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An Aspirations-led Capabilities Approach to Women's Career Pathways in Quantity Surveying

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the requirements of the
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Abstract

This thesis explores the career experiences of female quantity surveyors (QSs) in the UK construction industry and examines how they can pursue their aspirations within the structure and the culture of its organisations. There is a lack of research about the careers of female QSs, although there is a lot that focuses on women in the construction industry generally. Research about women's careers in construction has focused on their underachievement and lack of career success. However, these are based on traditional career patterns with an expectation of upwards progression.

In using the Capabilities Approach (CA) of Amartya Sen, the research enables understanding of how women can pursue their aspirations and achieve their own definitions of career success. A capability set for female QSs was established, combinations of capabilities within the set enable pursuit of any stated aspiration. A mixed methods research methodology was adopted, comprising interviews with twenty-seven female QSs working for Network Rail, supplemented by a questionnaire survey of female QSs throughout the wider construction industry. Structural and cultural enablers and constraints were examined by means of interviews with fourteen representatives from a range of construction organisations.

The findings build on and contribute to existing knowledge about women in the construction industry. A key finding is the identification of three career pathways. However, female QSs' aspirations mean that their pathways are not clearly determined, and trajectories are not necessarily linear. For female QSs, career success is having the ability to choose the aspirations they pursue and to change and adapt as circumstances dictate.

The research reflects that organisations can either enable or constrain the pursuit of aspirations. Although there are a range of organisations that female QSs can work for, their size and structure are significant in career development and, while many organisations have comprehensive equality policies, their implementation by line managers varies and gender stereotyped assumptions about female QSs' careers remain.

This research also contributes to existing career theory, particularly why a 'one size fits all' mechanism of evaluating career trajectories and career success is unsatisfactory. It also establishes that aspirations and individual definitions of career success are instrumental in determining career pathways where previously only organisational factors have been considered.

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This thesis is dedicated to my mum and dad, who never got to see me finish it but who I know would have been so proud and have always been my personal cheerleaders.

Declaration of Authorship

I, Denise Carole Bowes, declare that all the material contained in this thesis is my own work, except where otherwise indicated.

Signed:

Name: Denise Carole Bowes

Dated: 28th April 2020

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List of Abbreviations

CA	Capability Approach
CICES	Chartered Institution of Civil Engineering Surveyors
CIOB	Chartered Institute of Building
CPD	Continuing Professional Development
HNC	Higher National Certificate
HND	Higher National Diploma
HR	Human Resources
ICE	Institution of Civil Engineers
NR	Network Rail
PQQ	Pre-qualification questionnaire
QAA	Quality Assurance Association
QS(s)	Quantity Surveyor(s)
RIBA	Royal Institute of British Architects
RICS	Royal Institution of Chartered Surveyors
STEM	Science, Technology, Engineering and Maths
TOC	Train Operating Company
WLB	Work-life balance

Preface

I was aware that my experience of working as a quantity surveying professional in the construction industry for 10 years, plus 20 years working in higher education, could influence both the line of questioning and interpretation of the responses. As a woman, a QS and an academic, I present multiple identities which relate to Drake and Heath's (2010: 20) caution that insider researchers "often have assumptions and ideas about what they expect to find out ... [which may] ... compromise the researcher's ability to critically engage with information". Certainly, the research was driven initially by my reaction to the pre-conceived ideas and assumptions about women's careers in the construction industry. According to the majority of research, my own path has the potential to be seen as lacking career success in accordance with extrinsic measurements; I have gained neither hierarchical status nor earned a particularly high salary. Yet, within the framework and definitions of the CA, I have acquired capabilities that have enabled me to achieve a range of valued outcomes in terms of work-life balance, having interesting and varied jobs, adaptability and autonomy with regard to career development. These outcomes were possible even through aspiration changing events such as redundancy and motherhood. I had assumed that all QSs' possessed these capabilities, but pilot interviews and initial reading soon made it apparent that not all careers in quantity surveying develop in the same way. Nevertheless, it is inevitable that some researcher influence will remain, regardless of how neutral or objective they strive to be and how much they try to avoid "obvious, conscious or systematic bias and to be as neutral as possible in the collection, interpretation and presentation of data" (Ritchie et al, 2014: 22).

CHAPTER ONE

Introduction

1.1 Overview

Careers in the construction industry are usually evaluated on the basis of traditional, hierarchical career pathways. Measures of success are generally seen as an individual's upwards trajectory with an increasing salary while gaining accoutrements such as a better car or other external visual signs. By these benchmarks, women and some men in construction are deemed to be failing (Dainty, Bagilhole and Neale, 2000; Francis, 2017). This thesis intends to show that there are other aspirations and ways of defining success. These include work/life balance (WLB), happiness and choice, which arguably reflect wider changes in society.

The construction industry has been slow to adapt to these wider societal changes, reflected in extant literature that focuses on the negative. These include women's underachievement and lack of success (Dainty, Bagilhole and Neale, 2000; Worrall, 2012; Francis, 2017) and the "barriers and challenges to success" (Menches and Abraham, 2007: 703), with little attempt to address solutions (Francis, 2017). Meanwhile, any proposed answers concentrate on 'fixing the women' and not 'fixing the culture' (Burke, 2014: 374) as the latter takes too long (Worrall, 2012).

This thesis shifts the argument and challenges existing theories of careers in the construction industry. It does so by focusing on female quantity surveyors (Qs), a hitherto under-researched cohort. The central argument is that established definitions of achievement and success are too narrow. Career pathways, especially for women, are influenced by a range of aspirations that research up to now has not really covered.

This is not to say that women in construction have not been researched. Studies have been done of women in other construction occupations, professions and trades. Examples include women in civil engineering (Watts, 2007; 2009); architecture (Caven, 1999; Sang, Dainty and Ison, 2014); construction professions generally (Dainty, 1998; Francis, 2017); and construction occupations (Clarke and Wall, 2014). Although female Qs are included within the generic term 'women in construction' and 'women in surveying (Greed, 1991), to date no research has solely focused on their career pathways.

Women often make different career decisions to men (Walby, 1990). Factors such as personal resources (qualifications and experience), family circumstances and the structural and cultural factors within the construction industry form part of that process. Structural factors include the hierarchical nature of organisations; horizontal segregation underpinned by patriarchal assumptions about gender roles (Walby, 1990; Cockburn, 1991); women's exclusion from positions of power (Watts, 2003); and explicit and implicit discriminatory practices. Cultural barriers include the requirement to work long hours and to travel (Loosemore and Waters, 2004) and bullying and sexual harassment (Agapiou, 2002; Chan, 2013). Broader societal factors such as ideas about male and female roles in family life also subtly influence career expectations and decisions, with the result that it is often women who 'choose' to prioritise family over work (Hakim, 2000; 2006) i.e. they have different aspirations.

Although it could be argued that these barriers affect men too, this is not the focus of the thesis. Nor does it compare the career experiences of female and male QSs, as gender comparisons regarding career development in the construction industry have previously been researched (e.g. Dainty, Bagilhole and Neale, 2000). Instead, it focuses solely on women's values to gain new insight and understanding of the influences on their career development. Doing so is a complex process requiring a broad-brush framework, one that allows multi-layered analysis of quantitative and qualitative data, which establishes a complete picture of female QSs' lived experiences.

The capability approach (CA) of Amartya Sen (1984; 1992; 1999; 2009) was chosen because it provides the framework required to conceptualise the gap between aspirations and experience. It does not judge valued outcomes as more or less important to one another and also acknowledges that opportunities are constrained by external elements. In this research these elements are conceptualised as organisational, personal, social and cultural conversion factors (Sen 1999; 2009).

1.2 Aim, objectives and research questions

The aim of the research is to understand how aspirations and organisations influence the career pathways of female QSs. It leads to the following objectives:

- To identify women's career pathways in quantity surveying;
- To determine how existing career theories relate to those pathways;

- To establish the aspirations and definitions of career success for female QSs as a means of understanding their career pathways;
- To determine how inequalities in the structure and culture of the UK construction industry impact female QSs' career development.

The main research question is: "What is the impact of aspirations and organisations on female QSs' career pathways?". This leads to the following subset of questions:

- What factors impacted the historical development of women's career pathways in construction?
- To what extent do existing career theories reflect women's career pathways in quantity surveying?
- What is the influence of female QSs' aspirations on their career pathways ?
- Using the framework of the CA, what is the capability set that enables female QSs to pursue their aspirations?
- What are the structural and cultural factors within the construction industry that influence female QSs' ability to acquire relevant capabilities?

1.3 Research design

This research takes a mixed methods approach. Its main source of data is the personal accounts of women within one construction organisation, Network Rail (NR). These semi-structured interviews are the best way of obtaining direct insight into the experience of pursuing a career as a female QS. To understand how these findings apply within the wider construction industry, further data were sourced via semi-structured interviews conducted with representatives from a range of construction organisations, and a questionnaire survey sent to female QSs sourced from the RICS database and through LinkedIn. This methodological approach is analysed in greater detail in Chapter Five.

1.3.1 Literature review

The lack of research regarding quantity surveying as a specific discipline and women's experiences within it is striking. Thompson's (1968) seminal work "Chartered Surveyors, The Growth of a Profession" details the origins of the RICS but quantity surveying has few mentions and there are almost no mentions of women in any surveying discipline. Specific quantity surveying literature is limited to the work of Male (1984; 1990), Nisbet (1989) and some quantity surveying textbooks (e.g. Ashworth, Hogg and Higgs, 2013; Seeley, 2014; Cartlidge, 2017). Although Greed's (1991) book "Surveying Sisters", explores women in surveying, again quantity surveying is barely mentioned. This is significant as surveying is a

multi-stranded occupation¹ and there is scant literature on its individual specialisms. This research attempts to address that deficit with regard to quantity surveying.

Existing research has made important contributions to career theory, but these were developed by men, based on male careers, and favour the pattern of an upward trajectory within a single organisation (Brown and Assoc., 2002:10). Careers in the construction industry have been analysed from this perspective of a traditional, hierarchical pathway. Such widespread application of this theory disadvantages women in the industry, many of whom tend not to follow this pathway.

Alternative career patterns are explored in this research and deconstructed to illustrate why the careers of female QSs often differ. Although there are alternative career theories, because of the way they are framed they still cannot adequately explain female QS's vocational choices, unlike the CA. The CA provides a mechanism through which to understand inequalities in the construction industry by examining the external factors in society that constrain individuals' opportunities (Sen, 1992; 1999).

1.3.2 Empirical research

The starting point of the empirical research was to identify female QSs' aspirations. Four main aspirations were identified:

- to have opportunities for hierarchical progression;
- to have educational opportunities;
- to have work-life balance;
- to be happy at work.

These aspirations, which also correlate with their definitions of career success, conceptualise the traditional, adapted traditional and transferred pathways female QSs follow. The CA was used as the basis of the questioning framework enabling data gathering and analysis which centred on establishing the factors that influence the extent to which female QSs can pursue their aspirations. Discussions of these influencing factors is a key focus of the research.

¹ The term occupation is used, rather than profession, as not all who identify as a QS are a member of a professional body (such as the RICS or CIOB).

Interviews with organisational respondents established the policies and practices of construction companies and how they enable and constrain women's careers in the industry. For the case-study, 27 semi-structured interviews were undertaken with women who identify as a quantity surveyor (QS) within NR². The respondents' backgrounds vary in terms of age, hierarchical position, marital and family status, qualifications, children and ethnicity and these have impacted career decisions. The interviews determined views on career success and progression and ascertained their individual aspirations. Factors that have enabled or constrained them in pursuing their valued outcomes were discussed at length. Interview findings were supplemented by the questionnaire survey data gathered from 290 female respondents who self-identified as Qs. Analyses of these data established which of the factors that influence female Qs' career pathways in NR also apply to women in the wider industry.

1.4 Added knowledge

The research adds to existing knowledge in six ways:

- It contributes to existing career theory - particularly why a 'one size fits all' mechanism of evaluating career trajectories and career success is unsatisfactory;
- It determines that aspirations and personal definitions of career success are instrumental in shaping career pathways, whereas previously these were only determined by organisations;
- It provides a new application for, and adds to, the CA by using it to establish and analyse a range of career pathways;
- It provides a comprehensive account of the careers of women currently working in quantity surveying, an area lacking in research;
- It determines female Qs' aspirations and definitions of career success without valuing these outcomes as more or less important to each other;
- It establishes female Qs' capability set. Combinations of capabilities in this set enable them to pursue any of their identified aspirations.

² All interviewees were given a pseudonym with other identifying factors removed.

1.5 Structure of the thesis

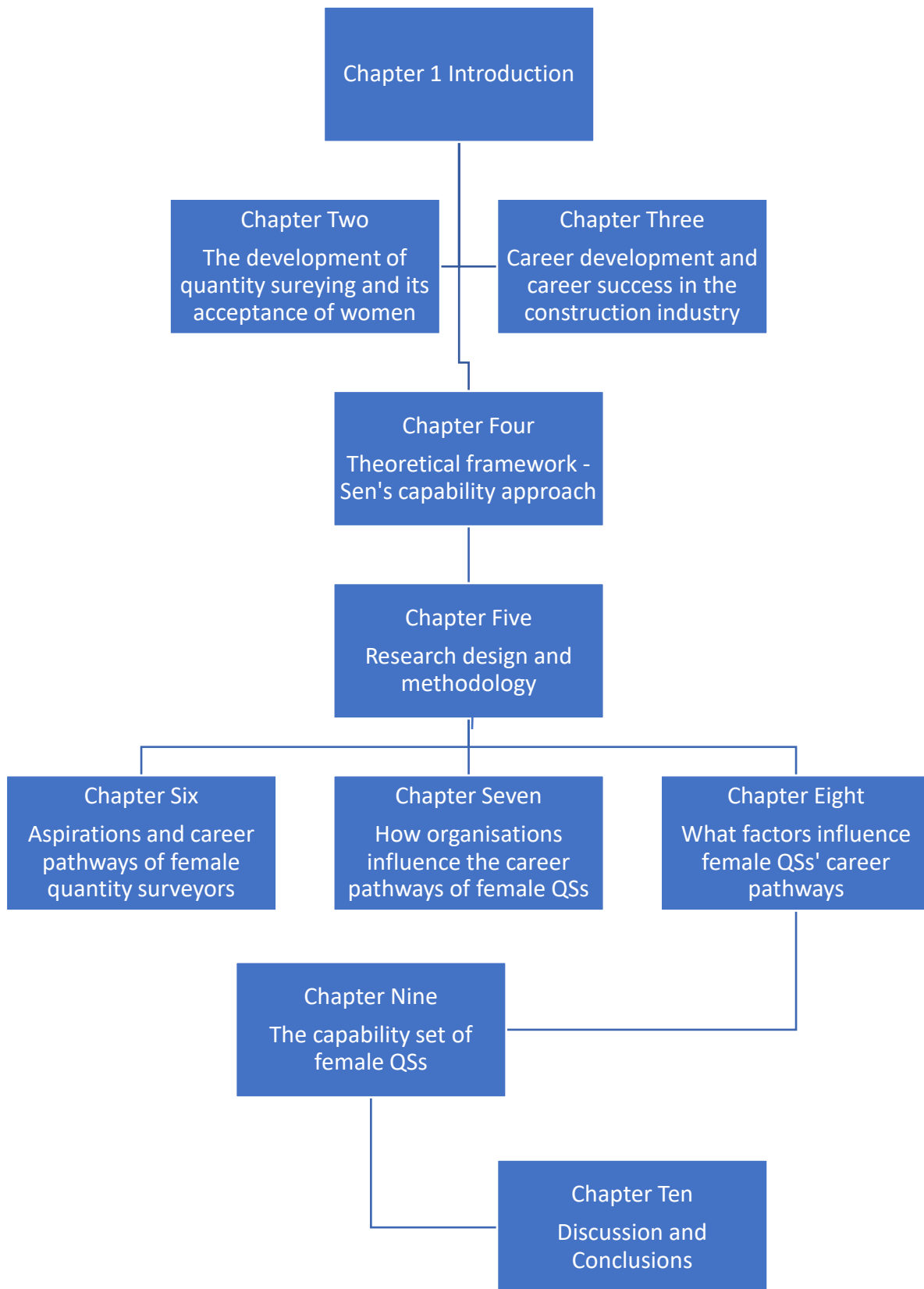


Figure 1: Structure of the thesis

Chapter Two describes the origins of quantity surveying, demonstrating how the profession sought to exclude women. It analyses the development of the RICS from a 'gentlemen's club', where career paths developed along traditional lines, into a multi-faceted occupation that has evolved in line with construction industry developments. Although occupational data are included, the chapter explains how not all QSs are members of a professional body. It also establishes that, while there are clear routes to becoming a chartered QS, not everybody chooses to follow this path but can still work in a quantity surveying role.

Chapter Three analyses career theories and their development from traditional, hierarchical careers carried out in one organisation into 'boundaryless' or 'protean' careers where intrinsic, subjective measures of success are considered as important as traditional, extrinsic and objective measures. The chapter also contextualises career theories in terms of women's careers in the construction industry, highlighting how literature has focused on barriers to women's career development.

Chapter Four establishes why the Capability Approach (CA) of Amartya Sen is an appropriate theoretical framework for the research. It analyses its core principles, its range of applications and its limitations to demonstrate its appropriateness as an alternative to the career theories outlined in Chapter Three. This chapter also determines a hypothetical capability set for female QSs based on an analysis of published lists. This is used as the basis of the empirical research.

Chapter Five outlines the research methods. A mixed-methods approach is used, combining qualitative and quantitative data. This provides the framework to enable understanding of the career experiences of a wide range of female QSs across the whole construction industry. The chapter justifies the use of the case study method and the development of the interview schedule as well as the method of composing the questionnaire survey. A brief biography of each case-study participant, and a summary of their demographic information, is given in Appendix A. Demographic information of questionnaire survey respondents is given in Appendix B.

The remaining chapters are those in which primary data are presented and analysed.

Chapter Six establishes three career pathways, identified from respondents' careers to date and based on their qualifications and experience. These are termed: traditional, adapted traditional and transferred pathways. The chapter then discusses how aspirations influence women's career trajectories analysing how they alter respondents' original career paths

using examples from the case-study respondents. It also determines that those respondents aspire to have the freedom to change path again should they wish to.

Chapter Seven analyses interview data from organisational representatives to determine how the structures of the industry impact women's acquisition of the full range of capabilities. It examines their policies, procedures, structure and culture and establishes that the most influential factors in this regard are related to the size of the organisation for whom QSs work.

Chapter Eight analyses interview data from the case-study respondents relating to organisational, personal, social and cultural factors influencing female QS's career development. The data establish the extent to which female QSs can pursue their aspirations identifying how line managers and stereotypical gendered assumptions are major influences.

Chapter Nine outlines the final set of eleven capabilities, combinations of which enable female QSs to pursue any or all of their aspirations, with analysis of questionnaire survey data used to identify relationships between the ability to pursue a career path and respondents' demographic data.

Chapter Ten discusses the key findings of the research. It identifies female QSs career pathways and how these are impacted both by female QSs' aspirations, their resources and the organisations for whom they work. The chapter also discusses the contributions to knowledge made by the research as well as its limitations and recommends how the research could be extended.

CHAPTER TWO

The Development of Quantity Surveying and Its Acceptance of Women

2.1 Introduction

Where do women fit in to the history of quantity surveying and what is their position in the occupation now? The history of surveying is largely contained in Thompson's (1968) seminal work "Chartered Surveyors, The Growth of a Profession". Although he outlines how surveying grew out of the 'measure and value' role of architects, arguably the most traditional of quantity surveying roles, he barely mentions QSs. Specific quantity surveying literature is limited to the work of Male (1984; 1990) and Nisbet (1989), with the latter being a personal account of his own experiences.

Other brief histories appear in quantity surveying textbooks (e.g. Ashworth, Hogg and Higgs, 2013; Seeley, 2014). However, most accounts examining the growth of surveying and quantity surveying scarcely allude to women's specific experiences and they lack depth. The major source is Greed's (1991) "Surveying Sisters". Her research explores the structures and subcultures of the profession and how they impact women's career development. Even so, although Greed's work has informed other studies of women in the construction industry (e.g. Dainty, 1998; Caven, 1999; Watts, 2003; Francis, 2017), it barely mentions quantity surveyors. Moreover, although these histories examine the development of surveying from a single function into a range of disciplines, most are now more than 30 years old. There is only one more recent publication. North (2010) has updated the development of the Royal Institution of Chartered Surveyors (RICS) but this is very brief and, again, quantity surveying and women are barely mentioned. The scope of this chapter, therefore, is first to revisit those histories to establish how quantity surveying developed as a distinct occupation and secondly to place women within that history.

From its beginnings as a kind of 'gentlemen's club' surveying, like other professional occupations, has gone to some lengths to exclude women and prevent them from developing a career within it. The chapter analyses how this exclusion has occurred by drawing on the scant literature detailing the experiences of women in surveying generally, and, due to the lack of research of this nature, also of those in other professions. It then demonstrates how changes in law and educational policies, and improvements in the scope of employment opportunities, have improved women's ability to pursue a career in the

occupation. The chapter concludes by analysing the current employment opportunities for women.

2.2 Surveying and quantity surveying: The Gentlemen's club

Aside from surveying, women in construction have been much researched. Examples include women in architecture (e.g. Caven, 1999; Sang, Dainty and Ison, 2014); civil engineering (e.g. Watts, 2007; 2012); construction trades (e.g. Clarke et al, 2015); as well as women in construction generally, which includes QSs (e.g. Dainty, Bagilhole and Neale, 2000; Greed, 2000; 2006; Worrall, 2012; Francis, 2017). Yet female surveyors represent the largest group of female professionals in construction (see Table One, section 2.4) with female QSs representing 9% of these (Table Two, section 2.4). Therefore, it is difficult to understand why they are so under-researched.

Surveying and other construction professions or, indeed, any male-dominated profession all operated a similar process in ensuring that women were excluded from their organisations. This section analyses how the surveying profession began and how the systems of closure operated from the start to exclude those considered the 'wrong sort' of people (Greed, 1991).

North (2010: 5) describes surveying as: "the un-named profession". This is due to the diverse range of functions included under the umbrella term 'surveying' which have: "little in common save that they all had property or land for their subject matter" (North, 2010:5). Not all of these functions operate within the construction industry, a clear example being the discipline of personal property/arts and antiquities. The range of different surveying functions has grown over time, but quantity surveying is one of its original disciplines. That it is distinct from other surveying disciplines was acknowledged by the RICS and the Monopolies and Mergers Commission, both of which described it as "virtually a separate profession from the remaining surveying professions" (Male, 1984:7).

The origins of surveying and quantity surveying are well documented within the works of Thompson (1968) and Nisbet (1989). These are supplemented by Male (1984), although he relies on Thompson to chart surveying's history. Thompson (1968) focuses on the origins and development of the RICS and takes little account of surveying activity outside of this institution. Although Nisbet's (1989) book is a personal account of his own experience in private practice it provides great insight into quantity surveying's underlying culture during its formative years. These three accounts, plus the later work by North (2010), undertaken on

behalf of the RICS, demonstrate the origins of surveying which are briefly examined in the following section.

After the Great Fire of London in 1666, the subsequent increased volume of building work led architects to subcontract their role of measuring and valuing completed work for billing purposes. The occupation of surveying developed from there. As such, quantity surveying is often said to be the first of all the surveying specialisms (Thompson, 1968; Male, 1990). A dispute between architects and surveyors in the early part of the 19th century led to surveying becoming a distinct activity, and then its own separate profession (Thompson, 1968; North, 2010). At that time, surveyors were still considered as little more than specialist tradesmen (Thompson, 1968), but they exploited the increase in industrialisation, the growth of cities and the advent of the railways to extend their services (Male, 1984). Recognising that there was a need for specialisation in building work as construction became more commercial, QSs' services extended into pre-contract estimating, producing bills of quantities for tendering purposes, as well as their original post-contract measuring service (Ashworth, Hogg and Higgs, 2013).

Alongside developments in the services offered, institutional developments were also taking place. The sequence of events beginning with the formation of the Surveyor's Club in 1792, the founding of the Surveyors Institution in 1868 (North, 2010) and the granting of a Royal Charter in 1881 all led to the Surveyors Institution's eventual recognition as a profession (Thompson, 1968; RICS, 2016). Thompson's (1968: 64) description of these developments compounds the gentleman's club metaphor: "there was a stirring of awareness among the practitioners of newer skills or services, that they constituted distinct new professions, that they were fee-earning consultants, ... gentlemen not mechanics, [leading to] ... men with similar occupations to get together to talk shop and eat dinners".

The focus of research on the origins of the RICS means there is no published history regarding how QSs began to develop careers within building contractors' organisations. One might be forgiven for thinking that QSs only worked in private practices until the 20th century, but there is evidence to suggest otherwise. It might be supposed, although there are no formal records, that master builders who emerged at the turn of the 18th century would have employed QSs. The histories of existing UK contractors demonstrate their evolution. For example, Interserve began as a dredging company on the Thames in 1884, evolving into a civil-engineering contractor before diversifying into construction (Interserve, 2019). Similarly, Laing O'Rourke can trace their beginnings, as family building firm John Laing, back to 1848 (Laing O'Rourke, 2019). So, although it is unclear exactly when

contractors began to employ QSs, it is likely that some form of internal accounting role would have been necessary to ensure that projects were profitable (Male, 1984).

Greed (1991) draws on Thompson's description of the gentlemen's club image of surveying to illustrate how the profession maintained its closure to women. Surveying is not unique in this. Both Caven (1999) and Watts (2003) have commented that the origins of architecture and civil engineering form the basis of the 'old boys' club within their respective professions. They illustrate how this culture continues to exclude women. For example, social exclusion occurred by means of fathers passing skills onto sons, an act that immediately precludes women's involvement, and there was also division by class and status (Greed, 1991).

Although, ultimately, education (together with legislation) led to women's inclusion into the occupation, lack of education continued to exclude women until the beginning of the 20th century. A significant impact on women's entry into the professions was their admission into British universities in the 1870s (Witz, 1992), but there were earlier breakthroughs. One of the most notable was that of Elizabeth Garrett Anderson's entry onto the medical register in 1865, and subsequent membership of the British Medical Association in 1874 (Witz, 1992). Witz's (1992) detailed account of the medical profession's resistance to women following Garrett Anderson's admission, and the direct action taken to ensure women could not become doctors, serves to demonstrate both how professions attempted to remain closed to women and the strategies used by women to gain admission.

This process of closure occurred within all professions, not just medicine and surveying and their gendered nature is a much-researched issue (e.g. Witz, 1990; 1992; Greed, 1991; 2000). By retaining their monopoly over specialist knowledge, male-dominated professions have been able to attain an elevated class and status in society (Cockburn, 1983; Walby, 1990; Greed, 1991). Allowing in women was believed to threaten a profession's homogeneity and lower its status due to the belief that to do so would 'demasculinise' them (Walby, 1990). A further issue for women in surveying (and other construction occupations) was that it involved working with buildings and other structures, in industry and in railways; places where women were deemed too weak and small to be effective (Greed, 1991). Nevertheless, it was deemed acceptable to employ small boys to fill the shortage of surveyors that industrial expansion created (Greed, 1991). Crompton (1987) suggests that capitalist theories create the hierarchical structure of occupations, but the closure theory dictates who fills those positions and gender and ethnicity are the most commonly cited as reasons why entry is limited (Witz, 1990; 1992; MacDonald, 1995; Friedson, 2001). Within the RICS, class was also a significant factor (Greed, 1991). Women were kept out by

denying them access to opportunities to gain relevant experience or qualifications. When these issues were resolved, largely through legislation, closure occurred by introducing work patterns that 'undesired' groups could not fulfil (MacDonald, 1995).

Educational reforms have played a large part in women's ability to become QSs. The granting of the RICS' Royal Charter of 1881 required that, to become a surveyor, examinations had to be undertaken (Greed, 1991). Although these assured the public that a surveyor was someone of competence and skill (Thompson, 1968), they also expanded the closure of the occupation as some men, as well as women, lacked access to relevant education (Greed, 1991). However, it was the introduction of examinations that informed women that it was possible for them to become a surveyor. City of London College in 1899 and, later, Birkbeck college, introduced surveying courses and these led to a few women asking to take the membership examinations of the RICS (Thompson, 1968). Greed (1991: 59) noted that it was "with relief" that the Institution insisted on the additional requirement of prospective surveyors gaining practical work experience for a specified period as "it was impossible for women to find such employment".

A breakthrough for women came with the Sex Disqualification Removal Act (1919) and, in 1922 the first woman, Irene Barclay, qualified as a chartered surveyor (Thompson, 1968; Nisbet, 1989; Greed, 1991; North, 2010).

2.3 Establishing women in surveying and quantity surveying

2.3.1 The introduction of women as chartered surveyors

The fact that women have been part of the profession for fewer than 100 years (Greed, 1991) may be why their role in surveying is given only brief attention in most histories. Although a breakthrough for female surveyors, Irene Barclay's admission into the RICS was barely addressed by that institution, nor was the subsequent qualification of Evelyn Perry in 1923³. The only indication that women had gained entry to the RICS was a 'Miss' entered beside their names on the list of members within the annual reports of the Institution.

Barclay and Perry were able to achieve chartered status by attending an evening course in surveying, aided by the support of "sympathetic men surveyors within the institution" (Greed, 1991, p.61). They gained practical experience through employment on working-class

³ Although neither was a QS.

housing estates for the Crown Estates Office. This is significant, according to Greed (1991), as housing was deemed an 'acceptable' field for women with the added 'benefit' to men that it diverted them away from construction. That Barclay and Parry's admission was not recognised as ground-breaking within the profession meant that only about twenty women had qualified as surveyors by the end of the 1920s (Greed, 1991).

The first female QS, Margaret Mitchell, qualified in 1939 but was still one of only a few women listed as chartered surveyors in the RICS yearbook that year (Greed, 1991) out of a total membership of around 7,000 (Thompson, 1968). Even the Second World War, where many women were employed in traditional male roles, did not help their expansion into quantity surveying as it was a reserved occupation (Nisbet, 1989).

2.3.2 The benefit of post-war education reforms to female surveyors

Women's expansion in surveying was aided by several educational reforms that occurred after World War Two. Appendix C summarises the 14 reports or initiatives introduced between 1948 and 1992, each of which changed education for surveyors. The most significant of these for women were the Watson Report of 1950, which encouraged full-time education as a route of entry; The Wells Committee Report on the Educational Policy of the RICS in 1960, which was conducted with a view to understanding how more students could be attracted into surveying which, for the first time, acknowledged that women formed part of the profession (RICS, 2016); and the Eve Report, in 1960, which concluded that all future professional surveyors should hold a degree. The recommendations of these reports, that undertaking a full-time degree should be the prevailing route into the profession, aided women's entry by shifting requirements from work-based experience. For women, obtaining a degree was easier than obtaining structured training (Greed, 1991).

As education reforms, and even the RICS itself, strove to improve the numbers of women in the profession, the subculture within employing institutions strove to keep them out. Indeed, Thompson (1968: 255) observed a discussion among surveyors regarding whether "the presence of ladies was consonant with the dignity of professional gatherings and social events". The drive to attract women was effective as Nisbet (1989) records there was an increase of women in his workplace in the 1960s. Although this could also be attributed to the boom in housing construction (Greed, 1991).

Several events between 1970 and 1990 demonstrate that female surveyors were becoming more widely accepted. One was the seemingly unimportant event of the installation of separate female toilets in the RICS headquarters in London in 1973. This was described by

Greed (1991: 79) as a “historic watershed for women” the importance of which was impressed on her by “many women”. Another seemingly trivial moment occurred in the mid-1970s when the President of the RICS questioned why there were not more women in the profession, which was the first acknowledgement by an RICS president that there were female surveyors. In 1980, women’s recognition was strengthened with the establishment of the Women Surveyors Association (originally the Lioness club). These events, combined with an increased number of organised professional and social events that improved networking for women, resulted in a rise in the numbers of female chartered surveyors. Between 1980 and 1989 the number of female chartered surveyors increased from 1% to 3% of membership (RICS, 2016).

2.3.3 Women’s post-war employment as quantity surveyors

From the end of the Second World War until 1990, it can be assumed that most female QSs worked for private practices as the RICS did not allow contractors’ surveyors to become chartered. For women this is significant because education and qualification remained the most common route of entry for them as they found it more difficult to secure employment in contractors’ organisations. Greed (1991) estimated that, at the end of the 1970s, only 2% of female QSs worked for contractors, compared with 7% of male QSs (Male, 1983: 4). Further, the RICS was reluctant to encourage any QS to work for anything other than private practice because, if those who worked for public bodies or contractors became chartered: “such approval would encourage their growth ... and it was feared that there would be less work available for private firms” (Nisbet, 1989: 39).

The amalgamation of the Institute of Quantity Surveyors (IQS) with the RICS in 1983 finally meant that contractor’s QSs could become chartered members of the RICS (Nisbet, 1989). Around the same time, the role of general contracting, where contractors undertook most of the building work themselves, declined in favour of the management of subcontractors employed to carry out the work. This changed the role of contractor’s QSs from one of mainly internal accounting, adding the procurement and management of subcontractors to their job function. That chartered surveyors could work for a wider range of organisations was a significant development for female QSs, most of whom were likely to be chartered (Watts, 2003) as it broadened their employment opportunities. Particularly as being chartered is considered by women as a “differentiating factor between those who have made it and those still yet to do so” (Watts, 2003; 146).

The expansion of potential employing organisation types gave women greater choices, not only in the type of work they undertook but in opportunities to advance. Greed (1991)

observed that larger practices with a corporate structure gave women better opportunities for promotion than smaller practices. Whereas in small practices there remained a reliance on social contacts, larger organisations had a more rigid structure with formal criteria. Turner (1979) had already observed this, although not in connection with women. He said that large firms with more complex structures could offer upwards progression, potentially to partner level but smaller practices, particularly those who were one or two-man firms, were unlikely to expand sufficiently for any newcomers to gain promotion. Nevertheless, Hakim (1996) observed that in other professions, women were still more likely to occupy lower ranking positions regardless of an organisation's size. Whether this is by choice or as a result of exclusionary practices, or a mixture of both, is a theme of this research.

The fast-changing pace of the construction industry in the second half of the 20th century, particularly advances in technology, caused concern that the QS would become obsolete. This changed the focus of the RICS from trying to attract women into the profession to ensuring its future. A number of reports were produced to address the issue (Ashworth, Hogg and Higgs, 2013), which were nearly all entitled 'The Future Role of the Quantity Surveyor'. These reports addressed the rapid changes in the industry and sought to find areas of expansion for quantity surveying services (Nisbet, 1989; Ashworth, Hogg and Higgs, 2013). The services offered by private practice Qs expanded (Nisbet, 1989) in addressing client needs for greater cost certainty and cost control. Services such as cost planning, whole life costing, value management and risk analysis and management were introduced (Ashworth, Hogg and Higgs, 2013:). These advisory functions not only put an end to the argument that quantity surveying was a technical role, rather than a profession (Male, 1984; 1990; Nisbet, 1989; Ashworth, Hogg and Higgs, 2013), they also negated the argument that construction and surveying is "too technological" for women (Greed, 1991).

2.4 1990s onwards: bringing women in quantity surveying up to date

Histories of quantity surveying largely finish at the end of the 20th century save for a brief update of the history of the RICS by North (2010) and those included in student textbooks (e.g. Ashworth, Hogg and Higgs, 2013; Cartlidge, 2017). However, these largely draw from the works of Thompson (1968) and there is also no specific mention of women's role in quantity surveying in these accounts.

2.4.1 How many female quantity surveyors are there?

Women in construction were mentioned in Sir Michael Latham’s major report, “Constructing the Team” (Latham, 1994). Although women are not a major focus of the report, section 7.24 makes the following observation: “Women are seriously underrepresented in the industry. There is no obvious reason why this should be so at a professional consultant level” (Latham, 1994: 71). The report quoted the Construction Industry Council (CIC) who said that the industry’s aim of recruiting ‘good quality people’ is still largely ignoring “half of the population” (Latham, 1994: 71). The CIC further highlighted that only 5.2% of the total construction professionals across 14 disciplines were women, (12,406 women out of a total collective membership of 239,700) (Latham, 1994: 71).

Although the Latham report helped to increase focus on attracting women into science, technology, engineering and maths (STEM) industries (e.g. Khan and Ginter, 2018), the proportion of women in construction has only increased slightly in the intervening 25 years. Table One, below, demonstrates:

Professional body	Total membership	Female membership	Percentage female
Royal Institution of Chartered Surveyors	77,820	11,673	15%
Institute of Civil Engineers	78,641	3,678	4.68%
Chartered Institute of Building	46,500	1,465	3.15%
Institution of Structural Engineers	20,173	950	4.71%
Royal Institute of British Architects	28,710	6,948	24.2%
Chartered Institution of Civil Engineering Surveyors	2,083	Not Known	Not Known

Table 1: Membership of construction professional bodies (as at June 2019) (Source: figures supplied by membership departments of each institute)

Table One gives the total membership of representative professional bodies of the construction industry and the proportion of women therein. It demonstrates that there is now an average of 9.8% of women within five professional bodies, an increase of approximately 4.6%. Although Table One only summarises membership of five professional bodies, rather than the fourteen disciplines indicated in the CIC report, it is a useful indicator of the current distribution of women within the construction professions. The table also shows that, although architecture has the largest percentage of women, surveying has the largest number of women.

The figures for surveying in the above table are somewhat misleading, however, as not all members of the RICS work in the construction industry. Although, for example, quantity surveying, building surveying, land surveying and general practice surveying are part of the construction industry, others such as hydrographic surveying and valuation of antiquities are not (RICS, 2019). Table Two summarises the number of RICS members and the proportion who are women for each surveying discipline:

Professional groups	Total members	% female
Arts and antiquities	618	14
Building control	1,010	7
Building surveying	14,533	7
Commercial property	22,021	20
Dispute resolution	475	7
Environment	576	15
Facilities management	395	17
Geomatics	641	11
Machinery and business assets	108	4
Minerals and waste management	352	5
Planning and development	2,380	19
Project management	1,368	17
Quantity surveying and construction	13,976	9
Residential property	4,414	18
Rural	2,561	32
Valuation	5,358	20
Undefined	5,141	14
Total	77,820	15%

Table 2: Membership of RICS by discipline (RICS, 2019)

Table Two demonstrates that 15% of all chartered surveyors are female and that the 9% of Qs who are female is below the average for all surveyors. This helps to demonstrate how difficult it is to estimate the number of female Qs in the construction industry, particularly given the high number who are 'undefined'. Further, the figures in Table Two are provided by the RICS and so only include chartered surveyors, but many who work as a QS are not chartered. The empirical research establishes that some women who identify as a QS are members of other professional bodies, for example the Chartered Institute of Building (CIOB) and the Chartered Institute of Civil Engineering Surveyors (CICES), some are dual, or even

triple, chartered and others either do not have professional status or may be working towards it. It is, therefore, not possible to use professional bodies' data to establish the number of female QSs in the UK.

The 2011 census is a further source from which to obtain data. It shows the figures for those who chose their occupations as quantity surveying, construction management or simply as chartered surveyors, some of whom may be QSs. These figures are summarised in Table Three:

Occupation	Total	Total female
Quantity Surveyor	40,786	3,821 (9.4%)
Construction managers (or related professionals)	63, 885	4,427 (6.9%)
Chartered surveyors	89,623	9,533 (10.6%)

Table 3: Numbers of people in surveying related occupations from the 2011 census (ONS, 2011)

Table Three determines that 9.4% of those who identified as QSs are female, a similar proportion to that obtained from the RICS. Although in one way it suggests that the RICS figure is accurate, in another it casts doubt on it by demonstrating the difficulty of obtaining accurate figures.

2.4.2 Organisations female QSs work for

Historical employment opportunities for QSs were detailed in sections 2.2 and 2.3.3. These illustrate that QSs originally worked in private practices, later expanding into contractor's organisations. Only a minority worked for other organisation types, such as local government, nationalised industries or private clients. Since 1990, QSs have expanded into a wide range of organisations. These include private house builders, insurance companies, property developers, subcontractors, education, transport and infrastructure, and financial and legal companies (RICS, 2019). Although the proportion working in private practice has reduced, there is a commensurate rise in those who work in other organisations (Ashworth, Hogg and Higgs, 2013). RICS figures demonstrate that the number of QSs in private practice reduced by 6% between 1981 and 2001 and the volume of contractors' QSs increased by 9% in the same period (Ashworth, Hogg and Higgs, 2013). However, this might be explained by the fact that RICS figures only include those who are chartered and as previously shown, these were not able to work for other organisations prior to the 1980s. The increase in contractors' QSs might also be explained by an industry shift whereby they have become more management orientated and potentially more attractive to qualified

women (Ashworth, Hogg and Higgs, 2013). Changes in the procurement process have also increased contractors' roles as project managers (Cartlidge, 2017).

Further organisational developments over the last 30 years has been the gradual assimilation of many small and medium-sized private practices by large practices. Cartlidge (2017) asserts that the growth of multi-disciplinary practices offering consultancy services has eliminated all but a few smaller practices. Most have been bought up by large organisations as a means of extending the services they offer. This take-over is also partially due to the global financial crash in 2008 and subsequent recession. The impact of this shift in organisation size on female QSs' careers is analysed in Chapters Six to Nine.

Although the government, the RICS and the industry generally have continued to publish reports and papers to address the issues faced by the construction industry, there remains a lack of attention to issues of equality and diversity. An amount of 'lip service' is paid to the issue in some papers, such as "Construction 2025" (H.M. Government, 2013). But it merely recommends that the industry needs to be more diverse, without any suggestions of how this could be achieved. Notwithstanding the introduction of gender pay gap reporting and the flexible working directive, and given that there have been papers, statutes and reports addressing issues such as sustainability and health and safety, for example, perhaps the distinct issue of diversity in the construction industry should be given greater attention.

2.4.3 Employment and educational changes impacting female QSs

QSs' job functions have changed in the last 30 years, largely due to technological changes and advancements. The widespread adoption of technology such as Computer Aided Taking Off (CATO) and, to a lesser extent, Building Information Modelling (BIM), have enabled QSs to diversify in line with changing client demands. Although bills of quantities are still produced, clients are demanding more advisory services such as cost planning and other forms of early cost advice, value engineering, management of the commercial interface and assessment of final accounts and claims (Ashworth, Hogg and Higgs, 2013). From the purely measure and value function that typified quantity surveying activity prior to 1980, QSs now undertake a range of 14 different competencies as defined by the RICS (RICS, 2015).

Education of QSs has also changed to keep pace with these advances. Technical subjects, such as measurement and construction technology became less significant in favour of advisory functions, such as cost planning, contract administration and data communication in line with increased client demands (Seeley, 2014). These changes ensure that the

qualification process is broad enough for QSs to be able to deliver all services across the full range of employing organisations.

Women's position in the RICS was consolidated in 2014 when Louise Brooke-Smith became its Global President, the first woman to be appointed to the role (RICS, 2016). For female QSs, a watershed moment came two years later when Amanda Clack became the first female QS to be President of the RICS (RICS, 2018), with the themes of her presidency including the promotion of diversity and inclusion (RICS, 2018).

2.5 Conclusion

This chapter demonstrates how quantity surveying has developed from a 'gentlemen's club' whose members worked solely in private practices into an occupation that has a number of different job functions within a range of organisations. Both the RICS and the construction industry have been resistant to structural change (Nisbet, 1989), including the accommodation of women (Thompson, 1968). Exclusion was achieved because the men who comprised the profession established the rules of entry. Women's lack of social contacts, access to education and experience ensured that they could not join the profession as it was believed that allowing them to join would demasculinise surveying and reduce its value in society. This exclusion was eventually overcome by a combination of educational reforms, legislation and the help of sympathetic men (Greed, 1991). Once women did enter the profession, they joined in increasing numbers. However, the proportion of women becoming QSs has remained static in recent years despite the expanding employment opportunities available. Nevertheless, it is clear that legislation and education have aided female QSs' careers a great deal.

Given that section 2.4 establishes that female QSs are one of the largest female professional groups in the construction industry, a key question is why is there so little research about them? Indeed, there is very little about quantity surveying generally and yet it is very distinct from other surveying occupations. This research is intended to bridge that gap. The next chapter looks at the various theories regarding the experiences of women in construction and details the barriers that they continue to face within the industry. It also examines why existing career theories are not appropriate for female QSs.

CHAPTER THREE

Career development and career success in the construction industry

3.1 Introduction

This chapter analyses career theories and how they relate to the career pathways of female QSs. It argues that, traditionally, individuals have developed careers within organisations, having recognised that the latter have the potential to aid career development (Baruch, 2004). At the same time, institutions seek members who have the relevant qualities it needs. In this way, the development of individuals and organisations converge, and both evolve over time.

How can this and other existing career theories be used to further our understanding of female quantity surveyors' career pathways and their views of career success? Early sociological career theories conceptualised career development as a process of hierarchical and linear progress, often bound to a single organisation (Cuzzocrea and Lyon, 2011). While this approach conceptualises how careers in quantity surveying developed - and is the basis of research regarding careers in construction - it does not encapsulate the experiences of most women or minority groups. As Chapter Two detailed, historically QSs' careers have been governed by the organisations for which they work - traditionally private practices - as well as the professional institution of the RICS. Although chartered QSs have been able to work in a wider range of organisations since the middle of the Twentieth Century, careers in construction continue to be evaluated using traditional measures of success.

The idea that careers must be traditional and hierarchical, where metaphors such as ladders are used, has been challenged since other career theories and metaphors have emerged. For example, 'boundaryless' (Arthur and Rousseau, 1996), 'protean' (Hall, 1976) and 'customised' (Dickman and Baruch, 2011) careers acknowledge a wide range of personal as well as work-related motivations. These alternatives to the traditional career allow scope for acknowledging women's experience in customising their careers around domestic responsibilities and that they may have aspirations other than hierarchal progression. Nevertheless, the significance of 'intrinsic' measures of career success for women are overshadowed by the fact that career success continues to be defined by 'extrinsic' factors.

Research strives to understand why women do not enter the construction industry, why many of those who do subsequently leave, and women's argued lack of career success. Women's careers are said to be impeded by a combination of structural, organisational and cultural factors, as well as their own subjective perceptions and strategies. This research suggests that career success should account for the wide variety of 'success' stories that emerge in this study; female quantity surveyors' careers need to be seen as an outcome of individual, organisational and sector structural opportunities and constraints.

The chapter begins by defining what is meant by a 'career' in sociological terms and outlines common theories of career development, both traditional and alternate. It then analyses research regarding women's careers in the construction industry to demonstrate why these career theories do not fully conceptualise female QSs' career motivations and why a new approach is proposed.

3.2 Definitions of career and career success

Despite continuing careers research, the definition of what is meant by a 'career' remains debated. It is "an everyday word used by a variety of people, in a variety of contexts, from a variety of perspectives, for a variety of purposes, and with various levels of specificity or generality, focus or breadth" (Collin, 2007: 558), but is often used synonymously with 'job', 'occupation' or 'vocation' (Patton and McMahon, 2014). However, whereas many people have the same job, occupation or vocation, a career is unique, evolving over a person's lifetime through a sequence of job roles (Arthur, Hall and Lawrence, 1989; Baruch 2004; Gunz and Peiperl, 2007). Psychological theories of career development have a more holistic view, emphasising the relevance of non-work within career development (e.g. Super, 1976; Arnold and Jackson, 1997). These theories account for the importance of life outside of work, both in terms of family responsibilities and leisure activities. Although sociological career theorists also assert that careers unfold in stages relating to individuals' changing roles, their attention is more focused on labour market and organisational dimensions of careers. This is discussed further in the following section.

In this research, the broadly accepted definition of career is: "the evolving sequence of a person's work experiences over time" (Arthur, Hall and Lawrence, 1989: 8); variations of this definition have been widely adopted in sociological careers research, for example Arthur and Rousseau (1996), Gunz and Peiperl (2007) and Baruch and Vardi (2015).

In research regarding women's careers in construction, career success is predominantly synonymous with advancement, although job satisfaction is said to have both subjective (intrinsic) and objective (extrinsic) components (Fernando, Amaratunga and Haigh, 2014). While researchers acknowledge that intrinsic measures exist, they continue to use the metaphor of success as a ladder to climb (Baruch, 2006). Francis (2017: 254) frequently interchanges 'advancement' and 'success', describing both as "vertical upward movement within an organization's hierarchical ranks".

Career satisfaction is a psychological concept but is "a valid measure of intrinsic success" (Moore, 2006: 226). It can be broken down into individual factors, including having flexibility, or variety in one's work. Van Emmerik (2004) said that, while job satisfaction is based on having interesting and challenging work, using knowledge and experience and having autonomy, career satisfaction includes more generalised factors such as an individual's employment conditions, their well-being and their opportunity for professional training.

Baruch (2006) is unusual amongst careers researchers in that he considers the effect of individual aspirations as a determining factor in career success which is an overriding feature of this research into female QSs' career pathways.

3.3 Theories of career development

A common conclusion regarding research on women in the construction industry is that they underachieve (Francis, 2017) and lack career success (Fernando, Amaratunga and Haigh, 2014). These conclusions emerge as a result of career evaluation based on traditional pathways, with measures of success that are encapsulated by upwards progression and increases in salary. It is not surprising that traditional career theories dominate this kind of research. Early careers research was largely carried out by "white males of European descent" (Brown and Assoc., 2002:10) with white male respondents; therefore, the emergent theories have favoured career patterns usually taken by white men. These assume that progress or advancement is upwards and that job changes were made with the purpose of increasing responsibility and status. Research is centred around the influence on careers of organisations and individuals' positions in them.

The careers of women in construction are also measured against the above criteria with added focus on the barriers they face in their career development and how to improve their advancement (Worrall, 2012). Little attention has been given to alternative pathways and other measures of success. Although some mention has been made of intrinsic career

success factors (e.g. Dainty, Bagilhole, Neale, 2000; Francis, 2017), researchers continue to use extrinsic factors to evaluate careers. However, while alternative career theories acknowledge intrinsic success, they do not fully conceptualise the careers of female Qs nor do they provide a framework for career development (Inkson, 2006). Further, while these concepts may describe career pathways, they neither explain them nor enable examination of how aspirations can be pursued. For example, in their book 'Understanding Careers', Inkson, Dries and Arnold (2015) use the concept of metaphors to examine ways in which careers can be viewed, such as in terms of inheritances, cycles, actions, fit, journeys, roles, relationships, resources and stories. Through these they present a range of career concepts. However, they state that their aim is to "provide a framework of ideas to assist you to understand how careers work" (Inkson, Dries and Arnold, 2015: 23), hence their use of metaphors. This is a common function of careers research. While these theories are a useful lens through which to view how careers evolve, identifying patterns and providing some context, they nevertheless fail to provide a mechanism to explain how the various career pathways of female Qs can be examined and understood.

Career theories should account for the "interplay that takes place between the three major 'participants' – an individual, work institutions and the whole society" (Dickmann and Baruch, 2011: 51). Work institutions mainly comprise employing organisations but, for some, it also includes professional bodies and trade unions. Inclusion of 'the whole society' is to acknowledge that family and other non-work commitments impact a person's career decisions. This acknowledgement is one that has long been a consideration of many women (Brewis, 2011). Making connections between the three categories - individuals, work institutions and societal factors - aids understanding as to how the other two impact on individuals (Gunz and Peiperl, 2007).

Perhaps a clearer indication of the pressures on an individual is represented by Ball et al's (2000: 147) "arenas of action". Working in an educational context, Ball et al (2000) found that young people change emphasis between family, home and domesticity; work, education and training; and leisure and social life. This is illustrated in the simple diagram below (Figure Two), and helps to emphasise that work is only one aspect of an individual's life:

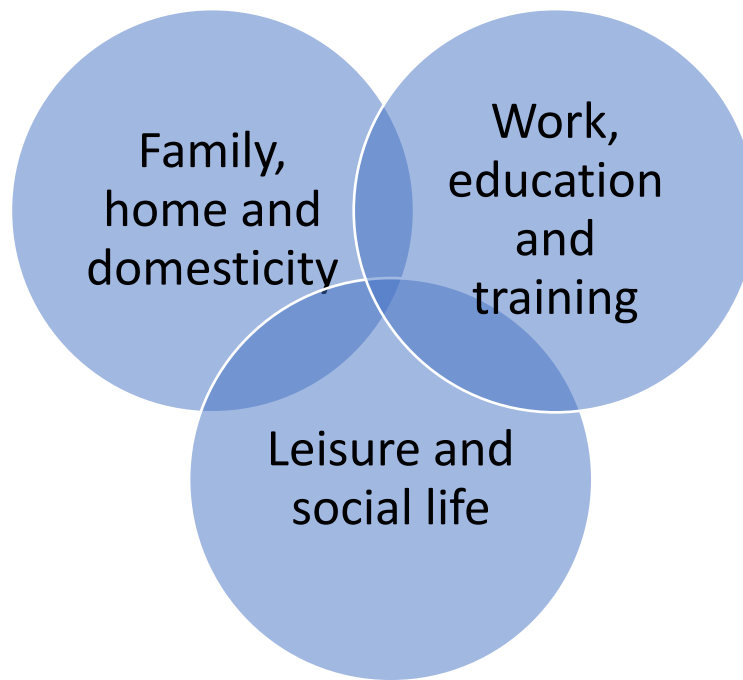


Figure 2: Arenas of action and centres of choice (from Ball et al, 2000: 148)

Sociological career theories that are based on the works of Weber, Durkheim and Freud (Gunz and Peiperl, 2007) traditionally incorporate the interplay between the individual and their work organisations. Only more recently have they examined the conflict in individuals' attention between work, domestic issues and leisure. These factors are examined in more depth within this research.

The chapter continues with a brief analysis of organisational and alternative career concepts.

3.3.1 Organisational careers

Traditionally, people remained within a single organisation for their entire career leading to careers and organisations being inextricably linked (Kanter, 1977). Even though Kanter's research was based on only one organisation, it has been widely applied within careers research, along with similar organisational research such as 'Careers in Organizations' (Hall, 1976), and 'Organizational Careers' (Van Maanen, 1977). This early careers research therefore focused on how the structures of organisations influenced career development. Although it is now more likely that people move between organisations looking for opportunities for personal development, the principles of the organisational career remain dominant. Although organisational careers are no longer assumed to be within a single organisation (Baruch, 2004), traditional, organisational career theories remain. These are based on the premise of hierarchical progression through organisations with a structural framework (Evetts, 1996) where roles are defined by work patterns, salary and promotion

opportunities. These have led to the common metaphor of a career as a ladder, or a climbing frame, indicating vertical progression.

