality and gap bridging.

6.10 Conclusion

This chapter is composed of the data collection process, which covers the sample size selection, the questionnaires and the quantitative analyses of the data as well as the conclusions drawn.

Earlier in chapter 4 it was indicated that the quantitative study has a complementary purpose of triangulation. With the interview findings, it was intended that the questionnaires would help to improve the validity of the research through further contributions to the data from both BME and non-BME employees in construction.

CHAPTER 7

DISCUSSION AND CONCLUSIONS

7.1 Introduction

This chapter evaluates the findings in the entire study in relation to the objectives set out to achieve the research aim in order to assess how best this has been achieved. It reviews the drivers and barriers responsible for BMEs underrepresentation and then presents the discussion following the presentation of the updated initial conceptual framework (section 3.10) and conclusions drawn. It also highlights the limitations of the research and finally suggests areas for further research. Earlier in the study, the issues facing BMEs' entry into construction were identified. Based on the findings from the literature review (sections 2.8 and 3.9), these factors were categorized into drivers and barriers which formed the basis to further investigate the problem through a qualitative study which was used to capture any evidence of these factors in the industry as well as any others that had not been revealed by literature. As mixed studies had been applied to this study based on methodological triangulation, (chapter 4) the problem was also studied through a quantitative approach in a questionnaires survey targeted mainly at construction employees set out to validate the findings from the qualitative interviews. The next section begins the discussion.

7.2 Discussion of Findings

The justification of the proportional representation of BMEs in construction had been done based on economic, ethical and legal fronts. The preoccupation of the study had not been to establish a distinguishing character of these justifications but to assess the significance of the major factors that contribute to upholding sustainable levels of labour supply by reviewing the barriers faced by one of the proportionally underrepresented groups in UK construction: the BME. Therefore, it did not matter the justification but whatever the reason, the need of involving BMEs was seen to be crucial. However, the entire argument tilted mostly towards economic justification as legal and ethical reasons had been seen to be ineffective from literature (chapters 2 and 3) and the empirical studies (chapters 5 and 6) while economic reasons had been said to carry the day (section 3.5). As a result, though the study considered all the factors in relation to the three justifications, the economic reason seemed quite dominant. These are discussed further in the

subsequent sections under the two main headings of drivers and barriers determining the factors for entry into the industry.

It had also been hinted elsewhere in the study (e.g. section 6.8) that although quite significant, the first level i.e. *entry into the industry* was to be given priority in the study as the other two levels, progression and retention could only follow from this initial step. For, the more BMEs there are in the industry, the better the chances of their moving into the other categories and the more justified the arguments for their proportional representation at those levels would be. This is the case because, considering their current representation in the industry generally, their inclusion at management level as well as their turnover figures may be justified. Of course, there would also be those BMEs who may enter at the management level for whom the major concern will be retention although they will still need to progress further. However, these will further aid the grounds for justifying the underrepresentation at those levels.

In section 6.5.4, it was generally agreeable that BME inclusion through employment was progressive rather than retrogressive or even stagnating. Quite a significant number of respondents had declined to be carried along those three views or pass any comments. This is quite significant and somewhat shows the level of disinterest in commenting on the issue of BME involvement in the industry. It will be significant to bring to mind, at this stage, that the many that failed to give their profession after stating that they were employed (section 6.5.1) had reasons for doing so which suggests some level of apathetic attitude to the subject of study. Therefore, the level of apathy and disinterest exhibited in the study at the earlier stages in the data collection process reported in chapter 4 was confirmed. Thus the culture of construction managers to hold on to the status quo in the industry is made bare. The views held by the respondents indicate that at the inclusion level, participants who relied on 'networks' to gain employment agree with the view that progress has been made in the employment of BMEs into the industry and the results for the two other levels did not differ (section 6.5.5). On the problem of BME underrepresentation, there has been the consensus that the industry had seen positive improvements. In a confirmatory note this can be said to be true considering historical and even anecdotal evidence of general employment restrictions to minority groups before the introduction of equality and diversity laws, regulations and initiatives by governments and commissions (see section 3.4).

Another important finding is the relationship between the mode of employment and employees who return to the industry (section 6.5.3) after leaving it. Here, it is significant to note that friends and relations who have previously worked in the industry were more attracted back although around the same number had not had the experience. Quite interesting, however, are both the 'college career advisor' and 'direct application' modes which percentagewise show quite high numbers of people with prior experience in the industry against those without it. It has been noted in section 6.5.2 earlier that direct applications are highly influenced by career advisors and so the two phenomena in question are highly related. The need to attract BMEs into construction therefore should be seen to have better chances through this mode than any other modes of entry. This is very much the case considering the limited networks they have in the industry. Having agreed with the consensus that though proportionally underrepresented, BMEs inclusion in construction is improving, the next section will continue with the factors that were isolated as responsible for making the situation better.

7.2.1 Drivers for BME representation in construction

This subsection outlines the factors identified in this study as helping the inclusion of BMEs in construction also called the pull factors. At the literature review stage (chapters 2 and 3), several factors emerged as being responsible for the problem being studied. These were further assessed in both empirical studies with new knowledge accounted for in these discussions.

The primary problem facing the industry has been the revelation in literature (chapter 3) and confirmation in the findings from the empirical studies (chapters 5 and 6) that the majority British White UK population has an aging profile. This is evidenced by the age profile of the respondents in the qualitative (section 5.2.4) and quantitative studies (section 6.4.1) who were predominantly over 50s. Therefore, the reliance of the industry on the traditional pool of white young male is seen to be economically unviable. This is because it confirms that the industry's dominant employees', who are unrepresentative of the wider population, are fast ageing and the recruitment base follows the same trend. As a result, there is the need to prioritise recruitment from minority groups to make the industry representative of the population. This is seen to be ethical and justifies legal requirements of diversity and equal opportunity but more importantly helps the economic justification of avoiding the recurrent skills shortages which is prevalent in the industry during periods of economic upturn. Failing this, the 'demographic time bomb' facing the industry (section 3.5) is likely to explode into chaos. However, it has also been noted in the qualitative

study (chapter 5) that the world is UK's construction workforce and that recruitment could be made anywhere in time of need. Yet it has also been noted in the same chapter that the lack of adequate and suitable training of new arrivals, as their skills may not be appropriate for the industry's local needs coupled with immigration status, have posed problems for the industry's recruitment drives.

Another important finding in this study was that the respondents who were employed part-time happened to be in the younger age bracket with the majority being below 25 years compared to the respondents employed full time who happened to be older than 50 years generally. This confirms literature and the ageing feature of the industry as addressed in the preceding paragraph needs special attention to stem the tide.

As has been noted above, (section 7.1) and elsewhere in the thesis (chapter 3), the commercial justification of diversifying an industry is stronger, as organizations are required to become heterogeneous; made up of diverse workforce. In this way, a wider range of abilities, experience and skills can be tapped in order to take advantage of today's globalization and the increasingly competitive business environment. The benefits of such a diverse workforce have been outlined in this study with the need for distinctive character traits of differences pulled together for synergy which has been known to bring with it benefits especially in teamwork where such variance helps to deal concertedly with problems of complex nature.

Also, the lack of the availability of appropriate skills during times of economic boom in the construction industry is a strong driver to see to the inclusion of traditionally underutilized groups such as BMEs as an attractive pool of potential expertise. As other industries also compete with the industry whose image and working practices are primarily unattractive due to the unstable, unreliable character of its projects compared to other industries, it is high time the industry shed its culture of reliance on a traditional pool of the population to look elsewhere. The need for this is stressed further by the persistent acute skills shortages particularly in times of recovery from recessions (chapter 3). Therefore the severe nature of this recession, coupled with the reduced input into training and the unwillingness of construction companies to take on apprenticeships and other forms of training schemes especially due to their predominantly small size and capital base, the caution of such skills problems escalating in the event of an upturn, which is inevitable, must be sounded.

Furthermore, legislation in the form of positive action, as affirmative action is illegal in the UK, and other policies and initiatives by political institutions and commissions are another positive way of pushing the agenda of BMEs inclusion in construction. Here, their contribution to the local public purse in the form of taxation in a rather one-sided manner as they may usually not qualify for public funds and other public services, especially where they are of the first generation, make them an attractive set of employees (chapter 5). The next subsection then looks at the barriers responsible for hindering BMEs access to the industry.

7.2.2 Barriers to BME representation in construction

This section, contrary to the section above, considers the numerous barriers BMEs face on entry into construction in a discussion aimed at extracting the salient points worthy of attention to help address the problem. It culminates in the conclusions for the two sections on drivers and barriers for representation where a succinct approach to the solution of the problem is expected to emerge.

The literature review (chapters2 and 3) and both the qualitative study (chapter 5) and quantitative study (chapter 6) concertedly tackled the issue of discrimination found to be prevalent in the industry because of stereotyping. At all levels in the study, the problem of stereotyping has been seen to result from issues with ethnicity and ethnic backgrounds, religious practices and language and these have been seen to be problems facing BME groups in getting recruitment into the industry. It has been noted that this has been the culture of the industry hence its predominance with the typical young British White male. This discriminatory tendency was seen to be influencing the practices in other minority-dominated companies where, as it emerged in the empirical studies referenced above, that there were evidence of reverse discrimination as these companies also fail to diversity and are usually dominated by the ethnic group of the management and/or ownership. Whether these were seen as a practice aimed at preserving their ethnicities, languages or religions, its roots are however found in the typical practice of the industry, which has been known to be aiding and perpetrating the process.

Additionally, BMEs have been thought of as preying on local jobs meant for the indigenous population and so BMEs giving jobs to their kind may be a way of the ethnic groups protecting their like. However, this is only possible and may appear feasible especially in times of recession as these, but otherwise are definitely plagued with difficulties in helping to surmount the problems of skills shortages for industry as whole.

The recruitment practices in the industry, where employers adhere to the usual norm of relying on the traditional white young male group coupled with the discriminatory practices and the associated perceptions formed as a result, mean that both employer and the potential BME employee have set barriers to surmount in this regard. Even where BMEs have been able to surmount such difficulties their experience in respect of having to outperform their white colleagues has meant that their chances had failed to be worthwhile and they usually have failed to be retained. Training is also usually denied them even in the face of their being the ones who need this most based on the accusation of their lack of the requisite skills and qualifications even in the face of over-education among BMEs (see section 5.4.1). Therefore they have again failed to progress. It is therefore evident that the practices of the industry in every respect do not suit the BME hence the tendency to look elsewhere.

Following on from the above therefore, BMEs tend to be attracted elsewhere. However, other factors like the need to earn quick income to survive as well as easy networks elsewhere account for such attraction too. It was found out that BMEs have done better in other industries (chapter 3) and as the findings of this study show in the empirical part, BMEs are also doing well in specific construction companies but these are not positive as the dominance here is based on the representation of specific ethnicities normally. It may also be that the same word-of-mouth practices, usually occurring in pubs and other social places normally patronized by the white young male, being employed as the major means of recruitment in construction generally, are what these may also be relying on. Thus, recruitment may occur in places like churches, mosques or temples where particular ethnicities abound usually.

Religion has been found to be one of the cultural characteristics of the BME that impacts negatively on how project managers have frowned upon them and inhibited their roles in the industry. Muslims for example have to pray several times in a working day and close early on Fridays for prayers (chapter 3). Therefore, in this study it was attempted to ascertain the severity of barriers posed by religion in contributing to the underrepresentation of BMEs. The implications of this can be observed in the results of the quantitative analysis where, with the exception of the two Asian groups of Asian and Asian British and Chinese or other background, Christians accounted for the largest number of respondents in each of the ethnic groupings. This therefore confirms the finding in literature (chapter 3) that some religious practices, for example Muslims are underrepresented in the industry and that their religious practices do not act to

favour their inclusion as, for instance, the number of times of prayers plus the Friday Prayers interfere with their working schedule which other employers and managers may frown upon. Also, with quite a significant number, of the respondents failing to disclose their religion, the point is reiterated that the fear of suffering rejection and possible attrition and employee turnover could be the reasons behind such failure. This is assumed the case where people shown respect and favour for their affiliation would always be proud to show their identity.

The generation BMEs belong to is also thought to be important in deciding their performance in the job market especially in relation to their understanding of the local culture and its impact. In this study, the first classification of generation referred to people who were born outside the UK; the second referred to the direct descendants of the first and the third group ascribed in the category those whose parents originate in the country by birth. Although no marked peculiarities were observed, a striking point worthy of note is the first generation's view of an improvement in the inclusivity of BMEs in the industry. This feeling was not surprising from the point of view of their disengagement with the local culture. Additionally, they have their past to compare the present to; especially considering their conditions in their home countries, the rights they had there, compared to what prevails in this place they now call home. It will be recalled that RT3 acknowledged that no matter what the condition it was better and that minorities in his home country had no rights comparable to what prevailed here (chapter 5). To the contrary, the later generations, upon seeing here as their home, with no other to compare it to feel otherwise and would want to be treated as fairly as their white counterparts.

The claim that BMEs lack the requisite education and training which literature disproves was also put under the limelight in this study. The results showed minimal distinction between ethnicities and their levels of education and training. However, comparatively more of the Non-BME groups had construction related qualifications within the ethnicity results (section 6.4). It is therefore evident that non-BMEs usually have an upper hand in construction training before and after employment in the industry. If BMEs are characterized with over-education and are more than proportionally represented in construction education in colleges and universities (chapter 3), the only justification for this finding is that BMEs are not finding their way into construction jobs after training. Again, another viable reason could be that non-BMEs are given priority to training while in employment over their counterparts.

Still differences between BME groups in education could not justify BMEs underrepresentation. For example, Asians were found to have the least construction education within the ethnicity results (section 6.4) but they were found to play quite a significant role in the industry irrespective of this fact. Contrary to this finding, however, the BME group (Black and Black British) that constituted the larger share of the respondents having construction related degrees has less influential positions in the industry with the majority employed in builders cleaning and jointing. Here also, the inter-regional responses show a bias which is very significant in this study as a result of the varying levels of concentration of BMEs in the regions. This, as a result, gave an idea of the trend in the various ethnic groupings and their involvement in the industry to aid an understanding of the general conclusions to the level of the BME involvement based on their own perceptions and of other stakeholders. Therefore, even between ethnicities, there are differences in their performance in the inclusivity process in construction. Therefore, the problem of underrepresentation is a matter of other forces at play, and that the higher the representation of one's ethnicity in a particular organisation, the better the chances of the others of the same ethnicity gaining access there. The case of the Polish on the 2012 London Olympics site was cited by RT21 in chapter 5.

It has been found that due to their nature, construction projects are usually sited farther away from company locations. For this reason, project managers usually take full responsibility for personnel issues from recruitment through progression and retention to a large extent (section 6.8.1). This is in view of the fact that they may, as the case usually is, lack skills in SHRM and therefore are unable to see the consequences of certain actions they may take especially where these are over the long term. In addition, their preoccupation has always been with meeting short-term goals at the least possible cost to the organization as projects are normally fixed within time and budget. Hence, there is little room for experiments, which results in the tendency to rely on those they know and are comfortable with, especially the construction SMEs.

In respect of policy outcomes and constraints, the results of this study have shown that the operation of equal opportunity in the sphere of employment should not be based solely on recruitment policy but rather be a multi-dimensional, end to end process. Therefore, in terms of career progression and retention of BME employees, this study confirms the findings in other studies (see Caplan *et al.* 2009; Ahmed *et al.* 2008; CCI, 2008) that the few that find their way into the industry are usually overwhelmingly represented at the lower end of the grading structure.

This has been found to be prominently the case in other countries as well, even where BMEs have been found to be significantly represented on the job market in construction. Here, it has been found that all the qualitative studies respondents who were BMEs were self-employed from micro businesses (see section 5.2.4) and those on the survey list were found at the lower rung of the grading structure (see section 6.4.1). There is, as a result, evidence in the study to support the conclusion that implementation of positive action policies, where it does occur, is not within the strict interpretation of the provisions of the Equality Act 2010. However, compared with the large companies, SMEs on Local Authority contracts were found to appear to have a higher regard for their employees in respect of the provisions of diversity and equal opportunity (see section 3.7.1) as these were prescribed in their contracts.

Looking at the reporting and appraisal systems, the study found that there is no uniformity or consistency in the operations of SMEs or large organisations. The latter have been known to function differently and that all systems relied heavily on the subjectivity of reporting officials mainly project managers and site supervisors (chapter 5). Moreover, there is evidence that this contributes to the disadvantaged position of BMEs in the employment cycle through discrimination. However, the evidence does not point solely to direct or indirect discrimination resulting from stereotyping, as indicated above, but based on the findings on personal experience of racism, victims have been targeted for other reasons (see section 6.6.2). Therefore, it is not enough to circumvent the initial barriers of entry but once in the industry, other factors militate against BMEs presenting bottlenecks in the process. As literature confirms, *religion* poses one such problem for retention due to practices that employers and job colleagues might frown upon like Muslim prayers. However, cultural barriers do not seem to have this problem to the same level in this study.

Recollections from literature (chapter 3) have noted a multiplicity of accountable factors affecting the representation of BMEs notably access to apprenticeship and employment training, lack of networks, ethnic origin and discrimination. Testing for the significance of ethnicity, (Section 6.7.5) it was noted that for training offer and preferences, respondent's ethnicity was important for the other factors except *benefits of training*. Even here, the main benefit yielded was remote and job related. The implication of this is that, even where it was offered ethnic minorities were mainly offered job related training at the expense of the other beneficial aspects of it. Thus, literature is confirmed (chapter 3) where most BMEs find themselves in job roles

mainly as operatives and labourers, hardly involving personal growth and development. However, the generation of BMEs and how long migrants have lived with the host was critical to the training offered them at work as they developed significant skills at different levels (Section 6.7).

A clear justification of the incidence of over-education among BMEs resulting from staying longer in higher education due to the lack of commensurate employment has been established both in literature (chapter 3) and field study findings (chapters 5 and 6). This condition did not seem to have worked to their advantage whatsoever considering their underrepresentation in the industry. The language used and proficiency in English also were not seen by respondents as vital to employment in the industry, confirming the finding in the qualitative study (chapter 5) where employees who had hardly any English to express their thoughts let alone execute instructions were gainfully employed in companies especially in the SE region.