Career progression, success or advancement within the construction industry is typically based on the traditional pattern (Dainty, Bagilhole and Neale, 2000; Francis, 2012) and “almost inevitably seems to equal management” (Watts, 2003: 238). Although researchers discuss issues such as work-life balance (WLB), career success remains equated with hierarchical progression. Watts (2003: 167) asserts that “these values continue to be powerful and provide the norm or the benchmark for success ... by and large ... this is what success still looks like”. Others also conclude that women who follow a linear career model are thought to display greater commitment to work (Caven, 1999; Dainty, Bagilhole and Neale, 2000) than to other areas of their lives. Although some of the research regarding women in construction acknowledges intrinsic success, this is not the focus of women’s career development, which remains centred on advancement (Francis, 2017), progression (Worrall, 2012), salary and occupational status (Dainty, Bagilhole and Neale, 2000; Judge, Klinger and Simon, 2010). While not all of these factors need to apply for an individual to be regarded as successful (Judge and Kammeyer-Mueller, 2007), the focus on extrinsic measures sustains an idealised male career pattern because men are more likely than women to follow this pattern (Acker, 2006). This is why, in construction, women are said not to be progressing or succeeding (Dainty, Bagilhole and Neale, 2000; Francis, 2017). These concepts are analysed more fully in the context of the construction industry in section 3.5.

Other theories challenge the structural, hierarchical conceptions of careers, focusing on individuals’ agency in pursuing their goals. In these alternative theories, which employ metaphors such as ‘boundaryless’, ‘kaleidoscope’, ‘protean’ (Inkson, Dries and Arnold, 2015) and ‘customised’, career success, progression and achievement have subjective as well as objective interpretations (Arthur, Khapova and Wilderom, 2005). A further metaphor applied to women’s careers in STEM occupations is that of a ‘leaky pipeline’ (Berryman, 1983).

3.3.2 Alternative career patterns

Not all early careers researchers assumed that hierarchical progression was a fundamental feature of all careers. Hughes (1958) and his colleagues at the Chicago School criticised the research as selective accounts of men’s working lives in a limited number of occupations and, therefore, inadequate for understanding those that did not fit the ‘ideal type’ model of career development and success. They acknowledged that vertical progression is not possible for everybody, that it is not always desired and that there are occurrences in a

person's career which are out of their control, such as redundancy. This led to them developing alternatives to a hierarchical career (Arthur, 1994).

Although these newer career theories are more reflective of female QSs' career trajectories than traditional career theories, they remain insufficient as a framework through which to examine them. However, there are aspects of these approaches that are useful as a means of analysing factors affecting women's career development.

The most prominent of the alternative career concepts are boundaryless (Arthur, 1994; Arthur and Rousseau, 1996), protean (Hall, 1976) and customised careers (Dickmann and Baruch, 2011), 'career anchors' (Schein, 1978), and Driver's (1982) typology of career patterns.

Schein's career anchors

Schein (1978: 128) developed 'career anchors', meaning "concerns or values which the person will not give up if a choice is to be made", based on people's work experiences, their employment needs and motives, their attitudes and values and their talents and abilities. He established eight categories of career anchor, only two of which (career stability and general managerial competence) relate to traditional, hierarchical careers. The remaining six were developed to reflect individuals' needs for creativity or challenge in their careers, or for those for whom lifestyle takes precedence over work (Schein, 1978; 1996). These are: service and dedication, entrepreneurial creativity, autonomy and independence, pure challenge, technical and functional competence and lifestyle.

Schein (1978) alleges that anchors cannot be predicted at the beginning of an individual's career. They become apparent after an individual has an amount of work experience but once established, they remain for the rest of their career (Schein, 1978). This theory is unsatisfactory for many people, but particularly women. It does not assume that work is an individual's prime focus, but it does assume that whatever their main motivation is, it remains regardless of external forces. This may be because Schein (1978) based his study on only 44 male graduates over 12 years and later tested the theory on the same small sample of men. Although the theory was further tested on a different sample of 20 senior executives, there is no indication that any of these were women. This omission casts doubt regarding the extent to which anchors apply. Events such as parenthood, illness or redundancy are not considered.

Although women were included in further research that produced different distributions of how the anchors apply in a range of occupational groups (Schein, 1996), respondents were still drawn from largely well-educated professionals, the majority of which were still likely to be men. This raises questions regarding the theory's applicability to women (Yarnall, 1998). Particularly as there were few respondents (1.9%) with the lifestyle anchor (Yarnall, 1998).

Although Schein (1978) originally argued that individuals have a career anchor that is more important than all others, some researchers have found that individuals can have multiple anchors (Quesenberry and Trauth, 2007). Although these researchers also did not consider the possibility that anchors might change. Derr (1986) and later Yarnall (1998) did find that anchors can change over the course of an individual's career. But, again, the focus of these researchers is on pure career concepts without really considering the impact of external forces, especially those such as parenthood, that are more likely to impact on women than men.

Although the theory aids identification of the individual factors influencing women's careers, it lacks the mechanisms through which to analyse organisational and interpersonal factors that need to be considered, as well as being an unsatisfactory lens through which to examine women's careers as QSs.

Driver's career concepts

Similar to career anchors, Driver's (1982) theory of career concepts, is also an alternative to a traditional linear career. However, this too does not account for life events that might influence these patterns as it also assumes that once an individual is established on a career pathway, they do not change track. Driver proposed three career pathways. The first, a steady state career, is more aligned to the traditional career. It conceptualises those who stay in one job or professional role for their entire working life. The second, a spiral career, is the term given to those who have several different occupations. Finally, the transitory career pathway was proposed for those who have no identifiable career pattern. While these concepts may account for individuals' changing aspirations and priorities, they too are unsatisfactory as they do not provide a framework with which to examine female QSs' careers. Moreover, they also do not consider those who undertake a range of different job functions within one occupation. For example, Abbott (1995) compared the role of an actuary, whose tasks are tightly structured, to that of an accountant, who can have a diverse range of job roles in a variety of organisations. Quantity surveying is more like the latter than the former, as described in the previous chapter.

Protean and boundaryless careers

Both protean and boundaryless careers are based on the premise of individuals pursuing a career outside of organisational boundaries. An individual is said to have a protean career mindset when they are focused on subjective career success achieved by means of self-directed vocational behaviour as opposed to career development by their organisation (Briscoe, Hall and DeMuth, 2005). It involves greater mobility, a more whole-life perspective, and is 'values-driven', meaning that individuals use their own values (as opposed to those of their organisation) to guide their career (Hall, 1996; 2002; Briscoe and Hall, 2002; Briscoe, Hall and DeMuth, 2005). A boundaryless career, on the other hand, is one that crosses organisational boundaries and individuals pursue either objective or subjective success (Arthur & Rousseau, 1996). Nevertheless, both indicate a level of career self-direction that relates to the agency aspect of careers as opposed to traditional careers that are directed by and within the structures of organisations (Inkson, Dries and Arnold, 2015).

While a boundaryless career pattern also acknowledges careers that are self-directed and values-driven, it remains independent from a protean career (Briscoe, Hall and DeMuth, 2005). The two are distinguished by the mindset of the career actor, rather than how individuals actively pursue career goals (Briscoe, Hall and DeMuth, 2005) and neither approach necessarily means that individuals must pursue their careers outside of a single organisation.

Of all the alternative career theories, that of the boundaryless career is the most applicable to women's careers in quantity surveying, although it, too, is unsatisfactory as a framework with which to examine them. As well as having similarities with the protean career, in that it emphasises individual freedom from organisational structures (Hall, 1976; 1996; 2002), the concept also has clear links with Schein's (1978) career anchors. Unlike career anchors, it recognises that validation can come from sources other than, or in addition to, employment and promotion (Arthur, 1994). Some examples include membership of a professional body, or achieving publication in respected journals, but it can be applied to an individual who gains validation by choosing better WLB over potential career opportunities.

Its many applications imply that this type of career pattern can mean anything except a traditional, organisational career (Cuzzocrea and Lyon, 2011). It has also been suggested that the concept, originally thought of as innovative in the early part of the 1990s, has become "a rather taken-for-granted reality for many of us" (Van Maanen, 2014: 46). However, although factors such as more flexible work patterns and a desire for better WLB are gaining acceptance (Brady, 2002; Cascio, 2007), the idea that all careers were once

traditional and are now boundaryless does not represent reality (Inkson et al, 2012; Guest and Rodrigues, 2014). Individuals are still “bounded” (Arthur and Rousseau, 1996: 3) by the constraining structures of the organisations for whom they work and the institutions to which they belong (Cuzzocrea and Lyon, 2011). For example, many Qs are members of the RICS, with its strict entry criteria and requirements for continuing professional development (CPD). Nevertheless, the boundaryless career concept emphasises individuals taking ownership of their careers, whatever the pattern and in whatever kind of organisation (Van Maanen, 1977; Arthur, 2014).

As a result of individual and organisational changes (Van Maanen, 1977), as well as changes in society (Kanter, 1977), lifelong employment in one organisation can no longer be assured. Schein (1996: 80) predicted that organisations would undergo “a metamorphosis”; that they would downsize, ‘right’ size, flatten or transform into “something as yet unknown” and that such changes have “implications for career development”. He even questioned whether organisational careers would exist in the future. Clarke (2013) also found that, in the last 20-30 years, organisations have flattened, for example due to mergers or restructuring, such that organisational structures are now more organic (See also Baruch, 2004).

Arthur (1994) and Arthur and Rousseau (1996: 3) concluded that careers had become less “bounded” by an organisation and, as a consequence, many individuals pursue independent goals such that their career exists outside of the organisation(s) for whom they work. They believed that the value previously placed on hierarchical progression within an organisation would diminish as ownership of careers shifted from employers to employees (Higgins and Dillon, 2007). Although this has materialised in the sense that individuals change organisations more often than was traditional, hierarchical progression remains the measure of a career’s value. Indeed, this is a common reason for people to change jobs and organisations.

Arthur, Hall and Lawrence (1989) asserted that additional influences from institutions such as professional bodies, and non-work influences such as home or family, cement the interplay between the individual, work institutions and the whole society referred to above (Dickmann and Baruch, 2011). They also acknowledge individuals’ shift of focus between the three arenas of action in Figure Two.

The boundaryless career concept also includes kaleidoscope (Sullivan and Baruch, 2009; Dickmann and Baruch, 2011), subjective, intrinsic and customised careers. These confirm

that it is possible to pursue something other than a traditional, organisational, objective, vertical, extrinsic, linear career.

Customised careers

Although it is possible to have a boundaryless career within one organisation (Arthur and Rousseau, 1996), the more usual interpretation is a career that includes working for many different employers or organisations throughout an individual's working life. Customising a career, however, can happen within a single organisation. It involves individuals taking sideways or even backwards steps to suit the changing circumstances of their lives (Van Maanen, 2014). Other ways to customise include changing work patterns within existing employment (e.g. part time working), undertaking temporary work or becoming an independent contractor (Valcour, Bailyn and Quijada, 2007). Like boundaryless careers, they better represent the careers of female QSs than traditional hierarchical careers but also do not provide an analytical framework.

Customising a career within an organisation may have implications for that organisation. For example, it is argued that those who work part-time are less productive; that they choose to prioritise family and other non-work roles and thus put in fewer hours than those whose main focus is work (Major, Klein, & Ehrhart, 2002). However, the effects of changing work patterns to flexible working hours, part-time or job sharing are debated. Piasna (2018), for example, studying work intensity of employees within the EU28 countries, found that work intensity reduced for part-time workers and those with autonomy over their work schedules. However, it was higher for those whose employer dictated their work schedules. Counter-arguments suggest that a move from full-time to part-time work improves the levels of focus and concentration when at work and gives improved ability to identify priorities, which makes for more efficient working (Meiksins and Whalley, 2002). Many studies have shown that giving individuals more choice about how they work, and greater variety and challenge in their work, also improves worker motivation and retention (Marler, Barringer and Milkovich, 2002; Barley & Kunda, 2004). This issue, therefore, remains debated.

Evidence suggests that traditional careers are heavily gendered towards men and customised careers towards women (Valcour, Bailyn and Quijada, 2007); one reason why women in construction are said to underachieve. Yet gendering career patterns in this way has disadvantages for all genders. Women's employability is influenced by the assumption that they are deemed more likely to take career breaks or to desire part-time work, whereas men wishing to customise their careers are often seen as deviant (Judge & Kammeyer Mueller, 2007). Therefore, customising a career is considered to be easier for women than it

is for men, particularly if the need for customising is in connection to family requirements and caregiving which is seen as a legitimate need of women, but not men (Klein, Berman and Dickson, 2000). Yet, caregiving is not the only reason that an individual might pursue a customised career as, for example, WLB has become an increasing need of many employees, male and female.

Studies suggest that customised careers are easier to pursue in an organisational culture more accepting of diversity, flexible work and adequate staffing levels (MacDermid et al, 2001; Valcour & Tolbert, 2003). However, customised careers are rarely enabled by organisations unless they perceive some benefit to them in terms of aiding their development, such as retaining valuable employees, or attracting new ones (Lee, MacDermid and Buck, 2000; Piasna, 2018). For individuals, benefits such as gaining more autonomy over work schedules; achieving greater job satisfaction and less stress (Kunda, Barley and Evans, 2002) are counterbalanced by negative impacts in terms of wages and promotion. Those who work part-time generally earn less per hour than those working full time, and even relatively short periods away from the workforce can mean a loss in earning power (Hewlett and Luce, 2005). Additionally, career opportunities are reduced for those who seek part time, flexible or job share employment, so career planning becomes more difficult and some options unavailable (Meiksins and Whalley, 2002).

Designing and building one's own career (Savickas et al, 2009), leaves it up to the individual to identify and manage gaps in their knowledge. In customising, women experience greater disadvantages than men both at home and at work. They end up with limited choices in their career development, and face hostility in the workplace (Savickas et al, 2009). Lower wages and fewer career prospects then reinforce stereotypical gender roles. Those who pursue these patterns are more likely to prioritise intrinsic measures of success, such as personal growth and WLB, over extrinsic measures (Khapova, Arthur and Wilderom, 2007; Judge and Kammeyer-Mueller, 2007). Because these are usually women, these factors are not usually considered as a measure of success. It does not mean that there are not men in low paid jobs with fewer prospects, but that women in comparative jobs are more likely to prioritise WLB over career progression. However, these theories do not account for changing aspirations or that even women who prioritise family for an amount of time may eventually aspire to progress.

3.3.3 Summary

These career concepts raise questions about the lack of attention given to individual motivations and emphasise the role of changing organisational structures as well as the

potential for a variety of 'valid' or 'successful' career outcomes. However, while one of the above metaphors may describe a female QS's career pathway, it will not explain it. These career patterns are researched retrospectively to understand career behaviour rather than as a tool to establish how careers can be pursued (Briscoe, Hall and DeMuth, 2005). Their practical applications are not researched. Further, the traditional career concept focuses on the structural considerations of careers whereas agency theories are about an individual's ability to follow a desired path without consideration of context.

Women's disadvantage in pursuing a non-traditional career strategy is highlighted, suggesting there is a cost in terms of achieving 'objective' success. Women's different life-work experience is recognised but it seems that they continue to be penalised if they customise their careers. Career success continues to be defined by extrinsic rewards that women are less likely to achieve because of the strategies they pursue. However, measuring a career using intrinsic factors emphasises facets of an individual other than their current job role. Their professional identity or non-work activities add to their personal resources which helps the individual to seek new roles in other organisations (Weick and Berlinger, 1989).

It is, of course, possible to be both extrinsically and intrinsically successful. For example, to have a good salary and status and also to be satisfied with one's career; but research shows only a moderate correlation (Judge and Bretz, 1994). Appiah (2005: 179) asserts that "neither subjective measures of success nor objective measures of success exhaust what we have in mind when we discuss well-being; some equipoise between them is wanted". Arthur, Khapova and Wilderom (2005) agree, saying that success is a balance of both extrinsic and intrinsic factors.

Additionally, many people do not conform to any career pattern. Although some still progress upwards, others move from the periphery of a job, occupation or organisation into its centre, either by means of acquiring knowledge and qualifications and/or by acquiring social capital. Some view work as a means to an end and follow no particular career pattern (in line with Driver's 'transitory' career); or they change job roles frequently. This may be either for variety or to gain experience, which may or may not be with a view to advancement (Guest and Sturges, 2007). But, whilst not unique to women, a boundaryless or customised career is more associated with most women's careers than most men's.

3.4 Women's careers in construction and surveying

Section 3.3 established that, although a range of career pathways are possible, studies of women's careers in construction continue to be assessed on the basis of a traditional, hierarchical career. This is regardless of the growing evidence that women make different career choices. Extensive research has been conducted to examine the influence of motherhood and domestic work on women's career development (e.g. Hochschild and Machung, 2012), but these are not the only influences. Moreover, not all women become mothers (Butler, 1990) and not all of those who do are the primary carers of their children. Research undertaken to ascertain other structural and cultural factors affecting the careers of women in construction still includes the presumption that all women become mothers and how this impacts on the ways in which they do their job (e.g. Worrall et al, 2010; Worrall, 2012; Francis, 2017; Navarro-Astor, Román-Onsalo, Infante-Perea, 2017). This is a very narrow view.

Women continue to be under-represented and under-rewarded in the construction industry. They represent approximately 10 per cent of the workforce, populate lower ranks and earn a lower salary than men (Fernando, Amaratunga and Haigh, 2014). No research exists specific to women's careers in quantity surveying, but there is much that concerns women in the construction industry as a whole, some of whom are QSs. The focus of this research includes:

- influences on women's career advancement (Francis, 2017);
- barriers to career development (Worrall et al, 2010; Navarro-Astor, Román-Onsalo and Infante-Perea, 2017);
- the challenges and success factors of their career development (Rosa et al, 2017);
- hegemonic masculinity in architecture (Sang, Dainty and Ison, 2014);
- cultural obstacles to women's careers in construction (Worrall, 2012);
- women's experiences in civil engineering (Watts, 2009; 2012);
- the social exclusion of women in construction (Greed, 2006);
- gender segregation in manual trades (Clarke, Michielsens and Wall, 2006);
- women's career underachievement in UK construction companies (Dainty, Bagilhole, and Neale, 2000); and
- agents for change influencing the careers of women in the construction industry (Greed, 2000).

These can be broadly divided into barriers and enabling factors. As none of this research expressly addresses women's careers in quantity surveying, it does not identify the specific

issues they experience; nor does it examine how their aspirations impact their career pathways. Further, although intrinsic factors relevant to alternative career pathways are acknowledged, alternative pathways themselves are not considered. This omission validates construction careers as following a traditional pathway.

As there is no specific research regarding the experiences of female Qs, this section analyses research in relation to women in the construction industry generally and other sectors that do not traditionally employ women. It does so from the perspective of the individual and organisations, with the latter divided into structural and cultural factors. The analysis incorporates discussion about the male-dominated nature of construction organisations (Worrall, 2012; Navarro-Astor, Román-Onsalo, and Infante-Perea, 2017; Francis, 2017).

3.4.1 Structural factors

A range of studies have identified structural limitations on women's career development. For example, Kanter (1977), in her study of gender differences in corporations, found that women's careers were limited by bureaucratic and structural systems. Kanter's study was based on only one organisation, but others have identified similar limitations. For example, Cockburn (1991) combined patriarchy and capitalism to demonstrate how organisations reproduce gendered roles in the workplace with patriarchal structures defined as those that exclude and segregate women (Walby, 1990). In the context of the construction industry, Dainty, Bagilhole and Neale (2000) drew on these findings when researching the careers of matched pairs of men and women who worked for large construction companies. They found that construction organisations are hierarchical, patriarchal, sex-discriminatory and contain gendered power structures. These issues will be examined in the empirical research.

Formal practices of exclusion are unlawful under the Equality Act 2010, but inequality is achieved through horizontal and vertical segregation within organisations. Jobs become gendered by giving opportunities for part-time work in administrative roles with managerial roles advertised as full-time only. This strategy leads to a higher proportion of women being employed in administrative and routinised roles with fewer in managerial or professional positions (Witz, 1990; 1992). In this way, horizontal segregation leads to vertical segregation because women tend to populate the lower ranking roles of an organisational hierarchy.

In her study of military organisations, Kronsell (2005) found that, as they were traditionally exclusively male orientated, their practices are based on masculine norms. Although a rather specific and less usual organisation to examine, parallels can nevertheless be drawn with the construction industry, providing insight that normative masculine practices can be challenged. She found that the presence of women in such male-dominated institutions identified gendered practices that made masculinity so visible women could change them, or at least attempt to. Other women would ignore these norms and not let them affect their own career strategies.

Other research suggests that women accept, and are complicit in, their own marginalisation in the industry. For example, Sang, Dainty and Ison (2014) found that by complying with the long working hours culture, or by enacting exclusionary practices on others, women were normalising hegemony in architectural practices. Although seemingly 'victim blaming', their research nevertheless recommends managers address these issues to prevent women leaving their organisations.

Individual, or agentic, action can either reproduce practice or change it but, in a male-dominated industry, changing entrenched behaviours is difficult and time consuming. The concept that structure is viewed as constraining and that agency represents freedom is debatable if agency cannot flourish within an environment. This may depend on the environment as, although Kronsell (2005) found that military women challenged structures, and initiated some changes, Sang, Dainty and Ison (2014) found that women reproduced the constraining structures of architectural practices. Hays (1994) argues that they are interconnected, a view posited by Giddens (1984: xxi) who said: "the structural properties of social systems exist only in so far as forms of social conduct are reproduced chronically across time and space".

The role of agency has been highlighted by many researchers. Acker (2006) asserts that individual agency is to be considered despite the class, gender and racial inequalities that exist within the structure and culture of organisations, while Giddens (1984), Bourdieu (1986), and Archer (2003) have all proposed theories that integrate structure and agency. These are analysed further in the following section.

The impact of organisations on careers is a theme of this research. That careers were once organisation dependent and are now boundaryless is not reflected in the construction industry. Baruch (2006) suggests that the true position is somewhere between these two extremes. He asserts that, although individuals may no longer pursue careers within one

organisation, organisations still maintain a great deal of influence on individuals' career paths. Organisation-centred approaches to women's careers mainly concentrate on their processes such as recruitment and promotion, availability of flexible working and the requirement to travel and how these impact the separate career experiences of women compared to men (Calas, Smircich and Holvino, 2014).

How different organisational structures impact women's career development remains debated. Size was found to be a relevant factor, particularly in terms of formal structuring and processes (Kvande and Rasmussen, 1995). Baruch (2006) determined that, while structures of organisations had not fundamentally changed, they had become flatter. Kanter (1989) found that flatter structures aided women's career progression, whereas other research demonstrates that it is unlikely to make a difference (Acker, 2006). Moreover, Acker (1990) argues that structures of organisations are themselves gendered, as they are based on a 'typical' male worker. This may explain Kanter's (1977) assertion that the structures of an organisation limit women's career development. Women seeking careers in large, established organisations are viewed as trying to change the prevailing order and, ultimately, the masculinity of those in higher positions (Kvande and Rasmussen, 1995). Nevertheless, these organisations are likely to have formal policies and procedures in place to aid equality.

However, as Chapter Two determines, female QSs work in a range of organisations from small private practices to large, multi-national corporations and there is a great deal of difference between these organisation types. Objective Four seeks to analyse how the structure of a large organisation, such as a contractor, has the same impact on female QSs' career pathways as a small organisation, such as a private practice, that has a flatter structure. Acker (2006) found that flatter structures only aided women's career development if they conform to masculine behaviours, such as working long hours and this was also found by Sang, Dainty and Ison (2014); but, as also found by them, this perpetuates existing gendered practice.

As stated in Chapter Two, the more formal criteria of large organisations is said to improve women's promotion prospects (Greed, 1991). In the UK, most large construction companies have a divisional structure, meaning that there is a central office that administers and monitors a range of multifunctional departments (Tolbert and Hall, 2009). These organisations have complex tiers of management (Tolbert and Hall, 2009; Harris and McCaffer, 2013) and specialist divisions, either by region, by specialism or both (Tolbert and Hall, 2009; Harris and McCaffer, 2013). Small organisations have simpler structures with an

overall managing director, or partner, although they may also have individual specialisms. As companies grow, their structure is likely to sub-divide into separate functions, each with a senior manager, the whole being overseen by a managing director (Harris and McCaffer, 2013). This introduces additional layers of managers and these can have a great deal of influence on the careers of employees. In these organisations, progression is predominantly vertical with a clearly defined career path, although within specialist departments a career path may not be as discernible (Handy, 1993: 186). These core structures and clear hierarchies form “climbing frames” for progression (Baruch, 2006: 128) but the 'pyramid' shape of many large organisations means that fewer positions are available to progress into, slowing progression for those in higher positions.

However, not only are fewer positions available at high levels, it is also more difficult for women to acquire them. Research into gender segregation at job level in other occupations has found that women are likely to hold more routinised jobs, even where little occupational segregation exists (Kvande and Rasmussen, 1995).

As well as employers, other organisations also influence women’s careers in construction. Chapter Two demonstrated how female QSs were excluded by the RICS, and only relatively recently have they been trying to identify how to attract more women into their ranks. Professional bodies, trades unions and other, more informal groups with no formal organisation (Hughes, 1971), all have structures and practices that define them. These practices are reinforced over time, such that it requires policy change or a legal development to alter patterns of behaviour (Van Maanen and Schein, 1977; Van Maanen and Barley, 1984). Other changes occur by altering or reinterpreting the entry requirements for roles (Evetts, 1992; Jones and Dunn, 2007) or targeted recruitment. Individuals can also be agents of change, particularly by collective action (van Zomeren, Postmes and Spears, 2008). This was also found by Kronsell (2005). These factors are examined in the following section.

3.4.2 Cultural factors

Alongside structural factors, research also highlights how the culture of organisations impacts women’s careers in construction. Women are required to fit into pre-existing, patriarchal sub-cultures in organisations, which do little to change their culture to accommodate them (Greed, 2006). Greed (2006) found that introducing more women into the industry is not enough to change the underlying subcultures that exist with women adopting coping strategies, contrary to the findings of Kronsell (2005). Examples such as

playing “the little woman”, i.e. displaying stereotypically feminine attributes (Powell et al, 2005: 33) can result in long-term disadvantage for women as it perpetuates a myth that women are either incompetent (Butler, 2004) or weak (Evetts, 1996). The opposite strategy of acting in a more masculine manner also attracts resentment from male colleagues (Wright, 2016), although blending in is said to be more effective (Evetts, 1996). While Powell et al, (2005) assert that the most effective strategy of all is to build a reputation as being good at the job, Worrall et al’s (2010) study found that doing a good job is not enough and, to progress, women must outperform male colleagues. Although once proven, they tend to become accepted.

Women are disadvantaged by cultural closure in construction. This occurs covertly, through social activities, and overtly through bullying and harassment. Women “battle ‘old boy’, white male dominated organizational cultures” as well as suffering from a lack of networking resources (Worrall et al, 2010; Worrall, 2012: 19). Activities such as golf days often seem designed to exclude women (Rosa et al, 2017) and even where there are activities that women could join in, they perceive they are not made welcome by male colleagues who are inhibited by their presence (Fielden et al, 2000; Rosa et al, 2017). The Equality Act 2010 outlaws discriminatory behaviour against all genders but women in male-dominated sectors are still said to remain more likely to experience bullying and sexual harassment, actual bodily contact, threats and social exclusion than men⁴ (Dainty, Bagilhole and Neale, 2000; Fielden et al, 2000; Greed, 2006; Navarro-Astor, Román-Onsalo, and Infante-Perea, 2017; Francis, 2017). Sexual harassment, including the use of inappropriate comments and pornographic imagery, is used as means of achieving the “continued marginalisation of women” (Chan, 2013: 818), although it is often passed off as men ‘just having a laugh’ (Walby, 1990). Studies highlighting barriers to women’s career development in construction intimate that women are expected to adapt to and tolerate ‘locker room’ type behaviour (Navarro-Astor, Román-Onsalo, Infante-Perea, 2017).

Exclusion does not have to be as overt as harassment, however. Other marginalising behaviours include hostile questioning of women, with accusations of incompetence if they cannot be answered, and tougher initiation rites on site (Fielden et al, 2000). Other site-focused observations are men on site refusing to work with women, using arguments that include being “distracted by females on site”, that they are worried about accusations of

⁴ Although Chan (2013) has conducted research regarding discriminatory behaviour towards gay men.

harassment or that they would have to lie to their partners about the gender of their colleagues (Agapiou, 2002: 702; Wright, 2016). Although these observations are site based, rather than office based, this victim blaming not only closes the industry to women but is also an issue of men transferring the responsibility for their own behaviour onto women (Wright, 2016). Greed (1991) observes that men justify their behaviour by believing women deserve to be treated badly for doing what is perceived to be a man's job.

Some research disputes the wide-held belief that women experience more work-family conflict than men (Frone, 2003; Sang, Dainty and Ison, 2014). Nevertheless, there remain assumptions that women bear the burden of all caring responsibilities – both for children and for wider family members, such as elderly relatives (Francis, 2017). This contributes to men being more likely to progress hierarchically than women. That women in construction and surveying have an advantage by being well paid, meaning they can afford to hire domestic help (childcare or cleaning) to facilitate full-time work (Greed, 1991) is rarely considered.

The perceived culture of the industry is such that workers are expected to work long hours, travel long distances and work away from home. This is said to cause conflict for women who are assumed to have caring responsibilities (Lingard and Francis, 2009) and the industry “seems to penalise” those who wish for more flexible working patterns (Worrall et al, 2010: 9). Failure to comply with requirements for long working hours is often interpreted as demonstrating a lack of commitment (Kanter, 1977; Fielden et al, 2000).

The homosocial reproduction of male managers prevents access by women into senior positions (Kanter, 1977). This is especially apparent in male-dominated industries (Dainty, 1998; Francis, 2017) where informal networks play a central role in career development in terms of access to jobs and information (Dainty, Bagilhole and Neale, 2000; Ibarra and Deshpande, 2007; Francis, 2017). Women are often said to receive less organisational sponsorship and have fewer informal networks and development opportunities (Dainty, Bagilhole and Neale, 2000; Worrall, 2012). Lack of access to informal networks affects women in terms of recruitment and progression as men tend to utilise contacts to hear about employment opportunities (Dainty, Bagilhole and Neale, 2000) and their lack of inclusion in instrumental networks affects both their own performance and also that of their team (Varella, Javidan and Waldman, 2012). Enabling women to better access these informal and instrumental networks, therefore, not only enables them to develop but also has advantages for the company as a whole. Women tend to be excluded due to stereotypical expectations of their career priorities (Dainty, Bagilhole and Neale, 2000) yet their career aspirations are never ascertained.

Although role models and mentors have been identified as important in women's early career development (Ibarra, 1999; Gibson, 2003), a lack of role models is a complaint made at every level of seniority within many industries (Sealy and Singh, 2008) and is frequently cited as a barrier to women's career development in construction (Worrall, 2012; Rosa et al, 2017). Role models "display the skills, meet the demands and enjoy the pleasures to be obtained from [a particular] pursuit" (Almquist and Angrist, 1971: 267), skills those looking up to them feel that they lack. Although the most visible role models are people within the same occupation (Almquist and Angrist, 1971; Sealy and Singh, 2008), there are limited numbers of women in the construction industry who can assume the role.

Mentors, which are essentially different to role models, were found to be only the second biggest influence on career advancement (behind personal factors), which is "a clear departure from previous research on women in construction" (Francis, 2017: 270). This contradicts the findings of Moore (2006), Fernando, Amaratunga and Haigh (2014) and Rosa et al (2017). However, Francis (2017) did find that having mentors had a positive effect on women's career satisfaction, even though it did not affect their career progression, a finding which is significant for intrinsic success.

The conclusions of established research imply that women should be responsible for the behaviour of men, avoiding organisations having to introduce strategies to force men to modify their behaviour. This is extended even further by Worrall et al (2010: n.p.), who concluded that women should be given specific CPD to equip them with what they term "necessary 'soft skills' in communication, people management and confidence building". Acknowledging that this view is controversial, as women are not particularly deficient in these 'skills', they recommend this as a short or medium-term fix to help women cope with male-dominated environments and difficult working conditions, arguing that changing these environments takes too long. The latter are in line with Cockburn's (1989) 'long agenda' of organisational change, which proposes educating men in how to permanently change their behaviours. Cockburn (1989; 1991) argues that merely introducing policies that improve the numbers of minority groups maintains the organisational structures that promote inequality and that prevailing cultural systems will only be overcome by education (see also Worrall, 2012). However, no research proposes that organisational change should occur in the construction industry.

3.4.3 Individual factors

In her extensive survey, Francis (2017) found that individual factors had the greatest influence on the career advancement of professional women in the Australian construction

industry. She specifically identified experience, education level and training relevant to their role as the most significant. Fernando, Amaratunga and Haigh (2014) also identified that personal factors, specifically 'soft skills' or the ability to manage people, were the most significant indicators of women's success. However, the latter research was based on professional women only (including 27 Qs), with moving up into management as the measure of success. As such, 'soft skills' are likely to be considered as crucial.

Rosa et al (2017), summarising a limited range of studies (including that of Fernando, Amaratunga and Haigh (2014)) together with primary research, sought to establish the success strategies required of professional women (including five Qs) to aid their career development in the UK construction industry. They also identified that the most important factors for career success were personal factors, especially soft skills. Again, this is unsurprising given that they established success in extrinsic terms. Some specific personality traits were identified by both Rosa et al (2017) and Francis (2017) as being relevant in career development. Human capital variables such as experience, education, work hours and relocations for career were also particularly relevant (also found by Ng et al (2005)). None of these studies ascertained women's aspirations.

The terms 'individual variables' and 'human capital' are used by the above researchers interchangeably to represent individual factors. Theories of human capital have long been associated with career development (e.g. Walby, 1990; Ng et al, 2005; Francis, 2017) and are based on the notion that the value of an individual is increased by the amount of education and training they have received and that education, therefore, is an investment (Tan, 2014). Outlined by Becker in 1964, Human Capital Theory (HCT) makes arguments for investing in education, training and development of individuals to benefit organisations (Chan and Marchington, 2012). However, not only is there no direct link between education level and productivity (Tan, 2014) but access to training and opportunities to gain experience in organisations are moderated by gender and organisational sponsorship, which is also moderated by gender (Ng et al, 2005). As human resource development of organisations is, under this model, motivated by outcomes in terms of organisational performance, rather than to benefit individuals, women are given fewer opportunities to gain qualifications and training because they will assume only supportive roles after childbirth (Acker, 1990; Glucksmann, 2005; Hochschild and Machung, 2012; Juraqulova, Byington and Kmec, 2015).

Further, under HCT, organisations only invest in giving individuals the skills that they need to benefit the organisation, not the individual (Clarke, 2006) without recognising that organisations can benefit from the broader knowledge of its employees in the future. It also

ignores the social reality of individuals, that there are other social, cultural and environmental factors that impact human behaviour (Tan, 2014). It also does not explain why women who are not married, and/or have no children, mothers (single or partnered) who need or want to work full-time, or women whose children have grown, all of whom may have personal resources that are equal to or better than men, also experience exclusion (Butler, 1990). HCT's relevance in 1964, when Becker first wrote his book, is more apparent than now. Then, individuals tended to remain with one organisation for their entire working lives meaning that organisations benefitted from investing in their employees' education and training. Nowadays, individuals move between organisations taking their competencies with them, which makes organisations less willing to invest in wider knowledge not immediately applicable to a role for fear that other establishments will 'poach' their staff (Clarke, 2006). However, this can be to the detriment of organisations who might otherwise benefit from such wider investment.

3.4.4 Summary

The above demonstrates how women's careers in construction are greatly influenced by structural and cultural factors. Although Francis (2017) found that individual factors had the greatest impact on women's career advancement in the industry, rather than interpersonal and organisational factors, her research was focused on women who had advanced. Other research highlights the barriers to women's career development. This raises questions about the relationship between agency factors that women can control and the structural factors that impact them. Further, while Frances (2017) indicates that experience, education level and training might enable women to advance, she gives scant attention to how the structure and culture of organisations impact those who have not advanced, focusing more on organisational fit.

Organisations are governed by their structures, policies, regulations and normative practices, which can operate to exclude and discriminate against women. This restricts their access to opportunities for development possibly because the advancement of women may be seen to demasculinise the status of men (Walby, 1990). As men are the dominant group in construction, the policies, regulations and structures of organisations tend towards maintaining and protecting their interests and privileges, despite having policies promoting equality. For women, these policies and practices obstruct their career development.

How, then, can women address and circumvent these policies and practices to aid their career development? The above demonstrates how the presence of women can change gendered practices in one organisation type (Kronsell, 2005), but in other organisations

women have normalised hegemony by complying with these practices (Sang, Dainty and Ison, 2014).

However, as stated above, changing entrenched behaviours is difficult, particularly if women have little agency in an organisation. How female QSs can pursue a range of career aspirations cannot be examined using either completely traditional or agency-based approaches as both structure and agency impact career development. Therefore, the following section addresses the structure and agency debate with a focus on Bourdieu's theory of practice.

3.5 The structure and agency debate

As demonstrated in Chapter Two, career development in quantity surveying is bounded by the structure and culture of organisations over which individuals have little control. These organisations, which include institutions such as the RICS as well as employers, require individuals to conform to the norms they impose – particularly for those who wish to progress. Historically these organisations, either consciously or subconsciously, determined to exclude women to maintain the existing order.

Career approaches, such as those analysed in section 3.3.2 above, provide an alternative to traditional career theories. Presenting careers as either traditional or boundaryless/protean demonstrates the two extremes where individuals are either constrained by organisational structures or they have complete agency (Tatli, Ozbilgin, and Karatas-Ozkan, 2015). There are key challenges with both approaches: agency-based theories do not allow for the impact of structural and cultural constraints on an individual's freedom to choose the outcomes they desire (Graham, 2011) whereas purely structural perspectives tend to focus negatively on the barriers to career development. This latter approach is commonly used to explain women's careers in the construction industry.

One agency-based career theory that addresses choice in career development is Preference Theory (Hakim, 2000). This proposes that women can choose to be either home-centred, work-centred or adapted (balancing work and home life). Although this theory has merits because it addresses the issue of women's choice, its critics observe that preferences are not made in isolation (Leahy and Doughney, 2006) and Hakim gives scant attention to the constraints women face. More significantly there is no consideration that preferences change over time or that women may have adapted their preference to something that is more attainable; an issue that is addressed by the CA. Leahy and Doughney (2006)

propose that the CA is a better method of demonstrating women's preferences in how they balance home and work.

Other theorists, such as Giddens (1979, 1984), Archer (1995, 2000, 2003) and Bourdieu (1977, 2010), have attempted to establish the relationship between structure and agency and their influences on each other. Giddens' (1979: 70) structuration theory focuses on the principle of duality of structure, that structure and agency are inseparable such that structures are both the medium and the outcome of agentic action. Archer (1995, 2000, 2003), however, disputed that structure and agency are inseparable. She proposed that structure comes first and that interactions with and between agents over time enable structures to either reproduce or change. Bourdieu (1977) also addressed the structure and agency debate, using habitus (ingrained habits) to conceptualise how structures become internalised by agents who then act upon those internalised mechanisms as described in the following section.

3.5.1 Field, habitus and capital

Bourdieu's ideas help to conceptualise how careers apply to individuals, groups and organisations (Iellatchitch, Mayrhofer and Meyer, 2003). Despite claims that careers are increasingly undertaken outside of organisations (Arthur et al, 1999; Iellatchitch, Mayrhofer and Meyer, 2003; Mayrhofer et al, 2004), they generally continue to play a major role in an individual's career development. For Qs, the policies and practices of both employers and professional institutions may influence their career development, as analysed in Chapter Two.

In addressing the aim of this research, which is to understand how both female Qs' aspirations and relevant organisations influence the career pathways of female Qs, both structures and agency need to be considered. While existing literature offers many different frameworks for the explanation of career patterns, as described in sections 3.1 and 3.2 above, they either take a structural perspective (e.g. traditional career trajectories) or they are agent-centric (e.g. protean or boundaryless careers). Research about women's careers in the construction industry has been based on the former with a focus on their lack of career success or advancement and the barriers that they face.

Bourdieu's (1977) theory of practice introduces a different perspective in understanding the structure/agency debate. His concepts of field, capital (including symbolic and career capital) and habitus provides a link between the individual and the structures of

organisations (Iellatchitch, Mayrhofer and Meyer, 2003), focusing on the “interplay between the individual actor and a set of practices” (Mayrhofer et al, 2004: 875).

Fields are “a social playground for individual and collective actors” (Mayrhofer, 2004: 876), imposing “structural constraints, rules, boundaries and expected practices” (Inkson, Dries and Arnold, 2015: 38). Careers themselves are not a field but they take place within one, usually in the form of workplaces and/or professional institutions. In a field, those who are in dominant positions seek to maintain its rules, boundaries and practices while others must overcome them to advance (Bourdieu and Wacquant, 1992). Thus, the structure of the field at any given time depends on the balance of power between individuals who, individually or collectively, are seeking to protect or improve their position. As construction is male-dominated, dominant men consciously or unconsciously impose rules that most favour their position (Bourdieu and Wacquant, 1992).

To advance in a field, an individual needs to acquire and employ relevant economic capital (money) or, more likely in a careers context, social (an individual’s social connections) and cultural (embodied knowledge, books and qualifications) capital (Bourdieu and Wacquant, 1992; Grenfell 2010, 24). As careers are sites of power, some individuals have more capital than others and have a better sense of how to use their capitals to advance. Further, not all capital is equal and Bourdieu (1977) asserts that social capital outweighs cultural capital; a particular qualification, as cultural capital, equalises all those who hold it and individuals are distinguished from one another by their social capital. This would therefore disagree with Francis’ (2017) assertion that individual factors are the most significant in women’s career advancement in construction. Further, in terms of female QSs’ careers, despite having the same qualifications as men, women continue to be affected by ‘old boy’s networks’ (Greed, 1991). Regardless, the value of an individual’s capital depends on how they use it to advance in the field and this depends on their habitus.

Habitus is described by Bourdieu as a set of historical relations ‘deposited’ within individuals and are mental and physical representations of perceptions, appreciation and action (Bourdieu 1977). It is the system of internal, personal, enduring dispositions through which we perceive the world acquired through the social conditions to which we are exposed (Inkson, Dries and Arnold, 2015). Field and habitus are related in that, when an individual has a new experience in a field, they internalise both the opportunities it presents together with any external constraints and thus develop the habitus (Inkson, dries and Arnold, 2015). However, an individual’s position in the field is also influenced by the habitus of others and, even in organisations with policies that promote equality, dominant agents manipulate the

rules to maintain their position (Bourdieu, 1977; 1986). This restricts the agency of those who are dominated, as demonstrated in section 3.4 above. Furthermore, habitus gives dominated individuals an unconscious social belief that the hierarchy should be maintained in what is known as “symbolic violence” (Bourdieu and Passeron, 1992).

Habitus emphasises the stability of an individual’s career behaviour and it also both enables and restricts career-related strategies and investments (Iellatchitch, Mayrhofer and Meyer, 2003). On the one hand, it enables an individual to derive appropriate strategies and tactics to advance their position in the field and enables others to recognise that they have the potential for success (Schneidhofer, Latzke and Mayrhofer, 2015). On the other hand, it is only able to change within the limits of the social structures that produced it. This preserves the structure of the field and reproduces inequalities, a process said to be more influential than individuals’ freedom of choice (Nentwich, Ozbilgin and Tatli, 2015). Therefore, according to Bourdieu, although habitus establishes a link between the individual (i.e. capitals and strategies) and structural (i.e. field) elements of human agency, agency itself is restricted to the relevant field (Nentwich, Ozbilgin and Tatli, 2015; Inkson, Dries and Arnold, 2015). Thus, Bourdieu is staunchly opposed to the concept of free agency, asserting that agency is limited to the structures within which an individual operates. Nevertheless, he asserts that change is possible - either through individuals acquiring and using capital to advance their position in the field (which does not change the field) (Bourdieu, 1987; Bourdieu and Wacquant, 1992), or by collective political action (which can change the field) (Bourdieu, 1998, 2003). According to Bourdieu (2001), it is the latter approach that enables the masculine domination of a field to be overcome.

However, while Bourdieu’s approach may explain how women’s careers in quantity surveying have unfolded, and contextualises women’s career development within the field of construction organisations, his opposition to the concept of free agency does not enable analysis of how female Qs can pursue their aspirations. The CA, which is concerned with situated agency and constrained choice, is proposed as a better framework through which to examine the pursuit of aspirations and is analysed in the following chapter.

3.6 Conclusion

Career theories examine how individuals develop their careers along established trajectories with most based on a traditional hierarchical pattern that assumes vertical progression within an organisation. Traditional theories originated from previous assumptions that individuals spend all of their working lives within the same organisation; this assumption also meant that

organisations were more prepared to invest in their employees in terms of education and training. Nowadays, this is more unusual, and people tend to move inter-organisationally. However, these traditional theories, that have never been applicable to everybody, remain the basis of careers research. Success within these patterns remains based on extrinsic measures such as hierarchical progression or salary. A number of alternative career patterns have been proposed based on the premise of boundaryless or customised careers where success can also be intrinsic, using measures such as happiness, job satisfaction and work-life balance.

Nevertheless, it will be demonstrated in this research that these alternative patterns also do not suit the career trajectories of everybody. Neither structure nor agency can take priority when assessing the factors that impact careers, and career theories do not examine how changes in organisational practices can be put into practice. Organisational policies regarding equality are used to justify procedures and practices which, in a male-dominated industry, those of the dominant group are standard. This contributes to women's continued subordination and exclusion (Bourdieu, 1977b).

Sen's capability approach provides a more appropriate mechanism by which to analyse the career pathways of female Qs based on their aspirations and definitions of career success, both intrinsic and extrinsic. While still acknowledging that individual factors, or resources, remain important it also allows for other factors that impact career development. Women face a number of barriers in the labour market and the workplace, especially in a male-dominated industry such as construction. Structural barriers include hierarchical organisations; horizontal segregation underpinned by patriarchal assumptions about gender roles; women's exclusion from positions of power; and explicit and implicit discriminatory practices. Cultural barriers include the long-hours culture, the need to work away from home, bullying and sexual harassment, and lack of female role models. Finally, research also indicates that broader societal factors such as ideas about men and women's role in family life subtly influence career expectations and decisions, with the result that it is often women who 'choose' to prioritise family over work.

CHAPTER FOUR

Theoretical framework – Sen’s Capability Approach

4.1 Introduction

Chapter Three concluded that existing career theories are unable to conceptualise fully female QSs’ pathways and that a different approach is required. This chapter argues that the capability approach (CA) of Amartya Sen (Sen, 1985a; 1985b; 1992; 1999; 2009) is a more useful framework. It addresses the structure and agency debate by providing a mechanism that will allow examination of issues of career aspiration and choice while, at the same time, addressing the inequalities that influence women’s career development as QSs.

The CA does this by not focussing on either an individual’s resources or their achieved outcomes; rather it establishes the freedom of individuals to achieve their own definition of well-being (Sen, 1992). It demonstrates that aspirations, as much as structural factors, impact women’s career development within the construction industry.

Although the CA has been criticised as being too individual (Dean, 2009), it nevertheless provides a framework through which to recognise the importance of agency while incorporating constraint; a framework not provided by traditional or alternative career theories. This enables understanding of the extent to which genuine career choices are available (Graham, 2011).

Thus Chapter Four will draw on the perspectives outlined in Chapter Three to develop a framework with which to analyse women’s careers in quantity surveying, using the CA. It begins by introducing the capability approach and explaining how it is to be used within the research. By devising a hypothetical capability set for female QSs based on relevant research of the CA, it forms a framework whereby the “constrained choice” (Graham, 2011: 41) of female QSs can be examined.

4.2 The Capability Approach

The CA is much researched and has been applied in a variety of contexts. The most notable of which are:

- poverty and human development (e.g. Sen, 1992, 1999, 2009; Nussbaum, 2000; 2003, 2005a, 2005b, 2006; Argawal, Humphries and Robeyns, 2005; Alkire, 2005, 2008; and Walby, 2012);

- women's rights (e.g. Robeyns, 2003, 2005a);
- gender and other inequality (e.g. Vizard and Burchardt, 2007; Graham, 2011);
- education (e.g. Walker, 2007; Hart, 2012);
- health (e.g. Abel and Frohlich, 2012); and
- career choice (e.g. Robertson, 2015).

The variety of its applications are explained by Sen (2009: 233), who says the CA is “inescapably concerned with a plurality of different features of our lives and concerns leading to contrasting applications from very basic requirements of being well nourished to having the ability to pursue one's work related plans and ambitions”. Yet, even though Sen refers to work-related plans and ambitions, the CA has not previously been applied in career development.

It is possible to draw parallels between the CA and Maslow's hierarchy of needs (Maslow, 1968). Dean (2009) distinguishes between the two by arguing that, in the CA, the only need of individuals is to be able to live as they would choose whereas with Maslow needs ascend in a hierarchy. The ability to live as one would choose does not take account of the concept of adapted preference, which limits this ability and is seen as an important aspect of the CA.

In the context of careers, the CA also shares ideas with boundaryless or customised careers discussed in Chapter Three, in that outcomes are whatever individuals have reason to value and are not judged solely on extrinsic criteria. However, the CA provides a framework with which to examine career pathways, something that boundaryless and customised career theories do not.

The previous chapter suggested that women's careers are governed by the structure and culture of the industry with little opportunity for their own agentic action. A range of barriers were analysed. Research recommends that women should be equipped to manage these constraints but does not suggest implementing policy and non-policy factors to challenge the existing structure and culture, something that Bourdieu (1977) asserts is a way to enact change. All research relating to women's careers in the construction industry refers to success and progression in extrinsic terms, although some of this research mentions intrinsic factors as an incidental consideration. Although the two career approaches (broadly, traditional and customised/boundaryless) make contributions to addressing the issues facing female Qs, they do not account for key issues concerning freedom and

choice. Sen (2009: 233) acknowledges that incomes “are often taken ... to be the main criteria of human success” but calls them “detached objects of convenience”.

Sen (2009) adds to the structure and agency debate by distinguishing between actual achievements and having the freedom to achieve. Similarly, adopting the CA in careers research enables the distinction between extrinsic and intrinsic career success. Yet, achieving extrinsic success does not necessarily mean that an individual has achieved well-being, if their freedom to pursue it has been compromised. For example, if an individual achieves a career-related goal through positive discrimination rather than through recognition of their abilities, they may not have career satisfaction, nor might it enhance their well-being. It also does not mean that discrimination has not occurred prior to reaching this goal (Vizard and Burchardt, 2007). Individuals can exert agency achievement in the form of refusing a promotion because, for example, it would affect their children’s (and consequently their own) well-being. This, therefore, demonstrates that well-being achievement is not necessarily the same as agency achievement. The outcomes are different, as are the freedoms of the relevant individuals, which is why actual achievements are considered less important in the CA.

Therefore, the CA is proposed as the framework for this research. Sen (1985a; 1992; 1999; 2009) based the approach on the freedoms of individuals to achieve the outcomes (known as functionings, or beings and doings) that they have reason to value. It contributes to the structure and agency debate by recognising that the individual agency of female QSs to pursue their career aspirations is influenced by the structure and culture of the construction industry. It also contributes to career theories by diverging from outcome-based approaches that focus on extrinsic success, and resource-based approaches centered on human capital. While the approach recognises outcomes, and the resources required in their pursuit, its basis is in the freedom of individuals to pursue outcomes they have reason to value (Sen, 1984; 1992). These outcomes are conceptualised in this research as career aspirations. Focusing on female QSs’ genuine choices not only acknowledges visible constraints on their achievement, but also addresses the covert strategies used to maintain closure of the occupation. The concept of genuine choice also recognises that female QSs adapt their career preferences to maintain their own well-being, as well as that of others. Nevertheless, by identifying relevant functionings and capabilities, the approach takes a more “plural view of well-being” (Robertson, 2015, n.p.) that is future-proofed to account for changing aspirations.

Sen (1992: ix) acknowledges, but departs from, the resource based (or utility) theories of Bentham (1748 – 1832) and Mill (1806 – 1873), and Rawls' Theory of Justice (Rawls, 1971). Drawing parallels with human-capital approaches, utility theories are concerned with the accumulation of resources, assuming that acquiring more resources gives an individual greater levels of well-being. Sen (1992; 1999) asserts that acquiring resources is meaningless if individuals still lack freedom to achieve their aspirations. He illustrates this with the following example: if an individual's desired functioning is to go somewhere by bicycle, acquiring a bicycle may not be sufficient to enable them to achieve that aspiration. Consideration must be given to constraints such as: disability, the lack of infrastructure to ride the bike on, or societal rules or laws prohibiting certain groups, such as women, from riding bikes. The number of bicycles the individual acquires is irrelevant; they will still be unable to ride them. Likewise, attempting equality of resources in giving everybody a bike, does not achieve equality in valued outcomes. Therefore, acquiring a wide range of resources may give an individual a wider choice of "potential attainable alternative lifestyles" (Robertson, 2015: n.p.), but only if they are able to convert them into freedoms. This is also one way in which the CA diverges from HCT, which focusses on acquiring further resources.

An important and relevant consideration of the CA in its departure from utility theories is that it does not measure well-being in terms of the amount of satisfaction an individual derives from something. Sen (1992: 7), as an economist, argues that those who lead a "very reduced life" may gain satisfaction if they receive something to make that life easier, although they may still not have achieved well-being. Although a psychological concept, career satisfaction is a "valid measure of intrinsic success" (Moore, 2006: 226) but it is the individual's own subjective evaluation of their position, influenced by their own unique situation, and cannot be compared to someone in a different situation. Thus, career satisfaction as a measure of well-being is problematic as it is possible that an individual will aspire to career satisfaction when other aspirations seem unachievable. Sen (1992) conceptualises this as adapted preference.

The terminology associated with the CA has been much criticised (e.g. Qizilbash, 1996; 1997; Gasper and van Staveren, 2003) with valued outcomes termed functionings, the freedom to pursue them as capabilities, conversion factors and the lowering of aspirations as adapted preference. These terms can confuse, both due to their similarity with everyday terms and the lack of clarity in their definitions. As the research is based on these concepts, some definition is required.

4.2.1 Functionings and capabilities

Functionings represent “the various things that [an individual] manages to do or be in leading a life” (Sen 1993:31). Graham (2011: 45) asserts that functionings must be “objectively and intrinsically valuable” but Sen (1992) simply says that they should be outcomes that individuals have reason to value, they do not also need to be objectively valuable.

The freedom of individuals to achieve their functionings is represented by their capability set, from which only some capabilities “become realised as functionings” (Hart, 2012: 29). The capability set compiled for female Qs within this research will demonstrate which combinations are required to achieve each desired outcome. Functionings in terms of career aspirations are likely to change over time but, with the right capability set, combinations of well-being can be achieved. Although total well-being is said to be defined by the number of achieved functionings, this will be demonstrated to be untrue in this context. Functionings are subjective, so acquiring capabilities is the main research focus. These represent the genuine opportunities of individuals to do and be whatever they have reason to value (Nussbaum, 2000; Robeyns, 2016b).

In this research, desired functionings are represented by female Qs’ aspirations. Once these are ascertained, the remainder of the research analyses how female Qs can acquire the capabilities to achieve them. Establishing female Qs’ capability set addresses the conflict between the three ‘arenas of action’ previously described, allowing the focus to transfer between work and non-work roles as careers develop. Researchers agree that bigger capability sets enable a greater range of functionings from which to choose (Vizard and Burchardt, 2007; Graham, 2011), which this research will reinforce. It is argued that the CA is difficult to operationalise because only the individual knows her own personal capability set (Gasper, 2007). However, this is irrelevant if a generic capabilities set relevant to a specific context is established, as it enables one desired functioning to be traded off against another to maintain overall well-being (Sen, 1992; Kotan, 2009). Additionally, the CA is deliberately incomplete to allow variations within contexts (Walby, 2012).

4.2.2 Adapted Preference

An individual’s functionings are influenced by the nature of the opportunities that are available to them (Sen, 1992; Walker and Unterhalter, 2007). Those who have to prioritise food and shelter, for example, are unlikely to aspire to higher functionings and more likely to decide that they did not want them anyway (Nussbaum, 2000). This decision may not be a conscious one. This means that care must be taken to ensure that the aspirations of female Qs are genuine desires, rather than ‘adapted preference’. A clear example is a stated

aspiration of female QSs to be happy in their careers. It will need to be established whether they have this aspiration because they are currently unhappy or whether it is a genuine valued outcome for them. Nevertheless, female QSs' aspiration for happiness may be grounded in their inability to gain a 'higher' aspiration, such as hierarchical progression, which they perceive is unavailable to them.

This is linked to an issue queried by Nussbaum (2000), interpreting Sunstein (1991), regarding whether habituation shapes desire. If it does, then Nussbaum (2000) suggests that instead of using individual choice to model institutions, we should model institutions to enable more individual choice. The point is particularly relevant to this research because, as Chapters Two and Three detailed, construction institutions have been modelled on the choices of the dominant men who populate them, and this could shape the desires or aspirations of women. This feeds into the recommendation by Worrall et al (2010), that women should undertake CPD to enable them to manage situations where they are disadvantaged, rather than educating men in how to work alongside women.

4.2.3 Conversion factors

Although researchers place different emphases on conversion factors, they nevertheless agree that these are an essential part of the CA. For this research, they provide the link between a utilitarian, resource-based, approach to careers and the outcome-based approaches commonly employed. They conceptualise the structural and cultural factors that influence women's career development in quantity surveying. Well-being is governed by an individual's ability to convert resources into capabilities (Sen, 1999; Nussbaum, 2000), so although ownership of resources enhances an individual's freedom to achieve, it does not necessarily mean they will achieve equal outcomes, because of the "significant variations in the conversion of resources and primary goods into freedoms" (Sen, 1992, p. 33).

Most CA researchers categorise conversion factors into the following, established by Robeyns (2005b; 2016a):

- Personal conversion factors are those which apply to the individual – such as age, gender, disability etc.;
- Social conversion factors come from society and might include public policies; social norms and practices that unfairly discriminate; societal hierarchies, or power relations related to class, gender, race, or caste;
- Environmental conversion factors come from one's physical environment, such as the effects of climate.

Three points are worthy of note. First, Robeyns' classification has been adopted without criticism; even Sen (2009) cites Robeyns' interpretation and Robeyns cites herself as the main source of their interpretation. Second, Sen (2009: 255) added a fourth conversion factor, "differences in relational perspectives". This is little featured in other CA research. It is defined as "established patterns of behaviour in a community [that] may ... vary the need for income [or other resources] to achieve the same elementary functionings" (Sen, 2009: 255). As an economist, Sen (2009) uses examples focusing on societal norms that are not relevant in this research. However, 'established patterns of behaviour in a community' can be related to the subcultures of the construction industry that directly affect women's ability to develop their careers and it is in this context that it is used in this research. Finally, Robeyns' study is contextualised within more generalised issues of inequality and so some adaptation of her conversion factors is required to make them relevant within the context of women's careers in quantity surveying. For example, environmental conversion factors in this context link to the work environment and organisational factors.

Conversion factors enable as well as constrain freedom. For example, legal and policy issues are more likely to enable women's careers, even though not all policies affect all women. An obvious example is those that are related to maternity. Other policies, or their implementation, may constrain some women's career development whilst, at the same time, enabling others. Factors such as age, hierarchical status (personal conversion factors), organisation types worked for and their associated policies (environmental or organisational conversion factors), and presence or absence of a mentor (social conversion factors) are also relevant in this context.

4.3 Criticisms of the CA

As an approach rather than a theory and, moreover, one that is applied within many different contexts, the CA has attracted wide-ranging criticism. The application of some aspects of this criticism is beyond the scope of this research. For example, researchers such as Qizilbash (1996; 1997) and Nussbaum (2000; 2011) have focused on the CA within its original application in welfare economics and human development. Other criticism, relating to the CA in general terms, can be related to career development.

Sen (1999) has welcomed critiques and endeavoured to address some of the points of discussion, particularly those in relation to perceived contradictions in the approach and the lack of clarity in terminology, as well as blurring the demarcation between what constitutes

capabilities, functionings and conversion factors (e.g. Gasper and van Staveren, 2003; Robeyns, 2005a; 2005b). Indeed, some factors can be included in all three. For example, qualifications are a resource but also a valued outcome (functioning); as a capability, they form the basis of having freedom to pursue educational experiences, and lack of qualifications may be a personal conversion factor (e.g. Francis, 2017). Their specific role is distinguishable by the circumstances of the individual and it is for the researcher to decide their context within the framework. As an open framework that has been subject to much interpretation, blurring of terms in the CA is inevitable (Robeyns, 2003; Walby, 2012), a point, once again, conceded by Sen (2009). Indeed, many researchers have ignored some individual concepts altogether or they have placed more emphasis on one than another (e.g. Graham, 2011; Hart, 2012).

Researchers have challenged the agency–centric nature of the approach as inadequate in situations where freedom and choice are limited by structural barriers that prevent the achievement of desired functionings (Dean, 2009). Burchardt (2006) also believes it ignores the role played by institutions in shaping opportunities. This is context dependent and is addressed to some extent by analysing conversion factors. In the context of employment, Dean (2009), Walby (2012) and Sayer (2012) allege that individuals cannot escape from exploitation and the hegemonic controls over them in the labour market, whatever their resources and capabilities. Walby (2012) and Bowman (2010), argue that choice is socially constructed; if individuals can only choose from that which is available, there can be no challenge to existing structures, which leads to their reproduction. Yet, Bowman (2010) also asserts that having agency means having the freedom to question and reassess choices, as well as having the freedom to act and challenge existing structures. That the CA is weak in addressing structural inequalities is acknowledged by Sen (Bowman, 2010); nevertheless, it highlights areas of concern and considers them in the form of conversion factors. Sen (1992: 40; 1999; 2009) describes capabilities as the freedom or “the real opportunities” of an individual to achieve well-being; the CA enables identification of these real opportunities.

The most prominent critiques are based on books and articles that are intended to gain understanding of, and also to develop, the scope and interpretation of the CA. They raise questions about the emphasis on capabilities over functionings (Qizilbash, 1997); and the central concept of freedom of choice (Walby, 2012). Yet, the capability framework has developed over time, often as a result of academic debate (Kremakova, 2013), such that many criticisms and concerns have been subsequently addressed and others are context specific. Empirical research such as that of Walker and Unterhalter (2007), Graham (2011), Hart (2012) and Holborough (2015), whilst acknowledging criticisms of the approach,

nevertheless use the breadth of interpretation to contextualise its application within their individual research fields.

Both Hart (2012: 34) and Kremakova (2013) have summarised key criticisms of the CA. As discussed above, their analyses include: the language and concepts of the CA, the difficulty in its operation due to its breadth of application and focus on agency and the influence of structures on the achievement of capabilities. Criticisms by Dean (2009), that the approach does little to consider the exploitative nature of capitalism and theories of power, dominance and subordination, have been addressed by Sen (2009) by acknowledging that the approach addresses questions of enhancing justice, rather than offering specific resolutions to injustice.

Nussbaum (2000), Robeyns (2005b), Hart (2012) and Kremakova (2013), amongst others, have highlighted Sen's unwillingness to compile a definitive list of capabilities. Sen (1992) has stated that he is not averse to the production of lists within specific contexts and, indeed, has produced them for himself. It is a 'definitive list' that he is not willing to publish. This, and the criticism that the CA is not fully operational, is also conceded by Sen (1999; 2009). It is a broadly conceived approach that allows for individual interpretation in its application (Alkire, 2008) and is deliberately open-ended to allow for context-specific interpretation (Walby, 2012). Although Sen (2004: 77) will not recommend a "predetermined canonical list of capabilities", lists have been produced, for example, by Nussbaum (2003), Robeyns (2003), Walker and Unterhalter (2007), and Holborough (2015) and these will form part of this research, as discussed in the following section.

4.4 The role of the CA in this research

The CA is used in this research to understand situated agency and to address the structure-agency tension (Graham, 2011) of female Qs in the construction industry. It provides a framework with which to analyse the processes that influence their abilities to acquire and convert resources in pursuing a range of aspirations. Switching the focus from examining careers in terms of outcomes to the freedom to pursue aspirations provides a departure from existing research regarding women's careers in the construction industry. The CA's focus on the role of individual agency in the active choice between genuinely available alternatives acknowledges several pertinent factors: that individuals with different resources can aspire to the same outcomes; that individuals with an equal level of resources do not necessarily aspire to the same things; that individuals do not have equal abilities to convert resources; and that outcomes are influenced by what is genuinely available to them. It provides a

framework through which a range of possible outcomes can be obtained, as there is little to analyse if outcomes are pure choice or are predetermined (Graham, 2011).

4.4.1 Research Approach

Although actual outcomes are less important than female QSs' freedom to pursue them, they need to be ascertained to enable the identification of relevant capabilities. This might appear to be a point of departure from the CA as proposed by Sen (1992; 1999; 2009) who, as an economist and philosopher, begins with resources. Although resources are important, analysing influential conversion factors that enable identification of inequalities in career development, is more relevant within this context. Additionally, in line with other research (e.g. Hart, 2012) aspirations, although a valued outcome are also a resource.

The research is divided into two parts. The first ascertains female QSs' aspirations and their definitions of career success as a means of identifying valued outcomes. The second analyses how each aspiration can be achieved through the acquisition of capabilities via the significant personal, social, organisational and cultural conversion factors. Capabilities are combined into a set, examined as a means of illustrating women's potential, attainable career paths in quantity surveying. Sen (1989; 1992; 1999; 2009) strives to establish where inequality lies, arguing that "any theory of justice that can serve as the basis of practical reasoning must include ways of judging how to reduce injustice and advance justice, rather than characterising a perfectly just society" (Sen, 2009: ix). This theoretical perspective is a valuable tool, not just in analysing career paths of female QSs, but also within the wider construction industry. Adopting the evaluative space of the CA highlights how the perceptions of female QSs are influenced by gendered assumptions and interpretations of what their career paths should be (Graham, 2011). Sen (1992: 89) asks: "should a person's position be judged positively, in terms of the level of achievement, or negatively, in terms of the shortfall, [compared to] what she could have maximally achieved?". This research argues the former, and that this also represents career success.

Women in construction are disadvantaged by the assessment of career success in terms of shortfalls. Words like 'underachievement' (Dainty, Bagilhole and Neale, 2000; Watts, 2007); limitation (Worrall et al, 2010) and barriers (Worrall et al, 2010); or that women 'lack' certain factors – mentoring, confidence, progress, advancement (Francis, 2017), or power, training and recognition (Watts, 2003; Worrall et al, 2010) all disadvantage women in construction. Women are perceived as failing, which can lead them to perceive a career in construction as fraught with inequality and poor career progression. Yet, there are a multitude of opportunities for women to have successful careers in quantity surveying; there are a range

of organisations for whom they can work, a range of job functions available and a range of career outcomes. The capability space offers the opportunity to consider the benefits of expanding an individual's capabilities "so that she is able to choose between a range of ways of being and doing that they have reason to value that they might live a flourishing life" (Hart, 2009: 85).

This research focuses on the factors that enable female Qs to maximise their ability to achieve well-being, within their own definitions of career success. It has been argued that the CA is difficult to operationalise; that it is hypothetical and, rather than focusing on the observed outcome, all possible outcomes need to be considered (Graham, 2011). By identifying a range of common aspirations of female Qs, the resulting capability set is relevant for all. First, however, a 'hypothetical' set of capabilities needs to be established as a basis of ascertaining which are ultimately required for female Qs to pursue their aspirations.

4.4.2 Establishing a list of capabilities.

As stated above, the issue of whether or not lists of capabilities should be produced remains debated. Despite his refusal to produce a definitive list, Sen (1992; 1999) is not averse to their production within context. Sen (1992) and Robeyns (2003: 89; 2005b) stress that "each application of the capability approach [requires] its own list". To prevent researcher bias in list production, Robeyns' (2003; 2005b) methodology has been employed. This states:

1. the list should be explicit, discussed and defended;
2. the method used to generate the list should be justified;
3. the list should be relevant to the context and use context-appropriate terminology;
4. the list may have levels of generality – the first may be to draw up an 'ideal' list and the second to draw up a more realistic one that takes constraints into account;
5. The list should be exhaustive – all capabilities should be included, and these should not be able to be reduced to other elements.

Different methods have been adopted by those who have produced lists, although there has been no debate regarding a 'correct' method. This research is adopting the method used by Walker (2012) and Holborough (2015) as it involves analysing elements of existing lists to establish capabilities relevant to the context of female Qs, which then form part of the data-collection process. As the first application of the CA in this context, careful consideration and interpretation of relevant capabilities is required.

Nussbaum's (2000) 'universally valid' list is an appropriate starting point. Albeit that Nussbaum's focus is gendered inequalities in human development, her ten-point list is intended to address inequalities applicable to any context. Additional lists were chosen for a variety of reasons. Robeyns' list focuses on gender inequality with capabilities relevant to this research. Erikson and Aberg (Erikson, Nussbaum and Sen. 1993: 72-3) produced a list centred on a person's "command over resources in the form of money, possessions, knowledge, mental and physical energy, social relations, security, and so on" which gives insight into the range of resources in addition to qualifications and experience. Walker's list also addresses gender inequality albeit in an educational context. Finally, Holborough's list was compiled in a comparable way to that of this research, developing throughout the research process. It also contained relevant capabilities not included on other lists. Some capabilities from these lists were dismissed as not relevant. For example, having the freedom to live a 'normal' lifespan (Nussbaum, 2000). The theoretical list of capabilities, Table Four, was formed by selecting relevant capabilities from the above lists, together with information obtained from the literature review and pilot interviews:

	Theoretical capability	Reasoning and alternative definitions
1	To be free from harassment and bullying	Included in all analysed lists: Nussbaum (2000: 78): “bodily integrity”; Robeyns (2003: 78): “safety”; Walker (2007): bodily integrity; Holborough (2015): to be treated fairly, including freedom from discrimination and bullying.
2	To have educational opportunities	Included in all analysed lists: Erikson and Aberg (1987: 4): “knowledge and education opportunities”; Nussbaum (2000: 79): “imagine, think and reason ... in a way informed and cultivated by an adequate education”; Robeyns (2003: 79): “education and knowledge”; Walker (2007): knowledge; Holborough (2015): having a formal education.
3	To seek paid employment on an equal basis with others	Nussbaum (2000: 80): included in “having control over one’s environment”; Robeyns’ (2003: 81): “paid work” focusing on gender inequality within employment; Holborough (2015: 280): “to be financially rewarded” for work.
4	To have mental well-being and support	Nussbaum (2000: 79): “emotions” and “affiliation”; Robeyns (2003: 83): “being respected and treated with dignity”; Walker (2007:190): “respect and recognition” Holborough (2015): being supported at work
5	To have social interaction	Included in all analysed lists: Nussbaum (2000: 79): “affiliation”; Robeyns (2003: 78): “Social relations ... social networks and social support”; Walker (2007: 189): “social relations ... work with others to form effective or good groups”; Holborough (2015: 280): “to have and enjoy relationships, social networks and to make friends at work”.
6	To have adaptability	Holborough (2015): to have adaptability.
7	To carry out domestic work and non-market care	Robeyns (2003) and Holborough (2015): To carry out domestic work and non-market care.
8	To have autonomy	Robeyns (2003) and Holborough (2015): to have time autonomy.
9	To have travel autonomy	Robeyns (2003: 81): “mobility”; Holborough (2015): “to move and relocate for work”.
10	To have a voice	Walker (2007) “speaking out, not being silenced through pedagogy or power relations or harassment”; Holborough (2015): to have a voice.
11	To have respect, self-confidence and self-esteem	Holborough (2015): To have respect, self-confidence and self-esteem.

Table 4: Theoretical list of capabilities with descriptors

Both Sen (1989) and Robeyns (2003: 89) recognise that there may be some overlap between capabilities. This hypothetical list forms the basis of the questioning framework in both the questionnaire survey and the case-study interviews, as detailed in Chapter Five.

There has been debate over whether capabilities should be weighted, or otherwise valued, to compare the importance of one to another. Although Sen (1992; 1999), acknowledged that that this is an issue to be explored, he asserts that weightings will differ according to circumstances and the context in which the list is compiled. Researchers do not give a value or weighting to their lists with any of the above capabilities as they all “are of central importance and all are distinct in quality” (Nussbaum, 2000: 81). Likewise, no weighting is given to the capabilities in this research.

4.4.3 Research direction

The questioning frameworks developed from this list are given in Appendices E, F and G. They consider the link between resources, capabilities and functionings and how conversion factors affect the transformation from inputs to outcomes. The research considers the impact of gender in individuals’ aspirations, their ability to obtain resources and the influence of conversion factors, which has led to the creation of a capability set that reflects the career aspirations of female QSs. By highlighting how structural and cultural factors influence female QSs’ ability to achieve their desired functionings, positive implementations to enable the development of female careers in quantity surveying can be identified. Although change could be achieved by increasing resources, for example by gaining additional qualifications, the demographics from the case-study respondents indicates that this does not necessarily influence their career pathways. However, change can be implemented through the expansion of female QSs capability sets (Graham, 2011), by addressing inequalities in conversion factors and how they influence female QSs’ ability to achieve their desired functionings.

4.5 Conclusion

This chapter has demonstrated that the study of careers of women in the construction industry, specifically female QSs, can be approached in a different way to previous research. Using the CA as the research framework switches focus from achieved outcomes, where women are said to lack success, to focusing on ways to enable them to achieve desired aspirations, whatever they may be.

Although the research begins with ascertaining desired aspirations, it passes no judgment regarding their nature, merely using them as a means of identifying the capability sets, or freedoms, through which they can be achieved. Thus, it diverges from other construction careers research by analysing, in-depth, the means to achieve a range of valued outcomes.

The CA is an open framework that can be adapted to specific contexts. The capability set formed will be unique to the careers of female QSs. Understanding the factors that influence career pathways of female QSs using the CA ensures that the voices of female QSs are heard. Despite arguments that the CA is not suitable for quantitative research (Nussbaum, 2003; Robeyns, 2005a; 2005b; Graham, 2011), with some saying it serves qualitative research better (Zimmerman, 2006), Sen argues that it is up to the researcher to develop the framework for their own purposes. This research adopts a mixed-methods approach incorporating both qualitative and quantitative methods as detailed in the following chapter.

The first question addressed is that of the aspirations of female QSs. Whilst not focused on outcomes, the CA is geared towards establishing freedoms for desired outcomes to be achieved. Research asserts that women underachieve in the construction industry, yet no one has asked women what their aspirations are or their definitions of career success. This is the starting point in understanding the capability sets required to achieve valued outcomes. The second theme addresses the acquisition of capabilities required to achieve these outcomes within the enabling and constraining factors impacting the conversion of aspirations and resources (the third theme). Finally, the capability set relevant to all career aspirations of female QSs is established.

CHAPTER FIVE

Research Design and Methodology

5.1 Introduction

The research aims to understand women's career pathways in quantity surveying and how pathways are impacted by female QSs' aspirations and definitions of career success, as well as structural enablers and constraints. While a purely qualitative approach would uncover the depth of female QSs' experience within a single organisation, it could not conclude that the resulting capability set applies across the construction industry. Purely quantitative methods on the other hand, do not uncover the depth of knowledge required to enable understanding of the relevant issues, particularly as the researcher is too distant from those being researched (Creswell, 2009). Therefore, this study adopts a mixed methods approach that is informed by the Capabilities Approach.

5.2 Research questions and propositions

The breadth and complexity of the research methods adopted is designed to address the main research question: "What is the impact of aspirations and organisations on female QSs career pathways?" and the resulting five research questions:

- What factors impacted the historical development of women's career pathways in construction?
- To what extent do existing career theories reflect women's career pathways in quantity surveying?
- What is the influence of female QS's aspirations on their career pathways?
- Using the framework of the CA, what is the capability set that enables female QSs to pursue their aspirations?
- What are the structural and cultural factors within the construction industry that influence female QS's ability to acquire relevant capabilities?

To address these questions, the primary research comprised three levels of data gathering:

- Macro-level interviews with fourteen representatives from a range of construction organisations;
- an industry-wide questionnaire survey of two hundred and ninety female QSs;
- and

- a micro level case-study formed of interviews with 27 women performing a QS role in Network Rail.

The methodology for the research was guided by a set of research propositions derived from the research’s aim and objectives as well as the research questions. The propositions, given in Table Five below, “constitute the paradigm within which the research will be carried out” (Fellows and Liu, 2015: 45).

Research question	Proposition
1. What factors impacted the historical development of women’s career pathways in construction?	1. The historical development of quantity surveying continues to impact female QSs’ career pathways, particularly in terms of structural and cultural factors of the construction industry and its definitions of career success.
2. To what extent do existing career theories reflect women’s career pathways in quantity surveying?	2. Existing career theories – traditional and alternative – cannot fully explain the dynamic career pathways of female QSs.
3. What is the influence of female QS’s aspirations on their career pathways?	3. Female QSs’ aspirations can be intrinsic and/or extrinsic. These aspirations impact the direction their careers take. 4. Quantity surveying enables women to pursue a range of aspirations.
4. Using the framework of the CA, what is the capability set that enables female QSs to pursue their aspirations?	5. Combinations of capabilities within female QSs’ capability set enables them to pursue any stated aspiration.
5. What are the structural and cultural factors within the construction industry that influence female QS’s ability to acquire relevant capabilities?	6. Female QSs’ ability to acquire the necessary capabilities is impacted by the structure and culture of the construction industry.

Table 5: Research propositions

5.3 Research philosophy and approach

5.3.1 Research Philosophy

The research philosophy and approach should reflect the aims of the research and address its objectives, research questions and propositions. Although there is no ‘correct’ research approach, the methodology should be reflective of the relevant ontology (the nature of

reality), epistemology (what constitutes acceptable knowledge and how it is communicated) and axiology (how researcher values and ethics affect the research process) (Saunders and Lewis, 2018). The approach adopted here, however, follows that of Creswell and Creswell (2018: 5) who use the term “world view” in lieu of ontology and epistemology. According to Robertson (2016: np), the CA cannot be classified into being positivist or anti-positivist, interpretivist or objectivist and the researcher “must seek a philosophical approach that transcends these dichotomies”. Further, the research itself does not fall into any one category of approach, having elements of several ‘world views’.

In keeping with social constructionist theory (Burr, 2015), the focus is not to make judgements but to identify patterns of relationships within responses from which to draw conclusions. The constructionist ontological approach is principally concerned with explaining how individuals make sense of their world. It assumes “that gender meanings inform the personal practices of individuals” and thus influence how social systems operate (Bird and Rhoton, 2011: n.p.). In this context, the social constructionist approach enables consideration of the structural and cultural conditions within the construction industry that affect individual’s choices, as well as the women’s unique circumstances in terms of the social context, systems and processes affecting them (Blaikie, 2007).

However, other elements of the research have a transformative approach which has at its basis the belief that constructivism will not address how women can pursue their goals or how changes can be made to the institutions that impact their lives (Creswell and Creswell, 2018). This element of the research addresses issues such as inequality and empowerment. As this is feminist research, it is based on the experiences of women whose voices need to be heard to ensure that their experiences are not overwhelmed by the organisational analysis.

Further, interpretivism may also seem an appropriate epistemological stance as it takes the view that social reality is subjective because it is shaped by our perceptions (Bryman and Bell, 2003), but this approach is not “in the spirit of Sen’s writings” (Robertson, 2016: np). Indeed, although Sen is a philosopher as well as an economist, debates on philosophical approaches feature little in his work.

Therefore, rather than choosing between competing perspectives, a pragmatist approach is adopted. Pragmatism allows the researcher to link research methods to the research questions and propositions and is concerned with applying whichever appropriate solutions work in addressing the research problem. It is not committed to any one system of

philosophy and reality and is particularly applicable to mixed methods research (Creswell and Creswell, 2018). It is also particularly appropriate when applying Sen, as it favours the practical over more overtly philosophical approaches (Hannan 2015). Its concern with action and change makes it a suitable basis for research approaches that seek to intervene in, rather than merely observe, reality (Goldkuhl, 2012). Like Sen, pragmatism not only observes what 'is' but also what else may be possible and, unlike interpretivism, is not restricted to merely understanding a situation (Goldkuhl, 2012).

It is possible to combine pragmatism with interpretivism in a kind of 'pragmatic interpretivism' where either one is the base paradigm, allowing elements of the other to be used in support (Goldkuhl, 2012). However, Robertson (2015: np) stresses that careers research "rejects a "strong" version of postmodern interpretivism, by taking a pragmatic approach" in which knowledge is sought to give guidelines, exhibit values and, significantly for the CA, suggest possibilities (Goldkuhl, 2012). Further, a pragmatic approach allows quantitative as well as qualitative methods, recognising that there are many different ways of interpreting the world (Saunders and Lewis, 2018).

Given its mixed methods approach, the research also adopts a pragmatist axiology. As stated in the preface, the researcher herself is a female QS and therefore complete objectivity "is impossible [but] the researcher can be shown to have acted in good faith" and not allow personal values to impact on the way the research is carried out (Bryman and Bell, 2003: 398). Nevertheless, the researcher as a female QS adds to the credibility of the data as her experience can aid its interpretation. Although having experience in the field may introduce issues of bias, as stated above, in another sense it brings positivity to the analysis as intimate knowledge of the field will alert the researcher to any anomalies in the data.

To understand how aspirations and organisations impact female QSs' career pathways, the research questions may be tested using a deductive research approach (Saunders and Lewis, 2018). However, the research also seeks to understand organisational context and to ascribe meaning to the accounts of the participants. This suggests an inductive research approach. Therefore, an abductive approach was adopted, combining deduction and induction. This is common in organisational research (Saunders and Lewis, 2018).

5.3.2 A mixed methods approach

A mixed methods approach extends beyond that which is purely observational to include exploratory research. It is not possible to achieve the aim of the research purely by means of a quantitative questionnaire survey as the researcher would be distant from the subjects

being researched and unlikely to uncover the depth of knowledge and understanding sought. A distant position removes context and the ability to interpret meaning from the answers given. Combining quantitative data with a qualitative approach based on personal experiences, gives richer data that enables better interpretation (Saunders and Lewis, 2018). A criticism of the CA is that it is too individualistic but using a method that gives deeper understanding of the needs and motivations of individuals (Creswell, 2009; Saunders and Lewis, 2018) means a more generalised framework can be established. The mixed methods approach adopted centres on identifying experiences of individuals through qualitative data, which are then interpreted within the context of the wider profession and industry using quantitative data.

The case-study interviews and questionnaire survey are based on a sample of women only, focusing exclusively on their own career experiences. Gender is unimportant in the macro-level interviews in the wider industry, albeit that most respondents are female. By analysing the collective accounts of individual women's experiences, the research seeks to understand how their career aspirations are achievable within their environment as well as the more descriptive (or what) questions and explanatory (why) questions.

Using a case study of NR as the main focus of the research gives insight regarding the career experiences of female QSs within an organisational setting. The policies, practices and culture of NR are examined within the study, providing context to the experiences described. The results from the case study are then triangulated with the data obtained from the questionnaire survey of female QSs across the wider construction industry as well as the organisational factors from macro interviews. This converging evidence thus validates the findings (i.e. the resulting capability set and conversion factors) as applicable to female QSs across the UK construction industry (Yin, 2018). While the case study shares the same research questions as the other methods, it has been conducted and analysed separately as is common in mixed-methods research (Yin, 2018).

The research strategy should ensure that the data collected address the what, why and how research questions (Yin, 2014). A single method study is unlikely to garner the "richer and stronger array of evidence" (Yin, 2014: 66) required to address the breadth and depth of the broad range of research questions. By undertaking a case-study of female QSs in a single organisation, and a questionnaire survey of respondents from the whole industry, the experiences of female QSs throughout the occupation are addressed. Macro-level interviews with representatives from a range of construction organisations complete the data collection and give insight into the structural factors that influence female QS's career

pathways. Details of the data collection techniques used in the research are given in sections 5.3.2 - 5.3.4 below.

5.3.3 How the CA is applied in the research

Elements of the CA form both the questioning and analysis frameworks for the research. Criticism that it is difficult to operationalise (Gasper, 2007), means that there is ongoing debate over whether the CA is suited more to quantitative or to qualitative approaches. While there are arguments that the CA is not suitable for quantitative research (Nussbaum, 2003; Agarwal, Humphries and Robeyns, 2005), Sen (1992) has successfully employed quantitative methods to assess wellbeing. Even so, it would be inappropriate to use purely quantitative methods in understanding the experiences of female QSs. The need to assess “opportunities, resources, rights (entitlements) and the achievements (functionings: beings and doings) they allow” (Zimmerman, 2006: 478) means that the CA is particularly suited to qualitative methods.

Contrary to research that assumes what it is that people value from their careers, the CA enables an exploratory qualitative methodology to determine what female QSs actually value. It enables discovery and exposition of women’s agency, as well as an investigation of the structural and cultural factors in organisations and other social settings in which their careers develop. These are then examined to understand their application across the wider construction industry by means of the quantitative study.

5.3.4 Feminist stance

Traditional feminist research has been rooted in qualitative research, valuing meaning making through the experiences of women (Maynard, 1994; Letherby, 2003). Subsequently, quantitative methods have experienced a resurgence, and multiple, or mixed, methods even more so (Reinharz and Davidman, 1992; Maynard and Purvis, 1994; Letherby, 2003).

This research is classified as feminist because it conforms to Ollivier and Tremblay’s (2000) three principles of feminist research. These are: that it is characterised by the construction of new knowledge and the production of social change, it is grounded in feminist values and beliefs and it is diverse. It questions existing arrangements and their implications for women (Watts, 2003) and the questioning framework is guided by the need to analyse female QSs’ career experiences in depth. As there is a gap between reality and the idealist goals of feminist research, the research may not totally conform to its principles, but it does include

some of the basic epistemological principles of feminist methodology as identified by Cook and Fonow (1986):

- it takes women and gender as the focus of analysis;
- it acknowledges the importance of consciousness raising;
- it acknowledges the subject as having expert knowledge, reflecting a social and historical standpoint.

Feminist research should have the aim of empowering women to challenge subordinate relationships and inequalities (Cook and Fonow, 1986) although it cannot claim to speak for all women. However, by ascertaining female QSs' career aspirations and capability sets, it can provide new knowledge grounded in the realities of women's experiences, providing a different way of looking at the construction industry (Letherby, 2003), and recommend structural and cultural changes to it.

The focus on changing and challenging the "gendered structures and systems in place that affect all women in an organisation" (Mavin, 2006: 361) denotes this research as having a more radical feminist approach than a liberal one. Brayton, Ollivier and Robins (n.d.) advise that there is a wide range of methods available within feminist research and that it is better to allow the context of the research to guide the choice of methodology.

5.3.5 Ethics

The research data have been collected with the informed consent of the participants and ethical decisions about appropriate content were made before data were collected.

Analysing the resulting data does not further impact any of the respondents. The questionnaire survey was anonymous which, together with the size of the dataset, means that it is impossible to identify a particular respondent. At micro and macro level, the respondents were anonymised and any identifying information (for example, a respondent's unique job role) has been omitted. Further, no respondent is linked to any geographical location or region of NR.

Rigorous and transparent analysis of the data is important, and the researcher should ensure that data are not manipulated to suit her agenda. A copy of the ethics approval is given in Appendix D.

5.4 Research design and data collection

Although it is usual for quantitative data to be obtained first, and then qualitative data (Swanborn, 2010), for this research all three levels were carried out more or less simultaneously. Macro-level data enhanced that gathered from the case-study but was not required to inform the process, or vice versa. At the same time, initial case-study interview data, plus the capabilities listed in the theoretical capability set outlined in section 4.4.2, were used to formulate the questionnaire survey. The advantage of this was that any issues that arose in an interview could be addressed in a subsequent one.

5.4.1 Pilot interviews

To counteract potential bias and to inform the main study (Kim, 2010), three pilot interviews were undertaken – two with female Qs from Network Rail (Anna and Diana), the case-study organisation, and one with a female QS from a large national contractor. These unstructured interviews were conducted at a very early stage of the research, even before the theoretical framework of the study had been formulated. The purpose was to gain a clear conceptualisation of the focus of the research, gauge the experiences of female Qs and ascertain their career pathways (Kim, 2010). As the three women presented a range of career pathways, with different aspirations and challenges in their achievement, they were invaluable in aiding the development of the theoretical framework. They also had different demographics in terms of age (58, 39 and 35 respectively), marital and family status and qualifications - and they had entered quantity surveying in different ways. The pilot interviews comprised of informal conversations about the respondents' career development, the barriers they have experienced and the enabling factors that they consider would help them in their career progression. In speaking freely about their own career development within quantity surveying, they informed the research in terms of the variety of career paths that are available. The three women had followed completely different career paths; both to each other and to that of the researcher. Identifying these pathways gave focus to the data analysis and elicited the development of a broader range of questions at all levels of research.

Anna and Diana agreed to answer follow-up questions so that their data could also be used in the case-study analysis. The information obtained from the contractor's representative was used to inform the macro-level data analysis. The questionnaire survey was developed from the literature review, together with the pilot interviews and the initial case-study interviews. Additionally, the case-study questioning framework was further refined following initial interviews.

5.4.2 Case-study

The term case-study has a broad definition, but two key authors in the subject, Swanborn (2010) and Yin (2014: 17), agree that it is the study of a social phenomenon carried out in its natural context and involves “multiple sources of evidence”. Case-study was selected as appropriate because it enables an in-depth examination of an area of interest in an organisation, without the necessity of studying the entire organisation (Noor, 2008). Case-study is the “optimal strategy” to use if the aim is to uncover information about the experiences and assessments of groups of people (Swanborn, 2010: 27) and “readily complements” the use of other methods (Yin, 2014: 22).

When undertaking case study research, the data collected must relate to the research questions and propositions and have clear criteria for interpreting the findings (Yin, 2018). Further, the units of analysis must be clear (Fellows and Liu, 2015). As part of the overall planning of the case study, a basic protocol was adopted, following the template of Yin (2003) and Brereton et al (2008) (Appendix E). The steps with regard to the background, design, procedures and data collection are given below. Analysis and generalisability of the findings are discussed in section 5.5.

Background

Previous research on this topic has been analysed in Chapters Two, Three and Four. The aim, objectives, research questions and propositions are given in Chapter One and section 5.2 above. The research aims to understand the career pathways of female QSs and, as such, female QSs are the unit of analysis.

Design

The main source of data in addressing research questions Three, Four and Five and propositions Three, Four, Five and Six was a case study of Network Rail (NR). This mainly comprised in-depth, semi-structured interviews with women working in a QS role for NR. There are many reasons why NR was selected as the case-study organisation. First, as an organisation that commissions both building and civil engineering works, it represents all functions of the construction industry (Network Rail, 2017). Examples of these works include: building work such as stations; civil engineering works such as bridges, tunnels and viaducts; plus very specialised work such as track and signalling. Second, it is a nationwide organisation with offices and depots in places such as London, Glasgow, Cardiff, York, Swindon, Birmingham, Milton Keynes and Manchester and so regional variations on influencing factors can be ascertained or demonstrated to be irrelevant. Third, it undertakes a wide range of projects, from small refurbishments to major programmes such as HS2,

Thameslink Programmes (1 and 2) and Crossrail (1 and 2) (Network Rail, 2017). Finally, the organisation is one of the biggest in the UK. It employs 5,600 women from a total of 35,000 (16%) employees which, although higher than the construction average⁵, the company aims to improve to 20% by 2020 (Network Rail, 2017). While NR is not totally representative of the construction industry, it is nevertheless representative of a networked rather than a hierarchical organisation, which in many respects reflects the way that organisations are developing (Baruch, 2004; Clarke, 2013). This is echoed in comparisons that are made in the research with other large organisations and which emphasises the importance of isomorphism in generalising the results.

Case Study Procedures

Access to participants was facilitated via an email sent to NR's department of diversity and inclusion. After establishing confidentiality and ethical considerations (Appendix D), that department sent an email to all women in NR asking those who work in a quantity surveying role to contact the researcher expressing their willingness to participate. This email was sent on 13th April 2017 and achieved fifteen responses. This was not deemed sufficient to obtain the breadth and depth of information required. Consequently, one of the pilot interviewees, Anna, was contacted to see if she could assist, as she was influential in a 'women in rail' group within the organisation. She circulated a further email to that group after which a further twenty replies were received. The purposive, snowball sampling technique avoids bias as it was self-selecting and respondent driven (Heckathorn, 1997; Saunders and Lewis, 2018). Some responses were not followed up due to similarities with previous respondents and, in one case, distance as the respondent was based in Scotland. A total of twenty-seven interviews were undertaken, with participants in a range of roles and locations within the UK. The sample contains women aged from 22 to 58 years old. They have different marital and family status, are in a range of salary bands (which indicates hierarchical status), have been in NR for different amounts of time and are in a variety of job roles. Although the sample is not random, the range of respondents represents a good cross-section of female QSs.

Data Collection

Case study data collected comprised semi-structured interviews with women in a quantity surveying role, an interview with a representative of HR (see section 5.4.4) together with the analysis of relevant policy documents (e.g. NR's recruitment and equal opportunities

⁵ Although not all NR activities are construction related.

policies) as well as reports commissioned by NR regarding women in rail. Other resources, such as the researcher witnessing a team meeting of a higher-ranked respondent and assisting in a mock Assessment of Professional Competence for case-study respondent Bryony, gave further insight.

To ensure that the data gathered enabled in-depth analyses of women's experience and perspective of the occupation, semi-structured interviews were considered to be the most appropriate approach. A schedule of interview questions to guide the process (Appendix F), gave the interviewees the freedom to speak of their own, unique experiences; at the same time, the interviews were structured enough to enable the subject matter to be fully addressed. This flexibility allowed the interviewees to elaborate on points made and gave the interviewer the opportunity to use follow-up questions when the conversation revealed issues not previously considered or that was unique to a respondent (Ritchie and Lewis, 2012). By facilitating interviewees' understanding of their experiences, they had the opportunity to reflect upon the reasons for the choices they made (Easterby-Smith, 2015). Knowledge the interviewee had forgotten could be revealed and they were encouraged to think about situations and events in a new way (Yeo et al, 2014). Although other qualitative methods are available, they "do not take adequate account of the complexities and contradictions heard in interviews" (Yeo et al, 2014: 179). Conducting many interviews, and the process of analysis, enabled threads to be identified which gave more meaning to the data gathered.

A noted disadvantage of interviews is that they are time-consuming (Yeo et al, 2014), even more so in this case as NR is a nationwide organisation. A great deal of time was spent travelling and conducting the interviews and then in transcribing them and processing the large amounts of data (Yeo et al, 2014). Most of the interviews required one day to conduct, even though the average length of interview was 1½ hours. Time was saved in some instances where respondents were interviewed together and several respondents in one regional office were interviewed on the same day, which saved travelling time. As permission was sought and obtained for interviews to be recorded, the challenge of transcribing the interviews was aided by voice-recognition software. All recordings are stored on password protected devices. Additionally, no real names are used within the transcripts or the data analysis. An example of a participant information sheet is given in Appendix D.

Interviews began by informing participants about the general nature of the research and their anticipated contribution. They were reassured that they would not be pressed if there was a

question with which they were uncomfortable and were warned that the issue of harassment would arise. No respondent refused to answer any questions. The contextual background and theoretical framework underpinning the study were explained as the interviews progressed. This avoided leading the respondents, particularly regarding issues such as their definitions of career success.

The literature review and the CA informed the interview schedule, particularly the analysis and compilation of the list of theoretical capabilities formulated in section 4.4.2. Given the feminist stance of the research, questions not only explored respondents' experiences and their aspirations and definitions of career success but also examined their views on the particular factors that impact their career pathways to determine how these may be improved. Questions were divided into six categories: personal information; education; work history; work-life balance; career success; and issues of equality. These address all objectives as well as the main research question. As the interviews were semi-structured, there was opportunity for clarification and further probing and, as the interviews progressed, some issues arose that had not been considered at all or as being relevant by the researcher. Examples of these included: the assumptions made by men about what women want from their careers, the extent of the 'jobs for the boys' culture in the organisation, and the 'confidence gap' - which proposes that women do not apply for jobs unless they perceive that they have 100% of the requirements, and men will apply if they perceive they have 60% (Clarke, 2014). Interviewees were always given the last word by being asked if there was anything else they wanted to say or add about their career experiences.

Most of the interviewees were very forthcoming and open about their career development and experiences. However, two respondents were very closed, and their stories were more difficult to obtain, although there was no obvious reason why – particularly as they had volunteered to be interviewed.

Undertaking semi-structured interviews also challenges the notion that, as feminist research, it is somewhat 'biased'. It enables richer data to emerge than would be obtained from fully structured interviews, while at the same time ensuring that all relevant topics are covered (Maynard and Purvis, 1994). Further, choosing to have entirely female samples for the questionnaire survey and case-study interviews challenges the masculine bias of historic careers research in construction, including that of quantity surveying, and also increases the visibility of female QSs in the industry.

It is important to appreciate when 'closure' is reached such that any further evidence or data will add little to the research (Brereton et al, 2008). Therefore, further offers of interviews were thanked but refused once it was clear that, after 27 interviews, closure was achieved.

5.4.3 Questionnaire survey

Acquiring data from the wider population of female Qs enables understanding as to how the experiences of the case-study participants can be applied to the wider construction industry (Blackstone, 2012). To do this, a questionnaire survey was undertaken (Appendix G). This was compiled using the Google forms online survey form and the link was distributed via email (Appendix H).

This web-based online survey was chosen on the basis that it reduces geographical barriers, allowing less studied populations to be reached (McInroy, 2016). Google Forms hosts the survey on a website to which participants are sent the link with a brief explanation (Andrews, Nonnecke and Preece, 2003; Hoonakker & Carayon, 2009). The advantage of this process over directly emailed or posted surveys is that data gathered are recorded by the software used, allowing speedier analysis. Other advantages include:

- fast, easy and therefore cost-effective compilation and distribution of the survey;
- a choice of approaches to sampling and recruitment of respondents;
- a reduced burden for respondents, who only have to follow a link with no return postage required, which contributes to an improved response rate;
- respondents' increased anonymity generates richer information in open-ended questions. (McInroy, 2016).

Nevertheless, there are disadvantages. These include the fact that participants must first be directed to the website; an additional step that may dissuade some potential respondents. Other criticisms concern methodological quality, technological drawbacks and different digital capabilities (Denissen, Neumann and van Zalk, 2010). It is impossible to know how many women were dissuaded from completing the questionnaire due to its method of distribution, but it seems unlikely that they would not have the requisite technical knowledge. Other cited disadvantages, such as obtaining a representative sample, problems with distribution and data security (McInroy, 2016), could also apply to paper-based surveys and, arguably, password protection for on-line data makes it more secure.

Quantitative data tend to use random sampling to select the respondents for study (Ritchie et al, 2014) but the lack of individual lists of male and female Qs meant that this was

impossible. As indicated in Chapter Two, many who work as QSs are not chartered so, although the RICS holds a directory of all chartered surveyors, using respondents only from this directory does not enable access to the full range of female QSs. Therefore, it was necessary to undertake a non-probability sampling technique for this research, where the sample size is not determined in advance. These are particularly suitable where there is “limited knowledge about the larger group or population from which the sample is taken” (Neuman, 2014: 273) and when constructing “socially or theoretically significant contrasts” (Henry, 2009: 81). Purposive sampling was used as an appropriate method of data collection to ensure that the research questions would be answered (Saunders and Lewis, 2018).

Whilst purposive sampling is most often used with qualitative research (Saunders and Lewis, 2018) it can also be used in quantitative research (Tongco, 2007). A criticism of this type of sampling is that, as it is not random, it is not free from bias (Tongco, 2007). Although it can still produce “reliable and robust data” (Tongco, 2007: 154), the findings cannot be presented as being applicable to the entire study population (Henry, 2009; Neuman, 2014; Saunders and Lewis, 2018). Lavrakas (2008) disputes this, stating that the aim of a purposive sample is to be representative. As the respondents have the same characteristics, this sampling technique is also homogeneous (Ritchie et al, 2014).

Respondents were accessed from two populations: the membership database of the RICS and LinkedIn, a social media site for professionals. These specific populations were selected to maximise both chartered and non-chartered QS respondents. Emails containing the link to the survey were sent directly to all potential participants and 290 responses were obtained.

As the questionnaire was designed to supplement and enhance the data gathered from the case-study, it was important to ensure that it followed the same format as the case-study interview questioning framework.

The questionnaire gained 290 responses, although the distribution between respondents who were obtained via the RICS database, those obtained through LinkedIn or those through snowballing is unknown. The data were analysed using the software package SPSS version 24. In addition to the statistical analysis, some of the data were used in a qualitative way. This results in the quantitative data augmenting the qualitative data in terms of breadth, but also aids depth of analysis and serves as a control to the findings (Creswell, 2009).

5.4.4 Wider industry interviews

The in-depth case-study interviews and industry-wide questionnaire survey are designed to give the research breadth and depth regarding the experiences of female QSs. To give a 'big picture' perspective of the organisational structures that influence career pathways, interviews were conducted with representatives from a range of construction organisations who employ female QSs (Blackstone, 2012). The organisations interviewed represent a cross section of construction employers of QSs and all employ at least one woman in a QS role. A summary of these organisations is given below in terms of size and the role of the interviewee:

- Micro organisation (fewer than 10 employees): small private practice – female QS;
- Small organisation (10 – 49 employees): construction consultancy – female director;
- Medium organisation (50 – 249 employees): medium private practice – male partner;
- Large organisations (250 + employees):
 - Network Rail – female HR representative;
 - Large multi-national contractor – female QS;
 - Large, national contractor – a male and a female director and four female employees, including one QS;
 - Local Authority (LA)⁶ – female QS;
 - Private house building company – female director;
 - Estates department of a train operating company (TOC) – female employee.

Additionally, an informal interview was undertaken with a construction business psychologist who was able to give insight into some issues through her work with construction organisations and her role as a mentor for women in the industry.

Semi-structured interviews were also used to gather these data, as they are an appropriate method of ensuring that the subject matter is fully addressed (Creswell, 2009). The organisations vary in size, structures, policies and procedures and, whilst many issues were addressed through common questions, the specifics of the organisations could be addressed within follow up questions (Ritchie and Lewis, 2012). All participants except the director of the housing company were approached directly through personal contacts. The housing company director volunteered to be interviewed after being invited to answer the questionnaire survey. Altogether, fourteen macro interviews were conducted. A summary of

⁶ The TOC and the LA are part of much larger organisations. Although these construction / estates departments themselves are small, they benefit from the structures of the larger organisations.

the participants is included within Chapter Six and they represent a range of ages and positions within their companies. Two respondents were male and the remainder female.

The question schedule (Appendix I) is designed to ascertain:

- The gender distribution regarding female Qs within institutions;
- The range of roles Qs undertake within institutions;
- Educational opportunities within institutions. For example, gaining professional status, Continuing Professional Development and other vocational education;
- Policies regarding, for example, working time arrangements and maternity leave;
- Team-building or other social events;
- Complaints procedures.

The chapter continues by discussing the data analysis and triangulation of data of all three methods employed.

5.5 Data analysis

Having been collected separately, the data were initially analysed separately. The qualitative case study and wider industry interview data were analysed using Nvivo 11 software whereas the quantitative questionnaire survey data were analysed using SPSS version 24.

5.5.1 Case study and wider industry interviews

Before coding the data, the question schedule was revisited to establish appropriate nodes, comprising:

- Personal data – e.g. age; marital status; number of children; qualifications;
- Information about the respondents' current job – e.g. job title and job functions; working time arrangements; salary bands, etc.;
- The same information regarding participants' previous jobs;
- Work-life balance – e.g. ability to work at home and its effects; travel time to work; overnight stays for work; childcare arrangements;
- Career issues – e.g. aspirations; definitions of career success and progression; factors influencing promotion; barriers and enablers of career development.

An example of the coding framework is given in Appendix J. Initially, each node had many sub (or child) nodes, and even sub-sub nodes. This caused even more data to be generated and there were many overlaps. For example, responses regarding factors that enable

careers were coded into vertical progression, horizontal progression and capabilities. Therefore, prior to further analysis, the range of nodes were reduced to aid manageability and reduce repetition.

Nvivo is commonly used within qualitative research. It enables management of the text and notes, comments and key points to be highlighted within the coding structure created by the researcher. Separate coding systems were established for the 27 case-study interview data and that of the 14 macro-level interviews with industry representatives. These generated a lot of data which were made more manageable by using this software. Data could also be retrieved quickly by means of the query functions. The coding framework followed the format of the questionnaire and interview schedules, which in turn were led by the conceptual priorities of the CA: ascertaining aspirations and definitions of career success, information related to each hypothetical capability and the enabling and constraining characteristics of the conversion factors. Personal information of each respondent relating to their age, qualifications, family status etc. was also incorporated.

One of the key criticisms of the CA is the difficulty in distinguishing between functionings, capabilities and conversion factors (Robeyns, 2003), as indicated in section 4.3. Therefore, when coding, care had to be taken to ensure data were coded into the correct nodes, such that the chances of confusing these key issues were reduced. Although initially coding the data and deciding where to place comments seemed a very straightforward process, as the volume of data increased it became more complex and the importance of emphasis and assigning meaning became apparent. Although coding the data was time-consuming, it was made easier by the fact that the interviews followed the same questioning sequence. Some new themes emerged, and different interpretations of others were identified. Issues not previously considered were the extent of the impact of the 'jobs for the boys' culture and management assumptions about women and their careers. As these topics arose, they were included for discussion in later interviews. Most of the women interviewed at case-study level had a positive story and outlook about their careers at NR although some were less positive when talking about their experiences working at other construction organisations. This highlighted the importance of obtaining macro data from a range of construction organisations.

Analysing qualitative data is dependent on the researcher's interpretation and meaning making, so it was important to ensure that the classifications used in the analysis were appropriate. Consequently, each transcript was re-read after coding to ensure that nothing was missed or needed re-classifying. It was also important to be open to the possibility of

other explanations for some of the findings, rather than merely attributing them into a near-fit category (Creswell, 2009). The process highlighted some inconsistencies that required further processing and there was a danger of oversimplifying the material, missing some of the nuances that emerged. Factors such as age, hierarchy and family status, which were first thought to differentiate respondents, became less relevant than their valued outcomes and the need to address assumptions became clear. For example, management assumptions that women with children are reluctant to travel for work were found to be untrue for many respondents.

5.5.2 Questionnaire survey

With regard to the questionnaire survey, the Google Forms software compiles results, instantly giving descriptive statistics and charts. It also allows the data to be transferred into a Microsoft Excel spreadsheet which, from there, can be formatted and checked for anomalies before it is put into the SPSS (version 24) software. Google Forms also allows individual responses to be viewed. SPSS allows a large amount of data to be processed, but a key stage in formatting the data in SPSS is to “define the variables” (Pallant, 2016: 31) which involves assigning a numerical value (code) to each relevant variable; for example, 1 = married; 2 = single; 3 = separated and so on. This is a time-consuming process and one that needs to be undertaken with great care as mistakes are easy to make. Once the data are coded and checked for errors then the relevant tests can be undertaken. Although this does include descriptive statistics (e.g. mean, mode, median and percentages), more complicated statistical analyses can also be undertaken. For example, a non-parametric t-test, the Chi-squared test, which is appropriate with nominal data, was undertaken to test for relationships such as, for example, between respondents’ ages and their hierarchical position. Other relevant tests, undertaken with interval data, were the Mann-Whitney U test and the Kruskal-Wallis test. An example is a test undertaken to examine whether there is a relationship between the hierarchical position of respondents and their level of satisfaction with their pay.

The two main purposes of the questionnaire were: to give an overall indication of women’s aspirations and definitions of career success, the range of organisations for whom they work and to examine the extent to which the qualitative data gathered in the interviews applies within the construction industry.

5.5.3 Validity and reliability of data

External validity refers to the extent to which findings can be generalisable beyond the immediate study into other settings (Bryman and Bell, 2003; Saunders and Lewis, 2018; Yin, 2018). The reliability of the research concerns the question of process and whether the way in which the study was undertaken could be repeated with the same results (Yin, 2018).

DiMaggio and Powell (1983) demonstrated how organisations mimic each other (institutional isomorphism), which enhances the generalisability of the findings. Further, in addition to the study of female QSs in NR, the research also contextualises these findings across the wider construction industry by means of both the questionnaire survey and macro-level organisational interviews. These enhance the generalisability of the findings in terms of their relevance for female QSs in other construction organisations.

The three sets of data collected comprised: 27 case-study interview transcripts, 290 questionnaire survey responses and 14 macro level interview transcripts. The data were analysed separately but were triangulated in addressing the research propositions as shown in Table Six below. Figure Three, following, illustrates how the three sets contribute to the different areas of the research:

Proposition	Location in thesis	Summary of analyses used to investigate each proposition
1. Women's career pathways in quantity surveying remain influenced by the historical development of the profession, particularly in terms of structural and cultural factors and traditional definitions of career success.	Chapters Two, Three, Seven, Eight and Nine.	The literature review discussed the development of quantity surveying and this is used to understand the historic constraints on women's career development. Traditional career theories and definitions of career success are analysed in Chapter Three and demonstrate that hierarchical progression remains a key determinant of success and advancement in construction. Structural and cultural factors that continue to impact the career development of female QSs are analysed in Chapters Seven, Eight and Nine from the perspective of female QSs in NR and the wider industry and from that of organisational respondents.
2. Existing career theories – traditional and alternative – do not fully encapsulate the more diverse pathways of female QSs.	Chapters Three, Six and Nine	The literature review in Chapter Three analyses a range of career theories and demonstrates that, while these may describe different career paths, they fail to explain them. Female QSs' career paths to date are demonstrated in Figure Four, Chapter Six confirming the above. Findings from Chapter Six are then re-examined in the context of other findings in Chapter Nine.
3. Female QSs' aspirations can be extrinsic and/or intrinsic and these directly impact their career pathways.	Chapter Six	The aspirations of female QSs are established in Chapter Six. Those of the NR case study respondents are ascertained and the extent to which they apply to female QSs across the construction industry is analysed. The career pathways of the case study respondents are demonstrated in Figure Four.
4. Quantity surveying enables women to pursue a range of aspirations.	Chapters Two, Six and Nine	Chapter Two analyses the development of quantity surveying, illustrating the range of opportunities it currently offers. In Chapter Six the range of organisations for whom QSs work are examined. In Chapter Nine the competencies of female QSs are analysed to enable understanding of how quantity surveying enables women to pursue their aspirations. Further Chapter Nine analyses the ability of female QSs to have WLB.
5. The CA identifies the female QSs' capability set so that they can pursue any stated aspiration.	Chapters Four, Seven, Eight and Nine	Chapter Four presents a hypothetical capability set for female QSs. This model is then developed through the analyses in Chapters Seven, Eight and Nine through interviews with organisational representatives, case-study respondents and female QSs in the wider construction industry to establish a capability set in Chapter Nine.
6. Female QSs' ability to acquire relevant capabilities is impacted by the structure and culture of the construction industry.	Chapters Seven, Eight and Nine	Organisational factors in terms of the structures, policies, practices and culture of the construction industry are examined from an organisational perspective in Chapter Seven. Chapters Eight and Nine then analyse these from the perspective of female QSs. Chapter Nine presents the capability set for female QSs, developed from the hypothetical set in Chapter Four. Conversion factors, extracted from Chapters Seven and Eight, examine women's ability to gain each capability.