Although the two regions were noted to be characteristically different, they were found to share similar characteristics except for unemployment (section 6.6.2). In addition, both sources note that the higher concentration of BMEs in the SE Region, resulting from the attractiveness of such high-urbanized locations to them as well as their affinity for proximity to relations, justify the consequences of unemployment. However, it is noteworthy that the similarities differed significantly, an example being continuity, which led to retention in the industry and remuneration based on the access to income as a means of survival. Therefore, individuals' access to public funds which is limited to migrant workers who abound in the SE region means that unemployment and remuneration would be important to participants from both regions but more so to those of the SE region as their survival very much depended on the two factors. However, in both cases retention came up as a very significant factor thereby indicating that although participants in both locations valued access to employment and remuneration, retention on the job was more important; a characteristic both groups held steadfastly. In gloomy economic times as this, this finding is rather not unexpected as it is worth holding on to one's job irrespective of the level of remuneration or reward attached to it. Therefore, these three factors served as distinct barriers to BMEs engagement especially in the SE.

From the foregoing, the evidence of high hurdles that BMEs need to be helped to overcome seem rather more palpable from this study. Failing this, their progress will continue to be hampered in the industry. Addressing these barriers are quite complicated than pointing a finger at one or two factors as responsible. Even non-BMEs were found to be underrepresented in BME dominated

companies. Lack of English language was not found to be a problem for some respondents already working in construction. However, networks were crucial considering how the two variables (recommended by relative and recommended by friend) fared in respondents' access to employment in the quantitative study. The next section looks at the conclusions from the research especially in the light of the foregoing issues.

7.3 Revised Conceptual Framework

This section presents the revised version of the conceptual framework (figure 3.2) presented in chapter 4 of the study. It was developed base on the review of literature and the initial overview of the domains of the knowledge in the field of SHRM. Based on the new insight gained into the subject, the framework has been refined. This was done using the findings from the various sections of the study; the literature review in chapters 2 and 3, the empirical study findings from the qualitative study (chapter 5) and finally the quantitative study (chapter 6). Figure 7.1 presents the revised version of the initial conceptual framework as the proposed framework to enhance employment practices for BME representation.

This framework outlines the need for a proportional representation of BMEs in construction. It shows the influence of factors such as knowledge of policies and initiatives, experience, training benefits of diversity etc on the processes leading to improved employment practices for BME representation. As the arrows indicate, the factors are not mutually exclusive and therefore are interdependent. The factors influencing the contributions identified in the initial conceptual framework were investigated further with employer interviews and the employee survey for further confirmation. The interviews as explained in section 5.3 served the purpose of identifying the subtheme classifications under which factors influencing the contributions of BMEs and benefits of diversity to the industry were explored. Accordingly, the final conceptual framework has been refined using the knowledge from the empirical studies. Figure 7.1 presents the refined conceptual framework covering the entire study.

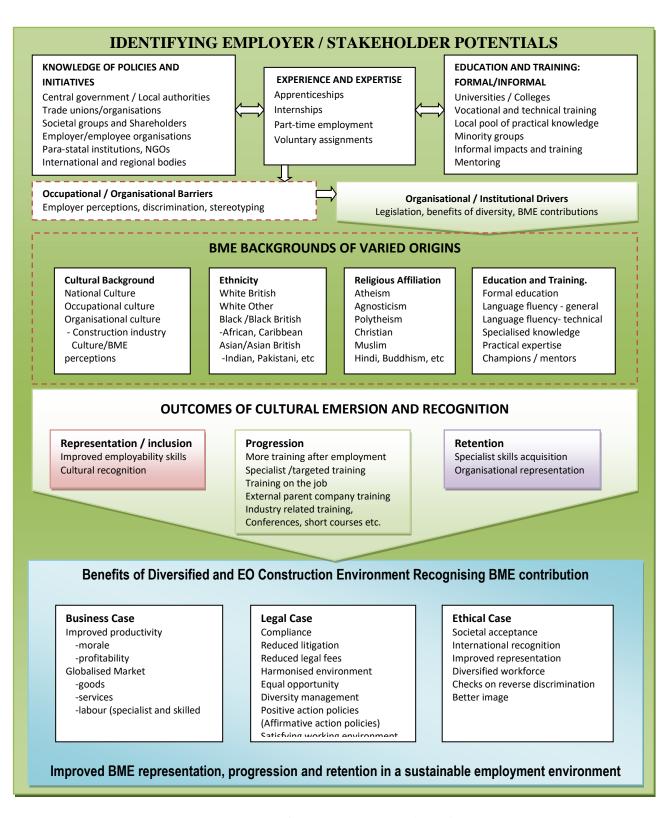


Figure 7.1: Proposed Framework for the representation of BMEs

The refined conceptual framework developed following empirical studies has identified the classified factors influencing the benefits and need for diversity, the levels at which contributions can be made and those who will benefit from them. Accordingly, the final framework reveals these factors at different levels, with peculiar emphasis on the beneficiaries. The framework also suggests that the contributions made by BMEs can bring benefits to the entire UK construction industry through business, legal and ethical means details of which are outlined under each. It has, as a result, brought together the findings from the review of literature and the empirical study covered in this research in order to enhance employment practices by construction employers (mainly project managers and site mangers) for a better BME representation in construction. The next section looks at the contributions of the piece of research to the body of knowledge in the field.

7.4 Objectives-Based Evaluation of the Research

The aim for this research was stated in chapter 1 as an investigation into the representation of BMEs in the Construction Industry in order to propose a strategic framework to aid an increase in the uptake of BMEs in the industry. Alongside the aim, objectives were defined to guide the process. This section therefore covers the assessment of these objectives.

Objective 1: To explore and analyse the published literature on BMEs representation in construction in view of the skills shortages facing the industry during economic upturns.

As is normally the case, to embark upon any meaningful research, there is the need to develop a well grounded understanding of the subject and the field of operation. The first objective therefore set out to do this and began with a review of literature on the state of the construction industry and its professional requirements in order to address this objective. This objective was addressed by giving an overview of the industry in chapter 1, and the current state of HR practices in chapter 2, which saw a progression to the second phase of the literature review in chapter 3, which covered HR management in construction. As a result, the need for the industry to adhere to strict diversity and EO policies to enhance the inclusivity of BMEs to reap the gains of a diversified workforce in a globalised industry setting was outlined. The literature review was followed by the empirical stage of the study, which saw a parallel mixed methods study of construction employers and employees using semi-structured interviews and questionnaires survey respectively. The results from both studies were incorporated into the refined framework

(figure 7.1) for the enhancement of employment practices in construction to better BMEs involvement in the industry.

Objective 2: To identify BMEs and develop an understanding of how they are perceived in construction and the impact of this on their interest, training and engagement.

Along with the review of the industry's condition and practices, the subjects of interest in the study, BMEs also deserved adequate attention in order to place the research in context. In chapter 3, the second part of the literature review attempted a definition the term BME in order to aid the understanding of this in general and its impact in construction specifically. It further considered their characteristics and cited instances of perceptions by stakeholders on either side of the divide. BMEs themselves also hold a perception of the industry and these were extensively covered throughout the literature review (chapter 3) and empirical studies (chapters 5 and 6). BMEs interest in the industry and the need for commensurate training had earlier been outlined under employment and human resource function (see section 2.4 in chapters 2). This was further explored in the employee survey (see section 6.6.3 and section 6.7.3) where factors accounting for their interests, training and engagement were assessed. This investigation revealed the perception of BMEs by the industry's employers and other stakeholders, which amounted to examples of significant barriers facing this minority group (see sections 3.6 and 7.2). This exercise aided and understanding of such perceptions and their impact on the performance of BMEs in the industry.

Objective 3: To investigate the level of uptake of BMEs within the industry identifying the factors leading to their intake, progression and retention.

The investigation into the factors responsible for the underrepresentation of BMEs in construction, which served as the basis of the development of the initial framework, was discussed throughout chapters 2 and 3. Here, the barriers and drivers accounting for the problem were outlined together with the review of their current participation in the industry. The previews had served as the springboard for developing an initial conceptual framework. Furthermore, chapters 5 and 6 defined the actual and current state of the art of BMEs inclusion at the various levels outlined in objective three. It was observed earlier in the research that although important, progression and retention could only follow from initial employment and so much attention was given to this initial step defining entry. Their involvement in the industry was found

to be minimal and unrepresentative of their share in the entire UK population. these outcomes served to refine the initial conceptual framework (figure 3.2) in chapter 3.

Objective 4: To examine the difficulties BMEs face in respect of barriers hindering their engagement and the enablers that could enhance their participation in the industry.

The possible enablers and barriers had been outlined in literature in chapter 3, which further set out the basis for the empirical studies. The first part, qualitative studies (chapter 5) identified and assessed these barriers and attempts aimed at addressing them through the drivers also explored alongside the entire process. These factors were further investigated in the quantitative study (chapter 6). Emerging findings, and conclusions from literature review (section 3.9) were introduced in the initial framework developed (figure 3.2) which was refined (figure 7.1) based on the findings from the empirical studies. These were further discussed in other sections of the study (see section 7.2). It had been found earlier that a multitude of barriers (see section 5.4.1a) hindered the uptake of BMEs even in the face of several drivers (see section 5.4.1b) that could counter this effect. However serious the barriers may be, they could be transformed into drivers to enhance the process of BMEs proportional representation if the industry's employers, found to be mainly project and site managers could change their perception and employment practices.

Objective 5: To develop a strategic framework to advance the engagement and full participation of BMEs in the industry.

The initial conceptual framework (figure 3.2) was introduced in chapter 3 to capture the views obtained from the literature review outlined in the findings (section 3.9). In chapter 7, it was revised and put forward as the proposed framework (figure 7.1). It is depicted as embodying the entire study and elucidated in this chapter as a proposed framework to guide diversity and EO policies and practices in construction. Marking the achieving of the study's aim and objectives, this framework is put forward as a tool for implementation to guide the enhancement of employment practices in UK construction in order to improve, at least, to proportional representation levels, the inclusion of BMEs ultimately. Validation of the findings by adopting the framework is therefore recommended to be undertaken in industry setting in order to consolidate the findings and the research outcomes as the remit and time limitations for this research could not permit this exercise.

7.5 Contribution of the Research

The success or failure of any research can be determined by the ability to produce novel and original contribution to extend the boundaries of knowledge domains (Kagioglou, 1999). The first chapter of this study touched on discussions in this regard. This part describes the contribution further. This research has ultimately investigated the underrepresentation of BMEs in the Construction Industry and proposed a strategic framework to increase their uptake in the industry. It is this aim that has informed the contribution of this research to the body of knowledge and practice in the field of strategic human resource management. The major contribution of this study has been the development of the strategic framework to advance the engagement and full participation of BMEs in the industry, which will be of particular importance to construction as well as business support organisations and policy makers on the need for diversity in construction organisations. The contributions are considered under the following three subheadings.

7.5.1 Contribution of the Research to Theory

Workforce diversity and equal opportunity in construction and the continuous underrepresentation of BMEs in construction as a result of the difficulties they fact in respect of their recruitment, retention and progression in the industry were identified in section 1.6 and section 3.11 respectively as creating a research gap. Moreover, an increasing amount of studies have concentrated on workforce diversity however, very few have been consistent with the antecedents and outcomes of diversity and fewer still have concentrated on localised paradigms and none have had the two regions of the UK in this study as their focal points of study. This research has focused on a single dimension of diversity, 'race' in an organisationally domestic and typically UK regional context. Moreover, in today's globalized world where organizations tend to be borderless and virtual, the benefits of diversity cannot be overlooked nor can operation of businesses be domesticated.

Therefore, in this research, current issues in literature were assessed particularly based on a unidimentional paradigm of the diversity debate, which has seen the relocation of theoretical knowledge on the subject and ultimately has put forward a conceptual framework (figures 3.2), which was reviewed after the empirical part of this study had been completed. Accordingly, the final framework (figure 7.1) helped to reveal three factors at different levels justifying the moral case, the legal case and the economic case of diversity with all factors having outstanding

benefits on either side - the practitioners (employers) and the beneficiaries (employees), with emphasis on the ultimate accrual of economic advantage to both. The framework, in the earlier stages outlined the processes involved in addressing and surmounting the many barriers that result in bottlenecks in the course of efforts aimed at achieving these goals. It has, as a result, brought together the findings from the review of literature and the empirical study covered in this research in order to enhance employment practices by construction employers (mainly project managers and site mangers) for a better BME representation in construction. Therefore, the empirical studies and their findings form the basis of further reference material and thus add to the body of knowledge and theory in the field of diversity management and equality of opportunity in employment in construction.

Diversity has been identified in this study to add another dimension to equal opportunity, a term that encompasses the various differences as covered by legal requirement while focusing mainly on individual needs. This concept has been known to bring a new set of assumptions that connotes the implications of affirmative action and positive action debates in the United States and the UK respectively. Although it is common practice for most people to associate the concept of 'diversity' with the subtext of race relations policies in the context of the workplace in western multicultural societies, it has, in today's world taken on a new meaning with global implications. Therefore, it is not necessarily the case for the key assumptions underlying diversity to be limited to race relations but rather acknowledging the uniqueness of all individuals and contrasts starkly with equal employment opportunity policy. Diversity has been said to be associated with the economic case on one hand while equal opportunity is tied to the moral consideration of protecting minority interests on the other. These factors had been recognised in the study based on which the final framework (figure 7.1) was arrived at.

The framework highlights strategies for reducing unemployment among BMEs, cultural tolerance and integration, economic sense of diversity in employment among others. In addition, knowledge with regard to BMEs and their employment in the industry has been contextualized within the construction industry body of knowledge. Furthermore, another contribution arising from this research has been the relocation of literature and knowledge which are otherwise fragmented across a number of disciplines. The research has brought together knowledge from various disciplines such as social and cultural constructs, human resource management, industrial relations, international trade and economics, business management and more in order to help

address the shortage of and rather transient nature of labour supply to the construction industry and for dissemination and use in other fields of human endeavour.

The methodological steps adopted in this study where a pragmatic paradigm marked by the doctrines that the meaning of conceptions is to be sought in their practical bearings (section 4.4) as was applied to this study of employability of BMEs in the construction sector in the two regions of the UK is unique and as a result can serve as reference material for subsequent studies. In fact, the use of theoretical as well as empirical evidence in the publications and dissemination of sections of this study on several different platforms locally, nationally and internationally are pointers to the contribution made to the theory on the subject. The appendix of this thesis contains a list of these publications in the form of journal papers, conference proceedings and presentations that resulted from this study. These publications and the material contained in this thesis have aided the relocation of literature and have added to it empirically thus augmenting the body of theoretical knowledge in the field of construction management.

7.5.2 Contribution of the Research to Practice

The contribution of this research to construction industry practice is manifold but can be classified under two main subheadings - barriers and drivers to BME representation and in fact address several issues applicable to other minority groups. These have been addressed in the literature study (sections 3.6 and 2.4.2), the qualitative study (sections 5.4.2 and 5.4.3 and tables 5.2 and 5.3) and the quantitative study (6.2.2, 6.8.3, 6.6.1). Furthermore, CABE's (2005) model (figure 2.6) was revisited and revised (figure 5.6) after the qualitative study where other factors that had featured at that stage of the study had been incorporated and added to either the helping or hindering factors. These stages of the study, among others, have helped to achieve the aim of proposing a strategic framework to address the problem of BME underrepresentation. The initial framework (figure 3.2) which was revised (figure 7.1) was put forward as a strategic tool for consideration by construction line managers and employers, policy makers and institutions as well as other bodies in helping address the problem.

Consequently, it is worthwhile noting here that the need to engage the BME community and attract them to the industry is far overdue considering the fact that they form the main sustainable employment pool of the industry because of their younger age profile and comparatively have larger family sizes (section 3.2.4). Accordingly, the final framework recommends the inclusion of

this group of people in the sustainable interest of the industry in helping to address the recurring boom time skills crises. The many benefits outlined in the framework suggests that the contributions made by BMEs can bring benefits to the entire UK construction industry through business, legal and ethical means details of which were outlined.

The literature review in chapters 2 and 3 and both the qualitative study in chapter 5 and quantitative study in chapter 6 coordinate in addressing stereotyping found to be prevalent in the industry, which has been noted to characterise recruitment practices. The usual norm of relying on the traditional white young male was seen to be unsustainable considering the finding that BMEs have larger family sizes that have predominantly younger age profile. In like manner, BMEs suffer from lack of access to training considering the fact that they face the accusation of lack of the requisite skills and qualifications even in the face of over-education (see section 5.4.1). These factors account for BMEs inability to do well on all three dimensions of representation in the industry - employment, retention and progression. Therefore, recruiters need to appreciate the sustainable significance of the younger employment pool characteristic of BMEs to address these issues in their economic, long-term and sustainable interest. These findings have connotation for construction industries in comparable situations and locations, especially in the developed world where construction output is known to outstrip labour supply (see section 2.6).

7.5.3 Contribution of the Research to Context

The contribution of this research to BMEs in respect of the provision of employment to potential BME recruits, the retention of those who gain access and the removal of the hypothetical glass ceiling effect (section 3.7.2), which has nurtured the belief that BMEs would hardly reach senior management positions, is enormous. This can be seen from the point of view where BMEs in attractive senior management position could act as role models to potential entrants into the industry. Throughout this study, the image of construction has been seen to be negative and BME respondents have been seen to be leaving the industry for 'better' roles in other preferred industries. Therefore, the need to project a positive image of the industry to BMEs is one of the initiatives indentified as helping to create a fairer and equitable working environment, which could serve as a magnet to entice more BME entrants to the industry. The recruitment practices of the industry by 'word of mouth' or 'recruitment in pubs' (sections 2.4.1, 3.3.2 and 5.4.2) has resulted in the lack of awareness of construction careers among BME and other minorities who are generally underrepresented in the industry. This was highlighted both in the literature review

and the empirical studies citing the proverbial 'Bob the Builder' TV series as one of the programmes creating awareness to younger generation to consider a role in construction. It was found to be incumbent on construction project/site managers as well to see the need to promote the industry through image enhancing campaigns by embarking on a more open recruitment practices through a systemic review and the provision of information on the industry's job opportunities to the youth, especially BME youth who have been shown to have a younger age profile and are seen as a sustainable employment/labour pool.