Table 6: Location of where propositions are addressed in the thesis.

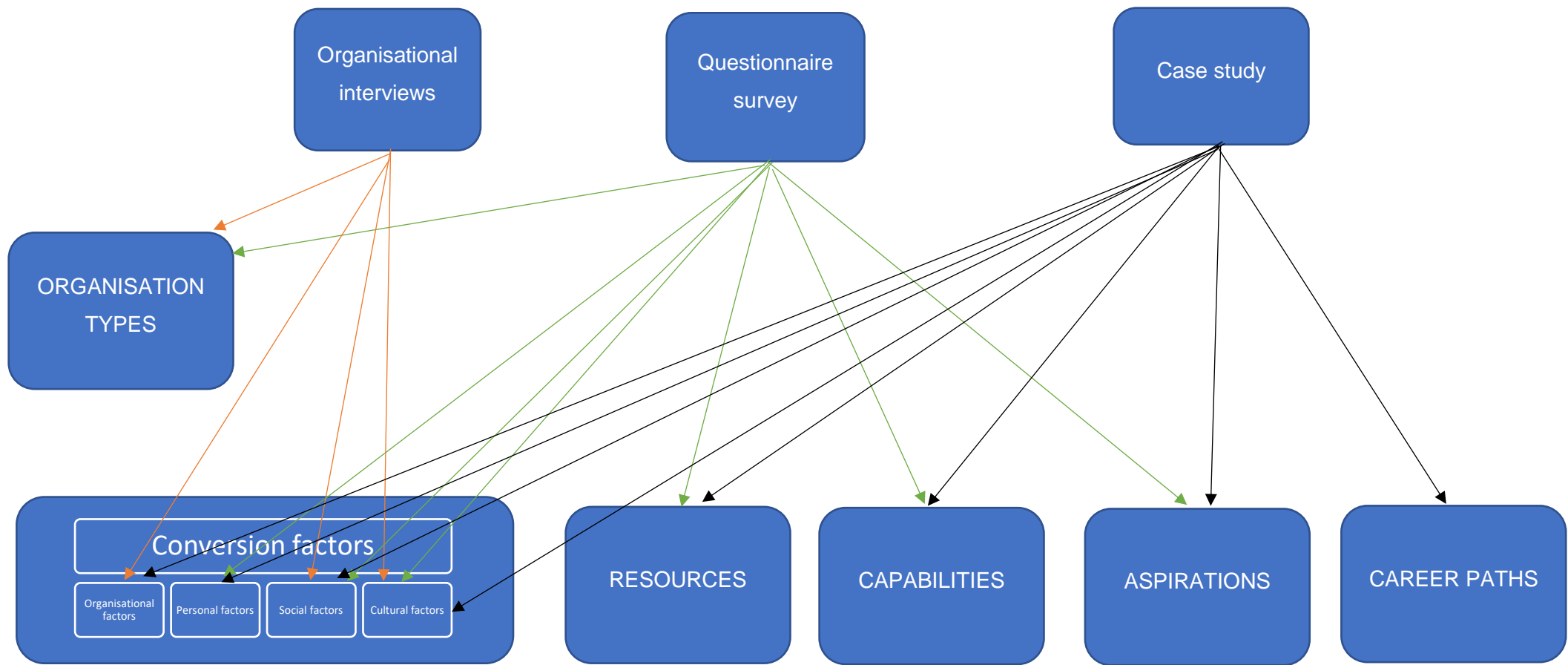


Figure 3: Illustration of triangulation of data

Table Six and Figure Three demonstrate how the three separate strands of the research - the organisational interviews, questionnaire survey and case study - are brought together to increase its validity. In this research, the findings from the micro level analyses were brought together with those from the wider construction industry, both in terms of female QSs themselves, by means of the questionnaire survey and the organisations they work for, and by means of the organisational interviews. The process also serves to highlight areas where the findings diverge or where an alternative interpretation of a phenomenon can be made (Bazeley, 2018). Indeed, while triangulation can verify findings, it may also find contradictions; combining methods is not necessarily only used to validate one set of findings with another (Meetoo and Temple, 2003). Devine and Heath (1999: 49) state that "triangulation can be used effectively to explore the dynamics of complex social phenomena, highlighting the multi-layered and often contradictory nature of social life" and it encourages the researcher to approach the research questions from different angles.

Total replicability is unrealistic but is improved by using a mixed-methods approach. This "strengthens causal inferences by providing the opportunity to observe data convergence or divergence" (Abowitz and Toole, 2010: 108). Reliability is further improved by triangulation of measures involving the use of interview data and that of the questionnaire survey to provide "multiple operationalizations of the same construct" (Abowitz and Toole, 2010: 12) (see also section 5.5.3). Yin (2014: 98) states that "mixed-methods research can permit researchers to address more complicated research questions and collect a richer and stronger array of evidence than can be accomplished by any single method alone" and that case study research enables numerous variables and multiple sources of evidence to be triangulated. Reliability is also enhanced by means of having a case study protocol (Yin, 2009) as discussed in section 5.4.2.

5.6 Study Limitations

Cited disadvantages (Yin, 2014) that the data cannot be generalised to the wider population are overcome by the questionnaire survey data as well as the concept of institutional isomorphism (Di Maggio and Powell, 1983). Di Maggio and Powell (1983) coined this term to represent how different organisations' processes and/or structure become similar to one another through either imitation, coercion or external pressures. In this context the latter includes pressures imposed by the RICS, such as their requirement for members to undertake 20 hours of CPD per annum. Applying key findings across the construction industry plus the potential to apply them to other organisations addresses some of the criticism that the CA is too individualistic.

5.7 Issues overcome

As with any research undertaken over many years, some situations occur which have the potential to change or supplement the findings, or that will change the way research is undertaken as well as the writing process. Such a situation has occurred with this research and the Covid-19 virus world pandemic in early 2020 (WHO, 2020). Aside from issues of having to rely on online references and finding a quiet place in a busy house to work, the biggest impact of the virus is that issues were changing even as they were being analysed and written. A clear example is the requirement imposed by the government for non-essential workers to work from home if at all possible. Therefore, as the research was addressing the problems associated with working from home, or organisations' reluctance to allow it, circumstances overtook the research and working from home became the new norm. Although at this point (August, 2020) the long-term impact of the virus on working arrangements cannot be predicted, personal contacts of the researcher (including the male director of the national contractor), stated that their organisations are already rethinking the ability to work at home and issues such as travelling for meetings that can be achieved remotely. Technology, which the analysis will show was not considered an important enabling factor, has become much more relevant both from the perspective of working at home but also in terms of meetings. Further, the director of the national contractor stated that attendance by women in virtual conferences and seminars has been noticeably higher than their presence has been in person.

5.8 Conclusion

The three-tier approach used in this research is designed to generate data that will enable the construction of a framework of women's careers in quantity surveying to be developed, based on the capabilities approach. The premise behind this strategy is to "study the interconnections between meanings across different organisational levels" (Pope et al, 2006:59). This chapter outlines how the thesis moves from theory to practice and the mechanisms undertaken to collect and analyse the data.

In line with Sen's work, where philosophical approaches feature little and the practical is favoured over more overtly philosophical approaches, a pragmatic world view is adopted for this research. This approach allows the research questions and propositions to be linked to the mixed methods approach, enabling observation of what the situation currently is and to establish the range of other possible outcomes.

The data gathered contain a large amount of information from female QSs at both case-study and industry-wide levels. The data also give broader detail about how the occupation can develop within a range of construction organisations. The research approach enables the interviews to be tailored to the individual within the questioning framework, with the quantitative data providing the breadth required to find out how results at case-study level apply across the wider industry and for relationships to be ascertained. A purely quantitative approach would not enable the depth of analysis of the qualitative nor have the flexibility to address issues as they arose (Cockburn, 1991). The qualitative approach enabled the respondents to be open about their experiences and this was reflected in their eagerness to contribute. It represented an opportunity for many to express their feelings about their own career experiences and voice their opinions on the issues that women in construction face.

As the data analysis progressed, it was important to continually question the extent to which one could generalise from the findings. A qualitative sample of 27 women within one organisation cannot be treated as representative of the experience of all female QSs. Therefore, other data are used to triangulate the results. Breadth is given to the findings through the results of the industry-wide questionnaire survey and the macro-level interviews of representatives of other construction organisations. The benefit of the CA as the framework for the data gathering and analysis is that it offers considerable insight into the significance of the freedom of individuals to pursue their valued outcomes. Transparency with respect to bias and working methods aids the validity of the research and these issues have informed the process.

Finally, the chapter addresses the fact that issues can arise, in this case the Covid-19 pandemic, that have the potential to affect parts of the research prior to its submission. While these issues cannot be fully addressed as the pandemic is ongoing, it is clear that there are likely to be long-reaching effects. This issue also forms part of the recommendations in the future research section of the thesis.

The data analysis in Chapters 6 – 10 has been organised around the central themes drawn from the literature review and the theoretical framework but begins with establishing the aspirations of female QSs.

CHAPTER SIX

Aspirations and career pathways of female quantity surveyors

6.1 Introduction

In this chapter, the relationship between female QSs' aspirations and actual career trajectories is examined. It is argued that women value intrinsic measures of success more than extrinsic and many adopt career strategies to enable enhanced WLB. Definitions of career success reveal a complex concept where women's aspirations for progression are counterbalanced with their desire for WLB, a desire not limited to those with dependent children.

Female QSs career pathways are dynamic, with a variety of aspirations and outcomes, in contrast with more traditional linear and progression oriented career paths. While hierarchical progression remains a goal for many, they also seek the opportunity to pursue a career path to fit their personal circumstances and priorities, and to adapt as needed.

The ongoing pursuit of aspirations within given constraints and opportunities is illustrated through in-depth analysis of work histories together with an analysis of female QSs in the context of the wider construction industry. It is argued that female QSs' careers follow three main pathways: traditional, adapted traditional and transferred. The suggestion is that women's desire to achieve WLB is facilitated by the changing landscape of QS as a profession and the wider range of opportunities available for entry and specialisation.

The chapter is divided into three sections. Section 6.2 analyses respondents' aspirations and definitions of career success. The findings are that these are not necessarily connected with any demographic factor such as a respondents' age, qualifications or family status. Section 6.3 then identifies the range of career pathways available to female QSs. From the career trajectories to date of case-study respondents, the three distinct pathways are identified and defined. Section 6.4 establishes that, whilst definitions of success influence female QS's career pathways, they may be changed by respondents' aspirations.

6.2 The career aspirations of female QSs

This section establishes the aspirations of female QSs. By analysing goals of both the case-study respondents and those who answered the questionnaire survey, aspirations are found

to represent a dynamic concept, sometimes connected, sometimes conflicting and often subject to change (Hart, 2012). Conflicting aspirations reduce an individual's agency as they have fewer available choices.

The two main themes that emerge from the analysis are that aspirations are both extrinsic and intrinsic. Four main aspirations are identified: extrinsic are centred on hierarchical progression and having educational opportunities; and intrinsic are centred on issues of WLB, and the subjective issue of 'being happy'.

Hierarchical progression is the presumed route of career development for those on a traditional pathway, yet few respondents gave this as their main aspiration. Few also openly said that they want to progress upwards. Examples of those who did include Jackie (Band Two), who said: "I like to be the boss. It doesn't matter what [project] it is. I'm the boss and I like that. I like the profile and I like to swim in a big fish-pond". Mary (Band Three) said: "If people ask me what I want to do, I say that if I have to stay in Network Rail for the rest of Eternity, being Company Secretary, chairman, or CEO is eventually where I would like to go. I don't see any point in aiming low. Aim really high and then beat yourself up for not reaching it". Commonly, those who aspire to an upwards trajectory qualified their answer. For example, Helen (Band Three) said it is because: "there are too many alpha males at the top" and Beth (Band Four) said it is because she wants to be a role model for other women.

The paucity of respondents who aspire purely for hierarchical progression is mystifying but one explanation is that it is a manifestation of adapted preference (Sen, 1992; Walker and Unterhalter, 2007), as described in section 4.2.2. If adapted preference were to be applied, it suggests that female Qs do not aspire to hierarchical progression because of an awareness that they may be unable to achieve it. Compounding this possibility is the fact that many respondents said they simply aspire to be happy, as this may be perceived as an achievable goal. Nevertheless, deeper analysis indicates that respondents do aspire to progress hierarchically but are concerned that it will compromise their WLB. Whilst respondents should like to have agency and choice in how their careers develop, they consider that progression to higher management means increased responsibility and having to work many additional hours. For example, Xanthe (Band Five) said she would like to progress but: "the higher you go, the more responsibility you get, and ... you get less work-life balance". Olivia (Band Four) expressed similar concerns, saying: "I am at the point where I just think 'do I want to progress and work all the hours or am I happy to have work life balance and stay as I am?' ... Having the demands of senior management, expecting you to pick up the phone at 10 o'clock at night and all that, is part of progression", a

sentiment also expressed by Bryony (Band Three). Bryony, Olivia and Xanthe have the resources that enable them to progress; they all have quantity surveying degrees, Olivia and Bryony are chartered surveyors and Xanthe is working towards becoming so. However, the aspiration to progress is moderated by their concerns about its impact on WLB. This is not without some justification as Laura (Band One) and Georgina, Isobel and Jackie (Band Two) all admit they work long hours, many more than respondents in lower salary bands. Indeed, Georgina said that she can work up to 60 hours a week. Further, this is not just a concern of those with children as Olivia has no children. This supports other research demonstrating women's concern that higher management means longer working hours, regardless of whether they have dependent children (Watts, 2003).

The younger respondents, Ceri, Kathy, Rosie and Tessa, also have no children. Yet only Tessa professed to an aspiration to progress upwards, saying: "I am aiming to go as far up the ladder as I can, and I am quite ambitious about that". Tessa and Kathy have degrees, although only Kathy's is cognate (i.e. it is not a quantity surveying degree, but it is construction related). Yet Kathy's aspiration is the same as Ceri and Rosie in this age group, in that they aim to increase their knowledge, qualifications and experience. Tessa did not acknowledge this as an aspiration, focusing only on hierarchy. A potential reason for the difference between Kathy's aspiration and Tessa's is that Tessa is a little older with a lot more experience in NR than Kathy. She was very much more confident than Kathy in her answers. However, as qualifications are the stepping-stones for progression, it might be assumed that this will become an aspiration in the future for Kathy.

Although few case-study respondents stated hierarchical progression as their main goal, comments made by others indicate that it remains relevant to them. For example, even though Isobel said she would be happy to remain a Band Two, she later admitted to having applied for Band One jobs. Further down the salary scale, Donna (Band Four) said "titles and money come at a cost", but later expressed interest in gaining promotion even if she had to relocate to do so. Similar to those who qualified their aspirations for hierarchy, it is unclear why these women did not openly admit to hierarchical goals.

Respondents' perceive that aspirations for hierarchical progression conflict with a desire for WLB, but the CA allows consideration of all aspirations. It recognises that they may conflict and may be transient; that "what is not possible today, might become possible in the future with adequate support, effort and ... a little luck" (Hart, 2012: 23). The CA enables a capability set of female Qs to be compiled that can encompass any and all aspirations such that they have "the freedom to do otherwise" (Hart, 2012: 23).

Aspiring to WLB is centred on working hours; specifically working fewer hours and having flexibility in working time. The literature review demonstrated that the construction industry has a culture of long working hours. Flexible working, as discussions in Chapter Eight indicate, is easier for some female Qs than others.

Included within the aspiration of being happy are those of being respected and treated equally. Happiness is a subjective issue but can be assessed by being broken down into constituent parts (Kahneman, 1999), such as job satisfaction. However, it may also be a further example of adapted preference. Although happiness was cited as an aspiration, respondents indicated they are happy to go to work and regard being happy as having career success. Indeed Jackie, who aspires to hierarchical progression, said that coming to work is: “like a spring out of bed every day. Every day is a new adventure, and I am loving it quite frankly” and Bryony also said she “loves work”.

To aid understanding regarding whether their aspirations constitute adapted preference, respondents were asked to define career success and career progression. For example, an individual with intrinsic aspirations but defines career success using extrinsic factors, such as hierarchical status or salary, may have adapted their preference. The following section, therefore, identifies respondents’ definitions of career success and career progression.

6.2.1 Distinguishing respondents’ aspirations from their definitions of career success and career progression.

The respondents’ definitions of career success are given in their biographies (Appendix A). Whilst definitions are individual, the extrinsic theme of hierarchical progression and intrinsic theme of WLB can still be identified.

Respondents’ definitions of success continue to express their concerns regarding how progression might compromise WLB. For example, Isobel said:

To me success is about getting to a point in the organisation where you're the decision maker, a key contributor, perhaps viewed as an expert in your field. But my home life is more important to me than my job. So, the success of my career is about getting the balance of being successful enough to satisfy my ego, my status and my brain, but not to the detriment of my life.

Here, Isobel expresses the conflict demonstrated by many respondents and is one reason why boundaryless careers, for example, cannot fully conceptualise and encompass all career aspirations. Respondents aspire to progress but recognise its potential implications

for their WLB. Isobel is a high salary band (Band Two), but this conflict was demonstrated by respondents throughout the salary bands.

No respondent defined success purely in terms of earning a high salary. However, some respondents said that being treated equally, including salary, constitutes success. Anna, for example, did not equate success with salary but recognised that earning more money was important in providing stability for her family. However, she added: "I don't especially judge my career success by that. Yes, the promotion to some extent, having additional responsibility but not necessarily the money of itself". Even though Anna denies that money is equal to success, she nevertheless demonstrates the range of extrinsic measures which are reflective of it.

Respondents could not give a general definition of success, saying it is individual, but three themes were identified: being happy, having WLB and having opportunities to progress. This was summed up by Diana (Band Four), who said career success is "being in a job that you enjoy with the prospect of development or promotion should you want it". This definition was also given by younger, less experienced respondents who might have been assumed to define success in terms of upwards progression. For example, Ceri (Band Four) defined success as: "being where you want to be, doing what you want to be doing ... but, if someone is striving to do better, they should have that opportunity". Responses stressed the importance of agency with phrases such as, 'promotion should you want it' and 'having opportunity to do better if someone wants to'. This need for opportunities and choice is rarely addressed by other researchers, who stress either upwards mobility or a boundaryless pattern, but has emerged by using the CA as the framework of the research.

Like aspirations, definitions of success also change as a career develops. Higher ranked respondents said, when they were younger, their definitions of success were different to those they have now. Both Isobel and Laura said that at the beginning of their careers, they would have defined success as synonymous with upwards progression, but now it is much more about seeking interesting work opportunities. As Isobel is Band Two and Laura is Band One, they have already achieved hierarchical status, yet it was not uncommon for respondents in lower salary bands to define success in those terms. For example, Penny is Band Five and a similar age to Isobel and Laura, but she too stressed the importance of having opportunity, saying: "success means achieving what you want to achieve, to move up if you want to move up and get promoted because you're learning and you're developing". Yvonne (Band Three), was adamant that progression was not instrumental in achieving success. She said: "my success is that I'm quite comfortable, thank you very much, I can

afford to do what I want to do. Progression for me, I'm not bothered, but I do see myself as successful". The comparison between Penny and Yvonne is striking - they are a similar age, have similar family status, neither has relevant qualifications and, despite being two salary bands apart, neither considers herself as unsuccessful. However, younger respondents also did not equate success with progression, casting doubt on Isobel's and Laura's claim that definitions change with age. Although this appears to justify the notion that success is an individual concept, it remains socially constructed. This is evidenced by Ceri who, after giving her definition of success, asked "is that right?", in an attempt to assure herself that this was the 'correct' response.

Respondents distinguish career success from career progression, with all acknowledging that it involves developing their careers in some way, although this, too, may not be upwards. Beth said: "career progression is about learning, gaining the skills and learning ... it is like a children's jungle gym, where you try a bit of everything to see what you like". She continued that this gives her: "the skills and the connections that enable me to go up". Whereas Beth, at Band Four, is looking at ways of moving upwards, Fiona (Band Three) will seek to progress for other reasons and, for her, progression includes moving horizontally as well as vertically. She stressed that when a job: "becomes too boring, mundane or generally unsatisfactory", she will look to change it but acknowledged that it has resulted in upwards movement eventually. In contrast, Tessa and Sue (both Band Four, but in different age categories) defined progression simply as being challenged. The following section establishes that these respondents are assigned different career pathways, and they have a variety of career backgrounds determining that, although there are common features of respondents' definitions of success and progression, they are not pathway dependent.

Aspirations, success and progression are linked but not co-dependent. Respondents who aspire to progress upwards in a hierarchy do not generally consider that this necessarily constitutes success, and not all respondents have the aspiration to do so. Those who instead aspire to having variety in their work, for example, consider that this constitutes both progression and success. While such respondents tend to be in higher salary bands, lower ranked respondents also have these aspirations.

The aspirations and definitions of success of the case-study respondents can be categorised into four distinct groups:

- hierarchical progression;
- having the ability to develop and gain knowledge;

- work-life balance;
- happiness, incorporating equal treatment, job satisfaction, respect and personal fulfilment.

Happiness as an aspiration and a measure of success is a departure from extant literature and it is a definition given by respondents from all backgrounds. Donna (Band Four), said: “progression is an element of success, but enjoyment is also important. Titles and money come at a cost and, for me, coming into work isn’t a chore - and that is also success”, which is a definition echoed by others, such as Beth, Bryony, Vanessa, Yvonne and Xanthe. Bryony said: “I love coming to work”.

To ascertain whether these four themes apply to female Qs within other construction organisations, the following section analyses data from the questionnaire survey.

6.2.2 Aspirations and definitions of success of female Qs across the construction industry

The questionnaire survey asked respondents to give their top 3 aspirations. The choices provided were based on answers given by case-study respondents, but opportunity was given to add any aspirations not included. Results are given in rank order:

Aspiration	No. of responses	Rank
To be happy in my work	185	1
To have good work-life balance	178	2
To earn more money	136	3
To improve my skills / knowledge	128	4
To be a role model	108	5
To have variety in my work	100	6
To have flexibility in my working time	85	7
To become a partner / director / decision maker	79	8
To have choices	58	9

Table 7: Ranked aspirations of questionnaire survey respondents

Table Seven demonstrates that the number of respondents aspiring to be happy at work (63.8%) and having work-life balance (61.4%) far exceeds other aspirations. It is unclear whether the third highest aspiration of earning more money, given by 46.9% of respondents, was chosen because it is a genuine aspiration or because respondents consider they are underpaid. Interestingly, only 79 respondents (27.2%) aspired to hierarchical progression in terms of becoming a partner or other decision maker. However, it does not clarify whether the low response to this success factor is genuine or an example of adapted preference.

Aspirations can change during a person's career (Hart, 2012). To understand whether these can be predicted, Chi-squared tests were undertaken to establish relationships between respondents' aspirations and their age, the type of organisation they work for, their level of hierarchy or their family status. Most tests indicate either no relationship ($p > .05$) or only a weak relationship, suggesting that aspirations cannot be predicted by any of these factors. However, some interesting observations can be made. Even though only a weak relationship was found between those who work in private practice and an aspiration to earn more money ($p = .008$; $r = .183$), it was stronger than for those who work for a contractor, where no relationship was indicated ($P > .05$). Those who are not chartered are more likely to aspire to earn more money ($p = .001$; $r = .239$) than those who are. This suggests that being chartered brings financial benefit. Those with multiple charterships are more likely to aspire to be a role model ($p = .046$; $r = .166$) than those without. This all suggests that, once an individual has achieved recognition in terms of qualifications, she looks for other means of accreditation. Those who work for contractors are more likely to aspire to improve their skills and knowledge ($p = .032$; $r = .154$) than those in any other organisation type. Although the fact that these women have fewer formal qualifications may explain this result.

A stated barrier for women's careers in construction is that the industry denies flexible working for women, who are assumed to desire it (e.g. Worrall et al, 2010). To test this assumption, an analysis was undertaken to determine whether women with dependent children (i.e. under the age of 15) aspire to work flexibly. Flexibility ranked only 5th as an aspiration, but the fact that this group of respondents mainly aspire to having WLB and to be happy may indicate that flexibility was included within those responses.

To ascertain whether there is a relationship between aspirations and definitions of success, respondents were asked to indicate, on a scale of 1 – 5, the extent to which they agree with given definitions of career success. Some definitions were obtained from case-study respondents and some were obtained from literature. A value of 1 indicated strong disagreement with the definition and 5 indicated strong agreement. Results are summarised in Table Eight below:

Definition	No. of responses	Mean	Median	Mode	Rank (based on mean)
Good work-life balance	289	4.44	5	5	1
Personal fulfilment	286	4.38	5	5	2
Having choices	289	4.37	4	5	3
Making a difference	290	4.25	4	5	4
Having variety of work	289	4.21	4	4	5
Earning a high salary	284	3.85	4	4	6
Becoming partner or managing director	283	3.68	4	4	7
Having an expensive company car	283	2.34	3	2	8

Table 8: Ranked definitions of career success of questionnaire survey respondents

These results substantiate the definitions given by NR respondents. Hierarchical progression, earning a high salary and having a company car are considered less important indicators of career success than WLB, fulfilment and other intrinsic factors. Interestingly, the means obtained demonstrate that respondents tend to agree with all but one definition of career success, that of having a company car. However, it is also noteworthy that all intrinsic definitions outrank all that are extrinsic.

Chi-squared tests for relationships were conducted between respondents' views on career success and the organisations they work for, their hierarchy and whether they are chartered. Results demonstrate no evidence of any relationship ($p = >.05$ for all factors). This supports the findings of the case-study that definitions of career success are not dependent on any one factor. Although social factors can impact on defining career success (Heslin, 2005), there is no indication from these data that the type of organisation female Qs work for, their level of hierarchy, family status or qualification level directly relate to individual's aspirations or their definitions of success.

In line with the aim and first objective of this research, that of defining women's career pathways in quantity surveying and how these are influenced by their aspirations and definitions of success, career pathways must be defined. Three pathways have been identified from case-study respondents' careers to date, which are established in the following section.

6.3 Women's career pathways in quantity surveying

6.3.1 Career pathways identified

A brief biography of each case-study respondent is presented in Appendix A, giving details of their entry into quantity surveying, the development of their careers in the occupation and

their definitions of career success. From respondents' experiences, three career pathways have been identified based on their qualifications and career trajectories to date. They are broadly termed: traditional, adapted traditional and transferred, although there is variance in individual trajectories.

Traditional pathway

The traditional pathway is characterised by gaining a relevant degree and work experience and becoming a chartered member of a relevant professional body, such as the RICS. Ten NR respondents are pursuing this pathway: Donna, Fiona, Georgina, Helen, Isobel, Nadia, Olivia, Vanessa, Wendy and Xanthe. They represent a range of positions within the hierarchy of NR, irrespective of their age, marital and family status or the type of organisations they have previously worked for. That the highest ranked respondents, Isobel and Georgina (Band Two), have worked for NR for the longest period of time (over 10 years) suggests this may be relevant, yet Helen (Band Three) has also worked for NR for more than 10 years. Fiona, Georgina, Helen, Isobel, Nadia and Olivia are already chartered with the remainder pursuing chartered status.

Adapted traditional pathway

An adapted traditional pathway is characterised by beginning a career in a different industry, or obtaining non-cognate degree but then, on deciding to be a QS, undertaking relevant education and training to become chartered. Four respondents are pursuing this pathway: Anna, Bryony, Diana and Jackie. All four began their careers in occupations not related to quantity surveying. Bryony's first degree is not construction related and Jackie has a business-related master's degree. All except Jackie have developed their careers as QSs by gaining relevant experience and academic qualifications, with some subsequently pursuing chartered status. However, currently only Bryony is chartered and Anna, who is close to retirement, has decided to no longer pursue chartered status. Jackie is currently pursuing chartership, without gaining relevant qualifications, via the RICS 'Senior Professional Assessment' route. Once again, these respondents represent different age groups, salary bands, qualifications, marital or family status, previous experience and length of time at NR.

Transferred pathway

The transferred pathway is characterised by those who began their careers in different occupations and have transferred into a quantity surveying role with little or no aspiration to pursue relevant quantity surveying qualifications, including chartered status. Seven respondents are pursuing variations of this pathway: Amelia, Beth, Caroline, Penny, Sue,

Yvonne and Zoe. All except Beth and Caroline work either as commercial managers, commercial assistants or quantity surveyors. Beth and Caroline self-identified as a QS but their roles are somewhat on the periphery of quantity surveying. Again, their demographics indicate no patterns with regard to their career development.

Others

Ceri, Kathy, Rosie and Tessa all work in commercial roles, but their age and lack of relevant qualifications and experience means their careers are not developed enough to place them within a specific pathway. However, their aspirations determine that they are pursuing an adapted traditional pathway. Laura and Mary both have roles that could be undertaken by a QS, but they are not Qs. Data obtained from the interviews with these respondents have been included as they inform the analysis and demonstrate the variation in routes into quantity surveying.

6.3.2 How do respondents' career pathways differ from established career theories?

Chapter Three concluded that traditional, hierarchical career theories are not applicable to everybody. By examining a number of alternative career patterns based on protean, boundaryless or customised careers where success can also be intrinsic, it was proposed that alternative patterns are also not reflective of the career pathways of all individuals. The career pattern of case-study respondents representative of each pathway demonstrates the difficulty in assigning individuals to one career trajectory. To illustrate this, a summary of the career progression of three respondents, one from each pathway are highlighted below, beginning with Isobel who is on the traditional pathway.

Traditional pathway - Isobel

Isobel is in her mid-forties and married with two children under 12. She works full time and is currently a Band Two programme commercial manager. She has worked at NR for 17 years. She has a BSc in quantity surveying and is chartered through the Institute of Civil Engineering Surveyors.

Isobel began her career as a QS on leaving school at 18. She began working as a trainee QS with a local building / civil engineering company having become interested in quantity surveying whilst helping her brother, who was a bricklayer, with his college homework.

She began her BSc degree on a part time basis at a local university, sponsored by her employer. After 4 years, she gave up the part time degree for personal reasons, deciding to complete it on a full time basis. Although she thought she may use the degree to explore other industries, she was persuaded to go back into construction after graduation and worked for a contractor. After undertaking a structured training program for two or three years, she gained chartered status of the Chartered Institute of Civil Engineering Surveyors (CICES). She has never felt she needed to be a member of the RICS.

After becoming chartered, she joined a national contractor and then a specialist road maintenance arm of the same company. Following a period of extended travel for work, between her home, her work and where her husband had relocated to, she decided to move company again to reduce the travelling. She said: "It was that feeling of being trapped in this ridiculous pattern of work, where it was all encompassing, stopping me having a decent quality of life". After 18 months she was sent an advertisement for a job at NR, which she applied for and was offered. Her role changes gave her a range of experience but did not particularly constitute promotion.

Since joining NR, she says her roles have got bigger and more diverse, and that has led to promotion. She joined NR as a Band Three and was promoted to a Band Two whilst on maternity leave, 11 years ago. Since joining NR she has relocated her home and her workplace, again because her WLB was affected by the volume of travelling she undertook.

Her aspirations are "to find a role in which I can feel personally fulfilled, that I can make a difference. If that is staying as a Band Two for the remainder of my career at NR to maintain my quality of life and my WLB, then that's what I'll do". Although Isobel said she does not want to be a Band One due to the commitment required, she later said that she had applied for Band One roles but is aware of the compromise on WLB promotion brings. She said: "The question is do I push my career on, or do I settle? I could put my energy in something other than my work and the kids, which is about personal fulfilment. Or will I never be fulfilled in whatever role and always feel like I am having to compromise on something else that I can get more pleasure from?".

Isobel's career trajectory appears, in the first instance, to be a traditional career. Since becoming a Band Two her career has developed horizontally. Although she has not completely dismissed further upwards movement, she is concerned that it may compromise her WLB, which is her priority. Indeed, her career history suggests that WLB has always been a factor in previous job moves, including to NR. Thus, Isobel cannot be assigned either a hierarchical or a lifestyle career anchor as conceived by Schein (1978) because,

even though she is currently prioritising her WLB, she has sought and gained promotion and does not rule that out in the future.

The juxtaposition of a need for progression and the compromise this means for WLB is a recurring theme in respondents' aspirations, regardless of their family status. The following example of a respondent on the adapted traditional pathway, Bryony, also illustrates the importance of WLB to this group of respondents.

Adapted traditional pathway - Bryony

Bryony is in her early forties, she is married with two young children. She works full time and is a salary Band Three, senior commercial manager. She has worked at NR for 14 years. She has a BSc in quantity surveying and became chartered through the RICS shortly after the interview.

Bryony's first career was in an industry completely unrelated to construction. She gave up that career for personal reasons and relocated. She joined NR working as an administrator for a team of Qs and liked the idea of working in the commercial department because it is technically detailed and she liked dealing with finance. She wanted to undertake the BSc degree and was going to fund it herself. Her boss in that team did not agree to allow her the day off to attend university, so she resigned. The day she resigned, another team manager rang her up and said 'don't resign, we really want you, we will pay the fees. Come and work for us, take your resignation back and work for us'. She joined that team, went to university for one day a week and got her degree. She is being aided by her boss to pursue RICS chartership, which she wanted as it is a "tick in the box. Particularly when it comes to reorganisations".

Bryony is focused on her marketability. She has taken two sideways moves since gaining her degree and is unusual in that she has worked in three different specialisms within NR, property, signalling and track. She considers this progression makes her more desirable as an employee as she has "a more well-rounded understanding of how everything fits together".

Her aspirations are to continue to deliver construction, rather than working in standards, policies, processes and procedures that most promotion would bring, saying: "I like going outside and saying, 'I built that' and being able to say that this has delivered a better service for the customer. I don't like things where you are just saying 'how can we improve a system? or process or procedure? what standards can we put in place?'. That's not my bag. I want to deliver construction. Definitely". She does not want promotion at the expense of her WLB, saying: "I'm not interested in a big car and a big salary, if that means somebody is going to call me at 9 o'clock at night. I don't want to be in the situation where someone can say 'because I pay you should be available at 9 o'clock'".

Like Isobel, Bryony's aspirations do not necessarily include upwards progression, although in Bryony's case it is because she does not wish to progress into management. Neither respondent conforms to the career anchor of hierarchy despite this having been an earlier strategy. This contradicts Schein's (1978) assertion that individuals' career anchors remain for their entire careers.

Hakim's (2000) preference theory, which proposes that women choose to be home-centred, work-centred, or they choose to balance their work and home life, gives no consideration to preferences changing over time, yet the accounts of Isobel and Bryony demonstrate that women change their career goals. The respondents on the transferred pathway particularly demonstrate how preferences and anchors can change over time. For example, Sue's career pathway is highlighted below as an example of the transferred pathway.

Transferred pathway - Sue

Sue is in her fifties and is married with no children. She works full time and is a salary Band Four commercial manager. She has worked for NR for 3½ years. She has no formal quantity surveying qualifications.

Sue says that she: "is not a QS really" and fell into her current role. This is her third career, her first having been in administration before she then worked in a niche industry. When work in this industry started to dry up, she trained to be an accountant, working as a financial controller for some time before being made redundant. She did some temping work and saw an advert on LinkedIn saying 'do you want to do your master's with Network Rail?'. So, following several interviews and training, she was offered the opportunity to do a full-time master's at Warwick university in Project management. "They paid for everything including accommodation. So, I went there, and I had an amazing time - absolutely loved it". At the end of the course there was a choice of roles - project management, risk and value, commercial or planning. She chose commercial because of her background in accounting. She began as a Band Five before being promoted to Band Four after 6 months.

Despite not being a QS and having no training, she says that she now understands what she is doing, having learned on the job. Whilst she was once interested in becoming chartered, she no longer is, although this is mainly due to her age. However, she expresses an aspiration to become a salary Band Three for which there is a requirement to be chartered or working towards it.

She is interested in expanding her knowledge into Building Information Management (BIM) and this may take precedence over hierarchical progression. She sees horizontal development as the most likely way she will progress her career.

A further respondent, Beth, is also on the transferred pathway and is pursuing her third career. Although she is currently in a QS type role, her aspiration for hierarchical progression is not necessarily within a QS role.

Of the remaining respondents on a transferred pathway, only Penny has remained at NR (or its forerunners) for most of her working life. Her career has changed direction many times within the 15 years she has been in NR, and she has been in the commercial (QS) team for fewer than 6 months. Caroline has had many previous jobs, seeking new opportunities and challenges when she becomes bored; whereas Yvonne and Zoe are seeking to pursue a career in NR that they hope includes hierarchical advancement, although not necessarily in quantity surveying, and they do not particularly want to pursue qualifications in that field. These career pathways do not follow a traditional pattern, nor do they especially relate to

Schein's (1978) career anchors, although they can be identified with Driver's (1982) alternatives of either a spiral or transitory career pattern.

Respondents' biographies indicate no discernible relationships between their demographics and their career paths. They have different backgrounds, work experience, qualifications and family status, none of which can be used to predict the career pathway of any individual respondent.

Although respondents' career patterns to date can be identified as belonging to one of the pathways identified, it is more difficult to predict their future trajectories. As the individual accounts featured in this section demonstrate, originally pursuing one pathway does not mean that individuals continue to develop their careers along the same trajectory.

To ascertain whether there are any identifiable relationships that can be used to understand the career pathways of female Qs across the wider construction industry, the following section analyses the qualifications and hierarchical status of female Qs who responded to the questionnaire survey.

6.3.3 Career pathways reflected in the wider construction industry

Appendix B summarises questionnaire survey respondents' qualifications, hierarchical position and the types of organisations they work for, along with demographic information, such as their ages and family status.

The traditional (including adapted traditional) pathway described in section 6.2.1 is based on the premise of an individual first obtaining a degree and, ultimately, becoming a chartered member of the RICS, or other relevant professional body. The vast majority of survey respondents (245 respondents; 84.5%) have a bachelor's degree (Table 19, Appendix B), 131 (45.2%) are chartered through the RICS and 160 (55.2%) are chartered members of other relevant professional bodies⁷. Therefore, these 160 respondents can be attributed to the traditional or adapted traditional pathways. However, while the traditional pathway is synonymous with hierarchical progression, tests establish only a moderate relationship ($p = .000$; $r = .627$) between those who are chartered and their hierarchical position.

⁷ Some of which are also members of the RICS

The following table (Table Nine) summarises the organisation types and qualifications of respondents who are at partner or senior manager level or above. It demonstrates that, of the 64 respondents in these positions, most (47 respondents) work in private practice, 45 of whom are chartered. This shows that being chartered is a vital qualification for progression within a private practice. As historically Qs only worked in private practices and followed a traditional pathway this is, perhaps, unsurprising.

Organisation	Number who are partners, senior managers or above	Charterships
Private Practice	25 large private practice 11 medium private practice 11 small private practice	44 MRICS, 1 Other construction
Contractor	9 (8 large, 1 medium contractor)	4 MRICS 1 Other construction
Other	8	6 MRICS 2 MRICS and other construction

Table 9: Summary of respondents at senior level

Tests establish only a weak relationship between respondents who are chartered and the organisations they work for ($p = .000$; $r = .458$), leading to the conclusion that, despite the above observation, those on a traditional pathway are not more likely to work for a private practice. No significant relationships are identified between the organisations respondents work for and their age, family status, level of hierarchy, working time arrangements, qualifications and chartered status. This supports the observations from the case-study that, while patterns can be observed, individual career pathways are not able to be predicted. However, there is no discernible reason for this; whether it can be attributed to the survey samples or whether it is a pattern that would be observed with all female Qs, is unclear.

As no significant relationships have been identified, how can careers of female Qs be understood? Resources, such as qualifications and experience, are not able to predict how careers develop and neither can aspirations or definitions of success. There is no relationship between career pathways and the organisations female Qs work for, their hierarchy or whether they are chartered. Attention therefore turns to agency factors such as aspirations, which do appear to influence female Qs' career direction. This is considered in the following section.

6.4 Do aspirations and definitions of career success influence female QS's career pathways?

The aspirations and definitions of career success of female QSs, identified in section 6.2, and the analysis of their career pathways in section 6.3, demonstrate that, even though a respondent might begin her career on one pathway, she may not continue to pursue that pathway. Careers develop within a range of pathways due to changing priorities and aspirations which suggests that, rather than the leaky pipeline metaphor (Berryman, 1983) often attributed to women's careers in STEM, a branch pipe metaphor is more applicable. Female QSs have multiple routes into quantity surveying and the ability to 'branch out' in different directions in pursuit of aspirations, rather than leave the occupation. This is illustrated in Figure Four below:

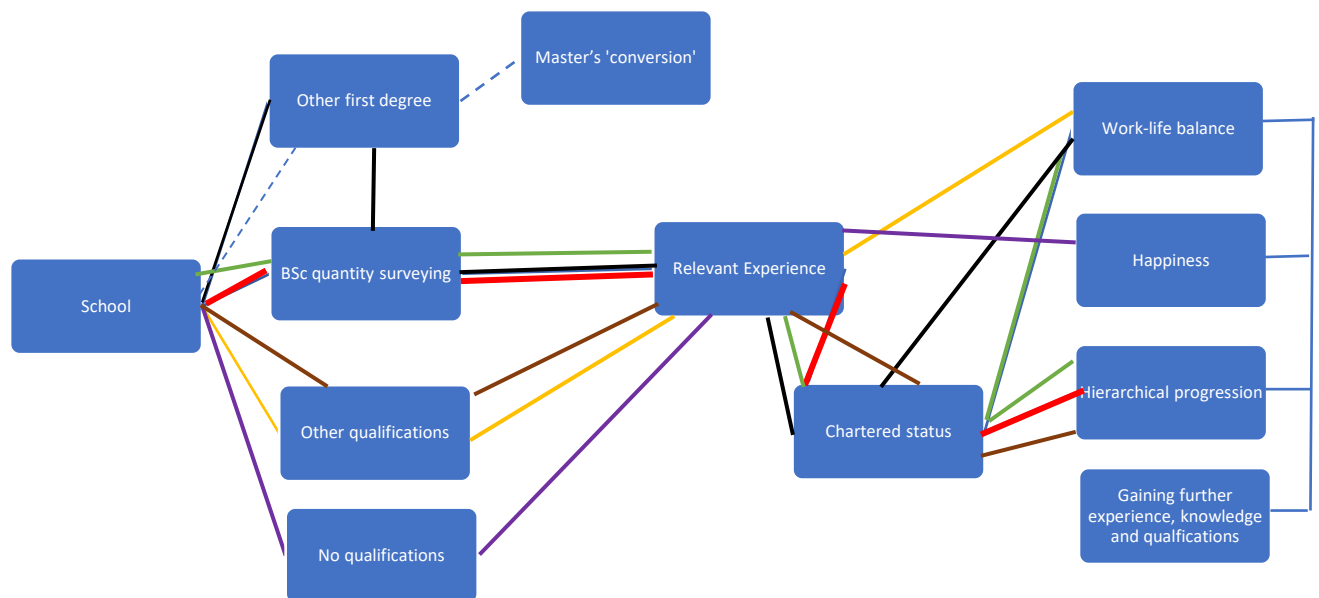


Figure 4: Career pathways in quantity surveying

This illustration shows the range of pathways that are possible in quantity surveying. The red line indicates a traditional hierarchical career, yet there are other entry points and outcomes to demonstrate the range of pathways. No respondent from NR is currently following a purely traditional pathway, but many are pursuing a variation on it, for example:

- Isobel's pathway is indicated in green. This pathway is only also followed by Nadia;
- Bryony's pathway is indicated in black. This pathway is currently not followed by anybody else;
- Sue's pathway is indicated in yellow. This pathway is also followed by Caroline;
- Penny's pathway is indicated in purple. This pathway is also followed by Amelia;

- Jackie's pathway is indicated in brown. This pathway is not currently followed by anyone else;
- Tessa and Kathy's aspired routes are indicated by a blue dotted line; only Tessa currently aspires to progress to a high salary band;
- Anna followed a route that comprised obtaining a quantity surveying degree and gaining relevant experience and further knowledge but has not pursued hierarchical progression or chartered status.

Figure Four demonstrates that obtaining certain resources does not automatically lead to particular outcomes. Individuals who aspire to progress hierarchically, for example, may decide instead to gain wider, or more interesting, experience as evidenced by Fiona.

Additionally, the above graphic does not demonstrate the range of organisations for whom female QSs work, or the range of job functions they undertake, as evidenced in Appendices A and B.

6.5 Conclusion

This chapter has demonstrated that the careers of female QSs broadly follow one of three pathways: traditional, adapted traditional and transferred. The traditional and adapted traditional pathways are in line with female QS's extrinsic valued outcomes of hierarchical progression and improving knowledge, which includes gaining qualifications, becoming chartered and work experience. The transferred pathway is in line with their intrinsic aspirations of work-life balance (including flexibility) and being happy at work, which includes having respect as well as choices and variety in their work.

Yet, these labels are too simplistic to fully illustrate the range of trajectories individuals pursue during their career as a QS. Respondents' valued outcomes also influence career development and well-being, and these cannot be predicted from pathways pursued to date. Appiah (2005: 179) claims that: "neither subjective measures of success nor objective measures of success exhaust what we have in mind when we discuss well-being; some equipoise between them is wanted" and this is reflected in the responses.

Although the research ascertains aspirations, and equates them with definitions of career success, the chapter establishes that career pathways are determined by a range of factors that include women's resources (in the form of qualifications and experience). However,

while qualifications are not necessarily required for career development in some organisations, in others it is possible to progress without them.

The three career pathways identified are not a closed route for women in quantity surveying. It is possible to move between them. For example, beginning a career on a traditional pathway does not mean that a female QS necessarily aspires to further hierarchical progression. However, it is a complex issue and balancing home life with work life and the desire for progression remains a dilemma for female QSs. Case-study respondents expressed the desire for agency and choice in their career development, to have the option of progression whilst, at the same time, maintaining their WLB. The increased time commitment and responsibility that progression brings is not considered worth the additional status and salary for many respondents. This is not confined to those with dependent children. Nevertheless, lack of hierarchical progression was not seen as underachieving or lacking in career success.

The pathways of female QSs cannot be predicted by demographic factors such as their age, their organisation or their family status. Whilst it appears as though being chartered is a factor in hierarchical progression for those working in a private practice, it is not a strong relationship. It is possible to progress in other construction organisations without gaining chartered status. Female QSs aspire to having agency to enable them to pursue whichever path they desire, depending on their preferred outcomes to achieve well-being.

The question of whether aspirations for happiness, equality and respect constitute adapted preference was considered. Francis (2017) and Nussbaum (2000: 137) suggest that some women, having realised that further advancement is not possible, lower their aspirations “to what they can actually achieve”. This remains a possibility despite respondents’ assertions that aspirations are genuine, as there is evidence of frustration by some respondents at their lack of hierarchical progression.

Ng et al (2005) suggest that aspirations enable progression. Yet, for female QSs, aspiring to a goal does not necessarily mean that goal will be achieved. As described in Chapter Three, structural factors impact career progression, particularly for women in a male-dominated industry. Therefore, the question turns to how can female QSs pursue their desired pathways? The following chapter analyses the structural, organisational, factors impacting their ability in this regard.

CHAPTER SEVEN

How organisations influence the career pathways of female quantity surveyors

7.1 Introduction

The previous chapter demonstrated that female QSs' are driven by a range of career aspirations and it is these, more than their resources, that guide their career pathways. It also determined that recognised career theories are insufficient as a means of determining the course of their careers. However, as Chapters Three and Four established, an individual's ability to pursue her desired outcomes is impacted by organisational, personal, social and cultural 'conversion' factors. The conflict that emerges from female QSs' individual agency to pursue their aspirations within structural constraining and enabling factors is conceptualised in this research by the framework of the CA. It enables examination of how construction organisations, their policies, practices and culture impact female QSs' career pathways from the perspective of both the organisations and female QSs.

This chapter begins by presenting an analysis of questionnaire survey data to determine the organisations for whom female QSs work. This is necessary as it contextualises the interview data that follow in the second half of the chapter. The questionnaire survey establishes that most female QSs work for large contractors or large private practices with only a very small proportion employed by 'other' organisation types. There follows an analysis of data obtained from interviews with representatives from typical employing organisations to understand how they perceive the policies, practices and culture of their organisations and how these impact on the pursuit of aspirations. Sen and other CA researchers believe that policy changes can improve individuals' well-being (Evans, 2002). With that in mind, the analysis examines organisations' policies regarding equality and their implementation. Bourdieu (1977) asserts that individual agency is limited to the structures in which it operates and so the chapter also analyses how organisational structures influence women's ability to progress upwards, how different organisation types approach flexible working and their perceptions of typical barriers, demonstrated in Chapter Three as impacting on women's careers in the construction industry.

Many of these features contrast with construction organisations' attempt to project themselves as diverse. On the one hand, respondents' accounts describe an intent to treat

women as equals with equal opportunities for recruitment and progression and an attempt to enable WLB. On the other hand, the implementation of these policies differs between organisation types, and even within individual organisations. Further, even those organisations that attempt to implement equality strategies do not necessarily account for the diversity of their employees such that women remain disadvantaged.

7.2 Which organisations do female QSs work for?

Careers in quantity surveying develop within organisations. Even though there is a range of organisations for whom QSs work, most develop their careers within one of the organisation types shown in Figure Five which presents data from the questionnaire survey respondents. It demonstrates that most female QSs work, or have worked, for either a large contractor or a large private practice in their three most recent jobs. In their current job, 179 of 290 respondents work in one of these two organisation types (61.7%). ‘Other construction’ comprises housing, local authorities, consultancies or commercial, client-owned organisations, numbers for which were too small to be presented separately. The majority of those in non-construction roles in their previous jobs were still in education.

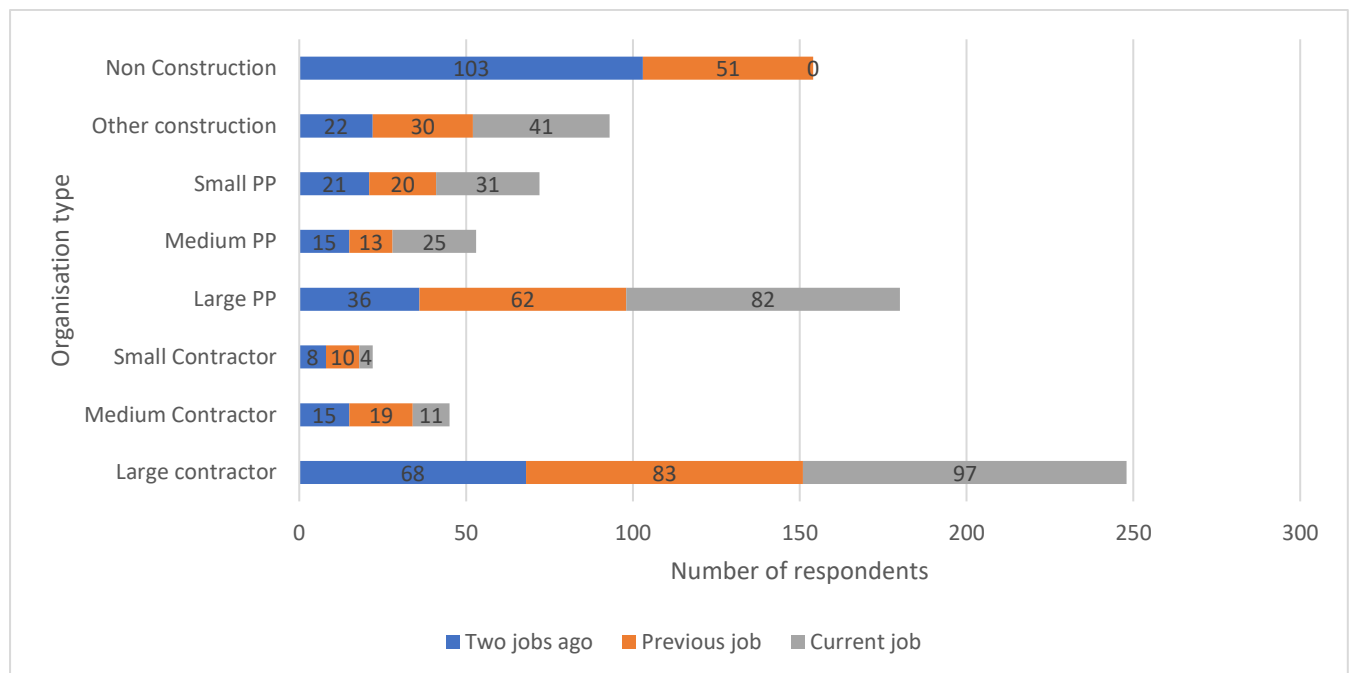


Figure 5: Respondents most recent three jobs by organisation type

Female QSs’ three most recent jobs were analysed to assess, among other things, whether, as they changed jobs, they changed organisations. However, Figure Five demonstrates that the proportion of women working in each organisation type has remained fairly consistent as

respondents have changed jobs and as more women have entered the occupation⁸. To simplify the data, the few respondents who work in small and medium-sized organisations, as well as those in individual ‘other’ organisations, have been combined as indicated in the following chart (Figure Six):

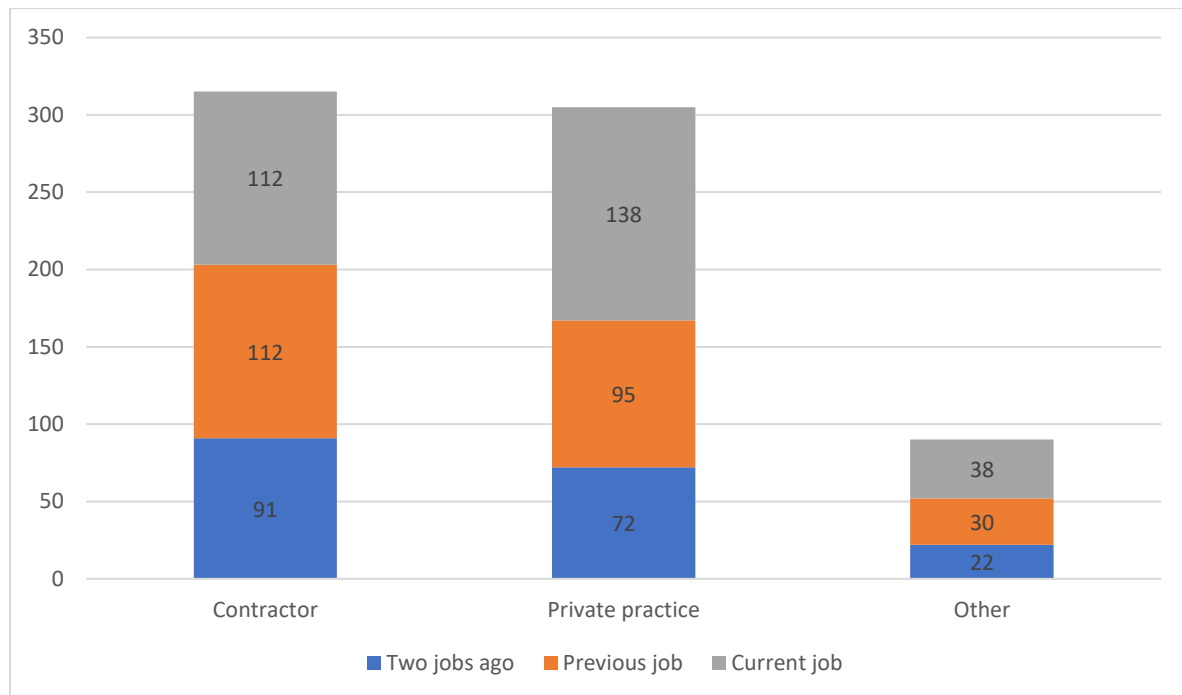


Figure 6: Simplified chart illustrating respondents three most recent jobs

Figure Six demonstrates a higher proportion of women working for a private practice in respondents’ current job compared with previous jobs. Analysis of respondents’ movements when they changed jobs demonstrates that, in doing so, few women changed organisation type. For those who did so, no pattern of change can be identified. Testing also indicates no relationship between the aspirations of female QSs and the organisations for which they work ($p > .05$), meaning that working for a particular organisation type is likely not a predictor of a female QS’s career pathway.