Characteristically, the religious and cultural practices of BMEs were noted to negatively impact on how project managers (employers) have frowned upon them and inhibited their roles in the industry (sections 2.7.6, 3.3.4 and 6.4.1). Moreover, BMEs have been thought of as preying on UK jobs meant for the indigenous population even considering that, some have naturalised. Where such tendencies have prevailed, ingrained discrimination and stereotyping known to be characteristic of the industry have meant that BMEs fail to assume any roles. This characteristic seemed to be impacting on BME-owned construction companies based on the respondents' from such companies that BME directors and managers are also giving jobs to their kind on the grounds of ethnicity, language or religious affiliation. Therefore, clusters are forming, especially in particular ethnic dominant localities. This may have other reasons that are not readily apparent, but the common justification may be a way of the ethnic groups protecting their like and interests. These practices have consequences for the opportunities open to potential employees and the impact this can have on the recruitment base especially for the attraction of the requisite skills. However, the effects of such negative practices may not be readily apparent especially in times of recession as these, but will definitely plague the industry with difficulties in surmounting the problems of skills shortages for the industry as whole especially during periods of economic growth and upturns.

The generation BMEs belong to was also seen to be important in deciding their performance in the job market especially in relation to their understanding of the local culture and its impact. Although no marked peculiarities were observed, a striking point worthy of note is the first generation's view of an improvement in the inclusivity of BMEs in the industry. This feeling was not surprising from the point of view of their disengagement with the local culture. Additionally, they have their past to compare the present to; especially considering their conditions in their home countries, the rights they had there, compared to what prevails here, a perception not

shared by later generation respondents in the study. Therefore, BMEs need to recognise this fact, and other factors that affect them in their quest for employment in the industry. Therefore, the organisational cultural practices typical of the industry with respect to recruitment and the associated perceptions formed as a result mean that both employer and the potential BME employee are faced with bottlenecks. These obstacles which are difficult to get rid of without a significant overhaul of the culture of the industry on one hand and the perception of potential employees on the other may persist unless there is significant intervention from the players own efforts or an external source. The next section concludes this chapter and the study generally.

7.6 Conclusions

The discussions (section 7.2) have further reviewed the findings of the study presented in the 1 empirical section. This helped to explore the research questions posed in Chapter 1, to ascertain whether the disproportionate representation of BME employees in construction is due to the organisational practices of the industry, which results from a combination of inter-related issues following the literature review (chapters 2 and 3). This section draws on the findings and synthesises the conclusions in order to focus the study on the proposed framework (section 3.12 and 7.4).

The problem of BMEs underrepresentation, of course, has been found to contribute to economic inequality, which bears heavily on BMEs against the backdrop of the general objective of positive action and EO to promote the socio-economic advancement of socially excluded minorities. The goal is to create substantive racial equality by reducing racial group differences of income, occupation and other aspects of employment processes. Macro-level economic studies focusing on factors such as education, occupational mobility, class structure, ethnicity, gender and labour market conditions in respect of job allocation and income assess the extent to which policy contributes to these broad purposes. Generally, the assumption had been that such approach has been adapted to promote better employment practices and to try to ensure equal employment opportunities for minority groups. From this study, it is evident that however minimal it may be, some progress has been made. Yet institutionalized discrimination and stereotyping has not been sufficiently deconstructed and minorities, especially BMEs have been merely allowed to enter the competition with the resultant effect of reverse discrimination evident in some minority dominated construction firms. The resultant effect has been the establishment of a status quo of minority groups in low paid work, BME unemployment and indigence. This study

found that although, discrimination did not seem strong at the inclusion stage, the negative association is much more pronounced at the progression and retention stages. However, this may have resulted from the fact that those who formed the respondent base already had jobs and so failed to perceive the difficulty of finding one having surpassed this hurdle. Realistically, they reported what the situation is to them, which happens to be more significant with retention, again confirming literature finding of high attrition of construction employees due to unfavourable factors especially for BMEs.

Therefore, BMEs who have been able to surmount such barriers into jobs in the industry are usually concentrated in the lower grades, irrespective of their backgrounds and the affect of the contents of the respective equal opportunity policies in their places of employment. The indication therefore, is that effective change seems very far off as current policies that are meant to facilitate diversity and equal opportunity within the diversity framework may be faulty in design in respect of their implementation from the BME perspective. Moreover, the relevant provisions of the recent Equality Act 2010 may appear to cease to feature in the development of employment policies in the industry. In this case, the natural corollary may be that the essence of the Equality Act is being set aside and in addition retreating from the progression of BME employees in the industry, processes which, by implication, may be happening by default.

7.7 Limitations of the Study

This section looks at the limitations of the study in respect of what could have been done different other conditions permitting. The research has investigated the underrepresentation of BMEs in the construction industry. It has stressed the need for diversity and EO policies to be applied in the industries recruitment process at all levels. This is in respect of the commercial justification of diversification which denotes an industry which is stronger. In order to reap the gains of a diverse workforce and the benefits of skills and expertise commensurate with today's globalization, organizations are required to become heterogeneous made up of diverse workforce in order to tap a wider range of abilities, experience and skills especially in the face of today's globalization and the increasingly competitive business environment. The benefits of such a diverse workforce have been outlined in this study and a framework has been developed to highlight the factors that require attention to aid the process. However, due to time and resource constraints the study could not identify particular BMEs for their views. Also, the framework that has been developed needs to be tested and validated in an industry setting to assess its

feasibility and effectiveness. These are deemed limitations and could have been addressed other conditions permitting.

7.8 Suggestions for Further Research

Considering the limitation of this research as outlined above, the following research areas are being put forward as suggestions for further research.

7.8.1 Framework Validation

The study developed a conceptual framework based on the literature review which was refined using qualitative and quantitative data i.e. interviews and questionnaires respectively. However, this framework which is supposed to guide good practice in the recruitment process in the industry to take into account the proportionate representation of BMEs could be improved with more empirical data and further tested and validated in the industry in order to be used as a policy instrument to guide recruitment activities. The problems of diversity and EO put BMEs with other minority groups and non BMEs or majority groups at different hierarchical levels which require expert attention through the validated framework to address the situation.

7.8.2 Similar Studies Comparing Practices in Different Countries.

The literature review made it abundantly clear that other countries like Australia, Singapore and Saudi Arabia to mention but a few have performed well on this front and may serve as points of reference. Therefore, studies across borders to identify areas of good practice to be incorporated in the framework could be encouraged. Again, frameworks from these locations could be compared to assess the differences.

7.8.3 Comparison of the Performance between different BME Groups.

The study found the definition of BMEs quite problematic as some BME groups felt that they did not belong to the group due to their skin colour, hair texture or even country of birth and origin. Therefore, it will be interesting to know how these groups compare and a study in this light could help bring out some of the peculiar problems that particular ethnic groups are faced with. Such a study is, as a result, very much warranted.

7.8.4 Comparison with other Minority Groups

It is evident from section 7.6.3 that even among BME groups some do better than others. It will therefore be interesting and worthwhile to note the differences in representation as well as the

barriers and drivers facing other minority groups like women or employees with disability. Through such comparisons, it is very probable to that issues particularly associated with stereotyping and discrimination could be elicited so that the cultural impacts of the stakeholders involved could be further assessed.

7.8.5 Case Studies Research.

Both the literature review and empirical studies reveal a difference in recruitment practices between micro-firms and SMEs on one hand and large companies on the other; stressing that good practice is usually evident in the latter. Therefore, organizing research based on case studies of a number of SMEs and large companies to compare areas of good practice for recommendations where necessary could be very beneficial to addressing the issue. Also, such studies could adopt strategies to limit or possibly avoid completely the possibility of respondents giving socially acceptable responses to questions especially in contrived conditions.

REFERENCES

- Abeysekera, V. (2002), "Understanding 'culture' in an international construction context", in Fellows, R. & Seymour, D. (Eds), Perspectives on Culture in Construction, *CIB Report*, 275, 39-51.
- Agapiou, A., Price, A. & McCaffer, R. (1995), "Planning future construction skill requirements: understanding labour resource issues", *Construction Management and Economics*, 13(2) 149-61.
- Ahmed, V., Lisa, W., Raju, P., David, B., & Sabri, A. (2008) 'An investigation into the barriers facing black and minority ethnics within the UK construction industry, *JCDC*, 13(2), 83-99.
- Akintoye, A., Goulding, J. & Zawdie, G. eds. (2012) Construction innovation and process improvement. Oxford: Blackwell Publishing.
- Allan, G. (2003) A critique of using grounded theory as a research method, *Electronic Journal of Business Research Methods*, 2(1) 1-10.
- Al-Karaghouli, W., Ghoneim, A., Sharif, A. & Dwivedi, Y. (2013) The Effect of Knowledge Management in Enhancing the Procurement Process in the UK Healthcare Supply Chain. Information Systems Management (ISM), 30: 35-49.
- Al-Karaghouli, W., AlShawi, S. & Fitzgerald, G. (2000) Negotiating and Understanding Information Systems Requirement: The use of set Diagram. Requirements Engineering Journal, 5: pp.93-102.
- Amato, P. (1998), 'More than money? Men's contributions to their children's lives', in: Booth A. & Creuter A. (eds) *Men In Families: When Do They Get Involved? What Difference Does It Make?*, New Jersey: Lawrence Erlbaum.
- Anderson, B. R. (1983) *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso.
- Anderson, V. (2009), Research Methods in Human Resource Management, London: CIPD.

- Andrew Dainty, A & Loosemore, M. (eds.) (2012), Human Resource Management in Construction: Critical Perspectives, Abingdon: Routledge.
- Angell M. E., Meadan, H. & B. Stoner, J. B. (2012), Experiences of Siblings of Individuals with Autism Spectrum Disorders *Autism Research and Treatment*, 11.
- Angen, M. J. (2000). Evaluating interpretive inquiry: Reviewing the validity debate and opening the dialogue. Qualitative Health Research. 10(3) pp. 378-395.
- Ankrah, N.,& Longford (2005), "Factors influencing organisational culture: a construction project perspective", in Egbu, C. & Tong, M. (Eds), *Proceedings of the PRoBE 2005 Conference*, Glasgow.
- Ankrah, N.A. (2007), "An investigation into the impact of culture on construction project performance", *unpublished PhD thesis*, University of Wolverhampton, Wolverhampton.
- Ansari, K. H. & Jackson, J. (1996) Managing Cultural Diversity at Work, London: Kogan Page
- Antonioli D., Mazzanti M. & Pini P. (2010). Productivity, innovation strategies and industrial relations in SMEs. Empirical evidence for a local production system in northern Italy, International Review of Applied Economics, 24(4), pages 453-482.
- Aouad, G. (2013) The art and science of doing a PhD, Keynote 1: 11th International Postgraduate Research Conference on 08 April 2013, Salford: University of Salford.
- Apple, M. (2004). Creating difference: Neo-liberalism, neo-conservatism and the politics of educational reform. *Educational Policy*, 18(1): 12.
- Arrow, K. J. (1998). 'What has economics to say about racial discrimination?' *The Journal of Economic Perspectives*, 12: 91–100.
- Arrow, K. (1972). "Some mathematical models of race discrimination in the labour market", in "Racial Discrimination in Economic Life", Pascal A. (ed.), Heath.
- Arthur, D. (2012) Recruiting, interviewing, selecting and orienting new employees. 5th ed. Amacom.

- Ashton, D. & Sung, J. (2005) High Performance Work Practices: linking strategy and skills to performance outcomes. DTI/CIPD.
- Association of Colleges, London Region (2008) available at: http://www.londoncolleges.com/en/working_in_london/Construction/studying-and-working-in-construction/ (Accessed on 12 February, 2010)
- Atkinson, J. (1984a) 'Manpower strategies for flexible organisations', *Personnel Management, august, 28-31.*
- Attridge, M. (2009). Employee Work Engagement: Best Practices for Employers Research Australian Statistician (2011), Census 100 years, 1911 2011 Australian Bureau of Statistics [Online] Available at: http://www.abs.gov.au/ausstats/abs@.nsf/mf/2903.0. [Accessed 12 October, 2011].
- Audretsch, D. *et al.*, (2009), Annual report on EU Small and Medium Sized Enterprises: EU Directorate General, Enterprise and Industry.
- Australian Bureau of Statistics (ABS) (2009). *Employee Earnings and Hours*, Cat No 6306.0, ABS, Canberra.
- Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2007). Small and medium enterprises across the globe, *Small Business Economics*, 29(4), 415-434.
- Baepler, P. (2003), White Slaves, African Master, the ANNALS of the American Academy of Political and Social Science. 588(1): 90-111.
- Bagilhole, B. (2009) Understanding equal opportunity and diversity: The social differentiations and intersections of inequalities. Bristol: Policy press.
- Ball, M. (1988) Rebuilding Construction, London: Routledge.
- Barnard, H., & Turner, C. (2011). Poverty and ethnicity: A review of evidence. York: Joseph Rowntree Foundation.
- Barthorpe, S., Duncan, R. & Miller, C. (2000) 'The Pluralistic Facets of Culture and its Impact on Construction'. *Property Management*. 18(5), 335-51.

- Bassanini, A., Booth, A., Brunello, G., De Paola, M. & Leuven, E. (2007), Workplace Training In Europe, in Brunello, Garibaldi & Wasmer, (2007), *Education and Training in Europe*, Oxford University Press.
- Battu, H., Seaman, P. & Zenou, Y. (2004) *Job Contact Networks and the Ethnic Minorities*, working paper 628, Stockholm: Research Institute of Industrial Economics
- Battu, H., Seaman, P. & Zenou, Y. (2005) *Oppositional Identities and the Labour Market*, discussion paper 5351, London: Centre for Economic Policy Research
- Bazeley, P. (2009). Integrating data analyses in mixed methods research [Editorial]. *Journal of Mixed Methods Research*, *3*(3), 203–207.
- Beardwell, I. & Holden, L. (eds) (1997) Human Resource Management: A Contemporary Perspective, London: Pitman.
- Beck, V., *et al.*. (2006). Safety in stereotypes? The impact of gender and race on young people's perceptions of their post-compulsory education and labour market opportunities. *British Educational Research Journal*, 32(5), 667-686.
- Becker, G. (1971), *The Economics of Discrimination*, Chicago University Press.
- Bednarz, D. (1985). Quality and quantity in evaluation research: A divergent view. *Evaluation and Program Planning*, 8, 289-306.
- Bendixen, M. T. & Sandler, M. (1995), Convering verbal scales to intervbal scales using correspondence analysis, Managemtn Dynamics, 4(1), 31-49.
- BERR (2007) Construction Statistics Annual 2007, Department for Business, Enterprise and Regulatory Reform (HMSO), London.
- Berry, J. W. (2005) Acculturation: Living successfully in two cultures. International *Journal of Intercultural Relations*, 29, 697-712.
- Berry, J. W., Poortinga, Y. H., Breugelmans, A. C., & Sam, D. L. (2011). Cross-cultural psychology: Research and applications (3nd ed.). Cambridge: Cambridge University Press.

- Berthoud, R. & Blekesaune M. (2006). "Persistent employment disadvantage, 1974 to 2003", *ISER Working Paper*, 2006-9
- Bilginsoy C, (2003), The hazards of Training: Attrition Retention in Construction Industry Apprenticeship Programs, *Industrial and Labour Relations Review*, 57(1) 54-67
- Bing, M. N., & Burroughs, S. M. (2001). The predictive and interactive effects of equity sensitivity in teamwork-oriented organizations. *Journal of Organizational Behaviour*, 22, 271-290.
- Black Training and Enterprise Group (2010a) Closing the ethnic minority apprenticeship gap in Yorkshire and the Humber [Online], available at: http://www.bteg.co.uk/index.php/bRecent-Events/Closing-the-ethnic-minorityapprenticeship-gap-in-Yorkshire-and-the-Humber.html [Accessed 20 May, 2011].
- Black Training and Enterprise Group (2010b) Race equality in apprenticeships: developing an action plan for London [Online], available at: www.bteg.co.uk/index.php/Recent-Events/Race-equality-in-apprenticeships-Developing-an-equalities-action-plan-for-London.html [Accessed 20 May, 2011].
- Blackaby, D. H., Leslie, D. G., Murphy, P. D. & O'Leary, N. C. (1999) 'Unemployment among Britain's ethnic minorities', *Manchester School*, 67(1), 1-20.
- Blackaby, D. H., Leslie, D. G., Murphy, P. D. & O'Leary, N. C. (2002) 'White/ethnic minority earnings and employment differentials in Britain: Evidence from the LFS. *Oxford Economic Papers*, 54(2), 270-297.
- Blackaby, D. H., Leslie, D. G., Murphy, P. D. & O'Leary, N. C. (2005) 'Born in Britain: how are native ethnic minorities faring in the British labour market?', *Economics Letters*, vol 88: 370-375
- Blanchard, O. & Galí, J., (2010) "Labour Markets and Monetary Policy: A New Keynesian Model with Unemployment," *American Economic Journal: Macroeconomics, American Economic Association*, 2(2), 1-30.

- Blanchard, O. J. & Diamond, P., (1990) "Ranking, Unemployment Duration and Wages," Working papers 546, Department of Economics, Massachusetts Institute of Technology (MIT).
- Bliss, L. B. (2008). Media review: Greene, J. C. (2007) Mixed methods in social inquiry. San Francisco: Jossey-Bass. *Journal of mixed methods research*, 2(2), 190 198.
- Booth, A., Leigh, A. & Varganova, E. (2012), Does ethnic discrimination vary across minority groups? Evidence from a field experiment. Oxford Bulletin of Economics and Statistics. 74 (4), 547–573.
- Brewer, J., & Hunter, A. (1989). Multi-method research: A Synthesis of styles. Newbury Park, CA: Sage
- Briscoe, G. (2005) 'Women and minority groups in UK Construction: recent trends': 'How useful and reliable are construction statistics?' *Building Research & Information*, 34(3), 220–29
- British National Party [BNP] (2013) White Britons: Minority Status? [Online], available at: http://www.bnp.org.uk/news/national/white-britons-ethnic-minority, [Accessed 24 June 2013].
- Britten, N. (1995) Qualitative interviews in medical research. BMJ, 311, 251–253
- Brockmann, M., Clarke, L., & Winch, C. (2009) Difficulties in recognising vocational skills and qualifications across Europe. *Assessment in Education: Principles, Policy and practice*, 16(1), 97-109.
- Brown, C. & Gay, P. (1985). Racial Discrimination 17 Years after the Act. London: Policy
- Brown, M. (2000) 'Religion and Economic Activity in the South Asian population', *Ethnic and Racial Studies*, 23(6) 1045.
- Brunello, G. (2009) The Effect of Economic Downturn on Apprenticeship and Initial Workforce Training: A Review of the Evidence", OECD June 2009.
- Bryman, A. (2008), Social Research Methods, 3rd ed. Oxford: Oxford University Press

- Burchardt, T. & Vizard, P. (2007) Definition of Equality and Framework for Measurement: Final Recommendations of the Equalities Review Steering Group on Measurement [Online], Available at: http://www.theequalitiesreview.org.uk/publications.aspx [Accessed 20 June, 2009].
- Burke, L. A. & Miller, M. K. (2001, May). Phone interviewing as a means of data collection: Lessons learned and practical recommendations [30 paragraphs]. *Forum Qualitative Socialforschung / Forum: Qualitative Social Research* [Online Journal], 2(2), Art. 7. Available at: http://www.qualitative-research.net/fqs-texte/2-01/2-01burkemiller-e.htm [Accessed 5 June, 2010].
- Burns, R. B. (2000) Introduction to research methods, California: Sage Publications.
- Byrne, J., et al.. (2005) 'Gender and ethnic minority exclusion from skilled occupations in construction: a Western European comparison', Construction Management and Economics, 23, 1025–34
- Caballero, R, J. & Hammour, M. L. (1994), The Cleansing Effect of Recessions," American Economic Review, *American Economic Association*, 84(5) 1350-68.
- CABE (2005), Black & Minority Ethnic Representation in the Built Environment Professions, Royal Holloway University of London in assoc. with CABE.
- Cabinet Office Strategy, Cabinet office/Strategy Unit and National statistics. (2002). Labour market [Online]. Available at: http://www.statistics.gov.uk/cci/nugget.asp?id=271, [Accessed 2 June, 2009].
- Cambridge Business Dictionary Online [Online], available at: http://dictionary.cambridge.org/dictionary/business-english/employment?q=employment, [Accessed 25 May, 2011].
- Cameron, K. S. & Quinn, R. E. (1999), Diagnosing and changing organizational culture: Based on the competing values framework. Reading, MA: Addison-Wesley.
- Cameron, K.S. & Quinn, R. E. (2005) Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework, San Francisco: Jossey-Bass.

- Cano, F. (2005). Epistemological beliefs and approaches to learning: Their change through secondary school and their influence on academic performance. British Journal of Educational Psychology, 75, 203–21.
- Caplan, A, Aujla, A, Prosser, S & Jackson, J (2009) Race Discrimination in the Construction Industry: A Thematic Review [Online], available at: http://www.equalityhumanrights.com [Accessed 12 April, 2010].
- Caplan, A.S. & Gilham, J.L. (2005) 'Included against the odds: failure and success among minority ethnic built-environment professionals in Britain'. *Construction Management and Economics*, 23(10), 1007–15
- Caracelli, V. J., & Greene, J. C. (1993). Data analysis strategies for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, *15*(2), 195–207.
- Carlsson, M. & Rooth, D. O. (2007). Evidence of ethnic discrimination in the Swedish labor market using experimental data, *Labour Economics*, 14(4): 716-729.
- Carmichael, F., & Woods, R. (2000). Ethnic penalties in unemployment and occupational attainment: Evidence for Britain. *International review of applied economics*, 14(1), 71-98.
- Cassell, C. (2009) Interviews in organizational research in Bryman, A. & Buchanan, D. (Eds.) Handbook of organizational research methods, London: Sage Publications Ltd.
- Castillo, J. (2009). Snowball Sampling [Online], available at: http://explorable.com/snowball-sampling [Accessed 7 July, 2011].
- Centre for Construction Innovation [CCI] (2008) Construction and BME (Black and Minority Ethnics) Project Final Report, University of Salford/European Social Fund.
- Centre for Ethnic Minority Studies [CEMS] (2000) The Impact of Race and Gender on Progression from GNVQ Construction into the Industry, Royal Holloway, University of London, CITB.
- Centre for Ethnic Minority Studies [CEMS] (2002) Retention and Career Progression of Black and Asian People in the Construction Industry, *Royal Holloway University of London*, CITB.

- Centre for Ethnic Minority Studies [CEMS], (1999) *The Under-Representation of Black and Asian People in Construction*, Royal Holloway University of London CITB
- Chan, P., Clarke, L., & Dainty, A. (2010) The dynamics of migrant employment in construction: Can the supply of skilled labour ever match demand? Ruhs, M. & Anderson, B. (eds.), who needs migrant workers? Labour shortages, immigration and public policy, Oxford: Oxford University Press, 225-54.
- Chevin, D (1995) 'Sex appeal', Building, 13 January: 18-21.
- Chomoro-Premuzic, T. & Furnham, A. (2010) *The psychology of personnel selection*, Cambridge: Cambridge University Press.
- Construction Industry Development Board (CIDB) (1998) Construction Economics Report: Third Quarter 1998, CIDB, Singapore.
- Chartered Institute of Personnel and Development, (2012). "Employee engagement". CIPD [Online], available at: http://www.cipd.co.uk/hr-resources/factsheets/employee-engagement.aspx [Accessed 1 may, 2010].
- CITB (2001). Construction Employment and Training Forecast Annual Report 2001, CITB
- CITB (2002) Construction Employment and Training Forecast 2002 2006, CITB.
- CITB (2003). Construction skills and foresight report [Online], http://www.citb.co.uk [Accessed 24 May, 2009].
- CITB-ConstructionSkills (2005) Opening Doors to the Construction Industry Diversity Handbook, CITB-Construction Skills.
- Clark, K. & Drinkwater, S. (2000), "Pushed out or pulled in? Self-employment among ethnic minorities in England and Wales", *Labour Economics*, 7: 603-628.
- Clark, K. & Drinkwater, S. (2006), "Changing Patterns of Ethnic Minority Self-Employment in Britain: Evidence from Census Microdata", *Institute for the Study of Labor* (IZA) Discussion Paper No. 2495.

- Coleman, J. (1988) Social Capital in the Creation of Human Capital, *The American Journal of Sociology*. Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure, 94: 95-S120.
- Coleman, J. (2011). A history maker. *Journal of Linguistics* 47, 201-217 [Online]. Available at: http://dx.doi.org/10.1017/S002222671000040X [Accessed 20 October, 2012].
- Collis, J. & Hussey, R. (2009) Business Research: A practical guide for undergraduate and postgraduate students, New York: Palgrave Macmillan.
- Commission for Architecture and the Built Environment (CABE) (2005), *Black & Minority Ethnic Representation in the Built Environment Professions*, commissioned research from the Centre for Ethnic Minority Studies, Royal Holloway University of London, CABE
- Commission for Racial Equality (2007), "Ethnic Minorities in Great Britain". Fact File 2.
- Constructing excellence (2004): Integrating Separate Benevolence and Entitlement Dimensions for Enhanced Constructing Excellence, "Culture and people" [Online], available at: www.constructingexcellence.org.uk [accessed 16 December, 2009].
- Construction Industry Board [CIB] (1996) *Tomorrow's team: Women and men in construction*, Report of the Construction Industry Board Working Group 8 (Equal Opportunities), Thomas Telford, London.
- Construction Skills Insight (2010), Sector Skills Assessment for the Construction Sector 2010, ConstructionSkills UK Report.
- Construction Skills Network. (2009). Construction Skills Network Labour Market Intelligence [Online], available at: http://www.Constructionskills.net/pdf/research/outputs/NW_LMI. pdf, [Accessed 11 February, 2010].
- ConstructionSkills (2007) Deconstructing Barriers Full report and Recommendations,

 ConstructionSkills
- Crawford, C., Deardeny, L. Mesnardz, A. Sianesix, B. & Shaw, J. (2010) Ethnic parity in labour market outcomes for benefit claimants in Great Britain. Department of Quantitative Social Science, Institute of Education, University of London: DoQSS Working Paper No. 10-07

- Creswell, J. (2009). *Research design: qualitative, quantitative and mixed method approaches*, 3rd ed. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2003). Research design: Qualitative, quantitative and mixed method approaches.

 Thousand Oaks, CA: SAGE Publications
- Creswell, J. W., Plano Clark, V. L., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs, in Tashakkori A. & Teddlie C. (eds.), Handbook of mixed methods in social and behavioural research (pp. 209–240). Thousand Oaks, CA: Sage.
- Crosthwaite, D (2012) World constructioh: programe, cost, consultancy, Davis Langdon, an AECOM company [Online], available at: http://www.aecom.com/7E1EDB80-35E5-45BB-A17B-F7E44CB5E7F9/FinalDownload/DownloadId-C252710AA5DD3AD748 D96C6F42E7AE87/7E1EDB80-35E5-45BB-A17B-F7E44CB5E7F9/deployedfiles/ Internet/About/CAM /WorldConstructionReport_2012.pdf, [Accessed 21 March, 2013].
- Crotty, M. (1998). The foundations of social research: meaning and perspective in the research process, St Leonards, NSW: Allen & Unwin.
- Dainty, A & Bagilhole, B. (2005) Equality and diversity in construction: guest editorial. Construction Management and Economics, 23(10), 995–1000
- Dainty, A. *et al.*, (2007). Understanding construction employment: The need for a fresh research agenda. *Personnel Review*, 36(4): 501–508
- Dainty, A. & Loosemore, M. (eds.) (2012) *Human resource management in construction: critical perspectives*. Routeledge.
- Dainty, A., Cheng, M. & Moore, D. (2004). A competency-based performance model for construction project managers, Construction Management and Economics 22 (8), 877-886
- Dainty, A., Green, S. & Bagilhole, B. (2007). People and Culture in Construction: A reader.

 Taylor and Francis: Psychology Press
- Dainty, A., Ison, S. & Briscoe, G. (2005) The construction labour market skills crisis: the perspective of small-medium-sized firms, Construction *Management and Economics* 23, 387-398

- Data Management and Anaylsis Group Update (DMAG). (2007). ONS Population Estimates by Ethnic Group, 2001 to 2005 *Demography Update October* 2007. London: Greater London Authority.
- Davison, H. & Bing, M. (2008) The multidimensionality of the equity sensitivity construct: Integrating separate benevolence and entitlement dimensions for enhanced construct measurement. Journal of Managerial Issues, 20 (1): 131-150.
- De Bono, E. (1993) Teach your child how to think, Hanrmondsworth: Penguin.
- Debrah, Y. A. & Ofori (1997) Flexibility, labour subcontracting and HEM in the construction industry in Singapore can the system be refined: *The international journal of human resource management* 8 (5):690-709
- Deji, O. F. (2011) Gender and Rural Development: Introduction Berlin: Lit Verlag.
- Delwyn, G. (2011), Qualitative Research, Design, Analysis and Representation, unpublished notes from workshop presented in the context of ACSPRI 2011 (Canberra).
- Denzin, N & Lincoln, Y (eds). (2003), *The Landscape of Qualitative Research: Theories and Issues*, Thousand Oaks: Sage Publications
- Department for Business, Innovation and Skills (BIS) (2007) Small Business Service statistics [Online], available at: http://www.bis.gov.uk/Publications, [Accessed, 23 July, 2011].
- Department for Innovation, Universities and Skills (DIUS). (2008) World-class apprenticeships: Unlocking talent, building skills for all: The Government's strategy for the future of apprenticeships in England. London: HMSO.
- Department of Trade and Industry. (2007) Construction Industry Statistics [Online], Available at: http://www.dti.gov.uk [Accessed 19 May, 2009].
- Dervin, B. (1983). An overview of sense-making: concepts, methods, and results to date, Paper presented at the annual meeting of the ICA, Dallas, TX, May 1983[Online], available at: http://communication.sbs.ohio-state.edu/sense-making/art/artdervin83.html [Accessed 15 May, 2011].

- Deshpande, R. & Webster, F. (1989) Organizational Culture and Marketing: Defining the Research Agenda *The Journal of Marketing*, 53(1) 3-15
- Devaney S. & Roberts D. (2012) Who gets the jobs? Factors influencing the employability of property and construction graduates in the UK, *Construction Management and Economics* 30(3)233-246
- Devine, P. G. (1989) 'Stereotypes and prejudice: their automatic and controlled components', Journal of Personality and Social Psychology 56(1): 5-18.
- The Online Dictionary.com [Online], http://dictionary.reference.com/browse/religion, [Accessed 30 May, 2009].
- Druker, J., White, G, Hegwisch, A. & Mayne, L. (1996) 'Between hard and soft HRM: human resource management in the construction industry', *Construction Management and Commercial Training* 33: 48-53
- Duncan, R. & Mortimer, J. (2005) *Review of Social Landlords' Implementation of the Black, Minority Ethnic (BME)*, Cardiff: Welsh Assembly Government (October).
- Duncan, R. I. & Mortimer, J. (2007) 'Race equality & procurement: an investigation into the impact of race equality policy on the procurement of BME contractors and consultants in the Welsh social housing sector' *Construction Management and Economics*, Taylor and Francis.
- Dunn, K. (2003). *Racism in Australia: findings of a survey on racist attitudes and experiences of racism*. National Europe Centre Paper No. 77, Sydney: The University of New South Wales.
- Calanzani, N., Koffman, J. & Higginson I. J. (2013) Palliative and end of life care for Black, Asian and Minority Ethnic groups in the UK, London: King's College London, Cicely Saunders Institute.
- Eagly A. H. & Chaiken S. (1993) The Psychology of Attitudes, Sydney: Harcourt Brace.
- Easterby-Smith, M., Thorpe, R. & Jackson, P. (2008. *Management Research: An Introduction*. 3rd ed. London: Sage Publications.

- Eck D. & Ryan J. (2012) the Mathbeans Project, the National Science Foundation DUE-9950473 [Online], available at http://math.hws.edu/javamath/ryan/ChiSquare.html, [Accessed 12 March, 2013].
- Egan, J. (1998), Rethinking Construction, Construction Task Force, London: HMSO.
- Eisenhardt, K. M. & M. E. Graebner (2007). "Theory building from cases: opportunities and challenges." Academy of Management Journal 50(1): 25-32.
- Elbaum P, (1995) The Economic Rationale of Apprenticeship Training: Some Lessons from British and US Experience, *Industrial Relations*, 34(4) 593-622
- Eldridge, J. & Crombie, A. (1975), *A Sociology of Organisations*, New York, NY: International Publications Service.
- Ely. R. J. & Thomas, D. A. (2001) Cultural Diversity at work: the effects of diversity perspectives on work groups processes and outcomes', *administrative Science Quarterly* 46(2) 229-73.
- Engineering News Record (2005) Global Construction Output [Online], available at: http://enr.construction.com, [Accessed 23 June, 2009].
- Equal Opportunities Commission/Commission for Racial Equality/disability Rights Commission (EOC/CRE/DRC) (1999) Equal Opportunities is your business too, EOC/CRE/DRC, Manchester.
- Equality and Human Rights Commission (EHRC). (2009a). Race discrimination in the construction industry inquiry report, London.
- Equality and Human Rights Commission (EHRC). (2009b). Race Discrimination in the Construction Industry Inquiry Report. *Equal Opportunities Review* (192), 5-5.
- Erez, M. & Gati, E. (2004) A dynamic, multi-level model of culture: from the micro level of the individual to the macro level of a global culture, *Applied Psychology: An International Review*, 53(4), 583-98.

- Fairclough, J (2002), Rethinking Construction Innovation and Research: A review of government, Research and Development Policies and practices [Online], Available at http://www.dti.gov.uk/construction/pdf/fcloughr.pdf, [Accessed 22 January, 2011].
- Fallon, M (2013) the industrial strategy for construction Construction 2025 [Online], available at: www.khl.com/magazines/construction, [Accessed 21 April, 2013].
- Feagin, J. R. & Imani, N. (1994) Racial Barriers to African American Entrepreneurship: An Exploratory Study. *Social Problems* 41(4) 562-584.
- Fellows, R. & Liu, A. (2009), Research methods for construction, 3rd ed., Oxford: Blackwell Publishing,.
- Felstead A. & Green F., (1996) Training Implications of Regulation Compliance and Business Cycles, in Booth, A. & Snower, D. *Acquiring Skills*, Cambridge University Press, pp.257-283.
- Felstead, A., Green, F., & Jewson, N. (2011) The Impact of the 2008-9 Recession on the Extent, Form and Patterns of Training at Work, the Centre for Learning and Life Chances in Knowledge Economies and Societies [Online], Available at: http://www.llakes.org [Accessed 10 August, 2012].
- Ferdman, B. M. & Sagiv L. (2012) Diversity in Organizations and Cross-Cultural Work Psychology: What If They Were More Connected? Industrial and Organizational Psychology. 5(3): 323–345.
- Finnegan, R. & Taylor, C. (2004). The Race for Talent: Retaining and Engaging Workers in the 21st Century. Human Resource Planning. 27 (3): 12 26.
- Finney, N., & Simpson, L. (2009). Sleepwalking to segregation. Bristol: The Policy Press.
- Fishbein, H. D. (2012) *Peer prejudice and discrimination: the origins of prejudice*. Routledge: Taylor and Francis.
- Flanagan, R. & Jewel, C. (2004), "International Competitiveness of the Finnish Construction Sector", Working Paper, School of Construction Management and Engineering, University of Reading, UK.