Having established who female QSs work for, the ways in which these organisations impact women’s career pathways are analysed in the following section using data obtained from interviews conducted with representatives of employing organisations.

The employer’s representatives are summarised in Table Ten below:

⁸ With the exception of small and medium contractors, which have reduced.

Organisation	Total employees	Team structure (if known)	Organisation Structure
Small private practice	9	4 directors (Male) 4 QSs and planner (3 male and 1 female).	Project based Specialised work (legal) Hierarchical progression possible to director level
Multi-disciplinary consultancy	45 - 50	1 female director and 11 Female non-administrative staff in one office.	Project based, specialised work (largely design) Hierarchical progression possible, from senior, associate and then partner.
Medium private practice	55 staff across two regional offices	12 male partners across 2 offices Approximately 10% of QS staff are females.	Project based structure within regions. Hierarchical progression through graduate QS to senior to associate to partner.
Local authority	Team of 6 QSs	2 female: 4 male.	A small division of a large company in one office. Hierarchical progression is into management and away from front line working.
Train operating company	Team of 8 in a QS type role	4 female: 4 male.	A small division of a large company in several offices. Hierarchical progression is into management and away from front line working.
Housing company	Approximately 2,000 employees across a number of offices	Workforce is 29% female; senior management 17% female.	Many regional offices and different disciplines. Project based organisation. Hierarchical progression is through graduate to QS to senior QS to management levels.
Large, national contractor	Approximately 2,200 employees across a number of offices	Female: male numbers unknown.	Many regional offices and different disciplines. Project based organisation. Hierarchical progression is through graduate to QS to senior QS to management levels.
Large multi-national contractor	Unknown, but many thousands	18% female. Respondent works in a team of approximately 10% females.	Many regional offices and different disciplines. Project based organisational structure. Hierarchical progression is through graduate to QS to senior QS to management levels.
Network Rail	Approximately 35,000 although not all are in construction-related jobs	5,600 female employees (16%) which the company aims to improve to 20% by 2020.	Construction work operates on a project basis, with regional offices and a range of construction disciplines. A salary band structure operates with hierarchical progression through the salary band system.

Table 10: Overview of respondent organisations

7.3 Organisational influence on conversion factors impacting the career pathways of female QSs

Interviews were obtained with representatives of two contractors, two private practices, a housing company, a local-authority estates department (LA), a consultancy, a train operating company estates department (TOC) as well as the HR department of Network Rail (NR). This section examines how they impact female QSs' acquisition of the capabilities required to achieve any identified aspiration. The capabilities are based on the hypothetical list established in Table Four (section 4.4.2). Organisational size, structure, policies, practice and culture, encompassing all four conversion factors, are relevant.

To understand the factors that impact female QSs' ability to develop relevant capabilities associated with their aspirations, this section is organised into factors influencing recruitment, hierarchical progression, WLB and equality.

7.3.1 Factors influencing recruitment

In the first instance, individuals must be recruited into an organisation. This requires the capability of being able to seek paid employment on an equal basis with others, which in turn is impacted by organisational policies and practices.

All respondents stated that their organisations follow the 'person-job fit' model of recruitment, focused on recruiting individuals with the right qualifications, skills and abilities for the job (Ng et al, 2005). Person-job fit is a very narrow view, particularly when organisations change, restructure or reorganise. It also does not account for the likelihood of employees changing jobs within the organisation (Sekiguchi, 2004). Recruiting on this basis means that, when changes do occur, employees need additional training. This method of recruiting can be detrimental to an organisation in the long term, particularly with regard to quantity surveying. As Chapter Two demonstrated, quantity surveying has undergone many changes during its evolution, caused by developments in technology and regulation, the services demanded by clients and the takeover of smaller firms by large ones, for example (Ashworth, Hogg and Higgs, 2013; Cartlidge, 2017). Such changes have required QSs to adapt and develop their competencies and therefore have additional training needs, which some organisations are better able to provide than others, as section 7.3.2 demonstrates.

In contrast, the person-organisation fit model emphasises the compatibility of an individual's values and goals with those of the organisation as a whole (Vancouver & Schmitt, 1991; Cable & DeRue, 2002; Ng et al, 2005). Kristof-Brown (2000) argues that both person-job fit

and person-organisation fit apply when organisations recruit, albeit at different stages in the process. This research argues that person-job fit does not allow the exploration of an applicant's aspirations, although person-organisation fit can. However, even though person-job fit equalises applicants as men and women are equally likely to have the required qualifications, skills and abilities for a job, in a male-dominated industry men are more likely than women to fulfil person-organisation fit (Greed, 2000; Francis, 2017).

NR's recruitment policy emphasises a commitment to equality and person-job fit, saying they recruit: "the right people into the right jobs at the right time" (Network Rail, 2019a: n.p.). In matching organisational needs with individual wants, this commitment conforms to the 'ideal person' narrative of careers research (Greed, 2000; Ng et al, 2005, Raidén, Dainty and Neale, 2008; Raidén and Sempik, 2012). According to NR recruitment policy, a person is considered for a job regardless of their: "age, disability, employment status, gender, health, marital status, sexual preference, membership or non-membership of a trade union, nationality, race, religion, social class or other non-job relevant personal characteristics" (Network Rail, 2017: n.p.). In trying to implement this policy and to assist in ensuring equality in both recruitment and progression, NR has devised a three-part interview procedure. This was explained by their HR representative:

First, interviewees give a presentation based on a case study that they have not seen beforehand. They have forty-five minutes in which they have to put together a half-hour presentation; this is presented to two people. After that they have a technical interview and then a competency-based interview. Each part is scored independently. So, if they do badly in one part, they can pick up marks in another.

However, when asked if this is undertaken in practice, she admitted: "they can fiddle it". Case study respondents agree, and this is discussed further in Chapter Eight. Additionally, NR, like many large organisations, is diverse and its recruitment policy must be suitable for employing people in a range of occupations other than quantity surveying, including customer services, signalling, engineering and track work. Further, quantity surveying itself has a diverse range of competencies, some of which do not match every job role.

As demonstrated above, most female QSs work either in private practices or for contractors, such that those applying for a QS role are likely to be equally, or at least similarly, qualified. As many applicants are likely to meet the job-fit criteria, person-organisation fit will become more relevant. This is evidenced by the partner from the medium private practice, who said:

We are always looking for the right type of people and those people need to be on the same journey, on the same path, that the business is on ... It has always been about the right person who fits the mould who wants to do the job and fits in with the personalities. If the person is right, it doesn't matter about their gender.

Even though the partner says that gender is unimportant, he confirms that person-job fit is not the only, and possibly not the main, criteria for recruitment. As women comprise only 10% of their workforce, someone who 'fits the mould' is more likely to be male than female. This confirms the assertions of Greed (2000) and Francis (2017) that the person most likely to fit into a male-dominated organisation will be male. However, the partner related that the company recently recruited a female QS, who originally applied for a job as an administrator:

She said that she wanted to become a QS but didn't know how to approach doing that and so thought she would start with the admin job to get some insight. Her CV was very good, so we suggested that she came to work for us as a trainee QS and we put her on a master's course. We saw that as an opportunity, and she has been with us for 12 months now. So, it is not about trying to hit quotas of 60% men or whatever. If the person is right, it doesn't matter about their gender.

That this employee did not know how to become a QS, together with the fact that some case-study respondents also began their careers in administration, highlights that women lack information regarding routes into quantity surveying. It is also noteworthy that he chose a quota figure of "60% men" rather than 50:50.

Spontaneous recruitment decisions such as that described are likely to be easier in smaller organisations like the private practices and the consultancy. Yet even in large organisations, such as the national contractor, some recruitment can be informal. Its male director explained that while graduate recruitment and training is formal, recruitment of qualified and experienced staff can be: "ad hoc. It can be based on prior knowledge, who you know". Once again, these recruitment strategies are more likely to advantage men over women. Even though he asserted that there is no gender bias, those 'who you know' are more likely to be men (Greed, 2000).

Graduate recruitment is more formal for the national contractor. Local universities are targeted for potential employees and a structured education and training programme is implemented. It also recruits individuals directly from school on a 'modern apprenticeship' basis and funds part time degrees. The director said that, although a 'person-organisation' fit basis is used for recruitment, it is biased in terms of the areas local to its offices rather than gender.

7.3.2 Factors influencing hierarchical progression

The ability to pursue hierarchical progression in quantity surveying also requires the capability of seeking paid employment (or promotion) on an equal basis with others plus those of having educational opportunities, autonomy and adaptability. The ability of

individuals to acquire these depends on the type of organisation they work for, their personal resources such as qualifications and experience, as well as social and cultural factors.

Organisation type and structure

The size of an organisation, its structure and the type of business it undertakes are relevant to hierarchical progression. Its size, and particularly its structure, dictate the types and number of positions available at each level of hierarchy.

NR, as a very large organisation, has a very complex structure. It has a head office in Milton Keynes, as well as many regional offices across the country. It is sub-divided into highly specialised divisions within its regions of which commercial practice (which includes quantity surveying) forms only one part. The following illustration is a highly simplified example of how one major regional office may be organised (Figure Seven), in terms of its construction and engineering activities:

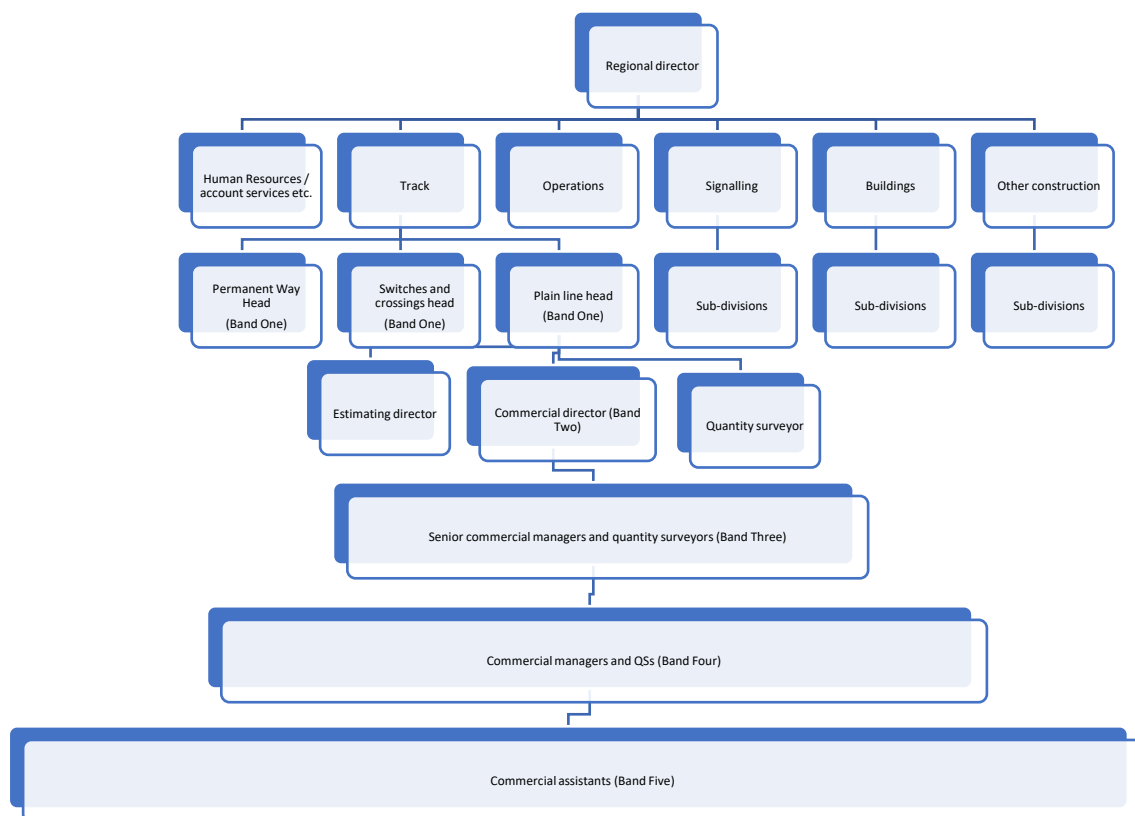


Figure 7: Simplified structural arrangement for one division of NR

As illustrated, the higher that an individual climbs in NR, the fewer the roles available. One NR respondent described how there are 5,000 Band Three positions, 2,500 Band Twos and only 500 Band Ones. Thus, there are more opportunities for promotion from a Band Three to a Band Two position than from a Band Two to a Band One.

The organisational structure of the national contractor is not too dissimilar, as shown in Figure Eight:

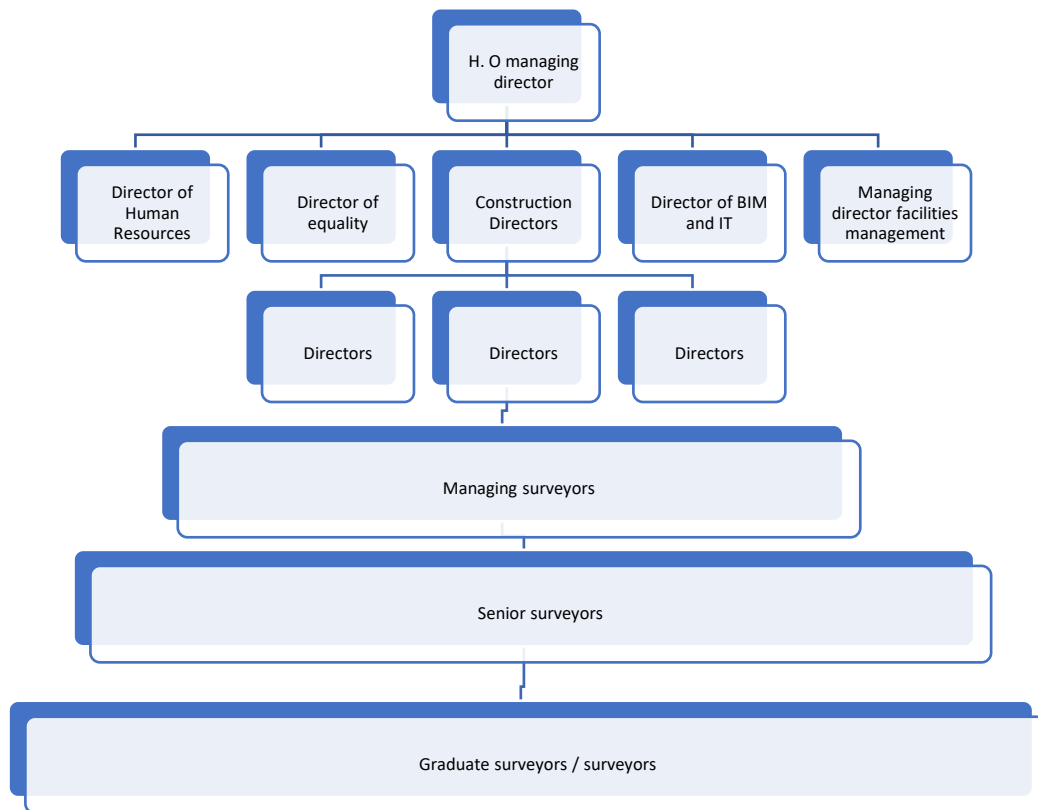


Figure 8: Simplified structure of the national contractor's organisation

As it is a smaller organisation, that only undertakes construction-based activities, the national contractor has fewer regional offices and fewer sub-divisions than NR. There is a clear route of progression for Qs within the hierarchy, although, again, there are fewer positions the higher an individual climbs.

The structures of the private practices demonstrate how even a slight increase in size and number of employees can impact the structure of the organisation and progression routes for Qs. The small practice has fewer than ten employees; there are four directors, two senior Qs and two graduate Qs as illustrated in Figure Nine:

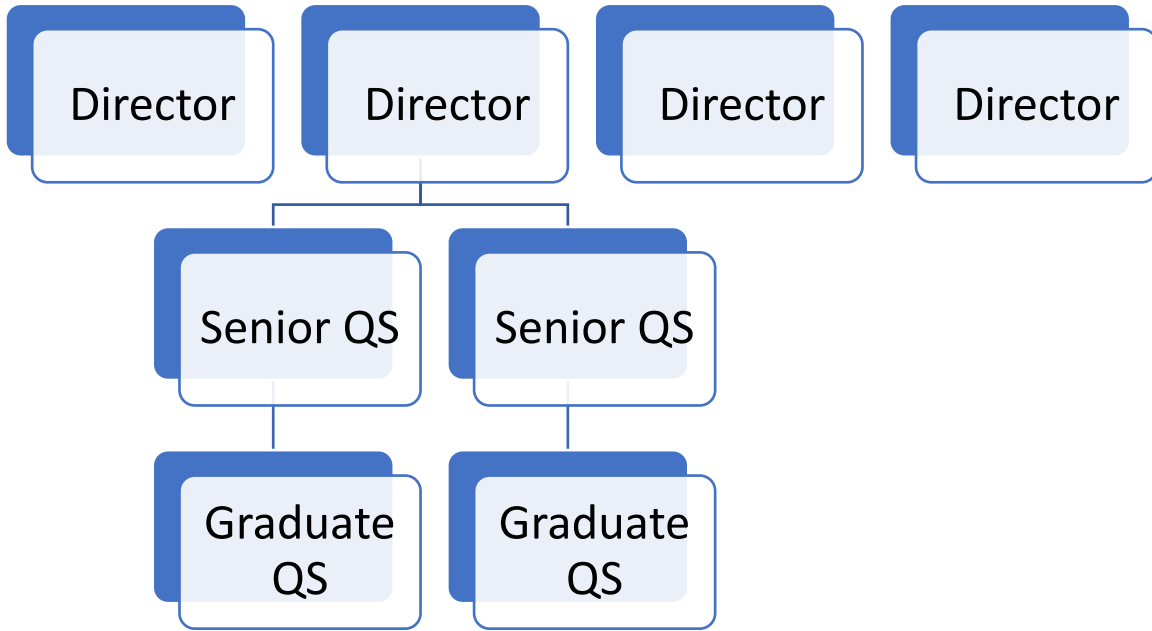


Figure 9: Structure of the small private practice

The respondent from the small practice said, once chartered, she is likely to become a senior QS but there are no further promotion opportunities for her within this practice because it will not offer a directorship to anyone else. Yet even a slight increase in size offers more opportunities. Figure Ten illustrates the structure of the medium-sized practice:

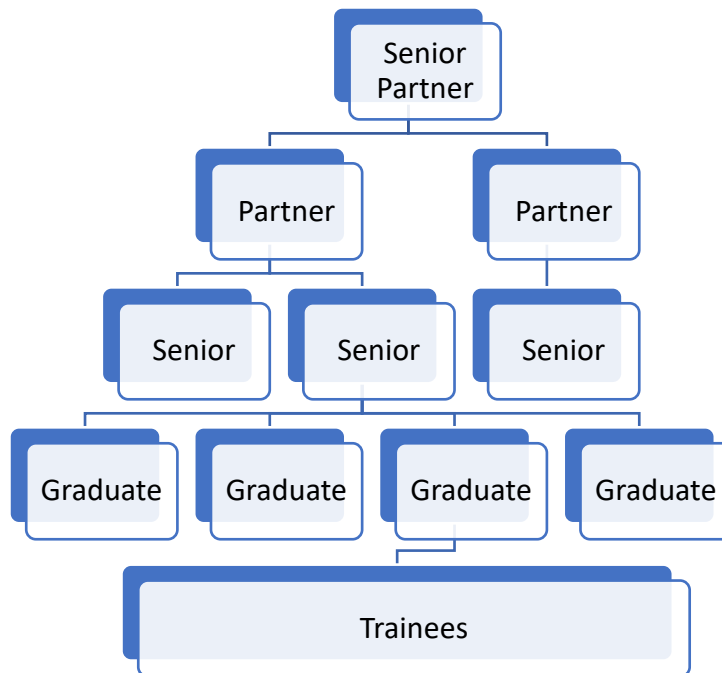


Figure 10: Structural representation of one office of the medium private practice

Once an individual has joined an organisation, size and structure become relevant in terms of both horizontal and vertical progression. Individuals' career patterns have changed over time, in that most people no longer work mainly in one organisation (as analysed in Chapter Three), but organisations themselves have changed little (Baruch, 2006). Their structures may have become flatter, with more opportunities in the specialisms described, but there remains a traditional, hierarchical, structure with a clear progression route. Whether alternative career pathways, incorporating more work variety and better WLB, can be adopted depends on whether or not organisations choose to enable them (Baruch, 2006).

Although organisations have clear progression routes, there need to be positions available for individuals to progress into. In many organisations this only occurs when someone leaves, which is less likely in a smaller organisation than in a larger one. However, although this is not a large organisation, the partner of the medium practice stressed that progression does not depend on someone leaving or being promoted. He said: "If you work hard and show that you can do the job, then you will get promoted to the position that you want to be in. I can't think of anything worse than being sat in a company having done a really good job and worked really hard, but you couldn't get promoted because somebody's got to retire". In the small practice this is not a possibility, according to its respondent.

Nevertheless, working hard is not the only criteria for promotion. In quantity surveying, it is necessary to have appropriate knowledge and experience. In a private practice this is also likely to include having relevant qualifications, as analysed in the following section.

Gaining knowledge and experience

Qualifications and gaining knowledge and experience are, at once, an individual's resources, a personal conversion factor, an aspiration and a capability (i.e. as having the freedom to gain knowledge). Which definition applies depends on the individual and where they are on their career path. Knowledge and experience are an individual's resources because quantity surveying is a professional occupation that requires specialist knowledge. As a conversion factor, they are important because the capability of seeking employment or promotion on an equal basis with others is unlikely to be acquired without appropriate qualifications and experience. At the same time, and as noted in section 6.2, gaining qualifications is an aspiration.

In NR, an individual does not require formal quantity surveying qualifications to be promoted, demonstrated by respondents on the transferred pathway. Other organisational respondents are divided about whether formal qualifications are required to carry out the function of

quantity surveying and whether they are necessary to progress. The respondent from the LA said that, although progression is possible without qualifications, they: “look better on paper. People are more likely to progress if they have qualifications, because you can see them”. Private practices require QSs either to be already chartered, or to be working towards it, before they are promoted. The medium-practice partner explained:

One thing that I am a stickler for is that no one steps above graduate until they are chartered ... People come into a business as a project surveyor or quantity surveyor [without being chartered] and, before you know it, somebody promotes them to senior and they get a pay rise. Yet you can see the difference in their ability. So, we don't promote people who are not chartered to senior level or above.

It is interesting that he perceives a difference in ability between those who are chartered and those who are not. He could not offer any reason why someone who is not chartered might have been promoted ahead of someone who is. An explanation regarding why private practices may require QSs to be chartered is that, in line with regulation 3.1 of the RICS, to be designated as a chartered surveying practice at least 50% of an organisation's principals or partners must be chartered members of the RICS (RICS, 2019). Additionally, having chartered status opens up networks of contacts through which business is obtained. Further, as Chapter Two illustrates, quantity surveying practices were the only organisation type that traditionally allowed QSs to become chartered (although, towards the middle of the Twentieth Century, some chartered QSs were employed by local government). There remains the perception that chartered surveyors work in private practices but that chartership, particularly that of the RICS: “doesn't carry as much weight” for contractors as it does in private practice, according to the medium-practice partner. This was confirmed by representatives of the various contractor organisations. Most contractors' representatives are chartered through bodies other than the RICS, such as the ICE or the CIOB, but they agree that having relevant experience and job-specific training influences promotion more than formal qualifications.

Ng et al (2005) found that educational opportunities within organisations, including access to training and opportunities to gain experience, are moderated by gender and by organisational sponsorship (which is also moderated by gender). Being educated is a significant factor in career advancement for women (Ng et al, 2005; Francis, 2017), but having access to education and training opportunities is often denied to women who are deemed to be: “less likely to hold jobs that are stepping-stones” to high ranking positions (Ng et al, 2005: 277). Again, the size of an organisation becomes relevant. Network Rail, the LA, the housing company, the national and multi-national contractors all say they provide

structured education and training programmes for employees, regardless of gender⁹. Of all the respondent organisations, NR provides the widest range of education and training opportunities for its employees. However, the HR director confirmed that, although there are lists of opportunities published internally and employees can apply for any training they wish to undertake, permission to do so must be obtained from line managers. She said it is usually given to those who request it for a course that is: “an essential requirement for their role ... but if it's only a desirable requirement, it may not”.

Other organisations offer fewer opportunities. The LA’s ability to fund education and training is affected by cuts in government funding. Its representative said that when she joined the organisation 27 years ago, there was a full education programme with designated development staff. Now her department is much smaller, and it is “too much of an expense and we don’t really have a training plan at all”.

When there is a fixed amount of organisational resources, decisions must be made regarding their allocation. Although organisations assert that women are equally likely to receive education and training as men, Dainty, Bagilhole and Neale (2000) and Worrall (2012) found that women receive less organisational sponsorship and fewer development opportunities. Moreover, Ng et al (2005) found that those who receive more organisational sponsorship are likely to advance their careers further than those who do not.

Smaller organisations, such as the private practices and the consultancy, have lower ability to offer structured programmes. The small practice respondent said that, although her organisation is facilitating her master’s degree, there are no other development opportunities available. The medium practice retains most development in-house, although it facilitates employees to undertake part-time degrees. It encourages senior people in the organisation to identify the needs of those below them and, although this is time consuming, there are long term benefits. This is reminiscent of the traditional education of Qs as illustrated in Chapter Two, but it does impact the senior person’s workload. The partner explained:

You must take on people below you, but you have to manage your own work and their work. That might mean sitting with a graduate for two to three hours ... but then you still have to go and catch up with your own workload. It has the benefit that next time you might have to sit with them for an hour, and after that half an hour, and then they're probably ok on their own. I might have to make up those two to three hours in the evening when I get home, but I am prepared to make that sacrifice because down

⁹ Chapter Eight analyses case-study respondents’ ability to pursue educational opportunities that depends on line managers’ approval

the line I will get it back by being able to ask them to do work for me and know that it's done in the way I would want it to be.

The medium-practice interviewee was the only organisational representative who claimed to personally undertake one-to-one training for staff, because it ensures that work is carried out in a way that benefits the organisation. No other organisation said that they do this.

Nevertheless, large organisations have structures that are better able to give individuals a range of work experience. Many have graduate training schemes. According to the respondent from the LA, until recently trainees would: “work in different departments to get experience. For example, people coming in would have a stint working in the health and safety department; and then with the building control officers going out on site and seeing what they did, and stuff like that”. Whereas budgetary cuts now prevent the LA from providing this type of development opportunity, they are still provided by other large organisations. For example, the housing director said: “the graduates do a circuit around all of the departments and the best people that we have in the organisation have come off that graduate scheme. They're brilliant”. That this kind of experience is a factor in progression was confirmed by a respondent from the national contractor who is not a formally qualified QS. She said the experience she gained in previous roles had: “really set me up for the position I have now. Without that experience, I couldn't have done this role – they wouldn't have wanted me”.

Such experience can only be provided by organisations with a range of departments, which large organisations can provide and small organisations cannot. This is illustrated in Figures Seven, Eight, Nine and Ten where the small and medium-sized organisations have fewer specialisms than the large; even a slight increase in size enables more development opportunities. For example, the only activity undertaken by the small practice is dispute resolution; therefore, it offers few further development opportunities, even after becoming chartered. However, the medium-practice partner said becoming chartered is just the beginning of a QSs' development in his organisation as it offers a range of opportunities.

Addressing gender as a personal factor in progression

Women are segregated vertically and horizontally in many organisations (Walby, 1990) and this is evident within the respondent organisations. For example, neither of the private practices has a female partner or directors (vertical segregation), although there are female directors in the consultancy. Further, 17% of the private housebuilder's senior management are female (Source: company annual report, 2018), but these largely work in finance and

business development rather than in construction-related roles (horizontal segregation). Similarly, the two female directors from the national contractor are responsible for BIM and diversity and inclusion, again not directly related to the delivery of construction. Cohen and Huffman (2007: 682) found “the presence of female managers should (if they have the power) promote gender equality”. However, a representative from the national contractor said that, although there are female directors, there is: “An underlying culture that there shouldn’t be a woman on the board. There is a reluctance to promote women into senior positions or site positions. And the statistics seem to bear that out, as when there were redundancies or layoffs, it was the women who went”. This is also an example of women facing a ‘glass cliff’, rather than a ‘glass ceiling’ (Bruckmüller et al, 2014), whereby women are placed in high-ranking but precarious positions.

Women can benefit from organisational support in the form of positive discrimination or positive action. Although positive discrimination is illegal under the Equality Act 2010, some action can still be taken to improve women’s employment and promotion prospects. For example, a respondent from NR suggested that removing identifying information from CVs will equalise women’s opportunity to obtain an interview. Taking direct action to increase the number of women in an organisation has benefits in providing role models, something women in construction are said to lack (Worrall, 2012; Rosa et al, 2017).

Conversations around this topic focused on respondents’ insistence that positive action would not help women’s experiences in the industry, and that no respondent organisation employed this policy. The housing director said:

If a guy is the best person for the job, because he works the hardest and he gets the best results, then he’s the one that should get the promotion. If, in the same breath, a girl is the best person for the job, then she should get it. Whoever is doing the job needs to get the salary and are benchmarked at the same level as everybody else. There is no differential. I hate positive action. I know the arguments around it and I absolutely get that, but when you are working in an organisation where it has no impact, then it is not necessary.

That promotion is not a gendered issue is not necessarily reflected in practice, however. This was acknowledged by the female director from the national contractor who was adamant that she would like to see more women attain higher positions. However, she stressed that doing so by means of positive action would “set women back a long way”. In this, she agrees with Cockburn (1989) who asserted that, whilst positive discrimination (or action) would facilitate an increase the volume of women in an organisation, the underlying discriminatory structures would remain unchanged. The director acknowledges this point, saying: “I want to understand how to make it so that it is the right person, making jobs more

flexible and [looking at] how we influence younger girls to consider this as a career, and enabling their progression". Part of her role is to examine the structures within her organisation to understand why many women are dissuaded from applying for a job. Although she is currently focusing on lack of flexibility within the organisation, she also acknowledges that there are deeper rooted cultural issues to be addressed.

However, women with the appropriate qualifications and experience to do a job are still not necessarily appointed to it and conversations were based around reasons for this. One reason that has not been researched in a construction context is the 'confidence gap'. This suggests that women will apply for a position only when they meet 100% of the requirements, but men will apply when they meet only 60% (Clark, 2014). It was first raised by a respondent from the national contractor, who said: "I wonder whether a big part of the issue is that women do not push themselves forward enough? You've got a big shouty guy next to you saying that he can do this and that and that pushes women back". This is a subjective issue that clearly depends on the individual but, if women are already disadvantaged by not applying for a job, because they perceive they lack the relevant requirements, one could argue that in this instance it becomes irrelevant whether a company has policies giving all genders an equal chance in terms of recruitment and progression. It is difficult to see how this issue can be resolved other than to introduce specific education and training for women to improve confidence in their abilities. Mentoring may also assist, as analysed further in Chapter Eight.

Cultural factors within construction organisations reduce women's ability to meet the person-organisation fit criteria (Francis, 2017). Women who are promoted are often similar to people within the existing hierarchy (Francis, 2017), as the organisation is unlikely to change to accommodate them. This is a recurring theme of research regarding women in construction (e.g. Worrall, 2012; Francis, 2017) as, in construction, the existing hierarchy will be mostly men and women are often said to 'have to act like men' to succeed (Dainty, Neale and Bagilhole, 2000). The female director of the national contractor says that this should not be a requirement for promotion, arguing: "do successful men have to act like men?". Other respondents, even those within her own organisation, disagree. For example, another representative from the same contractor said: "in construction, the more aggressive or pushy you are, the more likely you are to advance. You shouldn't have to be aggressive to put your point across, but in construction it doesn't work like that". This is not just associated with large contractors, however, as the representative of the small practice said:

I think aggression is the main barrier, and that is a male tendency. I have never seen women being aggressive; the introduction of more women into the industry will bring this softer side and it's kind of changing but there are still [those who think] they have to take advantage of someone, or shout at someone, to get by. I think that hinders the industry more than the men: women divide.

However, this feeds into the stereotype that women are nurturing while men are assertive. The social construction of so-called 'soft skills' results in them being undervalued (Rigby and Sanchis Gómez, 2006). This severely restricts women's ability to progress as they are seen as possessing less valuable competencies (Benschop and van den Brink, 2014). This also does not account for the fact that some women do not excel at these abilities and some men do. The director of the consultancy recognised this, saying that some stereotypically feminine behaviours are not exclusively female. She said:

There's a whole lot of nuanced behaviour that is very difficult to describe, express and capture which, although it might not hold people back, influences and impacts on women's ability to thrive. I don't mean just women, but also people who have come from a different perspective or a different point of view that might not play into more macho cultures. So, it's even more subtle than women, it's all diversity because there are as many men that are affected by those cultures as there are women.

Others also denied that 'soft skills' are unique to women, resenting the proposal that they should acquire these abilities to enable them to build their confidence and assertiveness to deal with "difficult (often male) personality types" (Worrall, 2012: 18). The business psychologist asserts that the association between women and 'soft skills' is because women are more likely to work in "supportive or handmaiden roles", often meaning that the ability to demonstrate leadership and assertiveness is then denied them. However, the director of the consultancy observed:

People say we need more women on teams because they bring a different perspective and skill set and I do not think it's true. It is flawed thinking because there is so much diversity between men and women that we don't fit into these stereotypes at all. If someone has experienced a specific behaviour in a woman, then that behaviour is projected on to you because you are a woman. For example, because I am female, I am thought to be organised, but I am not. Also, there is a man who sits opposite me who has really great soft skills.

However, women who are similar to men are viewed as competition for promotion (Francis, 2017), which can also disadvantage them.

One factor that respondents from the large organisations perceived as equalising women's career progression opportunities is that size aids equality. The representative from the multi-national contractor saw that its size gives it the ability to provide a clear progression route for Qs and removes bias. She asserted that this is less visible in small organisations:

Structure brings about equality because men have to do the same as women to progress. Without that structure, women can be overlooked. I think that is why larger companies have structured training - to prove to the QAA [Quality Assurance Agency] and so on that they are all about equality and how they are implementing it. I think it is all very well to say 'right, OK, we appreciate equality' but implementing it is something different in itself.

A reason for large organisations' structured and more inclusive development programmes is because they can attract higher-value work with clients who drive inclusion policies. For example, the government and other public clients procure a large amount of construction work and demand that contractors comply with their quality assurance requirements, insisting that diversity and inclusion policies and associated development are in place before organisations can bid for work. The director of the national contractor agreed that specific inclusion policies form part of the procurement process, with many clients demanding that contractors complete a pre-qualification questionnaire (PQQ) when bidding on projects. The inclusion of the requirement for structured training programmes, particularly relating to equality and diversity, leads organisations to actively encourage women to apply for promotion.

Hours worked

Women's working hours influence their ability to seek employment and promotion on an equal basis with others (and therefore pursue hierarchical progression) and their ability to have time autonomy (and thus WLB). Hours worked were classified by Ng et al (2005) as a personal factor that impacts on progression. Their finding that women who work long hours are more likely to progress than men who work long hours, is based on the expectation that women generally work fewer hours than men, such that those who do are more likely to be noticed.

Connected to this is the fact that women are assumed to be unwilling to work long hours, and this is often cited as a barrier to their career development (Rosa et al, 2017). When the interview questions turned to this subject, however, a clear view was that excessively long hours are not usually necessary. There are some occasions when overtime is required, but these are generally known about in advance and can be planned for. Respondents denied that presenteeism enables anyone's career development and progression.

Some respondents disagreed, however. For example, the representative from the multi-national contractor said that presenteeism in contractors' organisations is an: "issue that needs to be taken into account". She said:

If you're not there till 8 o'clock at night, there is a misperception that you are slacking off. It originates mostly from male employees working away from home when, rather than sit in an hotel room, they stay in the office. Although they are 'at work', they are not doing a lot of work, they're having a bit of banter about the football or whatever.

She disagrees with Ng et al (2005), considering that not only are men perceived as harder working, but that it also enables their career progression, particularly as many women are either unwilling or unable to spend this amount of time at work (see also Valcour, Bailyn and Quijada, 2007). A respondent from the national contractor agreed, adding that those who choose to spend long hours at work make it difficult for others not to do so. The medium-practice partner said that those who wish to be promoted must make some 'sacrifice'. He said: "I won't promote someone without a reason to do so, based on ability and experience. Every woman I've worked with who has wanted to get somewhere has got there. Not without sacrifice, but that is no different to men. Sometimes I go out when our boy is still asleep and not come back until after he's gone to bed". Although here he indicates that working long hours can sometimes be a requirement, particularly for those at higher levels.

However, his assertion that it takes 'sacrifice' is reflected in studies that highlight how women have more responsibility for 'second shift' work, i.e. carrying out domestic work after their paid work (Marlow, Henry and Carter, 2009; Burke, 2014). These studies show how women are more disadvantaged than men in terms of career development. Connected with this, the respondent from the multi-national contractor said that men arrange meetings at "inconvenient times for women with children", such as early in the morning or late in the afternoon, reinforcing the perception that women will not work long hours. She continued: "no woman says, 'we're going to have this meeting at 5:30 tonight', because even those without caring responsibilities are more sensitive to the needs of those who have". The female director of the same company said that she is trying to change the mindset within the company regarding working hours. Acknowledging that being at work is not the same as working, she said:

There's all these studies now about how you're not actually any more productive, and in fact become less productive, the more hours you spend at work. So maybe it is an industry thing that needs to change as well. We need to stop saying construction hours are XYZ and we need to be present for those hours. It would make it easier for people who have children, not only women but men as well. A lot of my men finish early one or two nights a week to go and pick their kids up.

Even though project-based organisations such as the large contractors and housing find it more difficult to provide a balanced workload, it appears as though they are better at acknowledging this than the private practices and are trying to find solutions. The comment above demonstrates a change in the underlying culture, albeit a small one, in that she wants

to rethink construction hours and acknowledges these impact both men and women. The housing director, too, recognises that there needs to be change but said: “it is difficult because we are project based and some jobs are more complicated than others, although we do try to average work out over a period of time. But working long hours is not a condition of promotion, it is more about working hard and being motivated”. Nevertheless, it is unclear how she defines ‘working hard’ and ‘getting the job done’, which can involve working excessive hours. Averaging out work over time may still not benefit women who cannot put in long site or office hours and will preclude them from certain jobs. A less intensive subsequent project does not mean that a more intensive one has been possible for an individual with caring responsibilities. A better solution would be to even out the workload on each project.

For the private practices and consultancy, which are not project based, it should be easier to maintain regular working hours. However, the medium-practice partner said: “If we were sat here at six o’clock in the evening, there would not be many people at their desk. How many would be going home and turning on their computer? Again, I would guess not that many.” However, the respondent from the small practice respondent said she is required to work long hours with no additional pay, or time off in lieu, to compensate. Whereas the contractors appear to be seeking solutions, the private practices deny there is a problem, despite research (Watts, 2012) indicating otherwise.

Developing social contacts

Bourdieu (1977) researched how family and wider, influential social contacts, or social capital, impact an individual’s development. He established that qualifications equalise individuals to the extent that social capital becomes a more dominant factor (Bourdieu, 1977). It was clear from the interviews that the extent to which social contacts impact female QSs’ career progression depends on the type of organisation they work for. Those in private practices and consultancies are required to network with clients to win fees, but this is rarely required of those who work for contractors. There was a stark contrast between the two organisation types with regard to the need to network. For example, the housing company director described networking as “cloud and fuzz”, saying it had no impact on progression within her organisation. For those in private practices and consultancies, where the ability to win fees is essential, individuals’ willingness and ability to network does impact. However, women are, once again, disadvantaged as many networking events are based around activities more likely to appeal to men, such as playing golf (Burke, 2014). The representative of the small practice said: “you wouldn’t get two women over afternoon tea networking, but you would get two blokes on a golf course ... so we are disadvantaged.

Particularly as I know that networking gets you higher, especially in this part of the industry". She added that, even seemingly gender-neutral events, such as corporate dinners, become gendered, saying: "you meet people, but they want to arrange to go on to a golf course".

Although lack of networks is a well-known issue for women within construction (Dainty, Bagilhole and Neale, 2000), Francis (2017) found it had little effect on their career advancement. Even though the medium-practice partner initially said that promotion is possible without networking, agreeing with the housing director that it depends more on individuals doing a good job, he added that this meant: "securing repeat business and being in a more client facing position, going to networking events and so forth ... if you want to get on, that will be what we are looking at, but it is not every week and not mandatory". He added:

If you wanted to become a partner, it isn't that you would have to go out and win fees. If you do then, yeah, you can gain promotion because it's good for the business. But at the same time there are people who are very experienced and very qualified who don't like networking. That doesn't mean to say they won't be promoted ... but it is likely to take longer.

There is a lot of contradiction in his comment, saying that doing a good job as a factor in promotion means winning fees, but that individuals do not have to do it – but will take them longer to become a partner. He strenuously denied that networking is a gendered issue, giving examples of women in his practice who specifically enjoy it, adding: "it doesn't matter if you're male or female, it is whether you like it, or you don't like it. Some people like it, or tolerate it, and others just detest it, full stop". He suggested this is more connected with age than gender, saying that junior staff welcome it as an opportunity to get out of the office and doing something different, but did not acknowledge the difficulties faced by women regarding the nature of networking activities. The consultant agreed that networking is a factor in promotion and also denied it is a gendered issue. She said male directors in her company also: "suffer with this" and that she also "struggles with it", even though the success of her organisation is based on the ability to win work. She agreed with the partner from the medium practice that some people are simply more comfortable doing it.

Respondents were divided regarding whether there should be networking events specifically aimed at women. The medium-practice partner actively encourages female employees to attend any such events, because they gain access to networks that are not available to men. Yet, the respondent from the small practice agrees with Bagilhole (2014), who says that women only events maintain segregation, discourage teamwork and are seen as a threat.

Although external networks influence progression for some, internal networks and social contacts potentially affect all female Qs. Otherwise known as the 'jobs for the boys' culture, or the 'old boy's' network, these informal networks are often cited as a factor in women's lack of progression in construction (Greed, 2000; Bagilhole, 2014). Case-study respondents highlight its significance in Chapter Eight, and the HR director agreed that this is an issue for progression in NR. She said that the interview procedure described above has been developed to reduce its incidence but added: "if you are best friends with a particular manager then you get that manager to interview you. The only way you can stop it is to get HR recruitment involved, to get me involved", suggesting that as yet, HR are not part of the formal process for internal progression.

Other organisations that also have clear equality policies, such as the LA, also have a 'jobs for the boys' culture. Their respondent said that her manager has been known to "have favourites", and that these are usually men. She added that these men were promoted even when it was clear to her and others, they were not suitable for the job. One respondent from the national contractor, said: "there are some golden boys whose way is paved for them to make their career. It is very clear who will be where, by when. I can see their career path".

To summarise, organisational structures remain influential in women's opportunities to progress, generally more so than whether they are Network Rail, a private practice, a contractor or another organisation type. Larger organisations, such as NR, offer opportunities for vertical and horizontal progression that are more limited in smaller organisations. Whereas structured training and education programmes offered by large organisations are often said to be moderated by gender, they can enable equality as all employees must undertake the same process to progress; this is often driven by a more powerful client base. Distinction is made between organisation types in terms of personal requirements for progression. Private practices, particularly, continue to promote employees using traditional values such as individuals' formal qualifications and their ability and willingness to network but opportunities in this regard are highly gendered. Regardless of policy, women's opportunities for progression are also moderated by their lack of confidence in their abilities. Irrespective of organisation type, respondents assert that the perceived requirement for presenteeism as a factor in progression is not completely founded; some even suggest that this perception is based on individuals who work away from home and do not want to spend their time otherwise alone.

7.3.3 Factors influencing work-life balance

This section establishes which aspects of organisational structure, practice and culture impact on female QSSs' ability to pursue WLB. This is an aspiration for most case-study respondents, whether or not they also seek hierarchical progression. Career strategies that enable women (or, indeed, men) to manage work responsibilities within the wider context of their home and family lives include having time, work and travel autonomy and being treated equally.

These strategies are researched far less than those associated with a hierarchical career trajectory. Hours worked are a factor in hierarchical progression, as analysed above, but they also influence women's ability to have WLB. Likewise, having time and travel autonomy is not usually considered in the context of having WLB as an aspiration, only that of hierarchical progression. Female QSSs' ability to pursue these aspirations is assessed through in-depth analysis of conversion factors relating to organisations' structures, policies and practice regarding alternative work patterns, flexible working and working at home. Relevant cultural conversion factors are also considered.

Working hours and work autonomy

The construction industry has a culture of long working hours, as stated above, and lacks flexibility in the hours individuals are required to work (Watts, 2012). This impacts those who aspire to have WLB. NR is unusual in construction as it operates a flexible working policy (Network Rail, 2019b), which provides that consideration must be given to reasonable requests to work alternative patterns such as part-time, job share, different start and/or finish times, or working from home. Such requests must be considered by the applicant's line manager. The HR director considers that, even though flexible working is promoted as a means of recruiting people into NR, an individual's presence at work affects their career development and their progression. She also related that requests for flexible working are sometimes refused as a means of managing out poor or weak performers. She asserted that this had happened to an administrator who then referred the case to HR and won on appeal. The HR representative considers this a positive result for both the individual and the organisation. She added:

She's in work. She's not off sick. The business is happy, she is happy. This is what I can't see - I understand if there are several requests, and if everyone wants to have a Friday off. Then people have to be a bit more flexible around the day they have off, but I think, as a business, we should be looking at requests for flexibility and rather than saying 'no, it won't work', they should be saying 'how can we make it work?'.

The LA is a former publicly owned organisation and so has similar flexible working policies as NR. Its representative, who has worked both full-time and part-time since joining the

organisation, is now an 'agile worker', meaning she can work at home as and when she wants to. This working pattern, which is undertaken by both males and females, is encouraged by management because the organisation practises 'hot desking', meaning that there are not enough spaces in the office for all to attend at the same time. As well as cutting office overheads, because they have moved to smaller premises, it also improves employees' WLB, even though the respondent said that she sometimes works longer than her contracted hours. This corresponds with the findings of Sang and Powell (2012) who found that organisations also benefit when employees have WLB.

As current and former publicly owned organisations, it is perhaps unsurprising that NR and the LA have clear policies in relation to requests for flexible working hours and working at home. However, other large organisations also state that they have such policies, although whether any such requests are granted depends on individual roles as it is more difficult for those who are site based. The female director of the national contractor is seeking ways of making this more common in her organisation, observing that advances in technology mean the ability to work flexibly can be a more efficient use of time. She considers that younger people, particularly, are used to: "logging on and off as they need to. It is easier for younger people of both sexes to be more flexible as they are used to working in such a way that fixed 9 – 5 hours become less relevant to them". However, she did not account for the fact that this will require a shift in the underlying culture of the industry as young people tend to follow the example set by older colleagues (Dainty, Neale and Bagilhole, 2000). She did acknowledge that it is becoming more common for site managers to be away from site for training courses or meetings, and that this could translate into introducing flexible hours on site, leaving it up to the managers of individual work packages to ensure smooth operation.

Similar to NR, the director considers enabling flexibility would be a way of making the industry "more appealing to women", something that she wishes to do, and acknowledges that men also benefit. However, the male director of the same company said that men in the organisation are much less likely than women to be granted permission to work flexibly, even when in similar roles. This supports observations by Valcour, Bailyn and Quijada (2007) who found that, although women are more likely to request alternative working hours, they are also more likely to have them granted.

As private practices are mainly office based, it might be expected that they are more likely to enable flexible and home working. However, representatives of both private practices said that they do not allow it, although the consultancy, which is a similar, small, organisation, offers flexible working to all directors and associate directors, although only the male

directors take it and not the female directors. Whether this is due to coincidence, circumstances or women's fear that it would disadvantage their promotion prospects is unclear.

The medium private practice partner tried to justify why his organisation does not offer flexible working. He said:

With regard to things like flexibility, the policy is going to say everything that is legal and if somebody has to go for scans and so forth, we are not going to say that they have to make their time up. But the reality is that we can only do the minimum because the problem is that you always have to go to the lowest common denominator. If you're working somewhere where you can finish at 4 o'clock on a Friday, provided that you've worked a few hours over, then that is a benefit to the company. But there will always be somebody who does 9-5 every day but finishes at 4 on a Friday. If that one person is abusing the system, you either have to accept that they are abusing the system, or you adapt the system to prevent them from abusing it. So, by not having that system in place, it can't be abused.

However, although this suggests that he does not trust his employees, he could not cite any instances where trust had been abused. He followed up by insisting that flexibility is a perk of seniority, explaining:

The more senior you become, the more flexibility you gain. It does come down to trust. If you've managed to get to a position of seniority, you haven't just got there because you've chanced it, you've put time and effort in and proved yourself, which is why you've been promoted to that position and which is why you can be trusted.

A further factor cited was his own convenience. He said:

If you are a junior member of staff, then you are not managing your own workload, so for you to work from home you have to come to work to get your brief to know what you are doing that day. If I am coming into work and thinking that somebody is going to measure something for me in the morning to work on in the afternoon, if they don't come in until 12, even if they say they will work till 8pm, then you can't work on it.

He did, however, state that: "there are always opportunities to work at home, anything is possible with prior notice and prior agreement". Yet, in organisations with flexible working, such as NR and the LA, good communication and open diaries mean managers know where individuals are on a given day as well as what they are likely to be working on. There does not appear to be any reason why this could not be considered in private practice.

The housing director gave an alternative viewpoint regarding trust and flexibility. She said trust is not about seniority and they allow flexible and home working for all employees:

I think it is about the job you do. If you are a competent, good, member of staff, we will be flexible because we want to keep you. I wouldn't give flexibility to a member of staff who wasn't really good. I work in an environment where we are exceptionally accountable for what we do, and we are lucky as far as that's concerned. If the

person who is responsible for the job is not doing that job, it is very clear, and they will be called to account on that. I do not check them working at home, but I would expect them to work, and if I thought that they were taking the mick then I would come down on them like a ton of bricks and restrict what they can do.

She indicates that trust is there to be lost, whereas the practice partner thinks it should be earned. Whether this issue is because of the nature of their work, the size of the organisation, or their own attitudes is uncertain, but the contrast between the organisations is very clear with the housing company focused on retaining staff, even if it means offering them flexible working.

No organisation said it requires people to travel extensively and few employees have to stay away from home overnight. Although contractors' employees are frequently said to have to travel for work, the director of the national contractor asserted that, although her job requires her to travel, including overnight stays, very few other staff do. Moreover, most travelling that is required is undertaken within a day and is known about in advance so those affected can make necessary arrangements; this was confirmed by other respondents from the same organisation. Some job descriptions clearly state that travelling will be involved, such as working for a national rail organisation like NR or for the train operating company. But even the TOC representative, who is responsible for buildings along 200 miles of track, said she is only required to travel about once a month.

Regardless that all respondents said gender was not a factor in their flexible working policy or in the need to work long hours, research has found that women are more likely to be affected by these than men as they assume the burden of domestic responsibilities (Watts, 2012). Claiming that the inability to work flexibly is not a gendered issue if it applies to all, does not reflect the fact that women are disproportionately affected. It might aid equality within an organisation, but not diversity (Metz and Kulik, 2014). The representative from the small private practice summed up the issue:

Ultimately, in order to progress, you need to be in your best mental state, haven't you? Yes, you've got to have the right qualifications, but you've got to be in the right frame of mind, and I think overuse of long working hours and long travelling time and no consideration for that mental balance can hinder your progression. Although I think it is the same for women and men, ultimately women do tend to be the ones to look after the children and pick them up.

The director of the consultancy, in promoting flexible working, said it is not: "just about putting in a better working environment for women, it's about making a working environment that encourages better work life balance for everybody, to make sure that we get diversity in

the workplace”. Cultural factors affecting equality and diversity are discussed further in the following section.

7.3.4 Cultural factors influencing equality and diversity

Happiness as an aspiration might be an issue of adapted preference, as previously discussed, but happiness as a state is impacted by a variety of factors. Among these, and also a stated aspiration, is being treated equally. This impacts other aspirations and influences female QSs’ ability to acquire most of the capabilities they need for their career development. In this section the impact of the culture and practices within organisations is analysed, beginning with harassment, a factor frequently cited as a barrier (e.g. Agapiou, 2002; Chan, 2013).

Harassment

Although in Chapter Eight respondents to both the case study and the questionnaire survey state that harassment is not a barrier to career development, the HR representative from NR said: “there’s a lot of it goes on”. However, the organisation has a whistleblowing policy (Network Rail, 2019c) that encourages all incidences of harassment and bullying to be reported. This means that HR deals with cases referred by employees across the whole organisation, many of whom do not work in construction directly, and these are likely to be the most severe incidents.

Not only is harassment cited as a barrier to women’s careers in construction, it is also considered a factor that deters women from entering the industry (Greed, 1992; Watts, 2003) and one that incites them to leave. However, in recent studies it is either not mentioned at all (e.g. Worrall, 2012) or only briefly (e.g. Francis, 2017). This suggests that incidences are declining. One possible explanation for this is the introduction of the Equality Act 2010, which both clarifies what constitutes harassment and bullying and gives advice regarding workplace harassment policies. Nevertheless, sexual harassment is more prevalent in male-dominated industries (Hunt et al, 2010).