- Forrest J. & Dunn, K. (2007). *Strangers in our midst? Intolerance and discrimination toward minority cultural groups in Victoria*. Report to VicHealth Foundation Surveys. Melbourne: Monash Institute for the Study of Global Movements.
- Frijters P., Shields M. A. & Wheatley P. S. (2005) 'Job search methods and their success: a comparison of immigrants and natives in the UK', *The Economic Journal*, 115 (507): 359-376.
- Fukuyama, F. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press.
- Furlong, S. & Al-Karaghouli, W. (2010) Delivering Professional Projects: The Effectiveness of Project Management in Transformational e-Government Initiatives. Transformation Government: People, Process and Policy, Vol.4, No.1: pp.73-94.
- Gale, A. W. & Davidson, M. J. (Eds.) (2006). Managing Diversity and Equality in Construction: Initiatives and Practice. London: Taylor and Francis.
- Gale, A. W. (1992), "Proceedings of the First International Construction Conference", Manchester, E. & F.N. Spon, UMIST.
- Gardenswartz, L. & Rowe, A. (2012), Diverse teams at work, Chicago: Irwin.
- Garson, D. (2007). Data level and mearsurement, NC State University [Online], available at: http://www2.chass. Ncsu.edu/garson/pa765/datalevl.htm [Accessed 15 February, 2010]
- Gatewood, R. D., Feild, H.S. & Barrick, M. R. (2010) Human resources selection, London: Cengage Learning.
- Gian J., (2012) 'Organisation Transformation Assessing Value, Competency and Capability' 5th HR Summit, 2(4) [Online journal], available at: www.gjimt.ac.in/GianJyotiE-Journal.htm 62 [Accessed 12 June, 2013].
- Gibb, A. (2004) *Effective Policies for Small Business*, The Organisation for Economic Cooperation and Development (OECD).
- Gielen A & van Ours J, (2005), Age Specific Cyclical Effects in Job Reallocation and Labor Mobility, IZA Discussion Paper 1670.

- Gilham, B. (2000) Research Methods For Managers, 3rd ed., London: Sage.
- Gill J. & Phil J. (2010) Research Methods for Managers, 4th ed., London: Sage.
- Gill, F. (2002). The Diversity Experiences of Black and Minority Ethnic Women in Relation to Housing and Social Exclusion. 'Race', Housing and Social Exclusion. P. Somerville & A. Steele. Jessica Kingsley Publishers, London and Philadelphia.
- Gilmore, T., Krantz, J. & Ramirez, R. (1986) "Action Based Modes of Inquiry and the Host-Researcher Relationship." *Consultation* 5.3: 160-76.
- Glaser, B. G. & Strauss, A. L. (1967) *The discovery of grounded theory: strategies for qualitative research.* Chicago: Aldine.
- Glassner, V. & Veune, M. (2010) Negotiating the crisis? Collective bargaining in Europe during the economic down turn. Industrial and Employment Relations Department (DIALOGUE) ILO Working Paper No.10.
- Goodman, L. A. (1961). "Snowball sampling". *Annals of Mathematical Statistics* 32 (1): 148–170 [Online], available at: doi:10.1214/aoms/1177705148, [Accessed 23 May, 2010].
- Gould, F. & Joyce, N. (2000), *Construction Project Management*, Upper Saddle River, NJ: Prentice Hall.
- Government Equalities Office (2010), Harriet Harman's Equality Act 2010, *Discrimination Law Review (DLR)* [Online], available at: http://www.equalities.gov.uk/dlr/index.htm, [Accessed 23 October, 2011].
- Greater London Authority (2007) 'The Construction Industry in London and Diversity Performance', Mayor of London
- Greene, J. C. (2007). Mixed methods in social inquiry. San Francisco: Jossey-Bass.
- Greene, J. C., & Caracelli, V. (1997). Defining and describing the paradigm issue in mixed method evaluation. *New Directions for Evaluation*, 74, 5-17.

- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274.
- Gregory, J. B. & Levy P. E. (2012) Employee feedback orientation: implications for effective coaching relationships, *Coaching: An international journal of Theory, research and practice*, 5(2),86-99.
- Guba, E. & Lincoln, Y. (1994). "Competing paradigms in qualitative research." pp.105-117 In Denzin N. K. & Lincoln, Y. (eds.) *Handbook of Qualitative Research*. Newbury Park: Sage Publications.
- Griffin, R. W. (2013) Management, 11th ed., South Western: Cengage Learning.
- Gurjao, S. I. (2006), INCLUSIVITY: The Changing Role of Women in the Construction Workforce. In: Pietroforte, R., De Angelis, E. & Polverino, F. (eds.) Proceedings of the Construction in the XXI century: Local and Global Challenges- the Joint International Symposium of CIB Working Commissions, La Sapienza School of Engineering, The University of Rome, 11-189.
- Guthrie, S. (2013) UK aims at global market [Online], available at: http://www.khl.com/magazines/construction-europe/detail/item86480/UK-aims-at-global-market [Accessed 12 April, 2013].
- Guzman, I. *et al.*. (2004), "A qualitative study of the occupational subculture of information systems employees in organizations", *Proceedings of the 2004 SIGMIS CPR Conference, Tucson, AZ, April*, pp.74-80
- Hall, B., & Howard, K. (2008). A synergistic approach: Conducting mixed methods research with typological and systemic design considerations. *Journal of Mixed Methods Research*, 2(3), 248–269.
- Hall, E. (1990) The Silent Language, New York: Anchor Press.
- Hamilton, A. (1997) Management by projects, Achieving Success in a Changing World, London: Thomas Telford.

- Hammond, M. (2006) 'Sector Needs Analysis of the building services engineering sector in the West Midlands', SummitSkills.
- Handy, C. (1989) *The age of unreason*, London: Business books.
- Handy, C. B. (1995), *Gods of Management: The Changing Work of Organizations*, New York, NY: Oxford University Press.
- Handy, C.B. (1993), *Understanding Organizations*, Oxford University Press, New York, NY.Hannaford, I. (1997) Race: The history of an Idea in the West, Baltimore, MD: Johns Hopkins University Press.
- Hansford, P. (2013) Construction Europe KHL [Online], available at: http://www.khl.com/magazines/construction-europe/detail/item86480 [Accessed 10 May, 2013].
- Harman, H. (2010) The Equality Act 2010 [Online], available at: http://www.legislation.gov.uk/ukpga/ 2010/15/pdfs/ukpga_20100015_en.pdf Office of the Shadow Deputy Prime Minister, London [Accessed 12 June, 2011].
- Harris Research Centre (1988) Factors affecting recruitment of the construction industry: The view of young people and their parents, CITB, Kings Lynn.
- Harris, P. H. (1998), All Management is Multicultural, European Business Review, 99(1).
- Harrison, M. & Davis, J. (1995) *Housing Associations' Use of Ethnic Minority Building Contractors and Services*, Bristol Policy, Press. in Steele, A. & Sodhi, D. (2004) Black and minority ethnic contractors and consultants and UK housing associations' contracting power. *Construction Management and Economics* 22, pp151-157
- Health and Safety Executive [HSE] (2010) Construction Work related injuries and ill health [Online], available at: http://www.hse.gov.uk/statistics/index.htm, [Accessed 15 December 2011].
- Heath, A., & Cheung, S. Y. (2006). Ethnic penalties in the labour market: Employers and discrimination *Research Report Number 341; Department for Work and Pensions* (Vol. 341): Corporate Document Services.

- Heckathorn, D. D. (2002). "Respondent-Driven Sampling II: Deriving Valid Estimates from Chain-Referral Samples of Hidden Populations". *Social Problems* 49 (1): 11–34.
- Heckman, J. & Siegelman, P. (1993). "The Urban Institute audit studies: Their methods and findings", in Fix, M. and Struyk, R.J. (eds.), *Clear and convincing evidence:*Measurement of discrimination in America. Washington, DC: Urban Institute Press, pp. 187-258.
- Heckman, J. (1998). "Detecting discrimination", *Journal of Economic Perspectives*, 12(2): 101-116.
- Heneman, R., Waldeck, N. & Cushnie, M. (1996) Diversity considerations in staffing decision making. In E. Kossek & S. Lobel (eds.). Managing diversity: Human resource strategies for transforming the workplace. Oxford: Blackwell.
- Hill, N. E., McBride Murry, V., & Anderson, V. D. (2005). Socioculrural contexts of African American families. In V. C. McLoyd, N. E. Hill, & K. A. Dodge (Eds), African Amen'canfamily life: Ecological and cultural diversity. New York: Guilford Press.
- Hillebrant, P. (2000), *Economic Theory and the Construction Industry*, 3rd ed., London: Macmillan.
- Hockney, J. et al.. (2005) Cross-Generational Investigation of the Making of Heterosexual Relationships, 1912-2003 (computer file]. Colchester, Essex: UK Data Archive distributor, October 2005.
- Hofstede, G. (1980) *Culture's Consequences: international differences in work-related values*, Beverly Hills: Sage Publications.
- Hofstede, G. (1997), Cultures and Organizations: Software of the Mind, New York NY: McGraw-Hill.
- Hofstede, G. (1998) Masculinity and Femininity: the taboo dimension of national cultures, Thousand Oaks: Sage Publications.
- Hofstede, G. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*, Thousand Oaks, CA: Sage Publications.

- Hofstede, G. (2005) *Cultures and Organizations: Software of the Mind*, (2nd Ed.), New York: McGraw-Hill.
- Hofstede, G., Bond, M.H. & Luk, C.L. (1993), Individual perceptions of organizational cultures: a methodological treatise on levels of analysis, *Organization Studies*, 14(4) 483.
- Hofstede, G., Neuijen, B., Ohayv, D. & Sanders, G. (1990), "Measuring organizational cultures: a qualitative and quantitative study across 20 cases", *Administrative Science Quarterly*, 35(2) 286-316.
- Home Office (2011). Racist Incidents England and Wales 2010/11. Home Office
- Home Office. (2007). Home Office Statistical Bulletin: Crime in England and Wales 2006/07. S. Nicholas, C. Kershaw & A. Walker. London.
- Home Office. (2008). Black and Minority Ethnic Voluntary and Community Organisations: a Code of Good Practice. Active Community Unit., Home Office 16-17.
- Hook J. & Goetjen, K (2009) engineering and construction, PricewaterhouseCoopers [Online], available at: http://www.pwc.com/gx/en/engineering-construction/index.jhtml [Accessed 15 October, 2009].
- Huseman, R.C., Hatfield, J.D., & Miles, E.W (1985). Test for individual perceptions of job equity: Some preliminary findings. Perceptual and Motor Skills, 61, 1055-1064.
- Huseman, R.C., Hatfield, J.D., & Miles, E.W (1987). A new perspective on equity theory: The equity sensitivity construct. Academy of Management Review, 12, 222-234.
- IES(2003). Employeee engagement, Institute of Employment studies [Online], available at: http://www.employment-studies.co.uk/pubs/summary.php?id=408, [Accessed 10 june, 2009].
- ILO (1998), Sectoral Activities [Online], available at: http://www.ilo.org/public/english/dialogue/sector/sectors/constr.htm [Accessed 23 April, 2009].
- International Labour Organization [ILO](2001) The construction industry in the twenty-first century: Its image, employment prospects and skill requirements Tripartite Committee

- Meeting Geneva, TMCIT http://www.ilo.org/public/english/standards/relm/gb/docs/gb
 283/pdf/tmcitr.pdf
- International Training Federation (ITF), (2009) International Responses to the Recession [Online], available at: http://www.itf.org.nz/international-responses-to-the-recession.html, [Accessed 23 January, 2010].
- Issues Deliberation Australia [IDA] (2007). "The Voice Of Australians: A National Random Sample Survey Of The Australian Population", in *Australia Deliberates: Muslims And Non-Muslims In Australia*. IDA, pp. 88-104.
- Jenkins, J. & Leaker, D. (2010) 'The labour market across the UK in the current recession', Job Equity: Some Preliminary Findings." *Perceptual and Motor Skills* 61: 1055-1064.
- Johnson, B..& Onwuegbuzie A. (2004). 'Mixed Methods Research: A Research Paradigm Whose Time Has Come', *Educational Researcher* 33/14, pp 14-26.
- Jowell, R. & Prescott-Clarke, P. (1970). "Racial discrimination and white-collar workers in Britain", *Race*, 11: 397-417.
- Kagioglou, M. (1999) Adapting Manufacturing Project Process into Construction: a Methodology, PhD thesis, University of Salford.
- Kagioglou, M., Cooper, R., Aouad, G. & Sexton, M. (2000), Rethinking construction: The generic guide to the design and construction process protocol, *Engineering Construction* and Architectural Management, 7(2), 141-153.
- Kalter, F. & Kogan, I. (2006) Ethnic inequalities at the transition from school to work in Belgium and Spain: Discrimination or self-exclusion? *Research in Social Stratification and Mobility* 24(3), 259-274.
- Kanter, E. (1993) The Change Masters, London: Allen & Unwin.
- Kanter, R. M. (1977) Women and Men of the Corporation, New York: Basic Books.
- Kasimati, E. (2003). Economic aspects and the Summer Olympics: a review of related research. International Journal of Tourism Research, 5(6), 433-444. doi: 10.1002/jtr.449

- Katz, L. (2005) Organisational verses National Culture [Online], available at: http://leadershipcrossroads.com/mat/Organizational 20vs 20National 20Culture.pdf [Accessed 23 April, 2010].
- Kayinamura, L. F. (2012) The extent to which organisations in Zimbabwe are learning organisations: A case of Banc ABC, A research report presented to the Graduate School of Business Leadership, University of South Africa [Online], available at: http://uir.unisa.ac.za/bitstream/ [Accessed 11 June, 2013].
- King, E. B., Hebl, M. R., George, J. M., & Matusik, S. F. (2010). Understanding tokenism: Antecedents and consequences of a psychological climate of gender inequity. *Journal of Management*, 36(2) 482-510.
- Kingston, P. (2009) 'Beware false economies', The Guardian, 24 February.
- Kirton, M. J. (2003) Adaptation and innovation in the context of diversity and change. London: Routledge.
- Kluve, J. (2006), The Effectiveness of European Active Labor Market Policy, IZA Discussion Paper m.2018
- Knobloch, N. A. (2010), Building Conceptual and Theoretical Frameworks that Inform Research Purdue University [Online], available at: http://www.public.iastate.edu/~laanan/ACTER/2010/symposia/Building_Conceptual_Knobloch.pdf [Accessed 19/05/12].
- Kossek, E. E., Pichler, S., Bodner, T & Hammer, L. B. (2011) Workplace social support and work-life conflict: a meta-analysis clarifying the influence of general and work-family-specific supervisor and organisational support. *Personnel Psychology*. 64(2), 289-313.
- Kotter, J. & Heskett, J. (1992) Corporate Culture and Performance, New York, NY: Free Press.
- Kroeber, A. L. & Kluckhohn, C., 1952. *Culture: A Critical Review of Concepts and Definitions*, New York: Vintage Books.
- Kuhn, T. (1970). The structure of scientific revolutions, Chicago: University of Chicago Press.

- Kulatunga, U. Amaratunga, D. & Haigh, R. (2007),"Performance measurement in the construction research and development", *International Journal of Productivity and Performance Management*, 56(8): 673 688.
- Kumaraswamy, M., Rowlinson, S. & Phua, F. T. T. (2002) "Strategies for triggering the required 'cultural revolution' in the construction industry", in: Fellows, R. & Seymour, D. (eds), Perspectives on Culture in Construction, CIB Report, CIB, Shizuoka, p. 275.
- Kvale, S. & S. Brinkmann (2008). Interviews: learning the craft of qualitative research interviewing, London: Sage Publications.
- Labour Force Survey (2004). Labour Force Survey: Quarterly Supplement. Office for National Statistics, London. *Labour Market Review*, 4(8) 37-43.
- Laerd statistics (2013), Cronbach's Alpha (α) using SPSS 16 [Online], available at: https://statistics.laerd.com/spss-tutorials/cronbachs-alpha-using-spss-statistics.php, [Accessed 12 May, 2013]
- Latham, M. (1994) Constructing the Team, Final Report of the Government/Industry Review of Procurement and Contractual Arrangements in the United Kingdom Construction Industry, Department of Environment, London: HMSO.
- Lebedeva, N., & Tatarko, A. (2004). Socio-psychological factors of ethnic intolerance in Russia's multicultural regions. In Berry, J.W. (2005), Acculturation: Living successfully in two cultures, *International Journal of Intercultural Relations* 29, 697-712.
- Leitch, S. (2006) Prosperity for All in the Global Economy World Class Skills: Final Report.
- Leming, (1997) Sociology 371: Theory Construction and Research Design [Online], available at: http://www.stolaf.edu/people/leming/soc371res/index.html [Accessed 12 May, 2012]
- Lievesley, N (2010) The future ageing of the ethnic minority population of England and Wales, Older BME People and Financial Inclusion Report, Runnymede and the Centre for Policy on Ageing.
- Liff, S. (1999) 'Diversity and Equal Opportunities: Room for a Constructive Compromise?' Human Resource Management Journal 9(1): 65–75.

- Likert, R. (1961) New patterns of management, New York: McGraw-Hill.
- Lillie, N. & Greer, I. (2007) Industrial Relations, migration and neoliberal politics: the case of the European construction sector, *Politics and Society*, 35(4),551-581.
- Lincoln, Y. & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park: Sage.
- Lingard, H., Gilbert, G. & Graham P., (2001) 'Improving construction workers' solid waste reduction and recycling behaviour suing goal setting and feedback', *Construction Management and Economics* 19: 809-71
- Liu, A. (1999) Culture in the Hong Kong real-estate profession: a trait approach, *Habitat International*, 23(3), 413-25.
- Lloyd, J. (2004) Offer empowerment to encourage engagement. Triangle Business Journal, 19 15(1).
- Lloyds TSB Business in Britain Survey. (2007). Business in Britiansurvey [Online]. http://www.lloydstsbcorporatemarkets. com/ media/pdfs/Economicresearch/ BiB reports/LTSBCM_BusinessInBritain_Jan07.pdf [Accessed 6 May 2007].
- Locke, E. A. (1968) 'Towards a theory of task motivation and incentives'. *Organizational Behavior and Human Performance*. 3:157-89.
- Lockyer, C. & Scholarios, D. (2007) 'The "Rain Dance" of Selection in Construction: Rationality as Ritual and the Logic of Informality', *Personnel Review*, 36(4): 528–548
- London 2012 (2010a). One of the biggest projects in Europe [Online], available at http://www.london2012.com/ blog/2008/01/one-of-the-biggest-construction-projects-ineurope.php [Accessed 28 January, 2010].
- London 2012. (2010b). Employment and Skills Update. London.
- London Organising Committee of the Olympic Games and Paralympic Games Limited (LOCOG) (2010) Employment and Skills Strategy, London.

- Loosemore, M. & Chau, D. W. (2002) 'Racial discrimination towards Asian workers in the Australian construction industry', Construction Management and Economics 20(1): 91-102.
- Loosemore, M. & Al Muslmani, H. S. (1999) 'Construction project management in the Persian Gulf Intercultural Communication', International journal of Project Management 17(2): 95-101.
- Loosemore, M., Dainty, A. & Lingard, H. eds. (2003) Human Resource Management in Construction Projects: Strategic and Operational Approaches, London: Spon press.
- Low, S. & Shi, Y. (2001), "Cultural influences on organizational processes in international projects: two case studies", *Work Study*, 50(6), 267-85.
- Machin, S., & Vignoles, A. (2006). Education Policy in the UK. *Centre for the Economics of Education Discussion Paper*, 57.
- Mackie, J. (1988) The Early Tudors: 1485 1558, Oxford: Clarendon Press.
- MacLeod D. & Clarke N. (2009) Engaging for success: Enhancing performance through employee engagement, A report to Government BIS (Dept. of Bus Innovation and Skills
- Maloney, W. & Federle, M. (1990) Organizational Culture in Engineering and Construction Organizations, Ann Arbor MI: University of Michigan.
- Management in Construction Projects: strategic and operational approaches, London: Spon Press
- Marchetti, E. (2008). Intersectional Race and Gender Analyses: Why Legal Processes Just Don't Get It. *Social and Legal Studies*, *17*(2), 155-174.
- Mason, G. & Bishop, K. (2010) 'Adult training, skills updating and recession in the UK: the implications for competitiveness and social inclusion', *LLAKES Research Paper 10*, London:
- Mason, Jennifer (2006). Qualitative research (2nd ed). Thousand Oaks, London: Sage.

- Maxwell, J. & Loomis, D. (2003). Mixed methods design: An alternative approach. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 241–271). Thousand Oaks, CA: Sage
- Maxwell, JA. (1992). Understanding validity in qualitative research. Harvard Educational Review. 62(3), pp. 279-300.
- McNamara, C. (1999) "Organisational culture" [Online], available at: www.mapnp.org/library/org_thry/culture/culture.htm [Accessed 27 February 2010].
- Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco: JosseyBass.
- Mertens, D. (2003). Mixed methods and the politics of human research: The transformative-emancipatory perspective. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 135–164). Thousand Oaks, CA: Sage.
- Mertens, D. (2009). Transformative research and evaluation, New York: Guilford Press.
- Meudell, K. & Gadd, K. (1994) Culture and climate in short life organizations: sunny spells or thunderstorms?, *International Journal of Contemporary Hospitality Management*, 6(5), 27-32.
- Micklewright, J. (2000). Education, inequality and transition. *Economics of Transition*, 7(2), 343-376.
- Migiro, S. O. & Magangi, B. A. (2011) Mixed Methods: A review of literature and the future of the new research paradigm. *African Journal of Business Management*. *5*(10), 3757-3764.
- Moriarty, J., Manthorpe, J., Hussein, S. & Cornes, M. (2008) Staff shortages and immigration in the social care sector. *A Paper prepared for the Migration Advisory Committee (MAC)*King's College London [Online], avialble at: www.ukba.homeoffice.gov.uk/mac, [Accessed 20 June, 2010].
- Miles, M. B. & Huberman, A. M. (1994) Qualitative data analysis, 2nd ed., London: Sage

- Publications.
- Milgram, S., Mann, L. & Harter, S. (1965). "The Lost-Letter Technique: A Tool of Social Research", *Public Opinion Quarterly*, 29(3): 437-438.
- Miller, L. (2005). Addressing gender segregation in apprenticeships in England. *Education and Training*, 47(4/5), 283-297.
- Miller, L. & Tuohy, S. (2007) 'Factors affecting Perceptions of Jobs within the SummitSkills Footprint: a literature review, Institute for Employment Studies. SummitSkills.
- Minichiello, V. & Kottler, J. A. (2010). *Qualitative Journeys. Student and mentor experiences with research*. Thousands oaks: Sage
- Minority Ethnic Construction Professionals and Urban Regeneration (MECPUR) (March 1996) 'Building Equality: a discussion document', MECPUR.
- Missa, P. & Ahmed, V. (2010) BME migrants' employment in construction: a multicultural perspective. In: Egbu, C. (Ed) Procs 26th Annual ARCOM Conference, 6-8 September 2010, Leeds, UK, Association of Researchers in Construction Management, 603-612.
- MLSA (1998) the annual statistics report of labourers, ministry of labour and social affairs, Riyadh, Saudi Arabia.
- Modood T & Shiner M (1994) Ethnic Minorities and Higher Education, London: Policy Studies Institute
- Mohyin, N., Dainty, A. & Carrillo, P. (2012) human resource strategies for managing employee commitment: A case study of small construction professional services firms.
- Morden, T. (1999): "Models of National Culture A Management Review", Cross Cultural Management, 6(1), 24-36.
- Morgan, D.L. (1997), Focus Groups as Qualitative Research, 2nd ed., London: Sage Publications.
- Morgan, David L.(2007). 'Paradigms Lost and Pragmatism Regained: Methodological Implications of Combining Qualitative and Quantitative Methods'. *Journal of Mixed Methods Research* 11: 48 76.

- Morse, J. M., & Niehaus, L. (2009). *Mixed methods design: Principles and procedures*. Walnut Creek, CA: Left Coast Press.
- Mullineux, A. (2009), The regulation of British retail banking utilities. *Journal of Financial Regaulation and compliance*, 17(4): 453-466.
- Mullins L. J. (2007) 'management and organizational behavior 8th ed. Pearson Education, Essex.
- Mullins, L. J. (1999) Management and Organisational Behaviour, 5th edn, Essex: Pearson Education.
- Mulqueen, C., Kahn, A., & Kirkpatrick, J. S. (2012). Managers' Interpersonal Skills and Their Role in Achieving Organizational Diversity and Inclusiveness. Journal of Psychological Issues in Organizational Culture, 3(3), 48-58.
- Nana, G., Sanderson, K., Stokes, F., Dixon, H., Molano, W. & Dustow, K. (2011) Industry Training: An Overview: Report to the Industry Training Federation (ITF), BERL [Online], available at: http://www.itf.org.nz/assets/BERL/Industry-Training-Overview.pdf [Accessed 12 May, 2012].
- Naoum, S. (2003) An overview into the concept of partnering, *International Journal of Project Management*, 21(1), 71-6.
- Newmann, I. & Benz C. R. (1998) Qualitative qnatnitative research methodology: exploring the interactive continuum. Carbondale and Edwardsville: Southern Illinois University Press.
- Ng, T., & Feldman, D. (2007). The school-to-work transition: A role identity perspective. *Journal of Vocational Behavior*, 71(1), 114-134.
- Noe, C. F., Hollenbeck, J. R., Gerhart B. & Wright P. M. (2000), Human Resource Management

 Gaining Competitive Advantage, New York: McGraw Hill.
- Nuffield Review (2008) Apprenticehsip: A high-quality pathway for young people. Issues Paper 4.
- O'Brien R, (1998), An Overview of the Methodological Approach of Action Research [Online], available at: http://www.web.net/robrien/papers/arfinal.html [Accessed: 23 August, 2011].

- Obama (2008) Economic manifesto: Alex Spillius in Washington and Toby Harnden in McAllen, Texas 12:01AM GMT 14 Feb 2008 the Telegraph [Online], available at: http://www.telegraph.co.uk/news/worldnews/1578704/Barack-Obama-launches-economic-manifesto.html, [Accessed 12 May, 2011].
- ODPM (2005). National Framework for Tenant Participation Compacts, Office of the Deputy Prime Minister.
- ODPM. (2006). Affordability and the Supply of Housing. Housing Planning Local Government and the Regions Committee. London, the Stationery Office Limited.
- OECD (2000a) *OECD small and medium enterprise outlook: 2000 edition*, Paris, Organisation for Economic Co-operation and Development (OECD).
- OECD (2000b) Small and Medium-sized Enterprises: Local Strength, Global Reach. *OECD Observer: Policy Brief.* Paris, OECD.
- OECD (2010). International Migration Outlook Sweden, OECD Publishing.
- OECD. (1996). Transition from school to work. *Education at a Glance: Analysis Paris: OECD*, 14-53.
- Office for National Statistics. (2007). Past Estimates Population Estimates by Ethnic Group Mid-2001-2006, Office for National Statistics.
- Office for National Statistics. (2009). Population Trend. Christopher Smith. Basingstoke, Palgrave Macmillan.
- Office for National Statistics (2005) Census 2001 Quality Report, London: Palgrave Macmillan.
- Ogbonna, E. & Noon, M. (1995) Experiencing Inequality: Ethnic Minorities and the Employment Training Scheme. *Work, Employment and Society* 9(3), 537-58
- Olympic Delivery Authority (ODA) (2009). Retrieved 20 December, 2009 [Online], Available at: http://www.london2012.com/about-us/the-people-delivering-the-games/the-olympic-delivery-authority/oda-priority-themes/employment-and-skills.php [Accessed 1 May, 2010].

- Olympic Delivery Authority [ODA] (2011). Jobs, Skills, Futures: Employment and skills update. London.
- Oney-Yazici, E., Giritli, H., Topcu-Oraz, G. & Acar, E. (2007) Organizational culture: the case of Turkish construction industry. *Engineering, Construction and Architectural Management*, 14(6), 519–31.
- ONS (2004), "Labour Market Data for Local Areas by Ethnicity" [Online], available at: http://www.statistics.gov.U.K./articles/nojournal/LM_Data_Ethnicity.pdf [Accessed 27 September, 2009].
- ONS (2009) Experimental Population Estimates by Ethnic Group for Local Authority Districts and Higher Administrative Areas for England and Wales for 2009, Office of National Statistics.
- ONS (2009) The Impact of the Recession on the Labour Market, 14 May 2009, Newport: Office for National Statistics.
- ONS (2012) Annual Mid-year 2011 Population Estimates for England and Wales, office for national statistics, Statistical bulletin, 25 September 2012.
- Oswald, H., (2003). "Logical Positivism": History of Philosophy, London: Routledge.
- Oxford Dictionary Online [Online], available at: http://oxforddictionaries.com/definition/english/employment? [Accessed 25 May, 2011].
- Pager, D. (2007) "The Use of Field Experiments for Studies of Employment Discrimination: Contributions, Critiques, and Directions for the Future", *The ANNALS of the American Academy of Political and Social Science*, 609: 104-133.
- Parekh, B. (2000). Future of Multi-Ethnic Britain. London: Profile Books.
- Parliamentary Office of Science and Technology [POST] (2007) Ethnicity and health, Postnote January 2007, no. 276.
- Parliamentary office of science and technology, Ethnicity and health, postnote Jan 2007 no. 276 [Online], available at: http://www.parliament.uk/documents/post/postpn276.pdf [Accessed 21 October, 2009].

- Pathirage, C. P., Amaratunga, R. D. G. & Haigh, R. (2007), 'Tacit knowledge and organisational performance: Construction industry perspective', Journal of Knowledge Management, 11 (1) 15-126.
- Pathirage, C. P., Amaratunga, R. D. G. & Haigh, R. P. (2008), 'The role of philosophical context in the development of research methodology and theory', The Built and Human Environment Review, 1(1): 1-10.
- Patton, M. Q. (1990) Qualitative Evaluation and Research Methods (2nd ed.), Newbury Park, CA: Sage.
- Personneltoday.com "Is there a case for positive discrimination?" [Online], available at: www.personneltoday.com/articles [Accessed 23 November, 2011].
- Peters, T. & Waterman, R. (1982) *In Search of Excellence: Lessons from America's Best-Run Companies*, New York, NY: Harper & Row.
- Pfister, J. A. (2009) Managing organisational culture for effective internal control: form practice to theory . Physica-Verlag.
- Phillips, D. (1998). Black and minority ethnic concentration, segregation and dispersal in Britain. *Urban Studies*, *35*(10), 1681-1702.
- Phillips, S. D., Blustein, D. L., Jobin-Davis, K., & White, S. F. (2002) Preparation for the school-to-work transition: The views of high school students. Journal of Vocational Behavior, 61, 202-216.
- Phoenix, A. & Pattynama, P. (2006). Intersectionality. *European Journal of Women Studies*, 13(3), 187-196.
- Phua, F. & Rowlinson, S. (2003) Cultural differences as an explanatory variable for adversarial attitudes in the construction industry: the case of Hong Kong, *ConstructionManagement and Economics*, 21, 777-85.
- Pierson, J. & Worley, C. (2006). Housing and Social Policy: contemporary themes and critical perspectives, *Housing and Society Series*. P. Somerville & N. Springings eds. Oxon: Routeledge.

- Pincus, F. (2003). Reverse discrimination: dismantling the myth. Lynne: Rienner Publishers.
- Pini, B. (2002), "Focus groups, feminist research and farm women: opportunities for empowerment in rural social research", *Journal of Rural Studies*, 18: 339-51.
- Pitts, J. (2007). Reluctant gangsters: youth gangs in Waltham Forest. *Unpublished internal document*. Retrieved 20 May, 2010, from http://www.walthamforest.gov.uk/reluctant-gangsters.pdf.
- Platt, L. (2005a) Technical Appendix to Migration and Social Mobility, York: Joseph Rowntree Foundation/York Publishing Services.
- Platt, L (2005b) 'New destinations? Assessing the post-migration social mobility of minority ethnic groups in England and Wales', Social Policy and Administration, 39 (6): 697-721.
- Platt, L., Simpson, L. & Akinwale, B. (2005) 'Stability and change in ethnic group in England and Wales', *Population Trends* 121: 35-45.
- Platt, L. (2011) Understanding Inequalities: Stratification and Difference, Cambridge: Polity Press.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24(1), 1-24.
- Potts, S. A. K. (1998). Impact of mixed method designs on knowledge gain, credibility, and utility of program evaluation findings. *Dissertation Abstracts International*, 59(06), 1942A.
- Poynting, S. & Noble, G. (2004). 'Living with Racism: The experience and reporting by Arab and Muslim Australians of discrimination, abuse and violence since 11September 2001'.

 Report to the Human Rights and Equal Opportunity Commission, April.
- Purcell, J., Kinnie, K., Hutchinson, S., Rayton, B. & Swart, J. (2003) Understanding the people and performance link: unlocking the black box, CIPD, London.
- Qualls, M., Pallin, D. J. & Schuur, J. D. (2010), Parametric Versus Nonparametric Statistical Tests: The Length of Stay Example. *Academic Emergency Medicine*, 17: 1113–1121.

- Quinn, R. & Rohrbaugh, J. (1981) A competing values approach to organizational effectiveness. *Public Productivity Review*, 5, 122–140.
- Quinn, R. & Kimberly, J. (1984) Paradox, planning and perseverance: Guidelines for managerial practice, in: J. R. Kimberly & R. E. Quinn (Eds.), Managing organizational transitions, Homewood, IL: Dow Jones-Irwin.
- Quinn, R. & Rohrbaugh, J. (1983) A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*, 29, 363–377
- Quinn, R. (1988), Beyond Rational Management: Mastering the Paradoxes and Competing Demands of High Performance, San Francisco, CA: Jossey-Bass.
- Race for Opportunity (RfO) (2008) Race to the Top: The place of ethnic minority groups within the UK workforce, RfO.
- Raffe, D. (2008). Strategies for collecting cross-national data on education-to-work transitions: Recommendations of the CATEWE (Comparative Analysis of Transitions from Education to Work in Europe) project: Centre for Educational Sociology, University of Edinburgh.
- Ras, N. L. (2009) Multidimensional theory and data interrogation in educational change research: a mixed methods case study. *Paper presented at the meeting of the American educational research association*, San Diego, CA.
- Reichardt, C. S., & Rallis, S. F. (1994a). The relationship between the qualitative and quantitative research traditions. *New Directions for Evaluation*, 61, 5-12.
- Remenyi, D., Williams, B., Money, A. & Swartz, E. (2003) *Doing research in business and management: An introduction to process and method*, London: SAGE Publications.
- Renzetti, C. M. & Curran, D. J. (1992) Women, Men and Society, 2nd ed., Boston, MA: Allyn & Bacon.
- Respect for People (2000) HMSO, London.
- Rethinking Construction (2000) A Commitment to people: 'Our biggest Asset', Report of the Movement for Innovation's Working Group on Respect for people, HMSO, London.

- Reynaldo, J. & Santos, A. (1999) Cronbach's Alpha: A Tool for Assessing the Reliability of Scales *Journal of Extension* [Online], (37)2 available at: http://www.joe.org/joe/1999april/tt3.php [Accessed 12May 2011].
- Caballero, R. J., Farhi, E. & Hammour, M. L. 2006. "Speculative Growth: Hints from the U.S. Economy," American Economic Review, American Economic Association, 96(4): 1159-1192.
- Richards, L. & Morse, J. (2007). *User's guide to qualitative methods* (2nd ed) Thousand Oaks, London: Sage.
- Richmond, A. (1993) Reactive migration: Sociological perspectives on refugee movements. *Journal of Refugee Studies*, 6, 7–24.
- RICS (2006) Contracts in Use: A Survey of Building Contracts in Use during 2004, *The Royal Institution of Chartered Surveyors*, London.
- Riley, M. & Clare-Brown, D. (2001) Comparison of cultures in construction and manufacturing industries, *Journal of Management in Engineering*, 17(3) 149-58.
- Roberts, D., & Davenport, T. (2002). Job Engagement: Why It's important and how to improve it. *Employment Relations Today*, 29(3): 21-29.
- Robinson, D., Perryman, S., & Hayday, S. (2004), *The Drivers of Employee Engagement*, Report 408, Institute for Employment Studies (IES).
- Robson, C. (2002). Real World Research. A Resource for Social Scientists and Practitioner Researches, 2nd edition. Oxford: Blackwell.
- Robson, C. (2007). Real world research, 2nd ed. Oxford: Blackwell
- Rochdale Metropolitan Borough Council (2008). A Black and Minority Ethnic (BME) Housing Strategy for the Borough of Rochdale 2008-2011. R. M. B. Council, Rochdale Metropolitan Borough Council.
- Rowlinson, M. (2001). Business History and Organization Theory. *Journal of Industrial History* 4(1): 1-23.