The NR respondent was the only organisational respondent who saw harassment as a major problem in their organisation. Others said that there are clear policies and procedures in place for issues that arise but are seldom required. Once again, the size of the employing organisation is relevant. Large organisations, such as contractors, the LA and the train operating company have formal procedures and established HR departments. This enables any complainants to remain anonymous, something that is more difficult in small organisations. For example, although the respondent from the small practice has not

experienced harassment, she said it would be difficult to report should it occur, as there is no formal procedure. Further, everyone in the organisation knows everyone else, which would deter her from escalating an issue to management. Although reporting harassment has been analysed in construction (e.g. Fielden and Hunt, 2014), the impact of an organisation's size is not taken into account. The business psychologist agreed that in small organisations, escalating an issue means reporting to management rather than HR. She added that this can have one of two, opposite, effects neither of which considers the victim. Either management will consider her as someone who cannot deal with such situations herself or the woman reporting harassment is: "seen as being a bitch". She has experienced both in her role, adding that men who take similar initiatives are viewed as assertive.

The housing company director considered that having formal policies with regard to reporting harassment can encourage seemingly minor incidences to be escalated, which detracts from very serious allegations. Asserting that there has been an improvement in the incidence rate of harassment in the construction industry in recent years, she says that renewed focus on it, such as the 'me too' movement, adds to the view that harassment remains a problem in the industry. She said:

I've read about these women who have come out saying 'me too'. I've worked in this industry for years and these are usually women who have joined at a very senior level from places like Price Waterhouse Cooper. I think, 'no it's not you. You haven't worked on site or dealt with the kinds of situations I've dealt with on site over the years. You haven't been the one to say, 'Oh mate, you need to stop that'. Women have a voice, why don't they use it? The legislation is there. They can just say something to a guy if he comes on too strong. There has to be some intuition about this. You can hold people at bay just in the way you act ... The construction industry has moved on massively, massively. We should say to people in the industry 'well done, you've moved on' and yet them dragging it down is doing more damage to girls coming into the industry. They should be saying 'it's moved forward, here are the positive things about the industry'. So, this 'me too' stuff? I'm sorry but I can't bear it.

There is much to consider within this statement. She does not, of course, condone harassment but considers that it has improved within the industry. She also clearly feels very strongly about women with little construction experience, who enter the industry at senior management level, drawing attention to minor issues of harassment which, she considers, can be resolved without having to escalate it to management. Nevertheless, in saying 'women have a voice and should use it' she acknowledges that it still occurs but that formal procedures should be reserved for the most serious incidents. The director continued by saying it is a manager's responsibility to set the standard of behaviour within a team and that there are bigger issues than harassment, such as the forming of exclusionary cliques or social groups in the workplace.

The partner from the medium practice agrees that it is up to management and senior staff to set the level of appropriate behaviour. He said:

There's no harassment [but] what is inevitable is appropriateness. If there is a room full of men, then the conversation will be very different than if there is a woman present or if it is a mixed room. Not necessarily just in the workplace but also on a night out. [Recently] there was a comment, which one of the girls took badly and was upset. The male was somebody quite senior and, whether what they said was right or indifferent, they shouldn't have said it purely because there was a lady there and they also shouldn't say it because they're senior and the woman was junior.

However, he pointed out women can make inappropriate comments also:

On the flip side we have had three ladies working for us who are all quite young and there have been some of conversations in the office that, if men had been having those conversations, it would probably have been grounds for some kind of discipline in a big firm. Men having that conversation would have been seen as derogatory. Essentially, they were talking about their sexual exploits, and if you were a guy saying, 'wow this weekend I did this' people would have said 'oh you can't say that'.

The partner is also highlighting the difference in organisation size in saying that men in a big firm are more likely to be disciplined for certain behaviours. This suggests that, in his organisation, they are not.

It is not surprising that organisational respondents all denied harassment is a major problem within their organisations. However, given that the female Qs surveyed in the case-study and those who responded to the questionnaire also say there is no major problem regarding harassment, it is reasonable to assume that, as stated by the housing director, the industry has improved in this regard. Lack of harassment does not mean that there is equality, however, and the chapter continues with an analysis of equal pay and equal treatment of women from an organisational perspective.

Developing equality

Being treated equally, including equal pay, is an issue of WLB as it helps foster happiness at work. Equal treatment is an issue of an organisation's policies and practices but also its culture.

NR's equal payment policy classifies jobs into salary bands. Quantity surveying is classed within management salary bands that range from Band One to Band Five. Each band has further sub-divisions of a, b and c. However, the range of salaries within each sub-division means that, for example, a Band Four (a) can earn more than a Band Three (c). This means that, while there is an equal payment policy, employees doing the same job within the same

pay band may not necessarily be paid the same salary. Other factors are considered, such as the length of time an individual has worked for NR, their qualifications and experience.

Other organisations' representatives said they also have equal pay policies. However, once again, subsequent conversations demonstrate that practice does not necessarily conform to policy. An example was given by the partner of the medium practice who, whilst saying they pay equally, added:

I think a man is more likely to come in and say, 'hang on a second, I've done my research and I think I should be paid x amount'. Whereas women will just say 'oh that's good' and accept the salary that you tell them ... When people get further up the ladder, senior level and above, it is almost like it clicks with the ladies because they suddenly realise how much a senior QS will get paid. They look and see, and ask a few questions, and they will see the band range [for a job] and realise that they are nowhere near that.

This implies that because men are more aggressive in asking for a pay rise, they receive it, whereas women do not receive the same pay rise because they do not ask for it. This belies his assertion that employees in equivalent roles are paid the same.

The housing director also said men are more likely than women to demand a higher salary. When asked if the strategy worked, she agreed it did to some extent, but those individuals are given increased targets in their performance reviews to justify the increase. This issue is possibly dependent on individual line managers, rather than organisational practice, as the representative from the multi-national contractor explained:

I just get on with my work and don't shout, or make my presence felt. I find that, depending on the boss, this can make a difference. Very much so if your boss is all about someone being the loudest one in the room and the one that says, "oh I've done this, and I've done that" and bigs up themselves. Some bosses take that really well and will promote them and give pay rises.

It appears that assertive, or even aggressive, behaviour distinguishes men from women in this regard. Again, it is suggested that educating senior management to understand that equality is not the same as diversity and that expecting women to behave like men, even in an equal opportunities organisation, does not ensure that equality results.

The business psychologist mentors female QSs to be more assertive. She said their "biggest problem is not being heard and having no influence". She observes that women in the industry find it difficult to ensure that they are listened to and that this is not an issue for most men. In line with research suggesting women should be enabled to work with men in the industry (Worrall, 2012; Rosa et al, 2017), she said women should be given additional training to enable them to be more assertive. Neither she, nor any research, suggests that

men should be given training to work alongside women. Worrall (2012) considered it as a recommendation, but ultimately dismissed it as too time-consuming. Many respondents however consider that educating men would improve women's experiences. For example, the director of the national contractor suggests workshops for men to improve their ability to listen to women's professional opinions. This would be a short-term remedy but one that would begin to change the underlying, male-dominated structures of the construction industry, in line with Acker's (1990) 'short' and 'long' agendas.

Increasing the volume of women is also suggested as aiding women in being treated equally (Greed, 2000). The respondent from the small practice observed that there is more respect for women who work in companies whose employees include established professional women. She is the first professional woman ever employed in her current practice, and her colleagues: "don't really know how to approach women ... women being introduced into the industry takes a bit of getting used to and they don't really know what to talk to them about". She suggests men need time to "kind of get used to the idea", but the director of the national contractor disagrees it is just a matter of time. She says it is: "a mindset and an unconscious bias. Young men also have that mindset and so it isn't going to just die out – we need to be proactive about it". In this she agrees with Dainty, Neale and Bagilhole (2000). She added: "we are all too worried about men being inconvenienced. They have got too comfortable with the industry structures and the way things are; but why shouldn't they be inconvenienced?". Kronsell (2005: 286), in her study of women in a military organisation, found that the introduction of only a few women made a difference in men's behaviour because the "norms of dominant culture" became more visible. She asserts that more women make men aware of their "explicitly gendered norms".

However, the consultant asserts that women should be enabled to deal with male colleagues, because they need to be: "as tooled up as possible to increase their value in the marketplace". She suggests specific policies and workshops should be implemented, but also added: "there is a mechanistic approach to how business is transacted, the structural approach has been validated and it will take policy to overcome it". Other respondents, however, think it is not enough to just have a policy. As someone from the national contractor said: "they don't bother to use them. I know they have the policies because they want to keep up with legislation, but the practicality of it is in the Middle Ages".

Regardless of client requirements, all respondent organisations state they comply with the law and have policies regarding equality, diversity and inclusion. Whilst large organisations have very clear policies, with people designated to implement them, those of smaller

organisations are less formal. For example, the small practice representative said their policies were: “about the minimum you can have to still be legal”. Moreover, the partner of the medium practice said, although policies are “available on request”, an employee who asks to see them is then regarded as being “legalistic”.

It is logical, therefore, to conclude that women would have better career experiences if organisations both implemented their inclusion policies and undertook to provide development programmes for both male and female employees to enable better working relationships between them.

Developing support and mentoring

Mentors have frequently been cited as assisting women’s career development (Dainty, Neale and Bagilhole, 2000; Worrall, 2012). However, Francis (2017) found that mentors did not aid women’s career advancement in construction, although she did find having a mentor improves women’s work experiences and prevents some from leaving the industry.

NR has an official mentoring scheme, but the HR director said it is not widely promoted and mentoring is undertaken on an informal basis between individuals and their line managers.

For other organisational respondents, once again the size of the organisation is relevant. Large organisations are more likely to have formal mentoring schemes; small organisations do not. As part of a large organisation, the LA was an exception as its respondent said there used to be a mentoring scheme, but it no longer exists. She speculated that it was disbanded because of the pressure it put on staff workload, and there was a lack of any commensurate incentives to become a mentor.

Formal mentoring does not occur in the smaller organisations. In the medium practice, for example, graduate Qs are mentored for their Assessment of Professional Competence, but there was little indication of any formal mentoring of employees in terms of their wellbeing.

To summarise, again size of organisation remains influential in issues of equality. Larger organisations have established policies such as those related to harassment, equal pay and organisational support. Further, reporting of incidences of harassment is more formal in large organisations than smaller ones, where women can be discouraged from doing so. Implementation of relevant policies is once again a relevant factor in women’s career development. For example, organisations state that they have equal pay policies, but responses indicate that pay inequality continues. This is not only based on individuals’

experience but also on their level of aggression/assertiveness in asking for additional pay which, again, disadvantages women. Responses establish that the traditional underlying culture of the industry, which continues to disadvantage women, remains with suggestions that not only should women be enabled to work with men, but also that men should be similarly educated. Women have better career experiences in organisations where they are more established.

7.4 Conclusion

This chapter has established how organisations influence the career pathways of female Qs. In determining the types of organisations that they work for, it found that the main employers of female Qs are contractors and private practices and few work in 'other' construction organisations. Moreover, large organisations dominate as employers.

Using the framework of the CA, the chapter then examined the different ways in which organisations' policies, practices and culture impact the pursuit of aspirations. Some organisational representatives challenge portrayals of construction as being anti-female, that there is little harassment, little requirement for working long hours, extensive travel or networking. Indeed, only private practices require employees to network for business at all. Organisations assert that they have policies to enable women to have the same career development opportunities as men. However, while all organisations have equality policies, the extent to which they are implemented varies. This can depend on organisation size but also type. Large organisations have more extensive policies than smaller ones but, with their many layers of management, many decisions regarding education, recruitment, progression and flexibility are deferred to line managers to implement. Smaller organisations tend to have more minimal policies, which are 'just about legal', but their implementation is easier to monitor.

Alongside this is the fact that equality is not the same as diversity. Not accounting for the diversity between individuals disproportionately affects women. For example, the medium private practice treats all employees equally in not allowing flexible working, but this is more likely to disadvantage women than men, as women bear most of the burden of domestic work (Marlow, Henry and Carter, 2009; Burke, 2014). Further, although flexible working, for example, is offered as a means of recruiting individuals into the organisation, it can be used negatively to manage people out of roles.

Large organisations may offer more variety in the opportunities for female QSs to develop their careers but, with layers of management and a range of different departments, progression remains difficult. Their structure brings more equality as all employees when entering the organisation must undertake the same process to progress. Often, their more extensive equality policies are client driven. Nevertheless, there remains a disproportionate number of men at high levels with women placed in less technical roles (such as BIM, or equality and diversity) that are more likely to be withdrawn in difficult times.

The following chapter extends the analysis of structural and, particularly, cultural influences on the career development of female QSs, but from the perspective of case-study respondents.

CHAPTER EIGHT

What factors influence female QSs' career pathways?

8.1 Introduction

This chapter continues the analysis of the conversion factors that impact female QSs' career pathways, but from the perspective of female QSs in Network Rail, the case-study organisation. Chapter Seven determined that, from an organisational perspective, the size of an organisation, the type of business it conducts, as well as underlying practices and cultures of the construction industry all affect women's career pathways. This chapter examines these, and other, issues from an agency perspective to establish how female QSs themselves perceive their freedom to pursue the aspirations established in Chapter Six.

Through a close examination of respondents' work experiences, the chapter demonstrates how NR's structures, policies, practices and subcultures impact on female QSs' trajectories. It identifies the crucial role of line managers in implementing organisational policies, giving an advantage to some individuals over others.

The chapter is divided into four main sections, analysing respondents' perceptions of each group of conversion factors: organisational, personal, social and cultural.

8.2 Perceptions of organisational conversion factors

Chapter Seven established how organisations enable or constrain female QSs' ability to pursue their aspirations. This section now looks at how these are implemented within NR, as perceived by the case-study respondents. They are mainly relevant to the capabilities of seeking employment (promotion) on an equal basis with others, having educational opportunities, and having time and travel autonomy. To a lesser extent, the section also addresses the capabilities of being supported at work and being respected, which are also analysed in section 8.5.3.

8.2.1 Organisation type, size and structure

Literature frequently describes the pursuit of a traditional career as involving individuals climbing a 'ladder' of hierarchy (Baruch, 2006). Tolbert and Hall (2009) found that, as an organisation grows, it becomes more complex, more geographically dispersed and with additional layers of management. This growth then encourages vertical and horizontal differentiation of roles; control becomes more formalised and the whole tends to be overseen

by more centralised power (Tolbert and Hall, 2009). These issues, clearly seen in terms of the different sizes of the organisations analysed in Chapter Seven, are prominent within NR as a large, national organisation with multiple specialised departments, regional offices and many levels of hierarchy.

The degree of departmental specialisation in NR is evident. The HR director said that it is difficult for individuals to move jobs into a different department because they are so diverse, and respondents agree. Upwards progression is facilitated by gaining experience from a range of departments, but this is difficult. Isobel (Band Two) said that, in interviews for a Band One position, interviewers expressed concern about her breadth of experience. She added that, although, there are far fewer Band One positions available, it is easier to move from a Band Two to a Band One within the same area of the business than to move to another Band Two in a different area: “if you have no technical experience in an area, why would they let you move there, when they already have people with experience who can move up into the job?”.

Georgina (Band Two) added that this means progression in NR requires a strategic approach to career planning. She said:

I think that you can't go, 'I've got a five-year plan'. What you've got to do is go, 'that's where I want to be, so what are my gaps?' 'ok so those are my gaps, so I need to go 'there' to get that experience'. It's about picking things that give me the experience that gets me to the job that I really want to do. In NR, you can get very siloed into being track, or signalling, or whatever. To get into the Band One positions you need to have a much broader knowledge and, although I have a horrible commute, and I had to take a pay cut to do this role, there was a purpose in it. Knowing that if I came here, I would get massive exposure and sometimes you have to offset that to do it.

Of the respondents pursuing the traditional pathway, only Fiona and Georgina have acquired experience across the breadth of the organisation. Fiona (Band Three) said that she has taken horizontal and diagonal moves (across departments with a small promotion) to get to her current position. However, although promotion has happened as a result of her experience, this was not always her prime motivation. Sometimes she has moved because a job: “becomes too boring, mundane or generally unsatisfactory, then I will leave to get a better job. I would always like to go up if possible but will go sideways if I have to”. Of all respondents, only Fiona and Anna describe their experience and promotion history as a mechanism for variety as much as progression. Both said that their career trajectories have not been planned; they have simply applied for more interesting jobs when they become available. Anna said: “although I have been keen to get promotions, they have often been about the challenge of the work more than the promotion in itself”.

Other respondents said that career planning is difficult in NR due to its frequent reorganisations. Francis (2017) found that career planning had little impact on women's career advancement and these respondents asserted that, in NR, it is pointless. Reorganisations not only impact on employees' ability to plan their careers, but they also have a negative impact on their perceptions of job security. Georgina said: "you never feel your job is secure, because you are only ever a few months away from a reorganisation". Diana agreed that: "the threat of re-organisations is always there". Some, however, have benefitted. For example Laura gained her promotion to Band One after being asked if she would accept a secondment into a position left vacant by a reorganisation, asserting that, as she was relatively junior, she would never have been offered the full promotion. Had she not been given the opportunity through reorganisation, becoming a Band One would have taken her much longer. At the other end of the hierarchy, Rosie is hoping that a reorganisation will give her the opportunity to move from a temporary to a permanent contract. This makes career planning in NR rather ad-hoc with constant potential for reorganisations with no knowledge of whether these will be a threat or an opportunity.

Jackie (Band Two) said obtaining a promotion is out of an individual's control, regardless of reorganisations. It is a case of waiting until positions become available. She said her control over her career is limited to obtaining relevant qualifications and, to some extent, experience, but progression itself is a question of: "dead man's shoes" i.e. waiting for someone to leave for a position to become available. This is more difficult, the higher in the organisation that an individual progresses due to the numbers of positions available in Bands One, Two and Three as explained in section 7.3.2. Jackie said it is an: "epic leap" to go from Band Two to Band One.

However, this is similar in all large organisations as the structures illustrated in Chapter Seven show. Although the range of departments appear to offer many opportunities to develop a career, the degree of specialisation within each department makes this difficult (Tolbert and Hall, 2009). Further, that NR's departments are very different from one another exacerbates this as they include buildings, bridges and tunnels, signalling and track. At the same time, upwards progression within the same department is also difficult as there are fewer opportunities, the higher that an individual climbs.

8.2.2 Organisational influences on gaining knowledge

Knowledge is a personal resource, whether it takes the form of qualifications, training or experience. Gaining knowledge is an aspiration for respondents and also a capability as it enables the pursuit of other aspirations, particularly hierarchical progression.

Respondents' qualifications differ (Appendix A) because they are in different age groups and have different backgrounds. Whereas some respondents acquired relevant quantity surveying qualifications prior to joining NR, most did not and, while those on the transferred career pathway do not have relevant qualifications, they also do not aspire to gaining any. Others are looking to NR to provide them with educational opportunities. In Chapter Seven, the HR director said that NR provides a wide range of in-house vocational education and training opportunities and it also funds some university degrees. She added that, if a course or qualification is an "essential requirement for a role", permission to undertake it is usually granted. However, what translates as an 'essential requirement' was not explained and is likely to be job-dependent.

Respondents' accounts demonstrate that permission to undertake education or training varies depending on their line manager. For example, Anna, Bryony, Diana and Helen all received NR funding to do their quantity surveying degrees, but Bryony's experience (highlighted in Chapter Six) shows that this support varies. The refusal of one line manager to support her requirement to study for a degree led her to move departments to a line manager who enabled it. The discrepancy of individual line managers is highlighted by Ceri, who wishes to undertake a bachelor's degree in quantity surveying. She explained:

I came into the role when things weren't as formal as they are now. Now QSs have to have a qualification. But I want to be the best QS I can be, and to progress higher, not just move sideways. I can't do it without having that knowledge and those qualifications. But, at the moment, the funding isn't there ... and I'm not getting support. I might have if my manager hadn't left, because I had been promised it ... but now they think I don't need the quantity surveying qualification. Network Rail is growing and works delivery is growing so it does make me think why can't there be funding? I think if they're wanting to evolve and they're getting [qualified] people in, why can't they look at the staff they've got and upskill them?

Not only has Ceri confirmed that a change of line manager can affect career development, she also highlighted that gaining qualifications is becoming more significant. She demonstrates how, over time, NR's approach to funding degrees has changed. Some, such as Anna and Diana, had previously been supported to pursue qualifications but now Ceri is being told by her line manager that qualifications are not necessary. Yet she knows this is not true as NR are recruiting already qualified people rather than investing in current staff. Whether this is because Ceri is a young woman is unclear, but the findings add weight to those of Dainty, Bagilhole and Neale (2000) and Worrall (2012) that women receive less organisational sponsorship and fewer development opportunities than men. It also supports traditional gender stereotypes that dictate that women's assumed role as carers of children means they receive less organisational sponsorship (Kanter, 1977; Ng et al, 2005). The explanation by her line manager that this lack of educational sponsorship is because Ceri

does not need a degree to do her job, but there remains the possibility that he is assuming the organisation is less likely to benefit because Ceri is a young female who may leave to start a family. That this is a practice of individual line managers is emphasised by the fact that a former manager was going to support her degree but her current manager is not. It also demonstrates lack of foresight by line managers as, although employees may be able to undertake their current role, it not only reduces their prospects for progression but also may reduce the skill set of the company as a whole. Recruiting already qualified people does not mean they have the necessary expertise in the unique nature of the organisations' activities. However, Chan and Marchington (2012: 87) found that human resources in an organisation are developed to meet an "agenda of organisational performance and that the individual worker, and the benefits associated with individual learning remain secondary".

In discussions regarding why line managers may not permit employees to undertake formal qualifications, Georgina observed that some degree courses do not teach required competencies sufficiently, if at all. Part of her role is to ensure that professional standards are maintained, and she has noticed that many degree courses do not adequately provide the necessary competencies. She cited the example of quantification (arguably the most fundamental quantity surveying competency) saying that in-house courses have to be provided for both qualified and non-qualified staff and the ability to measure: "seems to have really gone out of the window". Therefore, if managers are paying for additional courses to teach basic competencies, whether or not employees have a formal qualification, then it is likely that they perceive degrees to be inadequate, or unnecessary, for the needs of the organisation. Ashworth, Hogg and Higgs (2013: 15), at least two of whom are university lecturers, recognised that the teaching of quantity surveying practice needs to be improved by universities "for the benefit of all parties involved".

NR's drive to improve their professional standing means all respondents who wish to pursue chartered status are receiving funding. Jackie (Band Two), Donna, Vanessa and Wendy (Band Four) and Xanthe (Band Five) all intend to become chartered, enabled by NR. Although this benefits them directly, it also benefits the organisation as stated above, as they will be perceived as more professional.

In contrast, obtaining funding for in-house education and training does not appear to be difficult for any respondent. Donna said: "training in NR isn't really an issue ... you can pretty much do what you want, within reason". Vanessa explained: "there is a catalogue where you identify things that you want to do. As long as there is funding available, they will say yes. If there is anything you think you are lacking, you can go in and request it; provided

there's availability, then you can do it". This further supports Chan and Marchington's (2012) finding that job-specific training, which aids the organisation, is an acceptable allocation of funding, but that education that benefits the individual beyond organisational needs is seen by some line managers as an unnecessary use of their budget. Although respondents did not consider that this is a gendered issue, Bagilhole (2014) found that women in construction generally perceive that their training needs are unfairly assessed by managers.

In summary, although NR provides a range of in-house education and training opportunities, as well as external degrees, permission must be obtained from line managers, and this varies between regions and between line managers. Although line managers' reluctance to fund quantity surveying degrees might be explained by the fact that such courses are failing to provide practical skills, which then must be taught in-house, it is also suggested that this is a gendered issue.

8.2.3 Organisational influences on WLB

Having a policy of flexible working and working at home is frequently offered by organisations as a means of recruitment (Benschop and van den Brink, 2014). The HR director said that this is one reason for NR's policy, and it was a common reason among respondents as to why they joined NR. However, some respondents are discouraged or prevented from working flexibly. Again, it is up to line managers to give permission and is also affected by the practices and culture within individual offices. Although this is analysed from a cultural perspective in section 8.5.2, organisational practices also affect women's ability to work flexibly. The policy is applicable to all employees, depending more on role than gender, but it is more likely to be relevant for women, many of whom disproportionately assume caring responsibilities (Sang and Powell, 2012).

An office practice that women perceive as disadvantaging them is the timing of meetings, especially when these are arranged for early in the morning or late in the afternoon, times that are significantly difficult for working mothers. Nevertheless, all those with children said that they can attend meetings at any time, anywhere in the country, if they are given enough notice to arrange childcare. Yet, meeting times are regularly changed. Georgina said: "They should just fix the time and date of meetings and we can all arrange childcare, and then don't swap them around".

Whether this happens due to circumstances, thoughtlessness or as a deliberate attempt to exclude women is unclear. However, research supports the notion that such practices make women seem less committed to work (Watts, 2009; Sang and Powell, 2012). Sue, who does

not have children, demonstrated how this is an issue for all employees, not just those who are mothers. She said:

If they organise a meeting at 4 o'clock, then I am going to decline it, because I leave at 3.00. It hasn't really been a problem because most of the people on my team are all early birds who are in at 7.30 so we don't generally organise meetings that late. I automatically decline any late meetings knowing that, if it is important and it can't be moved, I will stay later.

Here, she demonstrates that her whole team, male and female, parents and non-parents, do not appreciate meetings at times inconvenient to them. Her use of the word 'most' is interesting and may mean that those who are parents cannot be 'early birds'. This highlights the difficulty of trying to organise meetings to suit a whole team, particularly when flexible working is implemented. However, there are clear core hours in NR in which meetings could be held.

A further factor in being able to work flexibly is that individuals must have autonomy over their workload. This also gives them greater job satisfaction and reduces stress (Kunda, Barley and Evans, 2002). Park and Jang (2017: 705) found: "when job autonomy is granted to employees with strong intrinsic work values, those employees will perceive more supervisor support and have better mental health than employees with weak intrinsic work values". Although there is no formal NR policy regarding autonomy, respondents demonstrate that it is not an issue in NR. In discussions centred on this issue, the higher-ranked respondents perceive that they have autonomy because of their status, but others said this is not a factor. For example, Laura (Band One) said: "I have the ability to create my own role. I can almost do what I want to do, within a framework ... what I deem to be appropriate" and Amelia (Band Three) said: "You have a project to do, and you have a time scale to meet, and you do what you have to do and finish it". However, respondents' accounts suggest that experience is more relevant than hierarchy. For example, Kathy (Band Five) had only been at NR for a few months and said: "no I am not left to plan my own workload, I am basically reliant on my manager to trickle it down to me". Other Band Five respondents, such as Penny and Xanthe who have been at NR much longer, said that they do have autonomy. Hierarchy is relevant, however, in the type of autonomy respondents have; whereas Laura creates her own workload, Amelia is given hers but can control how and when she does it.

In summary, organisational policy enables flexible working, but it is often prevented in practice. Flexible working relies on employees having autonomy, which is dependent more on experience than hierarchy. However, hierarchy is relevant in terms of the type and

amount of autonomy respondents are given. While having flexibility can be thwarted by practices such as inconvenient meeting times, there is evidence that this is beginning to change. These factors are further discussed, from a cultural perspective, in section 8.5.

8.3 Perceptions of personal conversion factors

Personal conversion factors comprise an individual's resources. Definitions differ regarding what is included as a personal conversion factor, but it is well established that, at its minimum, it includes qualifications and experience. Other relevant factors are confidence, hours worked and willingness and ability to travel (Ng et al, 2005; Francis, 2017). Female QSs' ability to gain personal resources is analysed in section 8.2, but their influence as a conversion factor is analysed in this section. Capabilities impacted by this factor are mainly those of seeking employment or promotion on an equal basis with others, adaptability and time and travel autonomy.

8.3.1 Qualifications and experience

Respondents' qualifications are given in Appendix A and their ability at a structural level to obtain additional education and training is analysed in sections 7.3.2 and 8.2.2. Appendix A establishes that only those on the traditional and adapted traditional pathways have formal QS qualifications, and then not all. However, this has not prevented some, such as Jackie, from achieving hierarchical progression. Respondents debated the extent to which having quantity surveying degrees improves their ability to do their job. For example, Olivia (Band Four), who has a quantity surveying degree and is chartered, said: "you do not need a degree to do this job". Diana agrees but also considers that her lack of progression is because she is an expert in NR's on-line accounting system 'ORACLE' and her line manager does not want to lose her expertise. This not only supports Ng et al's (2017) assertion that too much experience in one area can be detrimental to progression but also the concept that women are held in subordinate positions (Witz, 1990; 1992).

The debate is extended by Jackie, who has no quantity surveying qualifications, yet, at Band Two, is higher ranked than Diana and Olivia. However, she joined NR at Band Two level 12 years ago and has not progressed higher even though she has a business-related Master's degree. She was told by a senior colleague that, although her experience has enabled her to obtain Band Two positions, to progress to Band One she must be chartered and that this will "open doors" for her. Agreeing with Ceri (section 8.2.2), she considers that NR requires QSs to have professional qualifications because it is: "trying to take the lead with the professions, to have accredited people in roles ... We have been bench-marked against

external industry, we get paid in a commensurate way, so we should have the commensurate qualifications and skills”.

Laura (Band One) confirmed that she expects her team to have qualifications relevant to their position, explaining that, as a professional and the leader of a team, you need to know the answer to any questions asked, and often the theory behind it. Jackie agrees, adding that there are commercial managers who have “slipped through” and have “topped out, competency wise”. This may explain why NR’s current strategy is to recruit those who are already qualified. It is interesting to note that Jackie is focusing on qualifications as a means to progress whereas Isobel, who is qualified, considers experience to be more important. Significantly both women have been in a Band Two position for some time and are unable to gain promotion, with both saying that unqualified and/or less experienced men have been promoted ahead of them.

Other respondents also consider that experience is more important for progression. Diana (Band Three) and Olivia and Vanessa (Band Four) all said this, even though all have quantity surveying degrees and Olivia is chartered. Yvonne (Band Three) has no formal qualifications but considers that her experience has been sufficient as it has enabled her to gain that position. Significantly, she does not consider that she needs qualifications to progress further.

These respondents’ opinions differ in respect of the type of experience needed to progress. While some consider that a broad range of experience, particularly in different departments, is important, others assert that obtaining high-ranking positions requires individuals to have so-called ‘people skills’ or ‘soft skills’. Both Isobel and Georgina (both Band Two) say that having the ability and experience to manage people is more relevant than having other experience or even qualifications. Vanessa is Band Four, but she agrees, saying: “management skills help you to progress in NR, and these can only be gained by experience”. Although this agrees with Worrall’s (2012) findings, not all respondents agree that they are the most important factor. For example, Donna (Band Four) said that, although ‘soft-skills’: “certainly help, they are not everything”.

Although it is inconclusive whether qualifications or experience are more significant as a factor in career progression, it is clear that both play a role. Clarke, McGuire and Wall (2012) said that qualifications are becoming more crucial as a factor in entering an occupation than social contacts, for example, and this appears to be true within NR. Once recruited, however, respondents consider that both qualifications and experience are

relevant. As women in industry tend to be valued in accordance with their qualification level, qualifications are socially more relevant (Benschop and Verloo, 2011). Also, as will be seen in section 8.4, women do not tend to benefit from having social contacts in the same way that men do and so qualifications are a mechanism by which they can compete more equally (Benschop and Verloo, 2011). This also enables them to re-enter the industry following a career break, such as for maternity leave (Egerton, Dale and Elliott, 2001).

8.3.2 Developing confidence

Wilkinson (2012) found that, for women in civil engineering, having confidence in their abilities prevents them from leaving the profession before their careers are established. This is a common issue for women throughout all industries, but especially construction and others that are male-dominated. Confidence is under-represented as a personal resource and many case-study respondents raised the issue in connection with applying for promotion. Whereas establishing and implementing equality policies should enable women to obtain the capability of seeking employment or promotion on an equal basis with others, it comes with the prior assumption that women are confident enough in their abilities to apply for a job in the first place. As established in section 7.3.2 the confidence gap demonstrates how many women will not apply for a position unless they possess 100% of the desired qualities. This poses the danger that the confidence gap is then followed by an experience gap.

Respondents from all salary bands considered themselves to be victims of the confidence gap. Kathy first raised the issue, saying: "You know how, when you apply for a job, they have desired qualities and qualifications? If it isn't part of your qualifications, then you can't do it". As Kathy is a new graduate, this is perhaps unsurprising, but more experienced respondents agree. For example, Yvonne (Band Three) said that she has not applied for several jobs, which otherwise appealed to her, because she lacked some of the essential qualities. She continued: "now I wonder whether I should have [applied] because I might have had a lot more interviews". This somewhat contradicts Yvonne's previous assertion that she does not consider qualifications to be necessary for career progression.

Other respondents acknowledge the confidence gap but do not think that it applies to them. Both Tessa and Wendy said that not having all the requirements would not necessarily prevent them from applying for a job. Wendy claimed that it depended on the job and whether the requirements she lacked were: "something you could pick up as you go along".

Sue gave a different perspective. She said that she has applied for jobs without having all of the requirements but added: "I had about 70% of the requirements. I didn't get the job and I now wonder if it's because they expect women to have them all". This might suggest that the issue is not only that women will not apply for a job before having all the requirements, but also that those who are recruiting expect women to have 100% of the requirements. The implication is that this is not the same for men.

There are other ways that women's lack of confidence has impacted their career development. For example, Amelia said she had always lacked confidence saying: "it isn't easy to pretend that you are ok with everything in a male-dominated environment". Bryony and Donna consider that their lack of confidence in interviews has contributed to the fact that they have not been promoted. That women have less self-confidence than men, especially in a male-dominated environment is well-established (e.g. Court and Moralee, 1995; Lawrence, 2014) but less considered. Bryony perceives that men in construction have more confidence than women, and a sense of entitlement that advantages them in interviews.

Lawrence (2014) found that having a role model increases the self-confidence of female architects, and this research proposes that mentors also help in that regard. For example, Bryony is receiving support from her line manager, acting as mentor, to improve her confidence in interviews and younger respondents, particularly Kathy, entrust their line managers to improve their confidence generally. Kathy said: "I have a very good line manager who is very career-progression minded, and when you are someone like me, who is just coming out of university, you need all the confidence you can get. You need every cheerleader you can get". This contrasts with Ceri who said she has lacked line-manager support since she first joined the organisation. These two respondents are a similar age and, although Kathy has a construction-related degree, she has very little experience. Ceri is very experienced, having worked for NR for three years, but lacks formal qualifications. Kathy's observation that, as someone who has only just entered the industry, she needs 'all the confidence she can get' demonstrates how those without supportive managers are disadvantaged. Although Francis (2017) found that mentoring made little impact on women's career advancement, these respondents demonstrate that it affects their confidence which, in turn, aids their career development. Ceri, however, asserts that, although the lack of support has impacted her confidence in one way, in another her confidence has been boosted as she has: "been forced to go out and learn stuff for myself". Ceri was supported when she first joined NR, until her line-manger left, so it is difficult to say whether this initial support boosted her confidence enough to 'go and find things for herself'; had this not been given, it is possible that she would have left the industry.

This section continues by analysing working hours and willingness and ability to travel. These were identified as personal factors by Ng et al (2005) and their example was followed by Francis (2017).

8.3.3 Working hours

Research states that a factor affecting women's career advancement is their perceived unwillingness or inability to work long hours and/or the common belief that they desire to work part-time, flexibly or at home (e.g. Lingard and Francis, 2009; Worrall et al, 2010). Hours worked are a personal factor influencing women's WLB and potentially their ability to progress upwards. They are a factor deemed to be more significant for women than for men, as women are more likely to undertake the majority of domestic responsibilities and childcare (Watts, 2003; Francis, 2017).

Part-time working

It is impossible to assess the impact of working part-time with regard to these respondents as only Nadia does so. She works NR core hours of 10-4 every day and considers that, while this benefits her WLB, she is disadvantaged in terms of career development. There is some support for this view from Isobel, who confirmed that working part-time or condensed hours can be problematic. She said:

I think you could do it, don't get me wrong, but there's a lot of prejudice against it, and I include myself in that. I hear people say, 'Oh I do my time over four days and I have every Friday off', and I think 'well that may be ok, but your capacity to do a longer day when we have a problem is just not there. I have got other people who do their time over 5 days who will probably do an extra hour every day. So, they are not doing 35 hours, they are doing maybe 40+ hours'. If you are working nine hours a day just to get your basic hours in, you can't fit any more hours into those four days, there is no more capacity. You will do your hours, don't get me wrong, but I think there's a lot more people who do a lot more hours over their five days.

Section 3.4.2 presents arguments about working part-time or condensed hours and whether it improves or reduces an individual's focus on work, affecting their career development. Isobel's statement suggests that the career development of part-time workers is impacted due to their lack of flexibility and that they cannot work longer than their contracted hours. However, Nadia perceives her disadvantage is more that she is less informed about work issues by not being present in the office full time. This is contested by other respondents who say that they are also frequently absent from the office. Some will be working flexibly or at home, others have to visit head office or attend site meetings. They all say that they are contactable by phone or email and their diaries are open to inform managers and colleagues of their whereabouts.

The extent to which part-time working impacts the availability of career opportunities for employees (Meiksins and Whalley, 2002) is unclear. Despite the above, Nadia considers that her career progression is mainly affected by her line-manager's perception that she does not aspire to progress upwards, although this may be because she is one of only a few part-time workers. Lingard and Francis (2006) highlight the value in employee retention by organisations that offer part-time options but assert that individuals who do so should be equally valued with equal access to career development.

Flexible working

That Nadia works part-time means others have the potential to do so. However, because they can work flexibly and at home, they all said they choose not to. Some research suggests that working at home or flexibly hinders women's career development in construction (e.g. Worrall, 2012), but respondents disagree. They assert that flexible working enables them to work full time; it is why they joined NR and why none are looking to move anywhere else. This supports Sang and Powell's (2012) assertion that organisations can benefit by offering employees flexible working. Bryony said flexible working is: "worth thousands and thousands of pounds in salary. I would not move to a contractor, with that pressure, for more money, it just isn't worth it". This was the view of those without children as well as the mothers in the cohort. Nevertheless, they all said that, when possible, they prefer to go into the office as they like to have social interaction. Yvonne said: "It's my time to be Yvonne, and I'm nobody's mum, I'm nobody's wife. I'm just myself, and that's my time to be just me. In the office, I have some very odd conversations with people, that can end up with us having tears rolling down our faces with laughter, and you need that in your day".

Discussions centring on how working flexibly (including working at home) is perceived by colleagues were divided; particularly as some colleagues also work in this way, but others disapprove. Georgina considers that working flexibly is "not well thought of. Men, particularly, moan about women working flexibly". She did not say it impacts women's career progression, especially as her office operates a hot-desk system, which means there are not enough desks for everyone to be in the office at the same time. Yvonne considers that male colleagues' attitude stems from the traditional culture within construction and said: "I think we've got to get away from this 9 to 5, Monday to Friday mentality. Even in this day and age there is still a mentality around that, I think particularly from older people ... we might leave at 3 or 4, and you will always get people that will say 'oh, you didn't get in till 10 and now you're going again'". Yvonne is robust in her response to such comments, replying: "well it's none of your business for starters", but others find that comments discourage them from working flexibly or at home. For example, Olivia, Penny and Rosie said their line

managers demonstrate a lack of trust in them, making comments if they work from home or take flexi-time. Olivia said: "If you are not in the office, you get comments like 'are you in town shopping?'". She added that line managers' comments then filter down to male colleagues. She considers that it is a: "control thing. They want visibility; bums on seats".

Rosie elaborated:

They say it as a joke. But then there is the knowledge that, in the back of their minds, they are thinking they're superior; that maybe whilst they don't think you are actually in town shopping, they think you are still not actually doing anything. They question whether you are actually working or sitting in a café, drinking coffee? Men are very busy thinking about what we're doing, that it makes me wonder what they're doing as they're so bothered.

Not only does this demonstrate a lack of trust, but she also suggests that they are judging women based on their own behaviour.

That those who do not work flexibly perceive themselves as superior to those who do further stigmatises women as they form the majority of flexible workers (Ng et al, 2005). It is not only an issue of progression, but also impacts WLB. Olivia, Penny and Rosie say they are reluctant to exercise their right to work flexibly even though, when their male line managers and colleagues work from home, "nobody says anything". Rosie said: "We have quite a lot of men in our office who aren't based locally, and so a lot of them only work in the office for two or three days a week, and that seems to be OK. Yet we are away, for this interview, for one morning, and we get questioned as to where we are. It is like they don't trust us".

Penny added: "the men cover for the other men, but we don't have anyone to cover for us".

Other respondents can work flexibly without any issues and both males and females do so. For example, Bryony said: "working hours are not a barrier in our office. Just as many men as women go home early - or don't go home early". But she acknowledged that other offices are not so fortunate. She continued:

Maybe interview my boss, even though he is a man, about how he views the flexibility of time. We are very flexible. If I was to phone in now and say the kids are sick, he would just say 'fine'. There is never an issue about it. Maybe it is because he has been there before, but it never has to be discussed. Which is not the case in other NR teams. The flexibility means I don't look to move; I'm relaxed about my commitments and my home and work life balance makes me stay in that team - definitely. I might be on my phone, or pick up my laptop, at the weekend but it's just as and when. Nobody ever says, 'you've taken half a day here and half a day there, therefore you have to take a day of your annual leave'. It's just not like that; not clock watched at all and we are totally trusted. And that makes me happy about work. I love work. I love coming into work because there is no stress about it. There is the understanding that I am in that time of life where the kids are at nursery or at primary school. My boss recognises that this is what I have to do, because he has done it.

It is unclear why some respondents have no problem in working flexibly and others do, but Bryony's line manager trusts his team, and in return secures their loyalty. Further, Bryony says that she often works additional hours when necessary and is very happy to go to work. This is not the case for Olivia, Penny and Rosie.

Lack of trust may be due to the fact that working at home has the potential to be abused as few checks are made. Respondents acknowledge this, but say they do not abuse it because, as Donna and Xanthe said: "it is too valuable a perk to have" and they will not risk having it taken away. Line managers are also aware of this, but as Laura said:

Make no mistake, if they are not doing what they are supposed to be doing, I will switch them to some other arrangement ... but I am encouraging both males and females to work one day at home because most of them actually get more done. It is the role, not the gender, that dictates what they can work in terms of flexibility.

In some regions, women have resisted working at home, possibly due to the negativity of managers and colleagues. This is evidenced by the fact that some women began to do so only once their male colleagues did. Diana said that, initially, she: "did not want to be the woman with kids who worked at home". When she saw that a lot of men used the facility, she also requested to do so as: "I could see I would benefit without repercussions". She said that she should have done so sooner, however, as her WLB has improved "massively". Respondents assert that, if men are encouraged to work at home then more women would do so, which will improve WLB for both men and women (Munsch, 2016). However, for Olivia, Penny and Rosie, their male colleagues working from home has not lessened the comments they receive.

Long hours

Respondents perceive that the 'quid pro quo' of having flexibility is that they will work more than their contracted hours. Picking up a laptop to send emails, or being on the phone, in the evenings and weekends was the norm for many respondents. This casts doubt on whether it actually benefits their WLB, but they consider it a worthwhile exchange for being able to take time off when they need it. Although the industry is notorious for requiring individuals to work excessively long hours (Bagilhole, 2014; Navarro-Astor, Román-Onsalo and Infante-Perea, 2017), all except those in salary Bands One and Two said they work only a few additional hours over their 35-hour week. These are usually at planned 'key' times, such as when cost reports are due. Because much of their work is undertaken away from the office, respondents are generally under no pressure to spend long hours in it and only they, and their line managers, are aware of the hours they work.

The Band One and Band Two respondents were exceptions, and they work many more additional hours. Jackie (Band Two) said she does so because: “they pay me well. I have accountability and I enjoy what I am doing. Not because I am stressed, or I have too much work or it’s over-exerting. Thirty-five hours is frankly ludicrous”. Jackie’s denial that working long hours is because she has too much work is contradicted by the very fact that she must work additional hours. Isobel’s role is very similar to Jackie’s, albeit in a different region, and she acknowledged that she works overtime due to pressure of work. Georgina (Band Two) said that, sometimes, she can work as many as 60 hours a week as hers is a national role requiring extensive travel.

Other respondents agreed that monthly cost reporting is the only time they have to work long hours. These occur on fixed dates, known about in advance. Although this aids their time planning and, again, they consider it an acceptable exchange for their flexibility, it is clear that, as a known event, workloads could be arranged accordingly. This is relevant for both men and women, with or without children. In fact, many respondents without family commitments highlighted that management expects them to work longer hours than those with children. Olivia, who has no children, said that the expectation that she will work long hours is tantamount to saying that: “people without kids can’t have a life because you are expected to stay. That kind of attitude. Just because I haven’t got kids, I’ve still got things to do.”

Respondents all questioned the long hours culture of the construction industry and whether it improves productivity, particularly as they are aware that some studies have found that work fatigue increases with each additional hour spent at work (e.g. Pencavel, 2014). The discussions surrounding presenteeism highlighted two particular features. First, Olivia, Penny and Rosie, for example, observed that those who spend many additional hours in the office are not necessarily working; that they spend time on their phones or use late hours in the office as their social life. Rosie said: “they have no life out of work, it seems”. Jackie also observed that when some of her team say they arrive early into the office, she sees them having breakfast, taking cigarette breaks, and then leaving early. She said that, even though they will do their core hours, they are not putting in the additional hours they allege. Contrary to other research (e.g. Watts, 2003), the respondents did not perceive that colleagues were present due to a ‘need to be seen’ by line managers.

The second feature highlighted was that some male colleagues are resentful towards those who do not work long hours, or at least are not visibly in the office for extended periods. Although Isobel thinks that: “being here for 50 hours a week is not necessarily a good thing”,

she did observe that: “those who work long hours feel hard done by because they recognise that those who only work their minimum hours are still getting full pay and holiday entitlement”.

That colleagues, especially male colleagues, may look down on women who work flexibly or who do not work long hours is acknowledged, but that they resent them for doing so is not commonly observed. It is perhaps not made known to male colleagues that women in NR continue to work into the evening and at weekends, frequently working longer than their contracted hours (Burke, 2014). Having flexibility, therefore, does not necessarily contribute to having WLB as the line between work and home becomes more blurred.

8.3.4 Ability and willingness to travel

The construction industry has a reputation for requiring employees to travel for work, or to work away from home, as stated previously (Bagilhole, 2014; Navarro-Astor, Román-Onsalo and Infante-Perea, 2017). However, no case-study respondent travels to work for more than NR’s policy of a maximum of 90 minutes each way, with most travelling between 30 and 60 minutes each way. Those who travel by train have a dual benefit of subsidised travel and the ability to work on the train, utilising otherwise ‘dead’ travelling time.

As a national organisation, NR requires its employees to travel to construction sites or to head office. Although respondents admitted that their WLB would improve if they undertook less travelling, they said they try to limit it and to have sufficient prior knowledge to enable them to arrange childcare, for example. When possible, respondents will undertake journeys over one full day to avoid staying away from home overnight. For those in areas like the far northwest, travelling to London or to Milton Keynes can mean working a 12–15 hour day.

Only Donna said she would apply for a job that involved more travelling. Others, even those without children, would not consider it, even if it meant promotion. Tessa, for example, is single and still in her twenties, but she also said she would not apply for a job that involved extensive travel. She illustrated this by saying that her current job is based in a different city from the one where she lives and she has negotiated to only visit her office for a few days every month, and rarely stays overnight. Otherwise she works from an NR office closer to home but is at least enabled to do so. Even some with children said their reluctance to stay away from home is more about themselves than their children. Bryony said: “It’s not necessarily to do with childcare, it’s selfish as well. That’s me saying that I want to be at home to exercise and run and look after the animals ... going to live in a hotel is quite soulless. It is more the little things about being at home”.

Some respondents recognise that travelling exacerbates the conflict between home and work, and that it is usually women who have to make such choices (Du Billing and Alvesson, 2014). For example, Wendy said: “the female lifestyle doesn't always allow for [working away from home], especially if you've got a young family. I wouldn't personally have felt comfortable working away from home during the week when my children were small”.

Although she continued:

There are others who are quite happy to do that and let their husband stay at home and have that role reversal. In order to progress you have to accept that there are no boundaries and you can do what you want to do if you are determined and willing and prepared to do it. It might be easier for a man to do those things, but there's no reason why a woman shouldn't either, I think.

In summary, despite Francis' (2017) findings that personal factors have the greatest impact on career progression for women in construction, this research demonstrates that this is not true for all female Qs. In NR, quantity surveying qualifications have, to date, not been particularly significant in these respondents' career progression. Although they recognise their increasing importance, the view remains that progression to higher management levels requires confidence, wider experience and the ability to manage people rather than having relevant qualifications.

Having time autonomy does not necessarily impact respondents' career progression, but it does affect their WLB. They report mixed ability to work flexibly and at home, influenced largely by their individual line managers and male colleagues, although they do not believe that presenteeism is a factor in career progression. However, respondents recognise that working hours increase with career progression, as higher-ranked respondents all report that they work many more than their contracted hours. As a national organisation, NR requires them to travel for work but sufficient notice of when this is required means that appropriate plans can be made.

8.4 Perceptions of social conversion factors

Social conversion factors focus on the social norms and practices that unfairly discriminate (Sen, 2009). In this context, they also include social contacts and their impact on career progression as women in construction are said to lack the influential social contacts that men rely on to advance their careers (Worrall et al, 2010).

NR has a 'jobs for the boys' culture that respondents consider disadvantages them in terms of hierarchical progression. Also known as 'boys' club' or the 'old boy's network' (Greed, 1991; 2000), it relates to how men use their social contacts to aid their progression. This is

in line with Bourdieu (1977), who found that social contacts outweigh qualifications as a factor in progression. This is particularly true for women in a male-dominated industry. For example, Isobel said:

I think appointments are still made to people who are known to the person who is appointing them. Whether that is from a previous work life, a previous part of NR, or whether they go out socially to the pub or play golf together, or whatever it may be. You see those personal relationships forming part of the recruitment process and I think it is very hard to have cross-gender personal relationships.

This echoes Bagilhole (2014), who says that men recruit in their own likeness, something which is also recognised by line managers in NR. For example, Beth said: “My line manager and I were looking at where my next step is, and he said ‘there’s no point going to that part of the business because of boy’s club’”.

However, there is debate among respondents about whether jobs for the boys only exists because men are more likely to know a man than a woman, or whether it is a deliberate mechanism by which to maintain vertical segregation. Tessa said:

Sometimes you can go for an interview and it looks like they already know who they want. It looks like it's gender bias, but it might just be that more men get the jobs, because there are more men. If you know someone that you want to get the role, you are more likely to know a man than a woman. But there might be some element of jobs for the boys in it. There are definitely people in jobs where you think ‘I don't know how you got there’ and who are clearly a bit out of their depth.

This belies the person-job fit narrative of NR’s recruitment strategy, as Tessa observed that not only do managers identify potential candidates for the job prior to interview, but also that these are not always the ideal person for the job.

Some respondents assert that social contacts are not as influential in NR as in other construction organisations for which they have worked, particularly contractors, but they agree that it exists. Jackie considers it is more about: “cronyism than deliberate gender bias. It is about knowing who you know, who has worked next to you” which, in a male dominated industry, is more likely to be male than female.

That this can hurt the organisation as much as the individuals themselves is not generally considered. Georgina said that not only does the subculture limit women’s ability to progress and limit the number of female role models for women to aspire to, it also affects the organisation, because unqualified or less qualified people are appointed. She explained: “We've lost really good women recently, because of it. We lost a brilliant female engineer for a job that should have been hers, but one of the blokes wasn't enjoying his job and he got it.

You just think 'we lost the best candidate, because it is jobs for the boys' and blokes will employ blokes in their likeness".

Respondents consider that NR's revised recruitment and interview procedure, described in Chapter Seven, is still not effective at preventing the influence of social contacts. Georgina said: "You can still bodge them; everything is bodgeable. I don't know, but definitely in the past, it has been the male buddy system, and I can't believe that it has gone yet because of the age of the people that are still around. It will take quite a bit of time". Yet many consider that it is not about time, that systems need to be reinforced to enact change, in line with Cockburn's (1991) 'long agenda', described in Chapter Three.

In summary, for these respondents, social conversion factors are focused on the 'jobs for the boys' subculture. There is some debate regarding whether this is a perceived or a real factor in career development due to the male-dominated nature of the construction industry. Whereas some respondents consider it be a perception rather than reality, the prevailing view is that, despite NR's interview policy, male managers continue to appoint their friends into roles, even if they are not the most suitable applicant. This not only disadvantages female candidates, but it also affects men who are not in the 'club'. Respondents also observe that such appointments not only result in a less qualified person being appointed but that highly qualified female candidates may leave the organisation.

8.5 Perceptions of cultural conversion factors

The final set of conversion factors proposed by Sen (2009:255) is "differences in relational perspective". As a recently introduced conversion factor, it has been only briefly considered in CA literature. In accordance with Sen's (2009) explanation, and in the context of the research, it is retitled as 'cultural' conversion factors. These particularly impact respondents' acquisition of the capabilities of freedom from harassment, seeking employment or promotion on an equal basis with others, being supported at work, having a voice and having respect. It also impacts all aspirations and all career pathways.

8.5.1 Developing freedom from harassment

As stated in Chapter Seven, freedom from harassment is a right given to employees by the Equality Act 2010. No respondent stated she had experienced direct sexual harassment or bullying while working at NR or elsewhere, although some had witnessed it when working for other construction organisations. Donna said that, although harassment did not occur, some colleagues are obnoxious, but: "you get obnoxious people anywhere, not just in this job".

These assertions add to the doubt expressed by organisational representatives that harassment and bullying are a barrier to women's career development in construction and a reason for their perceived lack of career success (e.g. Agapiou, 2002; Dainty, Bagilhole and Jackson, 2004).

However, some behaviours relevant within the definition of harassment and bullying given by the Equality Act 2010 have been observed. The main issue discussed within this context is male colleagues 'crossing a line' in terms of 'banter'. Banter is acknowledged as "part and parcel of the culture of the construction industry" (Caplan et al, 2009) and the respondents accept that; in some offices it is a lively part of the culture and women give as much as they receive. Vanessa said: "there is banter everywhere isn't there?" and highlighted there is 'mickey-taking' and teasing in her office but nothing discriminatory or offensive. She added that it is good natured and given equally between men and women.

However, other respondents highlighted times when male colleagues have 'crossed the line'. This is apparent for Olivia, Penny and Rosie, who said:

Olivia: "it's indirect in the office. It's craic, it comes across as craic, but it is still discrimination";

Penny: "we've had an incident in our office with someone saying, 'women should be at home' and things like that. So now they've said there should be no banter in the office. But it doesn't offend me, and it doesn't upset me, and I wouldn't dream of going to report them to my boss. If they said something to upset me, I just say so to their face";

Rosie: "I think it's a case of knowing when to say something. I do have quite a high tolerance, so I just say 'is that really what you want to talk about? You must have a lonely life'".