- Rowlinson, S. & Cheung, F.Y.K. (2004) "A review of the concepts and definitions of the various forms of relational contracting", paper presented at International Symposium of the CIB W92 on Procurement Systems "Project Procurement for Infrastructure Construction", Chennai, India, 7-10 January 2004.
- Ryan, P. (1999). The school-to-work transition twenty years on: Issues evidence and conundrums (pp. 437-458): Published in OECD, Preparing Youth for the 21st Century: The Transition from Education to the Labour Market.
- Ryan, P. (2000). The school-to-work transition: a cross-national perspective. *Journal of Economic Literature*, 39(1), 34-92.
- Salas, E., Tannenbaum, S. I., Kraiger, K. & Smith-Jentsch, K. A. (2012) The Science of Training and Development in Organizations: What Matters in Practice, *Psychological Science in the Public Interest*, 13(2), 74-101.
- Salganik, M. J. & Heckathorn, D. D. (2004), "Sampling Estimation in Hidden Populations Using Respondent-Driven Sampling". *Sociological Methodology*, 34 (1): 193–239.
- Sang, K. & Powell, A. (2012) Equality, diversity, inclusion and work-life balance in constructiont industry in Dainty, A. &, Loosemore, M. eds. (2012) Human Resource Management in Construction: Critical Perspectives Abingdon: Routledge.
- Sang, K. & Powell, A. (2013) Equality, diversity, inclusion and work life balance in construction.

 Human Resource Management in Construction Projects, 163.
- Sarantakos, S. (2005). Social Research: third edition. London: Palgrave Macmillan.
- Saunders, M., Lewis, P. & Thornhill, A. (2012) *Research methods for business students*, 7th ed., Harlow: Pearson Education.
- Shamoo, A. & Resnik, D. (2009) Responsible Conduct of Research, 2nd ed. New York: Oxford University Press.
- Schaufeli, W. B., Bakker, A. & Salanova, M. (2006). The Measurement of Work Engagement with a short questionnaire: A cross national study, *Educational and Psychological Measurement*, 66: 701-716.

- Schein E. H. (1992). Organizational Culture and Leadership (2nd ed.), San Francisco: JosseyBass.
- Schein, E. (1985) Organizational Culture and Leadership, London: Jossey-Bass Publishers.
- Scott, T., Mannion, R., Davies, H., Marshall, M. (2003), "The quantitative measurement of organizational culture in health care: a review of the available instruments methods", Journal of Health Services Research, Vol. 38(3), 923-45.
- Searle, R., & Billsberry, J. (2011). The development and destruction of organisational trust during recruitment and selection, *Trust and Human resource management*, 67.
- Sexton, M. (2007) PhD resarch: Axiological purposes, ontological cages and epistemological keys, *Research Institute for the Built and Human Environment Research Methodology Workshop*. University of Salford.
- Shah, P. P. & K. A. Jehn (1993). "Do friends perform better than acquaintances? the interaction of friendship, conflict, and task." *Group Decision and Negotiation* 2(2): 149-165.
- Shein, E. (1992), *Organizational Culture and Leadership*, 2nd ed., San Francisco, CA: Jossey-Bass.
- Shenton, A. K. (2004) Strategies for ensuring trustworthiness in qualitative research projects, *Education for information*, 22(2), 63-75.
- Shields M. A. & Wheatley Price S. (2002) 'The English language fluency occupational success of ethnic minority immigrant men living in English metropolitan areas' *Journal of Populations Economics*, 15: 137-60.
- Shields, M. & Price, W. S. (2003). 'The labour market outcomes and psychological well-being of ethnic minority migrants in Britain', *Home Office Online Report* [Online], available at: http://www.homeoffice.gov.uk/rds/pdfs2/rdsolr0703.pdf [Accessed 15 January, 2010].
- Shields, M. & Wheatley Price, S. (1998). 'The earnings of male immigrants in England: evidence from the Quarterly LFS', *Applied Economics*, 30: 1157-68.
- Sisson, K. & Storey, J. (2000) The Realities of Human Resource Management: Managing the Employment Relationship, Open University Press, Birmingham.

- SkillBuild (2009) ConstructionSkills [Online], available at: http://www.cskills.org/newsand events/news/ SB09dates.aspx [Accessed, 23 March 2010]
- Sleight, A. (2009), Construction output in Southern Asia [Online], available at: http://www.khl.com/ [Accessed, 10 January, 2010].
- Smircich, L. (1983), "Concepts of culture and organisational analysis", *Administrative Science Ouarterly*, 28(3), 339-58.
- Smith D. J. (1977) Racial Disadvantage in Britain: The PEP report, Penguin: Harmondsworth.
- Smith, J. K., & Heshusius, L. (1986). Closing down the conversation: The end of the qualitative-quantitative debate among educational researchers. *Educational Researcher*, 15: 4-12.
- Smith, L. T. (2007). On tricky ground: Researching the native in an age of uncertainty. In, N. Denzin & Y. Lincoln (eds.) Handbook of Qualitative Research. Beverly Hills: Sage Publication.
- Sødergaard, M. (1996), "Hofstede's consequences: a study of reviews, citations and replications", *Organization Studies*, 15, 447-56.
- Somerville, P., Steele, A. & Sodhi, D (2002). Black and minority ethnic employment in housing organisations. Race', Housing and Social Exclusion, London: Jessica Kingsley.
- Somerville, W. & Sumption, M. (2009) Immigration in the United Kingdom: The recession and beyong [Online], Available at: http://www.migrationpolicy.org/pubs/Immigration-in-the-UK-The Recession-and-Beyond.pdf [3 January, 2010].
- Sommerville, J. (1996) An Analysis of Recruitment Sources and Employee Turnover in Scottish Construction Organisations, *Construction Management and Economics* 14(2): 147-53.
- Sparrow, P. & Marchington, M. (1998) *Human resource management: the new agenda*, London: Pitman.
- Stacey, R. (1992) Managing chaos, London: Kogan Page.
- Stainback, S. & Stainback, W. (1988) *Understanding and conducting qualitative research*, Dubuque, IA: Kendall/Hunt

- Stavrou, E., Kassinis, G. & Filotheou, A. (2006) Does Family Ownership Matter? Downsizing and Stakeholder Orientation among the Fortune 500, *Journal of Business Ethics*, Springer.
- Steele, A. & Todd, S. (2005). The Future of the Black and Minority Ethnic Construction Sector in England. *Construction Management and Economics*, 23: 1017-1023.
- Steele, A. & Sodhi, D. (2004) Black and minority ethnic contractors and consultants and UK housing associations' contracting power. *Construction Management and Economics* 22, 151-157
- Steele, A. & Sodhi, D. (2006) 'Race, ethnic minorities and the construction industry' in Managing Diversity and Equality in Construction: initiatives and practice, eds. Gale, A. W. & Davidson, M. J., London: Taylor and Francis.
- Stephanopolous, G. & Edley, E. (1995) "Review of Federal Affirmative Action Programs, Report to the President" Washington.
- Stern, S. (2008) 'Feel the strategy: Leaders must engage hearts as well as minds' Management Today 1 Nov 2008.
- Stewart, J. & Sambrook, S. (2012) The historical development of human resource development in the United Kingdom, *Human Resource Development Review*, 11(4), 443-462.
- Storey, D. J. (1994) Understanding the small business sector, London: Routledge.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*, London: Sage Publications.
- Streiner D. L. & Norman G. R. (1989) Health measurement scales a practical guide to their development and use. New York: Oxford University Press.
- Sweeney, P., Hannah, S. T., Park, N., Peterson, C., Matthews, M., & Brazil, D. (2009) Preventing workplace harassment and violence: Joint guidance for implementing a European social partner agreement, The Department for Business, Innovation and Skills (BIS), Employment Market Analysis and Research (EMAR) team [Online], available at: http://www.hse.gov.uk/violence/preventing-workplace-harassment.pdf [Accessed 12 May, 2011].

- Taras, V. & Steel, P. (2006b) Culture as a consequence: a multilevel multivariate meta-analysis of the effects of individual and country characteristics on work-related cultural values. Best Papers Proceedings, *the Academy of Management Annual Meeting*, Atlanta, GA.
- Tashakkori, A & Creswell TW (2007) Exploring the nature of research questions in mixed methods research, editorial, *Journal of Mixed Methods research*. 1(3) 207-211
- Tashakkori, A. & Teddlie, C. (1998) Mixed Methodology: Combining qualitative and quantitative approaches. Thousand Oaks, CA: Sage.
- Teddlie, C., & Tashakkori, A. (2009). Foundations of mixed methods research. Thousand Oaks, CA: Sage.
- The Black and Minority Ethnic Community Services of West Sussex Council (2007), Race and Etnicity [Online], available at: https://www.westsussex.gov.uk/learning/west_sussex_grid_forlearning/management_info__services/policies_and_publications/race_and_ethnicity.aspx [Accessed 15 October, 2011].
- The World Bank Institue (2007), Monitorign and Evaluation for Results, Mixed Methods. The World Bank Group.
- Thompson, N, (1997) Anti-discrimination practice. London: Macmillan.
- Toor, S. & Ofori, G. (2011). 'Women Leaders Breaking the Glass Ceiling in Singapore's Construction Industry.' *Journal of Professional Issues in Engineering Education Practice*, 137(1), 1–6
- Toor, S. U. R., & Ofori, G (2010). Women leaders breaking the glass ceiling in Singapore's construction industry. *Journal of Professional Issues in Engineering Education and Practice*, 137(1), 1-6.
- Trades Union Congress [TUC] (2009) 'Skills in the Recession', Trade Union Congress, London.
- Trice, H. & Beyer, J. (1993) *The Cultures of Work Organizations*, Englewood Cliffs, NJ: Prentice-Hall.
- Trice, H. (1993), Occupational Subcultures in the Workplace, Ithaca, NY: ILR Press.

- Trochim, W. M. K., (2006) "Positivism & Post-Positivism." Research Methods: Knowledge Base [Online], available at: http://www.socialresearchmethods.net/kb/qualval.php [Accessed, 14 August, 2010].
- Trompenaars, F. & Hampden-Turner, C. (2005) Riding the waves of culture: understanding cultural diversity in business. London: Nicholas Brealey.
- Trompenaars, F. (2003) *Did the Pedestrian Die? Insights from the greatest culture guru*, Oxford: Capstone Publishing.
- Trompenaars, F. & Hampden-Turner, C. (1998) *Riding the Waves of Culture: under-standing diversity in global business*, (2nd. Ed.), New York: McGraw-Hill.
- Tryfonidou, A. (2009). Reverse discrimination in EC law: European monographs. Kluwer Law International.
- The Free Dictionary Online [Online], available at: http://www.thefreedictionary.com/Engagement, [Accessed 25 May, 2011].
- TUC (2009) Skills in the Recession [Online], available at: http://www.tuc.org.uk/extras/skillsintherecession.pdf [Accessed 3 October, 2009].
- Turner, J. R., Ledwith, J. & Kelly, J. (2009) Project management in small to medium-sized enterprises: a comparison between firms by size and industry. *International journal of Managing Projects in Business*, 2(2), 282-296.
- Twomey, B. (2001). Labour market Participation of ethnic groups. *Labour Market Trends*, 109, 29–4
- Commission for Racial Equality (2011) "Affirmative action around the world" [Online], available at: www.cre.gov.uk [Accessed 23 November].
- UKCES (2008) 'Slash training at your peril', warn business bosses', 23 October 2008,
- UKCES (2009) Ambition 2020: World Class Skills and Jobs for the UK. Wath-upon-Dearne: UK

- Urwin P., Karuk V., Buscha F. & Siara B. (2008), Small Businesses in the UK: New Perspectives on Evidence and Policy, *Federation of Small Businesses*: Centre for Employment Research, University of Westminster.
- Urwin, P. & Buscha, F. (2007), 'Changing gender and ethnic diversity in the UK workplace: what can we learn from the 2004 WERS?', WERS 2004 User Group Meeting, March.
- Urwin, P., Michielsens, E. & Buscha, F. (2006), 'Work-Life Balance and Firm Performance: Explaining Some Of The Conflicting Evidence Using The 2004 WERS and The London First Diversity Practice Research Project', Cardiff ERU Conference, Cardiff Business School.
- van Emmerik, H. & Euwema M. C. (2006) Crossover of Burnout and Engagement in Work Teams, *Work and Occupations*, 33(4), 464-489.
- Van Maanen, J. & S. Barley (1984) Occupational Communities: Culture and control in organizations. *Research in Organizational Behaviour*, 6, 287-365.
- Van Manen, M. (1990). Research lived experience: Human science for an action sensitive pedagogy. New York: State University of New York Press.
- Vidich, A. J., & Lyman, S. M. (2000). *Qualitative methods: Their history in sociology and anthropology*, in N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (2nd ed.). Thousand Oaks, CA: Sage.
- Von Hippel E., Thomke S. & Sonnack M. (1999), Creating Breakthroughs at 3M, *Harvard Business Review*, 77(5): 47-57.
- Waldinger, R. & Bailey, T. (1991) "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics and Society* 19.
- Welsh Assembly Government. (2005). Review of Social Landlords' Implementation of the Black and Minority Ethnic (BME) Housing Action Plan for Wales, Cardiff: Employment Practice Solutions Ltd.
- West Sussex Council (2007), Race and Ethnicity, The Black and Minority Ethnic Community Services [Online], available at: https://www.westsussex.gov.uk/learning/west_sussex

- <u>grid_for_learning/management_info__services/policies_and_publications/race_and_ethn_icity.aspx</u> [Accessed 15 October, 2011].
- Wieczorek, J. (1995) Sectoral trends in world employment, *Sectoral Activities Programme*. Working Paper 82. ILO, Geneva.
- Wilkinson, A. (1998). "Empowerment: Theory and Practice". Personnel Review 27: 40–56.
- Winch, G. M. (1994) *Managing production: Engineering change and stability*. Oxford: Oxford University Press.
- Winter, G. (2000), 'A Comparative Discussion of the Notion of 'Validity' in Qualitative and Quantitative Research'. *The Qualitative Report*, 4(3&4), March, 2000 [Online], available at: http://www.nova.edu/ssss/QR/QR4-3/winter.html [Accessed 3 January, 2009]
- Wood, J. T. (1997) 'Gendered media: The influence of media on view of gender', in Davis, M. H. (ed) *Social Psychology Annual Editions* 97/98, 162-71.
- Wood, P., Landry, C. & Bloomfield, J. (2006). Cultural Diversity in Britain, A Toolkit for Cross-cultural Co-operation. Joseph Rowntree Foundation. York.
- Worman D. (2005) Managing diversity, CIPD [Online], available at: http://www.cipd.co.uk/NR/rdonlyres/D4D2D911-FC8A-4FD2-A814-B80A55A60B87/0/mandivlink0405.pdf [Accessed 12 February, 2011].
- Wray, M. (2006), *Not Quite White: White Trash and the Boundaries of Whiteness*, Durham, N. C.: Duke University Press.
- Yates, J. K. (1992) 'Women and minorities in construction in the 1990s', Cost Engineering 34(6): 9-12.
- Yin, R. K. (1993). Applications of case study research, Beverly Hills, CA.: Sage Publishing.
- Yin, R. K. (2003b) Case study research: Design and methods, London: Sage Publications.
- Yin, R. K. (2009). Case study research: design and methods, London: Sage Publications.
- Yu, C. H. (2005). "Test-retest reliability." Encyclopaedia of Social Measurement 3: 777-784.

- Yu, C. H. (2006). *Philosophical foundations of quantitative research methodology*, Lanham, M. D.: University Press of America.
- Zhang, S. &, Liu, A. (2006), "Organizational culture profiles of construction enterprises in China", *Construction Management and Economics*, 24(8), 817-28.

Appendix A: Respondents' Consent Form

TO: EMPLOYEES/INDUSTRIAL PLACEMENT STUDENTS OF CONSTRUCTION

RESEARCH INTO THE EMPLOYABILITY OF BLACK AND MINORITY ETHNIC (BME) PEOPLE IN CONSTRUCTION.

I am currently undertaking a PhD at the School of the Built Environment (SOBE), University of Salford which investigates the views, perceptions and experiences of construction industry practitioners in relation to BMEs engagement and participation in the sector. The study is currently at the data collection phase and interviews and questionnaires have been identified as the data collection techniques. Potential respondents, who are participants (and in the case of the students, who have participated on placement) in the industry, have been identified and interviews will be conducted through the semi-structured interview questions format for employers as well as questionnaires survey in the case of students and employees.

In brief, the aim of the research is to establish the effectiveness of equal opportunity policies not only in terms of direct employment by construction companies but also, in the case of students their chance of gaining opportunities on industrial placements. The project is based around issues of minimal engagement and in the extreme, exclusion in the industry and I particularly want to address how policies and initiatives impact the employment prospects and progression of the BME community.

I am seeking volunteers to talk to and answer questionnaires in strict confidence, where anonymity is assured. The greater the number of participants, the worthier the findings will be. I would be most grateful if you could contact me by detaching and returning the slip below along with the completed questionnaire. Please note that the University of Salford has given her consent to this survey and has granted an ethical approval for it to be conducted. Thank you

PAUL MISSA			

TO: Paul Missa, 504 Maxwell Building, University of Salford, SOBE, Salford M5 4WT

Tel: 01612957991 (Day), Mob: 07535716507, E-Mail: p.missa@edu.salford.ac.uk

Appendix B: Semi-structured interview Questions for employers

SEMI-STRUCTURED INTERVIEW QUESTIONS

A. Ethnicity Outside and at the Workplace

- 1. Do you think our society is discriminatory on account of ethnicity and race?
- 2. In your view, in what ways is organisational racial discrimination different from racial discrimination in societies, if any?
- 3. Do you think there are consequences for an industry with an ageing workforce, as construction is, that has no buffer for labour recruitment?
- 4. What do you think are the roles migrant (BME) workers play in host economies generally and specifically in construction?
- 5. Who, in your view, are the beneficiaries of migrant labour and how can it be promoted or discouraged if found to be unnecessary?
- 6. Do BME workers in construction have any specific qualities they bring to the industry?