Although they acknowledge that that it is mostly innocent (for example, Olivia saying 'it comes across as craic'), it was apparent that they have to tolerate quite a large amount of continuous banter. They distinguished between that which they accidentally overhear from that which is said knowingly in their presence and that which is said directly to them. Their reactions to it differ; Olivia said she ignores anything not said directly to her, but Penny said that she will always "pull someone up on it", even if it is something accidentally overheard. It is clear that, when respondents say that they have not experienced harassment, they mean it more in terms of direct sexual advances and overt bullying, because their responses would suggest that covert bullying still takes place. This is compounded by respondents who said that they have got better at managing situations as they have got older and gained more experience. Both Vanessa and Yvonne said the way they react now they are in their forties is not the same as they did when they were in their early twenties, which suggests that they experienced some harassment or bullying earlier in their careers. Zoe, who is in her thirties,

said that even the intervening ten years since she was in her early twenties has made a difference in her ability to manage any comments she receives. This agrees with research that suggests younger women are more likely to experience harassment than older women, possibly due to the latter's improved ability to quash it (Fielden and Hunt, 2014).

Following a comment by the medium private practice partner in Chapter Seven, respondents were asked if women also indulge in 'banter' that might be deemed offensive. Olivia, Penny and Rosie highlighted how one female colleague was dismissed after engaging in banter that offended the men. Rosie elaborated: "She is no longer here, and you could say that she has been got rid of because of what she was like. She made the men uncomfortable. It seems to be alright when they say it, but the minute they are uncomfortable, she had to go". This is one example of the double standards that exist; in one sense, women are encouraged to act like men if they wish to progress, but if they do so in a way that makes men uncomfortable, they are treated differently to the extent of being dismissed.

Respondents said that, although they are aware of NR policies regarding actions that can be taken if they experience harassment or bullying, they have not reported any such behaviour, preferring to deal with it themselves. Fielden and Hunt (2014) found that less than half of women report incidents that fall within a recognised definition of harassment. In saying they prefer to deal with it themselves, case-study respondents are conforming to the majority found in a study by Rutherford et al (2006) where 67% of respondents did not report sexual harassment for this reason. However, respondents suggest that the issue is resolved quickly if they deal with it themselves, and that this is the most effective method of addressing challenging behaviour. Yvonne explained how, after a male colleague had crossed the line: "I pulled him up on it and he apologised. End of story as far as I'm concerned". Yvonne and Zoe both said that if anyone steps over the line: "you have to stamp that line back out" because men are not always aware when they have crossed it. However, this again makes women responsible for men's behaviour.

Perceived lack of harassment or bullying does not, however, amount to being treated equally. The following section analyses how stereotypical assumptions of male colleagues impacts women's self-confidence and self-esteem as well as how they influence career development.

8.5.2 Stereotypical assumptions and their impact on career pathways

Research demonstrates that women looking to advance are disadvantaged by stereotypical gender assumptions (Streets and Major, 2014; Hoyt and Murphy 2016). Expectations of

leadership potential are gender biased in favour of men, who are seen as competitive, unemotional and analytical. As more males have traditionally been in managerial positions, masculine traits are stereotypically associated with leadership. In contrast women are viewed as more collaborative, exhibiting intuition and empathy (Streets and Major, 2014).

Many of these stereotypes are analysed below, but case-study respondents consider that they are more disadvantaged by stereotypical assumptions about women as mothers and about their career aspirations. Further, an 'ideal' female stereotype is allocated to women in terms of, for example, their weight and overall appearance, confirming Baruch's (2006: 134) observation that these: "will come into play in the future".

That women are assumed to have children remains a significant factor in their career development, according to respondents. It mainly affects progression, rather than WLB, and applies regardless of whether a woman has a child or not. There remains an assumption that all women have or will have children and that those who do only want to work flexibly or part-time, are unwilling to travel for work and do not wish to progress. Tessa, who is single and in her 20s, said of higher management: "there's always that doubt at the back of their minds about whether or not you're going to have children". Fiona, who is in her forties and also does not have children, agreed and said she was told that she was not promoted into one job because the interview panel assumed that she "would be going on maternity leave". Kathy is newly married and has only just joined the industry. She said:

I have to prove myself more. It comes back to me getting married and maybe having children. In my previous company, my manager said that she'd recently got married and was quite scared because she felt that management would now see her as somebody who is going to go and make babies. So, I have to work harder, and prove myself so that it doesn't matter that I'm married, and it doesn't matter that I might have children, I'm still going to work hard.

This issue, which is unlikely to affect newly-married men, disadvantages women whether or not they intend to have children. That Kathy's manager also expressed concern about this issue once she got married demonstrates it is a 'female' issue rather than a hierarchy issue. Diana calls this: "real 'old-school' thinking" and observes: "even men with wives and daughters don't necessarily treat women better ... I think if you're a female of a certain age, some assume that you could go off on maternity leave at any time".

Once women have had children, stereotypical assumptions then move to considering that mothers do not want to progress or develop their careers. Nadia works part-time and said her managers assume she lacks any aspirations to progress. However, she also said that she has not pursued two opportunities for promotion, so it is not clear whether this is purely

gender-related. Regardless, Nadia is looking to progress now but considers she is hindered by assumptions about her as a mother.

Even those without children are impacted by these assumptions. For example, Tessa said: “I think they assume that women with children are not looking to move up, that you’re quite happy to stay where you are and keep plodding on”. For this reason, Diana does not have photos of her children on her desk because she did not want people to: “see me as just a mom”. To some extent, though, their fears may be unfounded as others demonstrate that they are supported in their career development regardless of whether they have children.

Stereotyping does not only extend to women’s assumed family status and how it might impact career development. It also includes assumptions and preconceptions about how women should look and behave. For example, Bryony observed:

I think I wouldn't have got where I am today, even though I haven't done it quickly, if I was fatter. I think your appearance is taken into account ... I conform to a certain look and dress for the office, and that has helped, yes. Men can turn up in the same grey trousers, blue shirt, every single day and nobody bats an eyelid, but we have to conform and look the part.

While Jackie agreed appearance has an effect on women’s career opportunities, she added that it extends beyond that to encompass women’s whole attitude. She explained:

Only 8% of Band Ones are women. The Band One women are ‘rock chicks’ and I've never met one that didn't bowl me over. Because I think that to get to a Band One and be a woman you have to be a superstar ... Band One men? There are a few rock stars, but there's a flabby underbelly of beige people. It's a white, male, paunchy, balding environment to be in.

These two comments compound the idea that women have to conform to a certain look and attitude to progress; to be better than equivalent men. In saying that some Band One men form a ‘flabby underbelly of beige people’, Jackie demonstrates that not only is men’s appearance not such a significant factor in their progression but also their whole demeanour. Although Baruch (2006) included men as well as women in saying that appearance is relevant, respondents assert that, for women to progress, they have to ‘go the extra mile’, to the point of being ‘rock stars’. This conflicts with Tienari and Koveshnikov’s (2014) assertion that there is conformity of appearance for managers.

Hoyt and Murphy (2016: 388) discuss the stereotype threat, adopting Steele, Spencer and Aronson’s (2005: 385) definition of “being judged and treated poorly in settings where a negative stereotype about one's group applies”. Although they apply it to women in

leadership in any sphere, it particularly applies to situations in which women are a minority, such as in the construction industry.

To compensate for their perceived disadvantage, women will often adopt masculine traits and, in some situations are expected to 'act like men' (Worrall, 2012). This was debated within the respondent cohort. For example, Mary (Band Three) considers that, rather than an expectation, it is more a case where women who do act like men simply stand out more because there are so few at high levels. Although this agrees with Ng et al (2005), Mary stressed that not all highly ranked women act this way. Yvonne (Band Three) agrees that some female line managers act in an aggressive manner because they consider it enables their advancement, but she also stressed that this did not appear to be true of all and she described how a female line manager was criticised for her level of aggressiveness once she gained promotion. Hoyt and Murphy (2016) allude to these double standards, that women are expected to act like men to progress but are then criticised as being too unfeminine if they do so, something which these respondents largely agree with.

Not only do stereotypical expectations include preconceived ideas about what women are or what they want, they also prescribe how they should or should not be (Hoyt and Murphy, 2016). In terms of the latter, respondents described many incidences where they have been assumed to be secretaries or other support staff. Georgina gave an example of how, as a guest speaker at a workshop, she was at first assumed to be catering staff and asked to resolve a food issue. While perhaps not directly influencing career paths, these assumptions nevertheless undermine women's self-confidence and self-esteem, as they perceive their position in the industry is questioned and needs to be justified, which prevents them from seeking hierarchical progression (Streets and Major, 2014).

The assumption that women are support staff is connected with respondents' assertion that men in construction consider it to be a 'man's industry' and women should conform to, or put up with, certain behaviours on the basis that this is what has always occurred. An example was given by Bryony who, when she told site staff that she was unhappy with a display of pornographic images on the wall of a site office, was told: "we've always had them up, it's normal". This form of direct, yet subtle, discrimination (Chan, 2013; Wright, 2016) is widespread, and whether attitudes are beginning to change is debated. For example, Mary said: "there is a lot of respect for the fact that we all do the job that we are employed to do, so I think we are all treated pretty fairly". Although this was confirmed by other respondents, many maintain there is a culture of subliminal discrimination that may be improved by a more widespread understanding of how such behaviours impact on women. Bryony said:

Men are really threatened by things like the Women in Construction programme, saying 'why isn't there a 'men in construction' programme?'. They don't get it; they see it as discriminatory. But I've said to them, 'you don't understand the subconscious and subliminal discrimination that I experience every single day here as a female, that you do not'. They will never understand what women experience; things like being wolf whistled at or people saying things like 'don't worry love'. They've never sat in a meeting when someone has sworn and apologised only to you when there are 20 other people there, but those are all men. I can say fuck as much as the next person, I know what that word means, and I use it in my vocabulary. I don't need to be apologised to because I'm not fragile.

This also extends to assuming what women are able and willing to do, or not do, for their jobs. For example, Beth was not given the opportunity to apply for a job that involved nightshifts because management assumed that, as a woman, she would not want to do it. This is not isolated as, when another respondent found out she had missed a promotion opportunity, and asked why she had not been alerted to it, she was told that management assumed she would not be willing to do the travelling required as she had young children, even though she already travelled for her job.

Some, such as Greed (2006), argue that such assumptions will change only when there is a significant increase in the volume of women in the construction industry. She asserts that this will "lead to more humane forms of management and thus greater productivity and less of a confrontational, conflict-ridden 'macho pack culture'" (Greed, 2006: 71). How this should be achieved is debated, however. One interviewee suggested that positive recruitment would increase the number of role models and would reduce negative stereotypes. Others, such as Isobel, maintain that this could only be negative. She said:

I wouldn't want all women shortlists, quotas or anything like that. You get your job on merit. Unfortunately, there are still too many people out there who, when a woman is appointed, say 'oh we all know why she got that job. She's the token female'. Or, worse than that, they intimate that there is a sexual connection with the line manager.

Mary was more direct: "I don't think that any woman worth her salt on the planet would like to be put in a job just because they are a woman". All respondents said they did not want special treatment, they wanted equal treatment. This was summed up by Tessa who said: "we don't need any special treatment or anything like that, we just need people to stop trying to guess what we're thinking and let us decide what we want. If we are telling you what we want, then listen to that and trust us on it".

Promotion obtained by positive discrimination might satisfy an individual's well-being in terms of outcomes, but it detracts from their agency freedom as they would not achieve it on their own merit. Isobel's and Mary's assertion that they do not want promotion by this means

is “informed preference” (Appiah, 2005: 171) and is a demonstration that “well-being is not always served by the satisfaction of our actual preferences”. Yet men achieve promotion by means of their social contacts, which might also be said to detract from their agency freedom. However, this does not threaten the underlying structures of the industry that create inequality (Cockburn, 1989) and therefore it is not judged as negatively as overt positive discrimination.

Most research recommends enabling women to work alongside men with few recommending that men should be educated to adapt their behaviour, better enabling them to work alongside women. Changing underlying structures, in line with Cockburn’s (1991) long agenda, is rarely suggested. Although Worrall (2012) considered this as a recommendation, she ultimately dismissed it as it takes too long to effect change.

8.5.3 Support and mentoring.

Whether having role models, mentoring and line-manager support enables careers is debated in research. Much research recommends them as career enablers for women and Rosa et al’s (2017) meta-analysis of literature found that they are. However, Francis (2017) and Park and Jang (2017) found that while having role models, mentoring and line manager support is not necessarily significant in women’s career advancement, it does give them positive career experiences. However, this research contradicts theirs to some extent as Bryony’s experience, above, demonstrates.

An emerging theme of this research is the significance of line managers’ influence on women’s career development. Throughout the research, case-study respondents have demonstrated that their most influential relationship is with their line manager, regardless of the fact that NR has a formal mentoring scheme. It is therefore noteworthy that, although there are respondents who do not have supportive line managers and would benefit from the mentoring scheme (for example, Ceri, Olivia and Penny), Anna is the only one who has accessed it. Several respondents mentor those junior to them but do not themselves have mentors. A reason for this is a general lack of awareness of the official scheme; even those who act as mentors do so informally as part of their management role. As most mentoring occurs informally, this disadvantages those who lack supportive management.

Mentoring and line manager support is particularly effective at the beginning of women’s careers in NR. For example, Kathy’s line manager is very supportive, and she considers herself fortunate that she could choose him, which she did because his team is all-female,

and she was aware that he is very supportive of women's career development and planning. She said:

Every one-to-one that we have, we always talk about career progression. What are the short-term goals what are the long-term goals? Because if you don't have the support of your manager, it is really difficult, daring even, to say 'I would like to do this'. I am really happy that there is someone who is supporting me behind the scenes. I had the opportunity to choose a manager who is going to help me progress in my career, so why wouldn't I choose him?"

It is clear that Kathy lacks confidence, evidenced by her perception that it is 'daring' to state her career goals and that she needs 'every cheerleader she can get'. Others, such as Ceri, have been less fortunate both in not having the choice of managers and to be given one that is unsupportive. Although Bryony has experienced both types, her current manager is very supportive and is actively helping her to gain promotion. For example, he is coaching her to perform better in interviews, recognising that her progression is impacted by her lack of confidence; he is also aiding her to become chartered by organising several mock assessment interview panels. In this way, having supportive line managers, or mentors, aids career advancement. Conversely, Olivia considers that the lack of support from her line manager is negatively impacting her career path. Highlighting that she needs support in terms of having feedback to improve her confidence, she said: "but they're not giving that feedback and so people aren't going forward. Women aren't getting that feedback; I am not getting that feedback". Olivia's experience confirms Walker's (2007: 184) assertion that lack of support affects women's "assertive voices", which, in turn, frustrates their career development.

Both Walker (2007) and Rosa et al (2017) also found that men's aggressive behaviour prevents women from making their voices heard. Discussion in this regard centred on whether having an assertive voice is a result of hierarchical progression, that women are more listened to the higher they climb. Laura (Band One) said she had "the biggest voice" but, when asked if her position was relevant, she said: "there's other women at the same level as me, who don't have a big gob". She added "if I didn't think my opinion counted, then what's the point in turning up?". At first Jackie (Band Two), suggested it is connected with hierarchical status, but then added that it is more connected to an individual's personality, saying: "I have never been backwards in coming forwards, even if it hasn't always been popular".

Age, however, may be a factor as all younger respondents said they struggle to make their voices heard. Beth (Band Four) said that, although she has a voice within her team, she does not think this extends up the management chain. That developing a voice may come

with age rather than hierarchy was also inferred by Sue's example. She is an older respondent but is also salary Band Four and said: "Yes I do have a voice. Sometimes it is listened to with a pinch of salt and sometimes it's listened to properly but, yes, I do have a voice and I am trying to change things. If I can change things as a woman then it will help people to accept women". Yet, it is clear that these issues could be helped through mentoring and more supportive management.

Mentoring and other line-manager support is different to having role models (Sealy and Singh, 2008). Yet role models are also significant in women's career development. Having women in high positions encourages those below them. Nadia said: "when you see females progressing along the career path, you see it is achievable. Especially when they have families. They show you that it can work". Tessa said that one of her managers was recently promoted whilst on maternity leave and she said: "even though I am not planning to go on maternity leave anytime soon, I think it is nice to see stuff like that happening because you've always got that hope. It's nice to see that people are getting to move forward even though they're on maternity leave".

In summary, respondents rely on their line managers for support and mentoring. This advantages those with supportive managers, while those who lack support can struggle to get feedback and to make their voices heard, frustrating their career development. NR has a mentoring scheme which could be more widely advertised within the organisation as there is a general lack of awareness of the advantages and support it offers. Female role models in male-dominated fields enable women to see through traditional gender stereotypes, demonstrating the possibility of upwards progression (Streets and Major, 2014).

Several studies have emphasised the importance of academic role models and mentors with regard to women's experiences in construction education (e.g. Wilkinson, 2006; Lawrence, 2014), and this research suggests that this should be extended to early career development.

8.6 Conclusion

There is a perception that women in the construction industry are not interested in hierarchical progression, particularly if they have children. The aspirations of these respondents demonstrate otherwise; that even if WLB is currently a goal, they maintain a requirement to have the ability to progress should they want to. Nevertheless, having an aspiration is not the same as being able to achieve it and there are many factors that impact this ability. This chapter has established, using the lived experiences of female Qs from

NR, examples where respondents' ability to develop their careers were enabled by both the structure of NR and the implementation of its policies, as well as the underlying cultures that exist.

The overriding conclusion is that acquiring capabilities relevant to each aspiration is something of a 'lottery' depending on which region or even which department female Qs work. Line-manager support, or lack of, is particularly relevant. The narratives of these Qs highlight several key points in that regard. Some line managers support women's educational experiences and flexible working enabling them to acquire capabilities relevant to aspirations of progression and WLB. Other respondents, however, are less fortunate. Younger respondents, particularly, are unable to obtain funding for ongoing education, justified by line managers as deeming them unnecessary for their current roles. This is short-sighted, as overall development aids both the individual and the organisation. However, it supports findings by Dainty, Bagilhole and Neale (2000) and Worrall (2012) that women receive less organisational sponsorship than men. Others perceive that denying them access to qualifications constrains them in subordinate positions (Witz, 1990; 1992).

Yet, this is too simplistic to fully illustrate the dichotomy between those receiving sponsorship and those who do not. While it appears as though there is a stereotypical assumption that young women will become mothers and that this will change their aspirations from progression to WLB, some respondents demonstrate that a sympathetic line manager will enable both; that they trust women to know what they want from their careers. These respondents are able to work flexibly and at home, indeed they are likely to work additional hours seeing it as return for improved flexibility. In turn, this secures their loyalty to their managers and the organisation. Others, who perceive that they are not trusted, are actively dissuaded from flexible working or having educational experiences. They are disheartened and are considering their career direction, reporting that they are at a 'crossroads'. Line-managers as barriers to career development are frequently analysed (Bagilhole, 2014), but they are not considered in terms of enabling careers, or how they do so.

Although the research finds that long hours and travelling are not a major requirement for respondents, those at higher levels are exceptions. This somewhat confirms respondents' perceptions that hierarchy brings additional pressure and challenges to WLB.

The research identifies that stereotyped gendered assumptions are a major factor in women's opportunities for career development. Women are assumed to become mothers and, when they do, are assumed to prioritise family commitments over career. Respondents

resent these assumptions and consider they harm career development to the extent that they do not have family photographs on their desks or are nervous about getting married. These assumptions do not similarly impact men.

While it appears as though women are required to 'act like men' to succeed, observations regarding women in high-ranking positions demonstrate that in one way their 'softer' side is more relevant, in terms of not engaging in banter or not acting in a masculine way; in another, they have to look better than men, and work harder to be taken seriously.

Research proposes that women should be enabled to work alongside men, supported or mentored to find their assertive voices and otherwise conform to masculine notions of career development (Worrall, 2012). Yet, these women suggest that, when they do, they are characterised as unnecessarily aggressive or bitchy.

Chapters six to eight have documented the main findings of the research, analysing the data in line with respondents' aspirations of hierarchical progression, having educational opportunities, work-life balance and being happy at work. The analysis has concentrated on the structural factors from a range of construction organisations and a focus on one organisation to demonstrate how female QSs' agency in terms of capability acquisition is influenced by organisational, personal, social and cultural conversion factors. Equality policies, especially in NR, are wide-reaching, but there remains a strong but inconsistent subculture and regional practice that disadvantages some women. This is led by line-manager attitudes and support which filters down to male colleagues.

The following chapter draws these threads together within the framework of the CA. NR is a unique organisation in the construction industry as it is a publicly owned company that has a range of policies to enable equality, both in terms of recruitment and progression and WLB. To establish how the findings apply to female QSs across the wider construction industry, the following chapter analyses data from the 290 respondents to the questionnaire survey and compiles a master set of capabilities to apply to all female QSs, regardless of aspirations or pathway, examining the factors required to attain them.

CHAPTER NINE

The capability set of female QSs

9.1 Introduction

This chapter establishes a capability set for female QSs that enables them to pursue their current and potential future aspirations while allowing for the fact that these can change and/or conflict with one another. It demonstrates how combinations of capabilities within the capability set enable pursuit of each aspiration, while acknowledging the factors that impact their acquisition. Figure 11 (below) illustrates the link between resources, conversion factors, capabilities and outcomes. Aspirations are both a resource and an outcome within this process and Sen (1992, 1999, 2009) asserts that an individual's desired outcome is less significant than having the freedom to pursue it.

The chapter begins by demonstrating how the capability set of female QSs evolved from the hypothetical set proposed in Chapter Four. It continues by examining how the structural factors analysed in Chapter Seven, and the relevant conversion factors analysed in Chapter Eight, determine their ability to acquire each capability. The extent to which this applies within the wider construction industry is determined by analysing questionnaire survey data. Any relationships observed that predict how conversion factors impact pathways are also established.

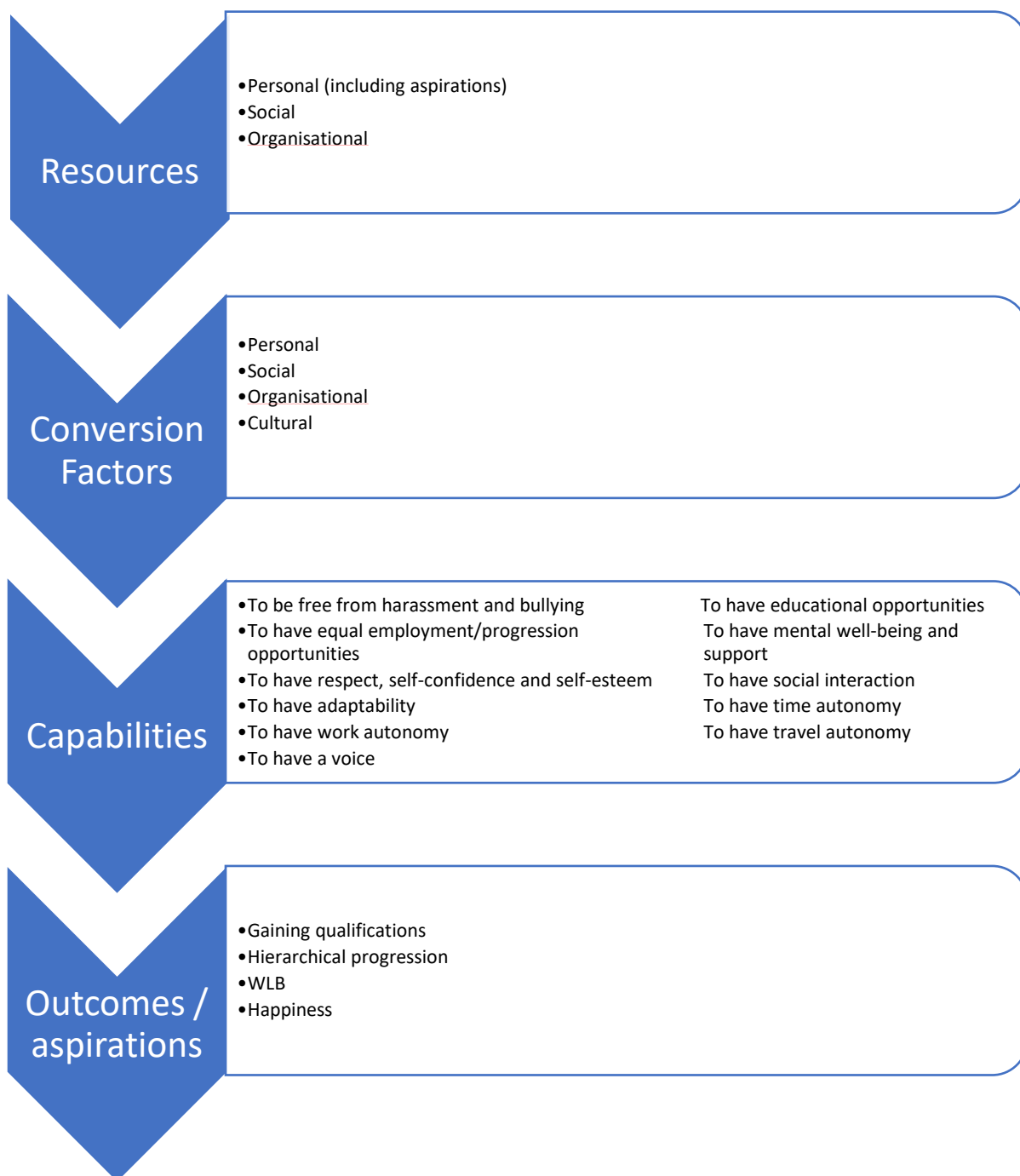


Figure 11: Diagram depicting the link between resources, conversion factors, capabilities and outcomes

9.2 The capability set of female QSs

The capability set of female QSs represents their freedom to pursue their desired outcomes (or functionings). This occurs by women first acquiring, and then combining, relevant capabilities within the set. The more capabilities they acquire enables pursuit of a greater range of outcomes. In the CA, outcomes are not evaluated as more or less important to one another because, as established in Chapter Six, goals are individual and changeable (Sen,

1992, 1999, 2009). This issue differentiates the CA from other career frameworks, such as traditional, protean or boundaryless careers, Preference Theory (Hakim, 1996) or Human Capital Theory (Becker, 1994) as these either do not allow for changing aspirations or there is a heavy focus on acquiring resources without consideration of their conversion into freedoms. Evaluating outcomes does not reflect the inequalities that have been overcome in their acquisition. For example, Bryony’s achievement in reaching Salary Band Three does not reflect her line manager’s refusal to facilitate her degree or that Penny’s aspiration for WLB is an active choice rather than a failed aspiration for hierarchical progression. In conjunction with other CA research (e.g. Walker and Unterhalter, 2007; Hart, 2008; 2012; Holborough, 2015), capabilities are also neither evaluated nor ranked.

The capabilities that comprise the hypothetical list established in Chapter Four either apply mainly to intrinsic aspirations (i.e. those which are subjective, such as desiring WLB) or mainly to extrinsic aspirations (i.e. those which are objective, such as aspiring to hierarchical progression). Several are ‘core’ capabilities, applying to all aspirations (e.g. freedom from harassment and bullying). These are analysed in section 9.3, but first Table 11 (below) presents the capability set of female Qs and the aspirations to which they are most relevant.

Capability	Aspiration
To be free from harassment and bullying	All
To be supported at work	All
To have adaptability	All
To have a voice	All
To be treated with respect	All
To have educational opportunities	Gain qualifications
To seek employment or promotion on an equal basis with others	Hierarchical progression
To have social interaction	WLB and happiness
To have time autonomy	WLB and happiness
To have autonomy	WLB and happiness
To have travel autonomy	WLB and happiness

Table 11: Capabilities and associated aspirations

This capability set enables female Qs to pursue any of the identified aspirations but has developed from the hypothetical list in section 4.4.3. This satisfies Sen’s (2009) assertion that any capability set should be context dependent and subject to public reasoning.

9.2.1 How has the capability set developed?

Table 12, below, compares the theoretical list of capabilities established in section 4.4.2 to the final capability set achieved following analysis of interview and questionnaire survey data:

Hypothetical capability	Final Capability
To be free from harassment and bullying	To be free from harassment and bullying
To have educational opportunities	To have educational opportunities
To seek employment on an equal basis with others	To seek employment / promotion on an equal basis with others
To be supported at work	To be supported at work
To have autonomy	To have autonomy
To have social interaction	To have social interaction
To have adaptability	To have adaptability
To carry out domestic work and non-market care	To have time autonomy
To have travel autonomy	To have travel autonomy
To have a voice	To have a voice
To be treated with respect	To be treated with respect

Table 12: Comparison of the hypothetical list of capabilities (from section 4.5.2) and the final capability set

The research findings demonstrate that the hypothetical list differs only slightly from the lived reality of female Qs. Only two capabilities have changed, and then only their titles. The hypothetical capability of 'to seek employment on an equal basis with others' has changed to 'to seek employment or promotion on an equal basis with others' and the hypothetical capability of 'to carry out domestic work and non-market care' does not necessarily apply to all female Qs all the time, whereas 'having time autonomy' does. Further, having control over their time enables female Qs to balance the three arenas identified in Figure Two. The process of developing the capability list in the context of the research complies with both Sen's (2009) assertion that the list should depend on the context and also with the first point of Robeyns' (2003; 2005b) methodology - that the list should be explicit, discussed and defended. It also demonstrates that the method used to compile the hypothetical list, of analysing previously published lists to select the appropriate capabilities, was judicious.

Moving from the hypothetical list to establishing the final capability set is a result of analysing the aspirations, capabilities and conversion factors of female Qs in the case-study, and in the wider construction industry, as well as obtaining input from representatives of a range of construction organisations. The hypothetical list provided the framework for data collection and analysis, one which also allowed for additional factors to be considered. It also satisfies the following:

- Objective Four: to determine how inequalities in the structure and culture of the UK construction industry impact female QSs' career development;
- Research question Four: using the framework of the CA, what is the capability set that enables female QSs to pursue their aspirations;
- Research question Five: what are the structural and cultural factors within the construction industry that influence female QSs' ability to acquire relevant capabilities;
- Research proposition Five: combinations of capabilities within female QSs' capability set enables them to pursue any stated aspiration;
- Research proposition Six: female QSs' ability to acquire the necessary capabilities is impacted by the structure and culture of the construction industry.

The chapter continues by determining how acquiring particular combinations of capabilities determines the career pathways of female QSs.

9.3 Career paths and capabilities

This section consolidates the data analysed in Chapters Seven and Eight to establish which capabilities are required by respondents to pursue their aspirations and establishes the conversion factors that have the greatest impact on their acquisition. The data are used to determine the factors that impact on the acquisition of each capability from the structural perspective (Chapter Seven) and that of case-study respondents (Chapter Eight). In addition, to establish the extent to which female QSs within construction organisations other than NR can acquire capabilities, data from the questionnaire survey are analysed. These are also used to understand whether relationships can be ascertained regarding, for example, female QSs' organisation type, hierarchical status, age or family status. This widens the analysis beyond the unique situation within NR to demonstrate the complexity of women's careers in quantity surveying across the construction industry.

The analysis remains from the perspective of female QSs, a cohort not previously analysed in research regarding women in the construction industry. Capability sets have been compiled in other research but not careers in the construction industry. However, other research has not analysed exactly how each capability is acquired, and the factors that might enable or constrain that acquisition. Common threads are identified that impact the acquisition of several capabilities; for example, the impact of women's confidence, the support of their line managers and the fact that no strong relationships between the acquisition of capabilities and respondents' organisation type, hierarchy level, family status

or qualifications are all relevant. Although some of these factors have previously been identified as enabling or constraining women's careers in the industry, the specific capabilities they impact are not usually considered.

9.3.1 To seek employment or promotion on an equal basis with others

While having equal opportunities for employment or promotion is a capability, it is also an aspiration and a definition of career success for many respondents (6.2).

Having promotion opportunities depends on the size and structure of the organisation for which a female QS works (7.3.2; 8.2.1) but having equal opportunities to progress is also impacted by the implementation of relevant organisational policies (7.3.2; 8.2). Therefore, questionnaire survey respondents were asked if, in their current organisation, they are as equally likely to be promoted as an equivalent man (Q. B11); only 50% of respondents said that they are. To determine whether those who are equally likely to be promoted is dependent on their organisation type or their level of hierarchy, Chi-squared tests for a relationship were conducted. These established that there is no evidence of a relationship between either of these factors and the responses given, with p values in excess of .05 for both.

This absence of a relationship could be that organisational policies and practices regarding recruitment ensure equality of opportunity for promotion (7.3.2), but it is more likely that all organisation types have similar exclusionary practices and culture. This is particularly likely as, while they stressed that their focus is on finding the right person for each job ('person-job fit'), the widespread practice appears to favour 'person-organisation' fit (7.3.1; 7.3.2). It cannot be established whether person-job fit, or person-organisation fit is the dominant practice. However, both models assume that all genders are equally likely to apply for a job. Yet, sections 7.3.2 and 8.3.2 demonstrate how women are not confident in applying for jobs when they do not have 100% of the relevant criteria. This supports the assertion in section 3.4.1 that agency may be unable to flourish within a particular environment and that expanding capabilities enables individuals to "choose between a range of ways of being and doing that they have reason to value that they might live a flourishing life" (Hart, 2009: 85).

The impact of personal factors on promotion is debated among both organisational and NR respondents. Francis (2017) found that individual factors, particularly those associated with personal variables, such as qualifications and experience are important to women's opportunities to advance. Therefore, questionnaire-survey respondents were asked to select three factors from a given list that they perceive as the most relevant in gaining

promotion. The choices, again, were based on case-study responses (Q. B6) and results are summarised in Figure 12:

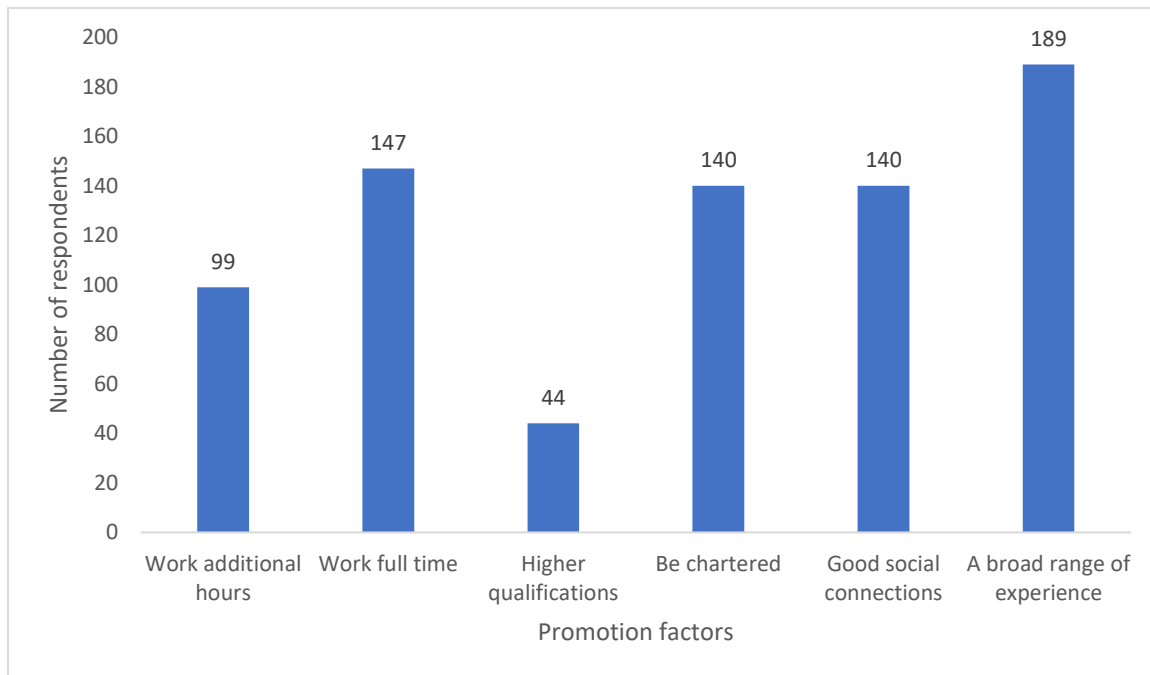


Figure 12: Factors that female QSs consider enable promotion

The above figure illustrates the responses, and the following sub-sections analyse female QSs’ ability to acquire each of these factors. It begins with qualifications and experience, which incorporate ‘a broad range of experience’ (the factor with the highest response), ‘being chartered’ (third highest) and ‘higher qualifications’ (the least selected response).

Qualifications and experience

Human Capital Theory (Becker, 1994) is commonly associated with career development (e.g. Walby, 1990; Ng et al, 2005; Francis, 2017), asserting that women accumulate less human capital than men because they will assume only supportive roles after childbirth (Acker, 1990; Glucksmann, 2005; Hochschild and Machung, 2012; Juraqulova, Byington and Kmec, 2015). However, the aspirations of female QSs established in Chapter Six demonstrate that this is not necessarily true as many women wish to retain the option to advance. Further, Human Capital Theory is not compatible with the CA, as the latter asserts that it is not enough to merely accumulate resources if individuals are unable to convert them into capabilities (Sen, 1984; 1992;1999). Nevertheless, QSs who wish to progress need to acquire personal resources in the form of qualifications and/or experience.

In the questionnaire survey, 180 respondents (65.2%) stated that having a broad range of experience is a key factor in gaining promotion. This is perhaps unsurprising as half of the respondents are already chartered (see Table 19, Appendix B). As such, it is likely that they view experience as a means of distinguishing themselves from other similarly qualified surveyors. This premise accords with Bourdieu (1977) as well as with case-study respondents who consider experience to be more important than qualifications (8.3.1), whether they are chartered or not.

Respondents of large organisations (7.3.2), including NR (8.2.2), explained the difficulty of obtaining experience across different areas of their organisations as departments are so diverse. Although 65.2% of questionnaire-survey respondents chose experience as a factor that enables promotion, they are inconsistent in this perception as lack of skills ranked only ninth as a barrier to career progression.

It is also evident that respondents are divided over whether having the ability to manage people and other 'soft skills' enables female QSs' career progression. Research asserts that 'soft skills' are a strength of women and are lacking in men (e.g. Benschop and van den Brink, 2014), but, as highlighted in Chapter Seven, representatives of some organisations reject this as a gendered issue, considering instead that it depends on whether an individual has these abilities or not (7.3.2). Nevertheless, many case-study respondents asserted that 'soft skills' are important for women's progression in NR (8.3.1). Worrall et al (2010: n.p.) conclude that women should have specific CPD to equip them with what they term "necessary 'soft skills' in communication, people management and confidence building" but strangely do not recommend similar CPD for men, even though 'soft skills' is something men are said to lack (3.4.3).

A benefit of wider experience is that it can improve women's confidence, not only in terms of the confidence gap (7.3.2; 8.3.2) but also to improve women's performance in interviews (8.3). Case-study respondents assert that this is an essential element for progression in such a male-dominated industry (8.3.2). In this, they agree with many researchers, such as Worrall (2012), Wilkinson (2012), Kumra (2014) and Francis (2017).

In terms of qualifications, being chartered is the third-highest factor that female QSs consider enables progression. Organisational respondents were divided regarding its importance, with representatives from private practices and the consultancy deeming it more important than did those from other organisations. This is because the RICS requires that at least 50% of the partners and principals of private practices be chartered (7.3.2). Although this is

not relevant for other organisation types, case-study respondents stated that being chartered is becoming increasingly relevant in terms of promotion in NR (8.3.1), and this may be true within other organisation types. Therefore, a Chi-squared test was undertaken to ascertain whether there is a relationship between a female QSs' organisation type and the selection of being chartered as a factor in promotion. A weak relationship was indicated ($p = .000$; $r = .393$), with a slightly stronger relationship indicated between those who do not work in a private practice and do not consider it a factor in promotion ($r = .508$). This may be explained by the fact that the majority of the respondents who are chartered work in a private practice.

Case-study respondents' comments that male colleagues are promoted despite not being chartered suggest that being a chartered QS is more significant for women than men. While this has been true in the past, as illustrated in Chapter Two, it is unclear whether it remains so.

Working hours

Working hours as a factor in promotion has been considered by many researchers regarding women's careers in construction (Rosa et al, 2017). Table 12 demonstrates that working full-time was perceived as the second-most common factor in promotion by female QSs, selected by 147 respondents (50.7%). Although this suggests that working part-time is not an option for most female QSs, as the majority of respondents (254, 87%) work full-time (Q. A8), its significance could not be ascertained within this sample and no meaningful tests for relationships could be undertaken. Only 36 respondents work part time (12.4%): 31 work 20-34 hours per week and five work fewer than 20 hours per week. Of these, 29 have young children and seven have no children, although one of these has other caring responsibilities. Only one case-study respondent works part time (3.7%). This demonstrates that, although there has been an increase in part-time working across all jobs (Sargeant, 2006) and it is increasingly offered by construction companies (Fernando, Amaratunga and Haigh, 2014), it remains rare in the construction industry.

Of the questionnaire-survey respondents who work full-time, 73.4% have young children, and 92.8% of case-study respondents with young children also work full-time. This demonstrates that having children does not automatically mean a female QS will work part-time. However, these figures should be treated with some caution - they cannot account for women who leave the industry upon starting a family or those for whom working part-time is not available. This is evidenced in the questionnaire survey as, in responses to Q. C4 'what

would improve your WLB?', 109 respondents (37.6%) selected 'the ability to work fewer hours' and 184 (63.4%) selected 'having more time flexibility'.

Working additional hours was selected as a factor in progression by 35.1% of respondents (Q. B6, Figure 12) and was the fourth most common response. Presenteeism is distinguished from having the ability to work flexibly or at home (analysed in section 9.3.4 as the capability of having time autonomy). Although in section 7.3.2, some organisational respondents said that presenteeism is a factor in promotion and that employees who choose to spend long hours at work make it difficult for others not to do so, the common view was that it is not a requirement or a factor in promotion. The case-study respondents (section 8.2.3) agreed that there are only a few times a month when additional hours are required and that these are known about in advance and can be planned for. They said that presenteeism is neither necessary nor particularly productive, and those who work long hours do not advance more easily because of it. Both case-study and organisational respondents observed that those who are in the office for extensive periods of time do not use that extended time to work, but as a means of social interaction (7.2.1; 8.2.3). While other research recognises that long hours are a feature of the construction industry (e.g. Bagilhole, 2014), this does not acknowledge that these hours can be used to socialise.

NR respondents said that they do not mind working some additional hours as a 'quid pro quo' for having flexible working and that they are happy to log on to their computers, answer phone calls or process emails at weekends or in the evenings. This is easier in office-based organisations such as NR, private practices, consultancies and LAs than in project-based organisations such as contractors. Nevertheless, in addition to NR, contractors and the LA are attempting to find solutions to working-hours arrangements that enable all employees to have better WLB (7.3.3). Respondents across the wider construction industry tend to agree that there is little requirement to work additional hours, demonstrated by the answers to the question: 'On average how many additional hours would you be expected to work each week?' (Q. A9), which are summarised in Table 13:

Additional hours worked per week (on average):	Number of respondents:
Fewer than 1	84
1 to fewer than 5	113
5 to fewer than 10	60
10 to fewer than 20	28
20 or more	7

Table 13: Additional hours worked by questionnaire survey respondents

Table 13 demonstrates that a majority of respondents (197, 67.9%) currently work fewer than five additional hours each week, and a high proportion (29%) work fewer than one. In answer to a subsequent question (Q. A10), 33 respondents (11.4%) inferred that they work no additional hours. Therefore, although the culture of presenteeism is often said to be a barrier to women's careers in construction (e.g. Rosa et al, 2017), it appears to be declining. This is also demonstrated by the fact that, in their previous job, fewer respondents (60%) worked fewer than five additional hours, with 62.3% doing so two jobs ago. However, there remains a significant proportion (124 respondents; 42.8%) who are obliged, or expected, to work additional hours (Q. C3).

The NR respondents demonstrated that only those in higher salary bands work many additional hours (8.2.3), but Chi-squared tests undertaken with the questionnaire survey data indicate no evidence of a relationship between working additional hours and female QSs' hierarchy ($p = .058$). There is also no relationship between presenteeism and their organisation type ($p = .730$). Some case-study respondents expressed reluctance to seek hierarchical progression because of the compromise to their WLB (6.2), but questionnaire-survey respondents consider that stress associated with promotion ranks only 11th out of 12 barriers to women's careers (mean 2.82, median and mode 3).

Networking and social contacts

Good social connections ranked joint third as a factor in promotion with 140 responses (48.4%) (Figure 12). This includes both networking to bring in business and using social contacts to gain promotion.

The extent to which QSs are required to network for business depends on the type of organisation they work for. Networking is not usually a requirement for contractor's QSs for example, or for those who work for NR. Respondents from both private practices and the consultancy said that, in their organisations, there is an expectation that employees will network to win business. The medium-practice partner asserted that, while networking is not compulsory, progression is slower for those who do not undertake it (7.3.3). Therefore, women who wish to progress their careers in a private practice should accept that networking is necessary. However, the representative from the small practice said many networking activities are male-focussed, such as golf days or other sporting events that exclude women. Even events that are more gender neutral, such as corporate dinners, are used as a means of arranging a golf day (7.3.2). Some respondents, such as the medium-practice partner, disagreed that these events are gender biased and said that as many female employees enjoyed networking as males and that it is about personal preference

rather than gender. The consultancy director agreed, saying that some people are more comfortable with networking than others (7.3.2). Female-only events are increasing, but whether these benefit women was debated (7.3.2).

Case-study interviewees (8.4) and the respondent from the small practice (7.3.2) consider that social contacts enable women's promotion, but contractors' respondents said they are less significant (7.3.2). In the questionnaire survey, the impact of social contacts was inconclusive. Whereas this was the third-highest factor that enables promotion (140 responses, 48.3%), only 60 respondents (20.7%) said they are significant in terms of enabling careers (Q. D6). Further, lack of social contacts ranked only eighth as a career barrier (Q. D8), although the response remained somewhat neutral with a mean of 3.15 (out of 5) and a median and mode of 3.

Both case-study respondents and their line managers acknowledge that 'boy's club', or 'jobs for the boys' is a significant career enabler for men in NR (8.4). Although some respondents acknowledge the existence of 'boys club', they assert that it is not an issue of gender but is because of the male-dominated nature of the construction industry. Nevertheless, examples were given where managers have promoted male colleagues who, in the respondents' opinion, were not the right person for the job (8.4).

In the wider construction industry, tests indicate only a weak relationship between respondents who consider social connections enable careers and those who also regard them as enabling promotion ($p = .000$; $r = .307$). This suggests that the extent to which female QSs agree that social contacts enable careers, and whether they are a conversion factor or not, is inconclusive, even though research asserts that informal networks play a central role in career development in terms of access to jobs and information (Dainty, Bagilhole and Neale, 2000; Ibarra and Deshpande, 2007; Francis, 2017).

In summary, seeking employment or promotion on an equal basis with others is dependent on structural or organisational factors such as the size, structure and type of organisation for whom QSs work. There is debate surrounding the extent and the type of personal resources that are relevant to progression; however, gaining chartered status is an advantage for those who work in private practices and is becoming increasingly relevant in other organisation types. Although contractor's representatives and case-study respondents consider that a range of experience is more of an advantage, the questionnaire survey found no association between organisation type and experience as a factor in promotion. Moreover, gaining a range of experience is difficult even in large organisations due to the diversity between

departments as well as women's reluctance to apply for a job where they do not have 100% of its requirements. The role of informal networks was highlighted as a factor in progression by case-study respondents as well as some organisational representatives.

Aspirations for hierarchical progression are also linked to the following capability, which itself is an aspiration for many respondents. Those on the traditional and adapted traditional pathways need to have educational opportunities to progress, especially those currently without formal qualifications.

9.3.2 To have educational opportunities

Individuals must be chartered if they wish to pursue a traditional or adapted traditional pathway. Becoming chartered involves obtaining a relevant degree and/or gaining experience and then undertaking the RICS Assessment of Professional Competence. Many QSs obtain their degree prior to entering employment but others rely on employers to facilitate education and training opportunities. As stated above, having equal qualifications does not mean that individuals have had equal opportunities to obtain them.

Large organisations are more able to provide structured programmes than smaller ones; their formal structures aid equality because to progress all genders have to undergo the same process in terms of education and experience (7.3.2). However, as case-study respondents - who all work for the same, large, organisation – report, their ability to have educational opportunities varies between regions and between line managers (8.3.1). It is reasonable to assume that this may also occur in other organisations. Line-managers are the budget holders and must approve requests for education and training (8.3.1). Some respondents have very supportive line managers but others less so. Bryony's story is an example of both (6.3.2). Research indicates that women receive less organisational sponsorship and fewer development opportunities than men (Dainty, Bagilhole and Neale, 2000; Worrall, 2012), potentially due to women's assumed role as mothers (Kanter, 1977; Ng et al, 2005). Case-study respondents assert that gender stereotypes affect their ability to receive funding for educational opportunities (8.2.2).

The qualifications of the questionnaire-survey respondents are summarised in Table 19, Appendix B. They demonstrate that the majority of respondents (245, 84.5%) have an undergraduate degree, although how many of these are in quantity surveying is not known.

Nearly half of the respondents (144, 49.7%) are chartered members of the RICS¹⁰ and 11.3% are chartered through other construction professional bodies, some of whom may be also chartered through the RICS. This high level of qualification among respondents may explain why, in response to question D6, 'which factors enable women's careers in quantity surveying', only 107 respondents (36.9%) selected 'acquiring further qualifications'.

Continuing education and job-specific training remain requirements for both unqualified and qualified individuals who work as a QS. For chartered QSs this is in the form of formal CPD, but unqualified case-study respondents also undertake in-house education and training, subject to line managers' approval. This is partly due to the fact that even degree education does not always provide the competencies required for individual jobs (8.3.1). The education and training that occurs in both NR and in, for example, the smaller private practices focuses on employers' needs rather than the individual (Clarke, 2006).

The RICS has a minimum requirement of 20 hours of CPD per year and this amount is undertaken by 74.8% of questionnaire-survey respondents. Of these, most respondents' employers (92.1%) pay for at least a proportion. There is no relationship between respondents' organisation type and having their CPD paid for ($p = .035$; $r = .035$).

Gaining experience aids individuals to be adaptable, which in turn can lead to career progression. The education provided by universities and industry employers should enable adaptability and this is analysed in the following section.

9.3.3 To have adaptability

Having adaptability only featured on Holborough's (2015) list of capabilities, but it is important for female QSs whose aspirations are subject to change. As the CA is founded on the premise that individuals should have the freedom to do and be what they want to do and be (Sen, 2005), having adaptability enables female QSs to change career pathways in line with their aspirations and their circumstances. This is a significant reason why the CA is an appropriate framework with which to analyse the career pathways of female QSs.

To establish the extent to which female QSs are adaptable, respondents to the questionnaire survey were asked to select which of the fourteen competencies classified by the RICS they

¹⁰ Although one of the two data sources was the membership database of the RICS (the other being LinkedIn).

have undertaken in their three most recent jobs (Q. A3). An option of 'other' was also given. Not only does this enable changes in competencies to be ascertained, it also aids understanding regarding whether competencies are linked to organisations and for tests for relationships to be undertaken between competencies and organisation type. Results are summarised in Table 14:

Competency	Current job (%)	Previous job	Two jobs ago
Building information modelling management (BIM)	31 (10.8)	22 (9.3)	8 (4.3)
Capital allowances	23 (8.0)	22 (9.3)	16 (8.6)
Commercial management of construction	177 (61.4)	140 (59.1)	98 (52.4)
Conflict avoidance, management and dispute resolution procedures	119 (41.30)	96 (40.5)	58 (31.0)
Construction technology and environmental services	106 (36.8)	80 (33.8)	53 (28.3)
Contract administration	217 (75.3)	164 (69.2)	121 (64.7)
Design economics and cost planning	164 (56.9)	109 (46.0)	85 (45.9)
Insurance	72 (25.0)	45 (19.0)	35 (18.7)
Procurement and tendering	241 (83.7)	172 (72.6)	129 (68.7)
Programming and planning	87 (30.2)	60 (25.3)	42 (22.5)
Project evaluation	99 (34.4)	76 (32.1)	49 (26.2)
Project financial control and reporting	239 (83.0)	174 (73.4)	127 (67.9)
Quantification and costing of construction works	225 (78.1)	167 (70.9)	132 (70.2)
Risk management	155 (53.8)	113 (47.7)	74 (39.8)

Table 14: Competencies undertaken by female QSs in their latest three jobs

Table 14 demonstrates that, as female QSs change jobs, there is little change in the proportions that undertake each competency. Further, 'traditional' competencies, such as contract administration, procurement and tendering, project financial control and reporting, and quantification and costing of construction works remain the most common functions undertaken by QSs. Far from declining, as some feared, they are increasing in use as QSs find new markets for their skills (Ashworth, Hogg and Higgs, 2013). This allows female QSs far more opportunities to develop their careers.

However, a more useful analysis is to ascertain the difference in competencies between organisation types and this is summarised in Table 15:

Competency	All contractor			All private practice			All other		
	Curr. (112)	Prev. (112)	Two (93)	Curr. (138)	Prev. (95)	Two (72)	Curr. (38)	Prev. (30)	Two (22)
BIM	17 (15.2)	11 (9.8)	4 (4.4)	11 (8.0)	8 (8.4)	2 (2.8)	3 (7.9)	3 (10.0)	2 (9.1)
Capital allowances	9 (8.0)	4 (3.8)	13 (14.3)	9 (6.5)	13 (13.7)	11 (15.3)	5 (13.2)	5 (16.7)	2 (9.1)
Commercial management	71 (63.4)	79 (70.5)	61 (67.0)	90 (65.2)	42 (44.2)	23 (31.9)	16 (42.1)	19 (63.3)	13 (59.1)
Dispute resolution	51 (45.5)	50 (44.6)	38 (41.8)	51 (37.0)	29 (30.5)	13 (18.1)	17 (44.7)	17 (56.7)	7 (31.9)
Construction technology	57 (50.8)	28 (25.0)	24 (26.4)	36 (26.1)	39 (41.1)	23 (31.9)	13 (34.2)	13 (43.3)	6 (27.3)
Contract administration	108 (96.4)	73 (65.2)	56 (61.5)	81 (58.7)	64 (67.4)	43 (59.7)	28 (73.7)	27 (90.0)	21 (95.5)
Design economics	106 (94.6)	26 (23.2)	25 (27.5)	38 (27.5)	65 (68.4)	49 (68.1)	20 (52.6)	18 (60.0)	11 (50.0)
Insurance	31 (27.7)	20 (17.9)	18 (19.8)	30 (21.7)	18 (18.9)	13 (18.1)	11 (28.9)	7 (23.3)	4 (18.2)
Procurement and tendering	112 (100)	73 (65.2)	54 (59.3)	87 (63.0)	73 (76.8)	55 (76.4)	29 (76.3)	26 (86.7)	20 (90.9)
Programming and planning	40 (35.7)	23 (20.5)	19 (20.8)	30 (21.7)	22 (23.2)	13 (18.1)	17 (44.7)	15 (50.0)	10 (45.5)
Project evaluation	44 (39.3)	28 (25.0)	21 (23.1)	38 (27.5)	29 (30.5)	19 (26.4)	17 (44.8)	19 (63.3)	9 (40.9)
Project Financial control	112 (100)	75 (67.0)	57 (62.6)	91 (65.9)	74 (77.9)	51 (70.8)	31 (81.6)	24 (80.0)	19 (86.4)
Quantification and costing	112 (100)	74 (66.1)	59 (64.8)	90 (65.2)	70 (73.7)	55 (76.4)	23 (60.5)	22 (73.3)	16 (72.3)
Risk	76 (67.9)	50 (44.6)	37 (40.7)	60 (43.5)	42 (44.2)	24 (33.3)	19 (50.0)	21 (70.0)	13 (59.0)

Table 15: Distribution of job functions in respondents' three most recent jobs (percentages given in brackets)

Analysis of the trends suggests that contractor's Qs are increasing the range of competencies they deliver – particularly in terms of contract administration, design economics, procurement, project financial control, quantification and costing and risk, which are not traditional contractor functions. The most likely reason for this is changes to procurement methods and contracts that give contractors more of an administrative / management role than the internal accounting role they are traditionally associated with. The decline of those in private practice undertaking design economics is also notable and is again a likely indicator that procurement methods have changed and that more are undertaken by contractors.