What about particular ethnic groups of workers?

- 7. Do you think specific industries attract people of particular ethnicity or race? Why do you think this is the case and what are the consequences?
- 8. Are there any instances you can think of where distinguishing features e.g. ethnicity, race, religion, language etc. should be used as a differentiating factor to encourage inclusion within construction?

B. Respondents' Direct Experience with Employees

- 9. Can you briefly describe the recruitment process of your employees for the various positions in your company?
- 10. What does your company look for in potential employees when recruiting and promoting?
- 11. What do you think of the view that BMEs are underrepresented in construction because they lack the necessary skills and qualifications?
- 12. In your view, do you think BMEs generally face peculiar employment barriers / obstacles that must be overcome to gain entry into the construction industry?
- 13. Can you recount the sort of experiences you have encountered in working with BME people if any?
- 14. Do you feel the legislation outlawing racial discrimination has any implications for your organisation? : If so, in what ways? / If not, why not?

Part 2 Please take a bit more of your time to answer the following questions about yourself. About You 1. How would you describe yourself? a. Age: \square younger than 25 \square 25 – 30 \Box 31 – 40 \square 41 – 50 \square older then 50 b. Gender: ☐ female ☐ male □ other: 2. Religion: ☐ Hindu ☐ Buddhist ☐ Atheist ☐ Christian ☐ Muslim ☐ Jewish ☐ Sikh ☐ Agnostic ☐ Prefer not to disclose □ Other: 3. WHAT IS YOUR ETHNIC GROUP? Choose one section from (a) to (e) and tick the appropriate box to indicate your cultural background WHITE **BLACK or BLACK BRITISH** (a) (b) **British** Caribbean П Irish African Any other White background Any other Black background please write it below please write it below (c) ASIAN or ASIAN BRITISH (d) **MIXED** Indian White and Black Caribbean Pakistani White and Black African Bangladeshi White and Asian Any other Asian background Any other Mixed background please write it below please write it below CHINESE or OTHER ETHNIC (e) **GROUP** Chinese Any other Mixed background (please write in opposite box) □ yes □ no 4. Are you of migrant descent If yes, how would you describe your generation using the following broad categorisation? ☐ First generation BME (if you migrated to the UK for the first time)

15. What strategies do you think, if implemented can help to remove the employment barriers

BME people face in the construction industry?

About You	<u>r Educati</u>	<u>on</u>				
1. What is	your usua	ıl spoken langu	age?			
At 1	home work	☐ English	☐ Native			
	GCSE O	level	Aʻlevel □Di _l	ations when you joi	□postgraduate	
	GCSE O	level 🗖 GC	SE A 'level		immediately above? Degree□postgraduate	
4. Is your o	_l ualificatio	on construction	related	res 🗖 no)	
5. What is	your area	of specialism?				
	Quantity S		_	☐ Project Manag		
	Project Ma Building Si	inagement and inveying	Investment	☐ Architectural Design and Technology ☐Other (specify)		
6. If you ar	nswered ye	_	is/was your jo	•	ecialism during trainin	ıg?
		□yes		□no		
7a. Have y	ou had on	the job training	g	□ yes	□ no	
•		•	_	you to find a place?		
$\Box v$	ery easy		☐fairly easy	,	easy	
	ifficult,		☐fairly diffi	cult,	very difficult	
□d						
	Who arrai	nged your indus	strial training?			

Appendix C: Copy of Employee Questionnaire

CONFIDENTIAL QUESTIONNAIRE

STUDY OF THE EMPLOYABILITY OF BLACK AND MINORITY ETHNIC (BME) PEOPLE IN CONSTRUCITON

This questionnaire is part of my PhD studies and your help in completing it would be greatly appreciated. The information required is crucial to this study and it would therefore be helpful if you could return it in the self-addressed envelope provided by **15 April**, **2011**.

Information provided will be treated in the strictest confidence and used for statistical analysis only, in accordance with academic standards and practices.

	Section A: About You 1. It is a like the section of the section o						
		I you describe yourself? Inger than $25 \square 25 - 30 \square 31 - 40 \square 41 - 50 \square$ older then 50					
a. Age	. 🗀 уо	inger than 25					
b. Gen	b. Gender: ☐ female ☐ male ☐ other:						
2. Rel	igion:	☐ Christian ☐ Muslim ☐ Hindu ☐ Buddhist ☐ Atheist					
		☐ Jewish ☐ Sikh ☐ Agnostic ☐ Prefer not to disclose					
		☐ Other:					
		YOUR ETHNIC GROUP?					
		ction from (a - e) and tick the appropriate box to indicate your cultural background					
(a)	WHIT						
		British Caribbean					
		Irish					
		Any other White background Any other Black background					
		please write it below please write it below					
(c)	ASIA	N or ASIAN BRITISH (d) MIXED					
		Indian					
		Pakistani					
		Bangladeshi					
		Any other Asian background Any other Mixed background					
		please write it below please write it below					
(e)	CHIN	ESE or OTHER ETHNIC					
GROU	JΡ						

	Chinese						
	Any other Mix	ed background	l				
	(please write	in opposite be	ox)				
4. Are you o	of migrant descen	nt		yes		□ no	
If yes, how w	If yes, how would you describe your generation using the following broad categorisation?						
☐ First generation BME (if you migrated to the UK for the first time) ☐ Second generation BME (If born in the UK /host nation) ☐ Third generation BME (if parents were born in UK/host nation)							
Section B: A	bout Your Educe	<u>ation</u>					
1. What is yo At home At work	\mathcal{C}	language? □ Native □ Native					
\square G	2. Please give details of your educational qualifications when you joined the industry? ☐ GCSE O 'level ☐GCSE A 'level ☐Diploma ☐Degree ☐postgraduate ☐other (please specify)						
\square GCSE O	3. What are your existing qualifications if different from those listed immediately above? □ GCSE O 'level □GCSE A 'level □Diploma □Degree □postgraduate □other (please specify)						
4. Is your qua	alification constru	action related	□ yes	;	□ no		
5. What is yo	our area of special	lism?					
□ Quantity Surveying, □ Project Management □ Project Management and Investment □ Architectural Design and Technology □ Building Surveying □ Other (specify)						= -	
6. If you answered yes to Q4 above, is/was your job related to your specialism during training? ☐yes ☐no							
7. Have you	had on the job tr	aining	□ yes		□ no)	
b. If yes (in 7 □very easy □difficult,		y was it for yo □fairly easy, □fairly diffice		-	e? □easy □very diffic	ault	
,		in the same of the			;		

S. Who arranged your indus□your tutor □your institu□other (please specify):	tion	□yo	urself			· ·
9. Are you currently working Section C: About Your Emp. 1. Please give your Section a	<u>loyme</u>	<u>nt</u>			□No (part	
2. At what age did you join ☐ younger than 25				-	□ 41 – 50	older then 50
3. How were you recruited i □Job Centreplus □New Application □Fast stream □ Recommended by Relativ (please specify)	vspape e	r Adver □Re	rt \square Co	nded by	Friend	er Adviser
4. Do you have any relation	in you	ır place	of worl	κ?	□Yes	□No
5. Do you have any relation	elsew	here in t	the indu	ıstry?	□Yes	□No
a. if "yes" are they s	still in	the indu	ustry?		□Yes	□No
b. if you answered " work/industry	no", c	an you	briefly	state rea	son(s) for lear	ving their place of
☐Contract en☐Transfer to☐Other: (Plea	differe		•	□ret	omotion irement	□Reorganisation □Sacked
c. What influenced your deci i.e. (1 = very influential; 2 =		•			•	
Unemployment			ა □	4	3 □	
Remuneration						
Skills/training						
Interest/satisfaction						
Continuity						
Promotion						
Relation						
Other (specify) 🗖					

6. Have you ever worked outside construction?		□Yes	□No
a. If "Yes", is it before or after first working in the	e industry?	□Before	□After
b. If "Before", what attracted you to the industry?		• • • • • • • • • • • • • • • • • • • •	
c. If "After", why have you returned to construction. How long have you worked/did you work with □Under 12months □1-2years □2-			ny/Section?
8. How long have you held your current post/post ☐ Under 12months ☐ 1-2years ☐ 2-5years		ears □ove	r 10years
9. Do you currently have staff management/ personal Yes □No	onnel relati	ons responsi	bility?
a. If "yes" how many? □1-3b. If "No", have you had any in previous post(s)		□4-6 □yes	□over 7 □no
10. What, in your view, are the causes of BME up your answer on a scale of 1-5 i.e. $(1 = \text{very important})$.	_		
Job applications/Finding employers BME Underrepresentation/Limited presence Immigration status Work experience/apprenticeship Cultural barriers Educational level/Language barriers Negative image of the sector Lack of transparency Religious barriers Discrimination/Racism Lack of networks General Perceptions			4 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
11. Do you see the inclusion/employment of BME □ Progressing/improving □ retrogress □ other (please specify):	sing/worser	_	□no change

12. Do you see the progression of BMEs as:

_	ressing/impro (please speci	· ·		_	ressing/worsening	□no change
13. Do	-	g/improvin	ng 🗖 re	_	sing/worsening	□no change
14. Do	you see yours □Yes	self as havi □No	-	term car on't Kn	reer in construction ow	?
	b. If "No" or	r "Don't K	know", wha	at other		got in mind, if any?
	you see yours □Yes		your caree		estruction?	
	a. If "yes",	how do yo	ou view you	ur caree	r prospects?	
	b. If "no" of	r "Don't K	Know", wha	at other	career(s) have you	got in mind?
	•			cy/ term	ination? □Yes	□No
	n D: About Tr					
institut	ions as approping	oriate.		ice train	ing you have receiv	ed, giving courses and
2. Is tra	aining a 2-way		where it is Yes	initiated □No	by you and/or line	manager?
Please		ver on a sc	ale of 1-5	i.e. (1 =		wth or is it job related only? uite useful; 3 = neutral; 4 =
Persona Job rela Otherw		1 2		4 	5 □ □	
b. If "n	o" in 2 above	please des	scribe:			

3. Have you developed skills and knowledge in on time in your present section? Please tick all that ap					
 ☐ General Management and administration ☐ Personnel management/industrial relations ☐ Public relations ☐ Research and IT (Information Technology) ☐ Technical 	 ☐ Financial management ☐ Negotiation ☐ Supervision ☐ Policy ☐ Other (specify 				
4. From a personal perspective, what are the most and development needs? Please tick all that apply.	appropriate ways of facilitating your training				
☐ Gaining experience by shadowing senior co ☐ In-service training, organised and carried ou ☐ Transfers within the company to learn the w ☐ Short course undertaken by outside provide: ☐ Arrange your own training, with costs met b ☐ Seconded to other companies ☐ Other (Please specify)	ork of other sections rs, arranged by the company by your employer				
 Section E: About Equal Opportunity on Your Job 1. Is there a Race Relations/Equal Opportunities Unit in your company? □Yes □No 					
2. Do you have specific workplace consultation an problems? ☐Yes ☐No	d grievance procedures to address BME				
3. Have any BME employees used above to take as Tyes No a. If "yes" what actions did the employees take (ples Informal approach to senior manager Informal approach to line manager Joined together with other workers Used formal complaint procedure	• •				
Went to citizen's advice bureau Sought help from friends and family Sought help from a trade union Approached co-workers responsible for the problem					
Began employment tribunal proceedings					
b. What was the outcome of above action?: no o	utcome \square outcome (s) \square				

c. Was the outcom	ie? s	atisfactory [J ı	insatisfactory	
Briefly explain yo	ur answer in	c above:			
4. Do you regard	_	ny as a practit JNo	tioner of e	equal opportunity i	in all/most respects?
a. If "yes", list are	as of good pr	ractice:	••••••		
b. If "no", please s	ay why:	• • • • • • • • • • • • • • • • • • • •			
5. What are your pemployment within	_		ectiveness Positi		nity in terms of ☐Negative
6. What is your po □Positive		on the effect Negative	iveness o	f positive action?	
7. From a persona component of equal a. If "yes", please	al opportunit	y?			
b. If "No", please	say why:				
8. Have you perso work?	onally experi	enced any for	rm of disc	crimination within	your current place of
	Zes [JNo			
If "yes": a. In what form?	□racial	□sex □	age 🗆	lother (specify)	
b. How was it deal	lt with?				
9. Do you know a ☐Yes	nyone who l⊓No	nas experienc	ed discrir	nination within yo	our current place of work?
If Yes: a. In what form?	□racial	□sex □	age (Jother (specify).	
b. How was it deal	lt with?				
10. Generally, who	at are your vi	ews on the o	peration o	of equal opportuni	ty policies?

Section F: About Promotion/Progression on Your Job

(Complete this section if you answered "yes" to any question in Section E above)

Positive action is an element of equal opportunity policy. How do you agree or disagree with this statement and its impact on the following?
 (1=Totally agree; 5=totally disagree)

	1	2	3	4	5		
Training							
Recruitment							
Promotion							
b. If "no", explain:							
2. Do you think positi ☐ Yes	ve action pol No	icies ha	ive beer	n benefi	ial to you in any way?		
a. If "yes", at which le	evel/stage of	your ca	reer and	d why: .			
b. If "no", please say	why:						
3. Do you think BME people have been proportionally represented throughout the grading structure in your company, in terms of the composition of the relevant employment pool? ☐ Yes ☐ No							
• •	a. If "yes", do you think it is proportional with regard to merit − e.g. qualification and hard work? ☐ Yes ☐ No						
b. If "no", please say	why:						
4. Have you at any tin ☐ Yes	me felt negat	ively af	fected b	y positi	ve action policies?		
a. If "yes", at which le	evel/stage of	your ca	reer				
•	• •	•			changed in your department o		
past 5 years, in terms recruitment?	of qualificati	ons and	l other e	entry rec	uirements, as well as method of	of	
☐ Yes	□ No		\square D	on't Kn)W		
Give reason(s) for voi	ır answer:						

Thank you for your cooperation. Please use the addressed, prepaid envelope to return the completed questionnaire.

Name:	. Telephone:
•	to participate in an interview or have any other comment or follow-up (first names only will suffice):
Your views on the way forward in addre	essing the issue of Black and Minority Ethnic people in

Appendix D

Ethical Approval REP10/088

From: Clements Timothy W Sent: Fri 17/09/2010 10:44 To: Missa Paul (P.Missa) PGR Cc: Hunter Jayne; Ahmed Vian Subject: Ethical Approval REP10/088 Dear Paul, I can confirm that based on the information provided, the Research Ethics Panel have no objections on ethical grounds to your project titled "EMPLOYABILITY OF BLACK AND MINORITY ETHNIC PEOPLES (BMEs) IN CONSTRUCTION" A formal Ethical Approval Memorandum will be sent out to you shortly. Regards, Tim **Tim Clements Contracts Administrator** Contracts Office | G10 Faraday House | University of Salford | 43 The Crescent | Salford | M5 4WT tel: 0161 295 6907 | fax: 0161 295 5495 | email: <u>t.w.clements@salford.ac.uk</u>

Concerns about content should be sent to abuse@salford.ac.uk mailto:abuse@salford.ac.uk

Appendix E

List of Publications

- Missa, P. & Ahmed, V. (2012) Legal, Ethical or Economic? Black and Minority Ethnics (BME) Representation in Construction. *Proceedings of the RICS COBRA Conference*, Las Vegas, USA. September 2012.
- Missa, P and Ahmed, V. (2012) Considerations for a Growth Challenge: Involving viable Hands in Construction In: *Proceedings of the CIB joint international conference on management of construction: Research to practice. Montreal, Canada, June* 26-29, 2012
- Missa, P and Ahmed, V. (2011) Ethical and Sustainable Employment in Construction: The Case of Black and Minority Ethnics' (BME's) Engagement In: *Proceedings of the Management and Innovation for a Sustainable Built Environment 20 23 June 2011, CIB World congress Amsterdam, The Netherlands ISBN: 9789052693958*
- Missa, P. and Ahmed, V. (2011) A Potential Labour Source: Black and Minority Ethnics (BMEs) as a Major Human Resource Priority for the Construction Industry: *The Built & Human Environment Review, Volume 4, Special Issue 1, 2011 Maxwell Building, School of the Built Environment, University of Salford, UK.*
- Missa, P. and Ahmed, V. (2010) Coping or Exiting? BMEs Response to Discrimination in Construction. In: *Proceedings of the Salford Postgraduate Research Conference* (SPARC), Salford, UK.
- Missa, P. and Ahmed, V. (2010) Ethnic Minority Migrants' Employment in Construction: A Multicultural Perspective. In: *Proceedings of the 26th Annual Conference of the Association of Researchers in Construction Management (ARCOM), Leeds, September, 2010.* eds. C. Egbu and E. Lou, Vol. 1, 603-612.
- Missa, P. and Ahmed, V. (2010) The Disproportional Representation of Black and Minority Ethnics' (BME) Employment in Construction: A Review of Literature. In: *Proceedings of the West African Built Environment Research (WABER) Conference, Accra, July 2010.*

Eds. S. Laryea, R. Leiringer and W. Hughes, The University of Reading, Reading. pp. 547-563

Work in Progress

Missa, P. and Ahmed, V. (forthcoming) Legitimising Sustainable Employment of BMEs in Construction, *International Journal of Law in the Built Environment (IJLBE)*.

Missa, P. and Ahmed, V. (forthcoming) Sustainable Employment and Inclusivity of BMEs in Construction, *The International Journal of Environmental, Cultural, Economic, and Social Sustainability* (IJECESS) 9/10.

Conference Proposals Accepted (Peer Reviewed)

Missa, P. and Ahmed, V. (2013) Sustainable Employment and Inclusivity of BMEs in Construction, the Ninth International Conference on Environmental, Cultural, Economic and Social Sustainability; Hiroshima, Japan. 23-25 January, 2013.