Chi-squared tests conducted to establish whether there is a relationship between the type of organisation respondents work(ed) for and the competencies undertaken show either no

evidence of a relationship or, in a few instances, very weak evidence of a relationship in all three of the respondents' most recent jobs. Absence of a strong relationship occurred even where one might have been expected. For example, there is no evidence of a relationship between those who work in a private practice and the competency of quantification and costing, and only weak evidence of a relationship between those who work for a contractor and the competency of commercial management of construction. An explanation for this may be the likelihood that, in practical terms, competencies vary between organisation types. That is, while both private practices and contractors undertake commercial management of construction, for example, the performance of it is likely to be slightly different between those organisations. QSs should be able to undertake all competencies enabling them to move between organisation types, but few respondents have changed organisation types when they have changed jobs. Therefore, although female QSs have the ability to be adaptable, moving between organisation types is not common.

9.3.4 To have time autonomy

The first three capabilities analysed in this section have been related mainly to hierarchical progression and are also mainly, but not exclusively, relevant to those on the traditional and adapted traditional pathways. The following three capabilities are more relevant to aspirations associated with WLB and the transferred pathway.

The questionnaire survey demonstrated respondents' general agreement that having children is a barrier to female QSs' careers. It was the second highest response to Q. D8 'barriers to female QSs' careers', a mean of 3.68, and a median and mode of 4. Added to which 'a desire for flexible working' ranked third highest as a barrier with a mean of 3.63 and a median and mode of 4. Although this adds to the assumption that women with children want to work flexibly and at home, only a weak relationship is indicated between those with a dependent child and those who have the desire to work flexibly working ($p = .012$, $r = .225$).

Question A11 asked respondents 'how often are you able to work from home?'. The results, are summarised in Table 16:

I am able to work at home:	Number of respondents	Percentage¹¹
Occasionally (i.e. If there is an emergency)	116	40.0%
If I have a major piece of work to undertake and need a quiet space	38	13.1%
Regularly (e.g. one or two fixed days per week)	36	12.4%
As I choose with permission from a line manager	71	24.5%
I am able to work from home but choose not to	23	7.9%
I am not able to work at home	34	11.7%

Table 16: Ability of questionnaire survey respondents to work at home

Table 16 demonstrates that most respondents (88.23%) have some ability to work from home. This improvement on their previous two jobs (64.23% in their previous job and 46% two jobs ago) suggests that working from home is becoming more widespread. However, these results conflict with the 66% of respondents, who stated that more time flexibility would improve their WLB (Q. C4), as well as responses to the above question regarding barriers to female QSS' career development (Q. D8).

NR and other large organisations have clear policies which state that requests for flexible working hours and working at home should be considered, but representatives said that ability to do so depends on individuals' roles (7.3.3). Contractors' respondents said that, for project-based organisations like theirs, it is more difficult to implement. However, a test undertaken on questionnaire survey data indicates no relationship between organisation type and the ability to work at home. Nevertheless, some added comments agree with organisational representatives that small organisations are less likely to allow flexible working. For example, one respondent commented: "traditional, smaller QS firms have definitely been stuck in the dark ages and I would not have been able to have flexibility to work around family life and progress, which is why I chose a larger firm". This respondent works for a large private practice, suggesting that it is the size of the practice that is significant and that larger practices enable flexibility.

Some respondents commented that having a good relationship with clients is key in issues of flexibility. They said that when clients are aware of women's obligations regarding

¹¹ Some respondents chose two options so results do not add up to 100%

childcare and that they work part time, requests for convenient meeting times are accommodated. For example, one respondent said:

My experience is, if you work with clients over a longer period, they accept your part-time hours. If you do a good job they understand if you can't make a meeting until 10, or if a meeting runs over you need to leave to collect your children. However, I have nearly 30 years' experience and, for younger, less experienced colleagues, getting project teams to work round you is tricky.

The medium-practice partner demonstrated that lack of trust is one reason why they do not offer flexible working, but a further reason was because it is: "a perk of seniority" (7.3.3). This was somewhat confirmed by the consultancy, which only offers flexible working to directors and associate directors. Other organisations, including NR, insist that trust is not about seniority. The housing director said her organisation allows flexible and home working for all employees, regardless of their position, because: "if we trust them, we want to keep them". NR respondents also have the ability to work flexibly, regardless of hierarchy (8.3.3). Further, tests carried out on questionnaire survey data indicate no evidence of a relationship between having the ability to work at home and respondents' level of hierarchy.

Some organisational (7.3.3) and some case-study respondents (8.2.3) said that working flexibly and at home is not a gendered issue and that as many men do it as women. NR respondents stressed that, when male colleagues work at home, women feel more able to do so (8.3.3). This is also facilitated through technology, which enables communication between team members, and clear visibility as to when they are out of office and where they are. Respondents state that facilities such as video meetings and conferencing could be improved (8.2), but technology as a means of improving WLB (Q. C4) was selected by only 32% of questionnaire survey respondents and only ten selected more technology as a factor that enables the careers of female Qs (Q. B6). This may be due to a lack of awareness regarding its potential.

Case-study respondents assert that their ability to work flexibly and at home is mainly impacted by their line managers. Some respondents (e.g. Bryony) have understanding and trusting line managers, others (e.g. Olivia) do not.

To ascertain the impact of working at home on a range of factors, questionnaire survey respondents were asked to indicate the level of impact of each factor (Q. A12). Results are summarised in Table 17:

Impact of working at home (where 1 is high adverse effect and 5 is a high positive effect) on:	Mean	Median	Mode
Respondents' work-life balance	4.27	4	5
Respondents' own efficiency	3.89	4	5
Respondents' career progression	2.87	3	3
Colleagues' efficiency	2.88	3	3
Colleagues' attitude	2.62	3	3

Table 17: Impact of working at home

Table 17 confirms the experience of Olivia, Penny and Rosie that the biggest adverse effect of working at home is colleagues' attitudes, although with a mean of 2.62 and median and mode of 3 the impact is not significant. Respondents also perceive that working at home has little impact on colleagues' efficiency or the respondents' own career progression. However, respondents do perceive working at home as having a high positive effect on their own efficiency and, particularly, their WLB, confirming the views of the case-study participants.

The results in Table 17 disagree with the practice partner's statement that having staff members working at home adversely impacts his own efficiency (7.3.3), although Kathy indicated that when her boss does so, she is left with little direction in her work.

Questionnaire-survey respondents are somewhat neutral regarding the impact of working at home on their own career progression (mean = 2.87; median and mode = 3), despite that a majority (63%) indicated that women's desire for flexible working is a barrier to their career development (Q. D8).

9.3.5 To have work autonomy

Work autonomy is defined as "the extent to which individual workers can self-govern how and when they perform the various tasks that make up their job" (Slemp et al, 2018). Further, having time and work autonomy leads to greater job satisfaction and less stress (Kunda, Barley and Evans, 2002) (3.3.4). Giving employees control over their work enables them to work flexibly, taking time off in the day when necessary knowing that they can make up time in the evening and at weekends, which, according to case-study respondents, gives them better WLB. They added that they are prepared to work additional, or unsocial hours, to have flexibility and they are given autonomy over their work so that they can decide the best allocation of their time.

Questionnaire survey respondents were therefore asked to state the amount of control they have over their workload (Q. B2). Results are summarised in Figure 13:

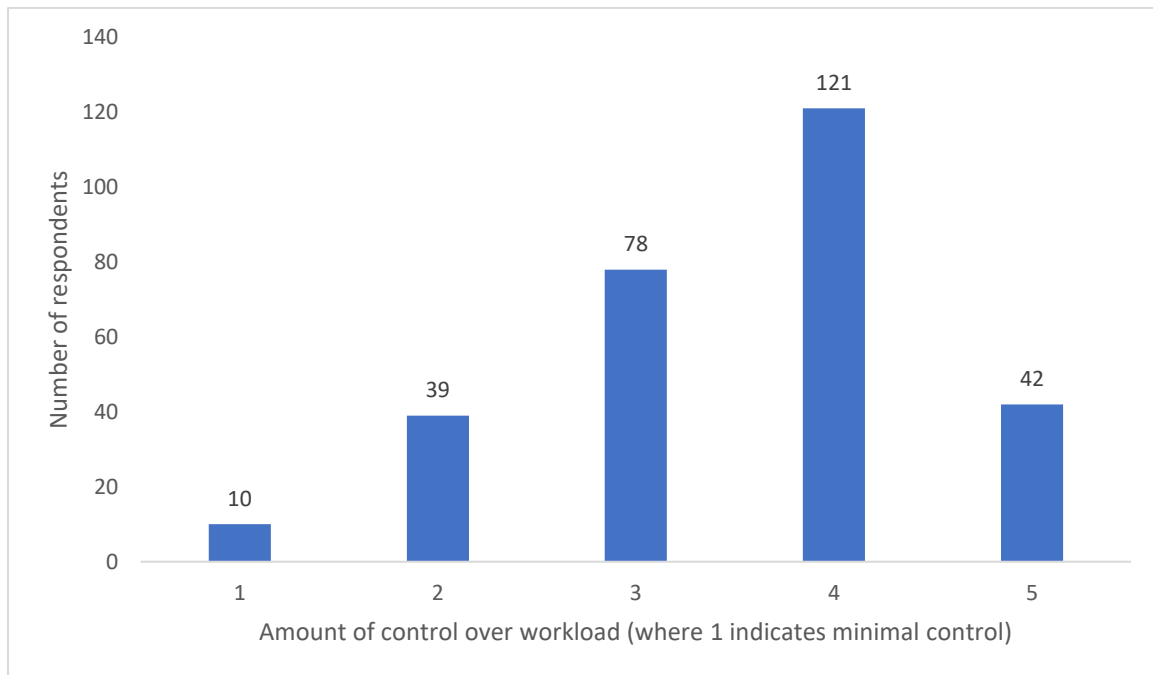


Figure 13: Respondents' control over workload

Figure 13 demonstrates a tendency towards respondents having control over their workload; a mean of 3.5, and median and mode of 4 confirms this. Although some case-study respondents consider that control over workload comes with seniority, analysis of the interview data reveals that this only dictates the type of control respondents have (8.3.3). A Kruskal-Wallis test on the questionnaire survey data demonstrates that, in the wider construction industry, while higher-ranked respondents have more control over their work than lower-ranked, the relationship is weak ($r = .284$). Therefore, this only somewhat confirms the suggestion that autonomy comes with experience rather than hierarchy (8.2). Further, many organisational and case-study respondents disagree (7.3.3; 8.3.3), with case-study respondents largely asserting that once they are given their workload, they are then left to manage it.

Respondents were also asked how satisfied they are with the amount of control they have over their workload (Q. B3). As Figure 14 demonstrates, most respondents (185, 64%) are satisfied with this amount of control and a further 47 (16.2%) are neutral. A mean of 3.67 and a median and mode of 4 confirms the tendency towards agreement, although a relatively high 58 respondents (20.0%) are not satisfied.

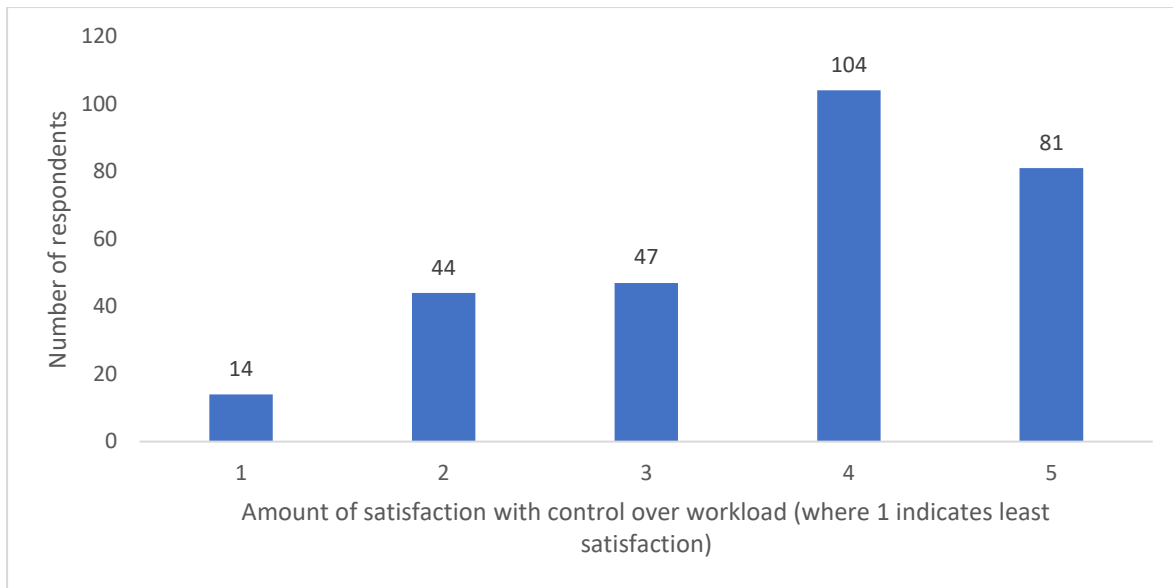


Figure 14: Respondents' satisfaction with control over their workload

Subsequent tests reveal only a weak relationship between those who have less control over their workload and their dissatisfaction with that amount of control ($p = .000$; $r = .469$).

9.3.6 To have travel autonomy

In addition to the culture of working long hours, as described in the previous sections, there is also the assumption that working in construction involves a great deal of travel, often requiring employees to be away from home overnight. This has long been cited as a barrier to women's careers in the industry (Watts, 2009; Navarro-Astor, Román-Onsalo and Infante-Perea, 2017). In the questionnaire survey, 'unwillingness to travel' was the highest-ranked barrier to women's careers in quantity surveying (Q. D8) by respondents, with 180 respondents (62.1%) tending towards agreement (mean = 3.69; median and mode = 4). However, 'less travelling for work' was the lowest ranked response to question C4 'which factors would make the biggest positive difference to your WLB?' with only 40 responses (13.8%), although 'less travelling to and from work' was selected as the second biggest factor with 122 responses (42%).

Further, when asked (Q. A14) 'how far do you travel to get from home to your main place of work?', most respondents (210, 72.4%) travel less than an hour each way, and in answer to 'do you ever have to stay away from home for work purposes?' (Q. A15), 243 respondents (84%) are rarely or never away from home overnight. Only 17 respondents (5.9%) said they stay away from home for more than five days per month. There are no relationships

indicated between the organisation types that respondents work for, their level of hierarchy, family status or other demographic factor regarding their requirement to travel for work.

These results agree with organisational representatives, who assert that their employees undertake very little travelling for work and even less that requires an overnight stay (7.3.3). Even NR respondents say that travelling for work is rarely required (8.2) and has minimal impact as it is known about in advance.

The remaining capabilities analysed are 'core' capabilities that are required to pursue all aspirations and all pathways.

9.3.7 To be free from harassment and bullying

Section 3.5 cites research stating that women are more likely to experience bullying and sexual harassment, actual bodily contact, threats and social exclusion than most men in construction (Dainty, Bagilhole and Neale, 2000; Fielden et al, 2000; Greed, 2006; Navarro-Astor, Román-Onsalo, and Infante-Perea, 2017; Francis, 2017). It also says that women are expected to adapt to and tolerate 'locker room' type behaviour (Navarro-Astor, Román-Onsalo, Infante-Perea, 2017). However, in the questionnaire survey, harassment ranked last as a barrier to women's careers in quantity surveying (Q. D8). A mean of 2.36 and a median and mode of 3 demonstrate that most respondents either tend towards disagreement, or are neutral, about harassment as a barrier. This agrees both with respondents to the case-study (8.5.1) and the organisational representatives (7.3.4). There were, however, some negative comments in the questionnaire. One respondent said: "There can often be a show of very macho and sometimes aggressive behaviour from other consultancies and construction companies alike ... I sometimes find this very difficult to cope with". Another respondent described more serious harassment: "I have experienced a variety of harassment throughout my career – I have had my bottom slapped and been called a 'split arse'. I think you have to be quite robust to deal with the treatment women receive in this industry and if you bring up the more subtle treatment, you are labelled a 'drama queen'".

Notwithstanding harassment and given that the case-study respondents gave examples of banter and other discriminatory behaviour, questionnaire-survey respondents were asked whether they are treated at least the same as equivalent male colleagues (Q. B10), with only 203 respondents (70.2%) stating that they are. A high 19.4%, or 56 respondents, say they are not treated the same and 30 respondents (10.4%) do not know. These findings, added to those from the case-study interviews (8.5.1), suggest that, while direct harassment

and bullying are not a major factor in female QSs' career development, there remains a culture of what Bryony calls: "subconscious and subliminal discrimination".

That organisations have policies regarding harassment and bullying does not necessarily enable women to report any such incidences (7.3.4). This is especially true in small organisations where women maintain that it is difficult to remain anonymous and that escalating occurrences can highlight to management that they are weak and unable to deal with issues themselves (7.3.4).

There are suggestions, both in literature (Agapiou, 2002) and from case-study respondents (8.5.1), that harassment is a bigger issue for women who work on site. Yet, a Kruskal-Wallis test conducted on questionnaire-survey data found no relationship between respondents who work for a contractor and those who gave harassment as a barrier to career development. In contrast to case-study respondents, those who answered the questionnaire survey do not regard it is an issue that disappears as an individual progresses upwards, as no relationship is indicated between hierarchical position and the selection of harassment as a barrier. A weak relationship indicated between respondents' age and their selection of harassment as a barrier ($p = .001$; $r = .286$), suggests that younger respondents are more likely to perceive it is. This indicates agreement with case-study respondents that, as women get older and gain more experience within the industry, they are more able to manage potential situations of harassment and bullying (8.5.1), and also echoes Fielden and Hunt (2014).

Testing also ascertained a weak relationship ($p = .017$; $r = .204$) between being treated equally and respondents' organisation type. Respondents working in a private practice are more likely to be treated at least the same as equivalent males than those who work in other organisations. This is compounded by one respondent who works for a contractor who wrote: "I have experienced a generation who consider that women should not be on their site ... on any construction site. As a woman you need to be a strong character who can voice their opinion and stand their ground".

Worrall (2012), amongst others, proposes that the quickest way of addressing the culture of subliminal discrimination in the construction industry is for women to be empowered to fit into it, rather than trying to change the culture. However, there is no evidence of any organisation offering this as CPD or training. Organisational and case-study respondents propose that a better approach is to educate men in the industry to work alongside women. This includes banning pornographic, or otherwise demeaning, images and educating men

about behaviours that intimidate women or treat them differently in other ways (8.5.1). Otherwise the suggestions are to increase the volume of women in the industry. The respondent from the small practice said that she is the first professional woman in her organisation and that her male colleagues do not know how to treat her. This is less apparent in larger organisations where women are more established and accepted and where male colleagues are more respectful. Greed (2006: 71) questions whether the push to increase the volume of women in the construction industry will change behaviour towards women but, even though some respondents acknowledge that women are respected for the work they do, they still experience a culture of subliminal discrimination that would be improved by greater female presence. Although Kronsell (2005) found that the introduction of only a few women made a difference to men's behaviour, this does not appear to be the case in construction, confirming the findings of Sang, Dainty and Ison (2014). How the introduction of a significant enough number of women to effect change is to be achieved remains debated, with respondents agreeing that positive discrimination or positive action is not the answer (7.3.2, 8.5.1).

9.3.8 To be treated with respect

Being treated with respect is both a capability and also an aspiration for many respondents. It includes being treated equally and being paid the same as equivalent male colleagues, leading to increased self-confidence and self-esteem (Walker, 2007).

In response to the direct question of 'are you respected at work?', case-study respondents said they are. However, some additional comments imply otherwise. For example, Diana said: "my current boss is good, but they haven't always been", Georgina was mistaken for catering staff and Helen said: "there is a culture of assuming females know nothing".

Although, she added that this is not just about being female, but also about being Asian.

She said:

I listen to them when they talk about collaboration, and I have been to talks where they have spoken about collaboration and diversity but there are only three women in the room. I was one and I was the only Asian person in the room. There were three women and three Asians but one in each of those groups was me.

Jackie considers that being respected is an essential component of career success. That this, more than being liked is essential if an individual wants to gain hierarchical status.

Tessa perceives that respect comes with confidence, saying:

I think I was a lot less respected before I started to get some confidence and started telling them what I thought. As soon as I started being more vocal about things then I found out I got a lot more respect from people. Because, I guess, the more confident you look, the more it makes you look like you know what you're talking about.

It is suggested that confidence is built when women work alongside men, that this improves assertiveness and teaches women how to deal with “difficult personality types” (Worrall, 2012: 18). Not only does this continue to make women responsible for men’s behaviour, but it could have the opposite effect, diminishing confidence and thus reducing assertiveness. The representatives from the national contractor questioned why men are not educated to improve their abilities to work alongside women. This was supported by the respondent from the small practice, who suggested that men need time to “kind of get used to the idea” of working alongside women. However, the director of the national contractor disagrees, saying that it is more than a matter of time and that more direct action is required (7.3.4).

In terms of equal pay, organisational respondents all said that equal roles are paid equally, but the medium-practice partner demonstrated how this is not always the case (7.3.4). In the questionnaire survey, only 83 respondents (28.7%) know that they are paid the same as equivalent males (Q. B8) with 97 respondents (33.6%) who know they receive the same level of bonus (Q. B9). Pay satisfaction (Q. B1) was gauged on a scale of 1 to 5 (where 1 is very dissatisfied and 5 is very satisfied). Results are given in Figure 15:

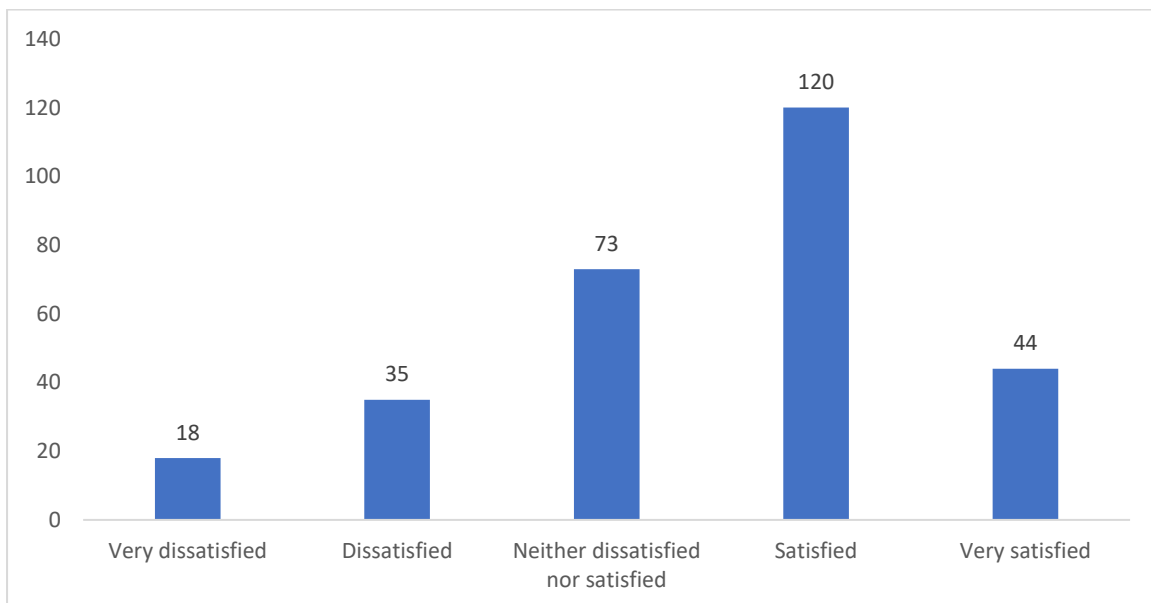


Figure 15: Pay satisfaction

Results demonstrate that respondents tend towards being satisfied with their level of pay (mean = 3.47, median and mode = 4), although a significant group are dissatisfied (53 respondents, 18.3%). There is no relationship indicated between respondents’ organisation type and satisfaction with their pay, but a relationship is indicated between hierarchy and satisfaction with pay ($p = .003$). Subsequent Mann-Whitney tests demonstrate that higher-

ranked respondents are less satisfied. There is no evidence of a relationship between those who do not know whether they are paid equally and their level of satisfaction with their pay ($p = .753$).

Case-study respondents are generally satisfied with their level of pay, but a minority do not know whether they are paid the same as equivalently ranked colleagues of either gender. They explained that, although NR operates a transparent pay scheme, knowing a colleague's salary band does not mean they know their exact pay, because it is influenced by factors such as the length of time they have worked for NR and how long they have been in role. Isobel (Band Two) gave an example where a male colleague is paid the same as her, but argues that this, too, is unfair. She said:

I have a newly appointed male counterpart who is on exactly the same pay as me, even though I have been there for 10 years. He was asking me all sorts of questions and looking to me for leadership and mentorship, and I'm thinking 'we are on the same pay, maybe I don't want to answer these questions. It is up to you to find your own way through. You got the job, crack on'.

In saying this, Isobel highlights NR's inconsistency in pay between genders, despite their Fair Payment Policy and the explanations regarding why actual pay may differ within salary bands.

Beth has an alternative explanation regarding why pay is unequal. In stating her awareness that she is paid less than an equivalent male, she explained: "I don't think this is due to the fact that I am female and them male. I think it is because of the way businesses were assimilated into NR when it took over 12 years ago". She added: "there are both males and females who are paid more, but most are male". Both Beth and Diana said the Fair Payment Policy was introduced "under duress", after pressure from the unions and, whilst it has not unilaterally equalised pay, prior to the introduction of the policy, many women were paid significantly less than their male counterparts.

Nevertheless, pay inequality frustrates some respondents. Georgina finds it unfair that, although she is the highest qualified out of all of her counterparts, she is paid the least and has fewer travel perks. Some people hierarchically below her are paid more due to the increments within salary bands, such that a Band Three (a) could earn more than a Two (c), although Band Two is higher. She does not know why this is the case and considers that gender is relevant.

Respondents who have worked for other construction organisations state that NR is a good employer in terms of pay equality. Xanthe and Nadia believe that they are paid the same as equivalent males at NR but say that this was not the case when they worked in other parts of the industry. Nadia said: “when I was at [private practice], although I had the PQS experience, they took on a guy who only had contractors’ QS experience and I know for sure he was getting paid more than me even though he came in with less PQS experience”. When asked if she thought the only reason for this was because he was a man, she said: “that would be my assumption, yeah”.

9.3.9 To have a voice

The capability of ‘having a voice’ was defined by Walker (2007: 184) as being able to speak out and not be silenced through: “power relations or harassment”. Organisational respondents, particularly the business psychologist, said that women can struggle to make their assertive voices heard within the construction industry, often due to the aggressive behaviour of men (Rosa et al, 2017). Case-study respondents said they have a voice, but some said, even when they do speak out, they are not always listened to (8.5.3). The assumption that those in higher positions are more likely to have a voice was denied by Band One case-study respondent Laura, who said others in her position did not “have a big gob” (8.5). Figure 16 demonstrates that most questionnaire-survey respondents’ (187, 65.4%) line-managers seek their opinions (or those of other females) at least as often as equivalent males (Q. B12).

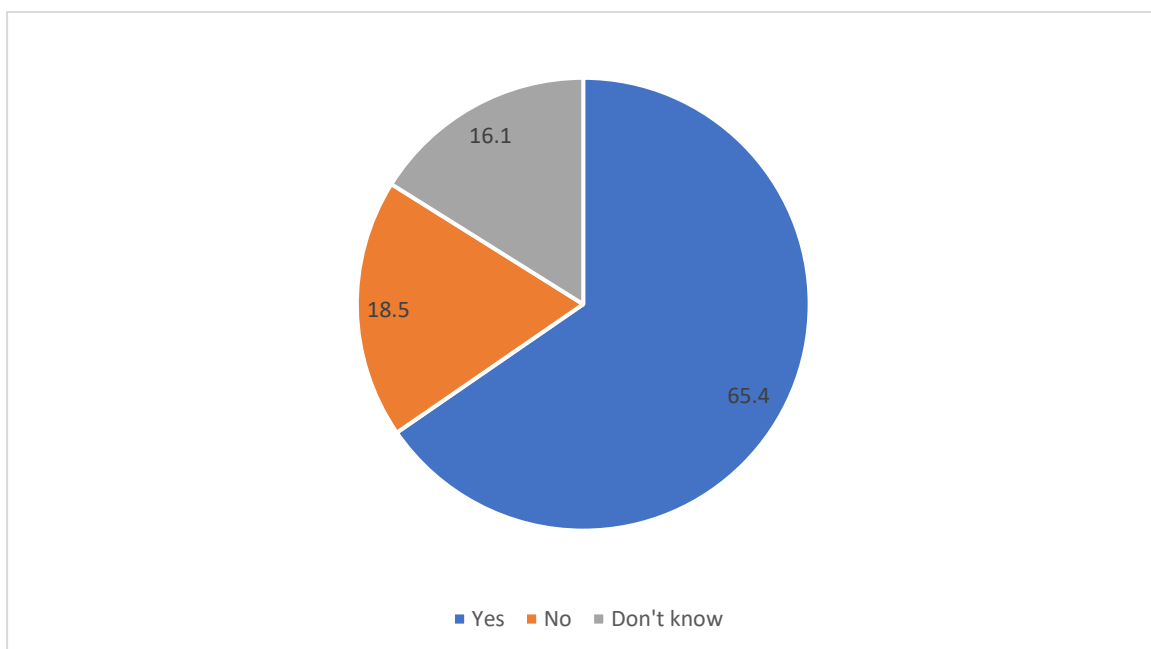


Figure 16: Do managers seek the opinions of females at least as often as equivalent males?

Nevertheless, there remains a significant group of 53 respondents (18.5%) who said they do not have a voice and a further 46 (16.1%) who do not know. Chi-squared tests indicate no evidence of a relationship between these responses and respondents' organisation types, age or hierarchy, supporting Laura's assertion that hierarchy is irrelevant.

9.3.10 To have social interaction

Having social interaction featured in all analysed capability lists (4.5.2) and many case-study respondents prefer to go into the office, even though they have the ability to work flexibly, because it gives them social interaction and they are able to be themselves (8.3.3).

However, some regional offices have more social interaction than others. Caroline, for example, said there is little social interaction for her team outside of work. She attributes this to the age difference between colleagues, adding: "we still laugh, and talk and everything; we get on, but we don't really go out. I prefer to keep a little distance". Some respondents who work in open plan offices have too much distraction. Vanessa said that although it: "makes it easier to come to work, you sometimes think 'stop talking, I need to get on with my work'. They can get a bit carried away with the whole being sociable thing sometimes".

9.3.11 To be supported at work

Support at work is achieved through mentoring and line managers. There are examples throughout this chapter and Chapter Eight that demonstrate how line-manager support influences career pathways. In the questionnaire survey, 118 respondents (40.7%) selected mentoring as a career-enabling factor (Q. D6), but Francis (2017) found that, although it improved women's career experiences in construction, it had little effect on their advancement. That formal mentoring is only offered to employees in the large respondent organisations (7.3.4), may be an explanation for the low response to this question but a Chi-squared test reveals no evidence of a relationship between those who work for large organisations and those who selected this as an enabling factor. In smaller organisations, while no formal mentoring is offered, unofficial mentoring is undertaken (7.3.4), mainly to aid employees' education and training; especially for their Assessment of Professional Competence.

However, as a career-enabling factor, having sympathetic managers gained the highest number of responses in the questionnaire survey, with 204 responses (70.3%). This agrees with the findings from Chapter Eight that highlighted the influence of line managers on case-study respondents' career development. Further, the attitudes of management ranked fifth

(out of 12) as a career barrier (Q. D8) in the questionnaire survey with 175 responses (mean = 3.56, median and mode = 4); unsupportive management was the reason 40 respondents (13.8%) changed into their most recent job (Q. A15), demonstrating how managers can both positively and negatively influence female QSs' career development. This research, therefore, disagrees with Francis (2017). Although support and mentoring may not directly enable career advancement, it does impact women's confidence and can provide more practical help in terms of, for example, interview techniques that can improve their career progression.

9.4 Conclusion

This study is based on the thesis that female QSs' aspirations determine their career development. Further, female QSs can change career pathways and their initial trajectories do not necessarily contribute to the pathways they choose. This does not mean that they are not successful. This complies with Sen's (1999) assertion that what people value should be the determining factor of their development. Nevertheless, aspiring to a goal does not mean that it can be achieved, and the purpose of this chapter was to demonstrate how female QSs' career development opportunities are impacted by the extent to which they can acquire relevant capabilities. The more capabilities they acquire, the more career options they have.

The capability set of female QSs established in this research resulted from a process that began with a hypothetical list of capabilities compiled from existing research (4.4.2). This was then used as the basis of the questioning framework at each level of data collection. The purpose of using the framework of the CA was to enable identification of specific factors that impact female QSs' careers. This satisfies Sen's (2009) requirement that any capability set should be context dependent and subject to public reasoning. Further, the research demonstrates that established career theories are unsatisfactory as a framework with which to analyse female QSs' careers. Traditional career theories focus on structural elements, such as the structure of organisations and their policies, practices and culture. Whereas alternative frameworks (e.g. protean, boundaryless or customised careers as well as career anchors) promote agency as the most important factor. Sen's approach strikes a balance between purely structural or purely agentic theories using situated agency and constrained choice (Graham, 2011) to examine women's careers in construction. The approach is not perfect, of course, in conceptualising women's careers in quantity surveying. The overlap between capabilities, functionings and conversion factors makes it difficult to operationalise in agreement with Gasper (2007). Context is vital, both in terms of the capability set as a

whole but also individual components. For example, the context of working hours as a personal and also a cultural factor. Or that qualifications feature in most elements of the framework.

Nevertheless, in establishing the impact of conversion factors on how women acquire capabilities, the research confirms some previously identified barriers - for example, that women experience stereotypical-gendered assumptions about their career aspirations or wishes – such as being unwilling to work long hours or full time - many of which are governed by their assumed role as mothers. Many women continue to find it difficult to gain hierarchical progression, although reasons for this are debated. Some female QsSs assert that having appropriate qualifications is key, others regard experience as more important. However, the research has established that, while women debate the importance of resources, men with neither experience nor qualifications continue to be promoted ahead of them. Many respondents assert that this is because men are able to make social connections that enable their career progression.

Other barriers, however, are not founded. Women do not experience direct harassment (although they are subject to 'banter' and 'comments'), they rarely have to work away from home, and flexibility is becoming increasingly available to them.

The chapter adds to the structure and agency debate finding that women's agency in pursuing their aspirations is constrained by the size, structure and policies of an organisation. Further, the agency of individuals within organisations can vary. Acquiring capabilities requires resources, such as qualifications and experience but also includes confidence. Female QsSs' freedom to acquire these resources and convert them into capabilities depends, from an organisational perspective, on their size and structure and on the implementation of organisational policies and practice by individual line managers. Large organisations offer a wider range of job opportunities and structured education and training. However, respondents demonstrate that it is often difficult to transfer into a different department if an individual lacks experience in that area of the business. Opportunities for upwards progression are limited by the availability of positions, often requiring someone to leave before one becomes available. This is less apparent in smaller organisations such as a private practice.

The extent to which line-managers influence women's career development is a finding of this research. While they have always been a factor in careers research (e.g. Bagilhole, 2014), this is often considered in terms of barriers. For some women, this is confirmed. For

example, Ceri, Olivia and Penny have unsupportive line managers influencing both progression and WLB. A gap in the research is how supportive line managers can impact careers at all levels. Female Qs new to the industry, such as Kathy, rely on their line managers for guidance; those with more experience, such as Bryony, have managers who identify their development needs and put in place processes to help her overcome issues such as lack of confidence. This somewhat disagrees with the findings of Francis (2017).

The research argues that there needs to be a cultural change in the construction industry, implemented by educating men to work alongside women and increasing the volume of women in the industry. Introducing practices such as flexible working and working at home aids WLB for men as well as women. This would have little perceived impact on progression and would help to improve the relationships between male and female colleagues.

Critical to this process, however, is acceptance that women have the same aspirations as men, and that there does not need to be a culture of presenteeism or extensive travel for individuals to progress their careers. Indeed, the data from women in the wider construction industry, regardless of organisation, hierarchy, age or family status, demonstrate that perceptions of the industry as requiring long hours at work, extensive travel or that harassment remains a problem, are unfounded.

In acquiring relevant capabilities, female Qs can change their aspirations, even if this necessitates abandoning previously held goals. Through the CA framework the chapter provides an alternative approach to established career theories that assume either a linear progression or a 'boundaryless' career pattern.

CHAPTER TEN

Discussion and conclusions

10.1 Introduction

This chapter provides overall conclusions, presenting a summary of the research and reflecting on the findings and the framework used. It highlights its original contributions to knowledge and its limitations and makes recommendations for further research.

This research is about the careers of female QSs. Its aim was to understand how aspirations and organisations impact their career pathways. Three career pathways of female QSs were identified, based on their qualifications and experience to date, but the research demonstrated how these do not fully represent their career trajectories. The research determined that their aspirations are also relevant but these conflict and change. Female QSs' agency in pursuing their aspirations is also influenced by the structure and culture of construction organisations and this varies between respondents and organisations. For example, it depends on organisation type and size, individual line managers and respondents' own personal resources. The three career pathways are still apparent, but it is clear that female QSs' careers do not develop in a linear way.

Representations of careers as either traditional, protean, boundaryless or other established metaphors, do not fully conceptualise female QSs career pathways. Therefore, the research adopted the Capability Approach to identify which capability sets (or freedoms) are required to pursue each aspiration, and to identify the factors that impact this ability. Capabilities are described by Gagnon and Cornelius (2006: 68) as the: "building blocks of equality [that represent] instrumental freedoms and agency, both individual and collective". Using the CA enables consideration of both the agency and the structural elements of careers. When combined, capabilities form an "interrelated and interdependent ensemble" (Gagnon and Cornelius, 2006: 68) such that the greater the number of capabilities a female QS acquires, the more freedom she has to pursue her aspirations.

The research was motivated by two factors. First, that literature concerning women's careers in construction focuses on their perceived lack of career success (Dainty, Bagilhole and Neale, 2000; Francis, 2017) and the barriers they face when developing their careers (Menches and Abraham, 2007; Worrall, 2012; Rosa et al, 2017). Women's aspirations are rarely, if ever, considered, particularly those other than hierarchical progression; nor is it

recognised that aspirations change. Second, quantity surveying as a distinct occupation has been little researched and even then, not since the 1980's. This is surprising as it is unique among surveying disciplines; it is one of only two that are construction-related and QSs undertake a range of job roles in a variety of organisations. Female QSs as a single cohort have never before been researched even though they form a significant proportion of women in any construction professional occupation.

10.2 The research findings

The thesis builds on and contributes to existing knowledge about women in the construction industry by examining the career experiences of female QSs. Chapter Two addresses the first research proposition, detailing the development of surveying and quantity surveying, placing women – as far as is possible – into its history. It demonstrates how quantity surveying became a distinct discipline within all surveying, not conjoined with other, also distinct, surveying disciplines. It adds to previous knowledge in terms of the marginalisation of women in both the construction industry and the surveying profession, detailing how the industry remained closed to women until the early 20th century. It establishes that few female QSs joined the occupation until the education reforms of the 1970s with the proportion of females increasing until the 1990s, even though the professional body has tried to encourage more women to become surveyors. The aim of the research was not to establish why so few women join the occupation, but its findings may inform future research in that field.

10.2.1 Female QSs' career pathways

Female QSs loosely follow three career pathways: traditional, adapted traditional and transferred. A traditional pathway comprises gaining relevant qualifications and experience and then progressing hierarchically. An adapted traditional pathway is similar except that QSs following this pathway have formerly pursued a different career, or have acquired an unrelated first degree, before becoming a QS. A transferred pathway is followed by those who work in a quantity surveying role but have no relevant qualifications and do not aspire to progress hierarchically. However, the research establishes that female QSs' pathways are more complex than these classifications indicate, finding that their aspirations are a crucial ingredient in how their careers develop.

Because female QSs' career pathways are so dynamic, existing career theories do not fully encapsulate them. Traditional and, to some extent, adapted traditional career paths are in line with the traditional career outlined in Chapter Two but similarities end there. Few case-

study respondents who began their careers on a traditional pathway have continued to follow that trajectory because many prioritise their WLB. Commonly, however, they wish to retain the opportunity to progress hierarchically in the future and assert that having the ability to do so constitutes career success. Few female QSs' career trajectories, therefore, follow the traditional career as outlined in Chapter Three.

In addressing proposition two, parallels can be drawn between some female QSs' career pathways and alternatives such as protean, boundaryless and customised careers and career anchors. However, while they may provide a useful metaphor with which to describe an individual female QS's pathway (Inkson, Dries and Arnold, 2015), they do not fully encapsulate the trajectories of the cohort, nor do they provide a framework with which to examine or explain them. As traditional and alternative career theories focus on structure or agency respectively, they do not allow examination of the juxtaposition of these factors in terms of constrained choice and situated agency. Nor do they allow for the fact that the overriding aspiration of many respondents is to have the choice to shift their focus between the three 'arenas of action' illustrated in Figure Two (section 4.2).

The following section, therefore, discusses a further key finding concerning how female QSs' aspirations impact their career pathways.

10.2.2 How aspirations impact career pathways

In addressing propositions three and four, the research established that female QSs' aspirations can be extrinsic (gaining qualifications and hierarchical progression) and intrinsic (WLB and happiness). In establishing female QSs' aspirations, it also identified that these correlate with their definitions of career success. More importantly however, the research found that aspirations are not mutually exclusive. For example, aspiring to progress hierarchically does not mean that an individual does not also aspire to having WLB. Conflicting aspirations are said to reduce a female QSs' agency as fewer choices are then available, but this research argues that even these two, seemingly opposite, goals can be held simultaneously. The more capabilities a female QS acquires in her set means that she has "the freedom to do otherwise" (Hart, 2012: 23) and these give her increased agency. This is facilitated by the changing landscape and opportunities offered by quantity surveying in terms of job roles and employing organisations.

Aspirations are dynamic in that an aspiration might change before an individual achieves it, one formerly held can be returned to or once achieved, can be replaced with another (Hart, 2012). Most commonly, female QSs' aspirations change due to a life event, such as

becoming a parent or relocation, a need or desire to obtain a qualification or to prioritise their WLB. Some respondents stated that their aspirations changed as they got older, but no statistically significant relationships between aspirations and age or hierarchy were established.

The emphasis here is on stated aspirations, but respondents would change their accounts, even during the course of the interview. For example, although respondents might assert that they aspire to having WLB, during the interview they demonstrated how they still actively pursue progression. This raises a question regarding why respondents did not openly admit to having alternative aspirations. A reason offered by the CA is 'adaptive preference'. This is when individuals' preferences develop in line with their perceived options (Nussbaum, 2000). It means, for example, that individuals aspire for WLB because they perceive that upwards progression is not possible and justify it by telling themselves that progression brings greater stress (Nussbaum, 2000). The research suggests that whilst individuals may adjust their preferences in relation to possibilities and constraints, in line with what Appiah (2005) terms 'informed preference', this does not mean abandoning progression aspirations completely. Neither does it mean that the adapted preference is somewhat of lesser value or seen as such by the individual.

Further, evidence presented here suggests that women Qs prioritising WLB span all age groups and levels of hierarchy. Indeed, as Colburn (2012) suggests, the active agency involved in prioritising WLB rather than hierarchical progression, and its value to individuals, needs to be recognised.

This research also argues that adaptive preference is not necessarily negative. To attribute aspirations for WLB or happiness to adaptive preference is to equate career success with advancement. This reduces the value of intrinsic aspirations and goes against the ethos of the CA. Hart (2010) discusses whether there is a disparity in aspiring for contentment, presenting arguments that they are opposites; one either aspires or is content. However, she concludes that contentment is an "aspirational goal" (Hart, 2010: 327). Additionally, although hierarchical progression was not a stated aspiration for most NR respondents, the overriding factor in their definitions of career success was having the opportunity to progress should they want to.

The thesis does not support the assumption that aspirations for WLB are only held by respondents who are mothers, and aspirations for hierarchy are held by those who are not.

Some respondents without children also said they aspire for WLB and others with children aspire to be “company CEO”.

Adapted preference notwithstanding, respondents’ declared lack of aspiration for hierarchical progression was also shaped by concerns that a move into management brought a requirement for long working hours with additional stress and responsibility. This is perhaps justified, as only respondents in senior positions stated that they work many additional hours. However, the analysis of questionnaire survey data revealed no evidence of a relationship between hierarchical status and hours worked although this may be because few respondents work more than five additional hours a week.

Some research, for example Dainty, Bagilhole and Neale (2000), found that women in construction prefer to maintain the technical aspect of their job, even in their later career stages, and view promotion as going away from the ‘nuts and bolts’ of construction into management. This research contradicts those findings as only one respondent said that she does not want to be promoted away from the creative nature of delivering construction. Other respondents accepted that promotion means management and are more concerned with how to obtain the tools necessary to achieve it. This may be more indicative of the unique nature of NR, and its size and status as a public company, rather than representative of all female QSs. Those who work in private practice, for example, especially those that are either small or medium-sized, are likely to continue to carry out ‘nuts and bolts’ quantity surveying work regardless of their hierarchical position.

This research, therefore, partially confirms Watts’ (2003) view that one reason why there are fewer women in senior levels is because they choose to pursue other paths. This is related to Hakim’s (2000; 2006) theory that women often ‘choose’ to prioritise family over work. Whilst some parallels may be made with Hakim’s Preference Theory, this research suggests that it is more fruitful to think about ‘choices’ and ‘preferences’ as socially constructed and dynamic, rather than static decisions associated with being a woman/mother. Female QSs’ accounts show that preferences are not made in isolation (Leahy and Doughney, 2006) and that they change over time. As Leahy and Doughney (2006) propose, the CA is also better at demonstrating women’s preferences in how they balance home and work. It enables illustration of the interrelationship between subjective ‘choices’ and ‘preferences’ on the one hand and the impact of personal and organisational conversion factors on the other, without giving analytical priority to either. Evidence presented shows that female QSs with equal resources pursue different outcomes, those with different resources pursue the same

outcomes and that individuals do not have equal ability to convert their resources into desired outcomes.

10.2.3 How the development of women in quantity surveying impacted career pathways

In addressing propositions one and four, the research shows how quantity surveying has developed from a single function role into a multi-competency occupation. It established that women have been surveyors for only about a hundred years, and QSs for even fewer. They were only able to pursue careers in this field because of changes in legislation and educational reforms. Although educational reforms opened the occupation to women, it is now no longer necessary to have formal qualifications to pursue a career as a QS. As the research shows, women with no qualifications can be a QS and it is also possible for an individual to acquire them part way through their career.

Further, the growth of the occupation that occurred in the years following the Second World War - because of increasing client demands for advisory services, as well as changes in contractors' activities - has enabled QSs to undertake a variety of job roles. Respondents' accounts demonstrate that these include estimating and procurement of construction work and subcontractors, claims, cost planning and commercial and project management. The competencies required to undertake these functions are not organisation or department dependent.

A further development has been in the range of organisations for whom QSs can work. Initially, QSs mainly worked for small or medium-sized private practices, but amalgamations and absorption by large multi-disciplinary practices means that most respondent QSs work in large practices. The other major employing organisation is large contractors, with those working in small practices, small contractors, local authorities, housing and client-based organisations, for example, being in the minority. Moreover, it was shown that few women change organisation type when they change jobs. This may seem surprising, especially as it was found that competencies are not organisation dependent. Although large organisations have the ability to offer more variety in terms of opportunities for development (Baruch, 2006), the reality is that it is difficult for individuals to transfer between different departments within an organisation regardless of their level of qualification. This may also be true of transfers between organisation types.

A female QS's acquired competencies enhance her adaptability and, while 'traditional' competencies such as quantification and contract administration, remain dominant, others

have emerged with the development of new markets for Qs (Ashworth, Hogg and Higgs, 2013). This is especially true of contractors' Qs who, since their acceptance as chartered surveyors in 1980, are still developing their range of competencies. Nevertheless, the lack of movement between organisation types may be explained by a difference in emphasis and performance of competencies.

The following sections address proposition six in detailing how the structural and cultural factors within the construction industry, as well as individuals' personal resources, impact their career pathways.

10.2.4 How personal resources impact career pathways

Personal resources are frequently used as indicators of career success (Ng et al, 2005). The resources a female QS needs vary depending on her aspirations and the type of organisation she works for. The ones that have the most impact on pathways are their qualifications and experience and also their confidence (discussed further below). While working time arrangements are also a personal factor, their impact on career pathways could not be assessed as few respondents work part time.

Respondents were generally divided as to whether qualifications or experience were more significant for progression. Ng et al (2005: 394) found that, for women to succeed, they are more likely than men to have to "prove their credentials" and may need to obtain "greater educational experiences" as they have fewer opportunities for promotion. However, respondents with qualifications say that experience is the key to progression and those with experience say it is qualifications. Meanwhile, both the case-study and the questionnaire survey respondents observed that less experienced and less qualified male colleagues are promoted ahead of women.

Further, some female Qs pursue a traditional or adapted traditional pathway even without formal qualifications. The exception was those who work in private practice where formal qualifications and chartered status remains important. This may be attributable to the historical development of quantity surveying that equates the two, but that is not the only reason. Private practice relies on formal and informal contacts to attract business and being chartered opens these connections. Further, the RICS has a regulation requiring that chartered status is held by 50% of a practice's principals and partners so, if an individual wishes to become a partner, being chartered is an advantage. Other organisations place less importance on being chartered, but the research found that it is becoming increasingly more relevant in NR. Nevertheless, there was no strong relationship indicated between a

female QSs' organisations type, her qualifications and her level of hierarchy. Therefore, the impact of personal resources on career pathways is somewhat debated and the research demonstrates that other factors are relevant in progression.

10.2.5 How the type and size of employing organisations impact career pathways

The research determines that the size of an organisation has a bigger impact on female QSs' pathways than whether it is a contractor, private practice or other construction organisation. This is particularly significant given the finding that women do not tend to change organisation type when they change jobs and that organisation type is not significant in most of the tests for relationships undertaken. The main ways in which it does so relate to how the size determines the structure of the organisation and its policies in terms of equal opportunities for recruitment and progression, equal pay, flexible working patterns, harassment and access to training and education.

Equal opportunities policies, which should enable women's careers to develop in the same way as men's, do not acknowledge the pressures on career development for women that are generally not experienced by men, such as the conflict between home life and family life (Frone, 2003; Sang, Dainty and Ison, 2014). Thus, they may consider equality but not diversity. A further disadvantage of having formal policies is that employers may perceive they 'have done equal opportunities' without really changing the culture of the organisation. Some interviewees expressed that NR needs to focus on equality in the same depth as their recent safety drive, that it should underpin every aspect of NR and that equality needs the same degree of concerted effort for it to have an effect.

The only factor that is less applicable to size and more applicable to the type of organisation individuals work for is whether it requires employees to network to bring in business. This is much more relevant for those who wish to progress in private practices and consultancies than for those in other organisation types (Watts, 2009). Indeed, most participants did not regard social contacts as important, either for promotion or career development generally and, while networking is not compulsory in private practice, progression is slower for those who do not undertake it. However, most networking experiences are closed to women as they frequently centre on male-dominated activities, such as golf. Although, historically, networking opened up contacts for women in quantity surveying, nowadays even gender neutral events are commonly used as a means of arranging male-dominated activities (Kumra, Simpson and Burke, 2014). A suggestion that there should be women-only networking activities was met with resistance as respondents considered it would support

'separation politics', maintaining segregation and discouraging teamwork, confirming the findings of Watts (2012).

Structure

The research determined that the structure of large organisations enables greater opportunities for both vertical and horizontal career development than that of small and medium-sized organisations. However, even in large organisations, upwards and sideways progression was found to be difficult. The specialist departments of large organisations means that knowledge and experience gained in one area of the business is not easily transferred into another. NR respondents assert that it is easier to progress upwards in the same area of the business than to transfer sideways into a different area. Yet upwards progression is also restricted as the pyramid structure of large organisations means that, in NR for example, there is a 5:1 chance of moving upward from a Band Two position into a Band One. Loosemore, Higson and Aroney (2012) found that subcultures also conflict between different specialisms of an organisation such that it becomes a set of isolated units and respondents from the large organisations agreed with this. The research also found that large organisations such as NR are frequently subject to reorganisations. Although these present opportunities for progression, some find it disadvantageous as they are unable to plan their careers. Whereas Francis (2017) found that career planning made little impact on advancement, this research determines that lack of career planning reduces female Qs' career satisfaction and perceptions of job security.

The small and medium-sized organisations are more restricted both horizontally and vertically, which impacts progression in terms of job availability and opportunities to gain wider experience. Nevertheless, the research demonstrates how even a small increase in size, for example from a small practice to a medium-sized one, opens up progression opportunities. NR respondents said that having an opportunity to progress upwards is a case of 'dead man's shoes' (i.e. waiting for someone to leave or retire) whereas, in the medium-sized practice, progression is dependent on individuals having the relevant professional qualifications and Qs do not have to wait for someone to leave or retire to progress.

Policies

Policies that impact women's career pathways are those related to equality in terms of progression, flexible working, training and education, but their careers are also affected by those relating to harassment and equal pay. Such policies are more established in large organisations than they are in small, where respondents from those organisations said they

are: “about the minimum you can have to still be legal”. Although equality policies are governed by the Equality Act 2010, the Act imposes no duty on organisations to promote equality, leading some to only do the ‘bare minimum’ (Sang and Powell, 2012).

NR promotes its equal opportunities approach as a means of recruitment and requires all employees, regardless of gender, to undertake compulsory on-line equality training. Although other large organisations also have detailed equality policies, more so than the smaller ones, NR has the most wide-ranging of all, probably due to its accountability as a publicly owned company. The Local Authority, as a former publicly owned company, has similar policies but less comprehensive formal training. A drawback of NR’s training, however, is that it is undertaken through on-line programmes and does not include face-to-face interactions. This can result in underlying subcultures still not being addressed and, therefore can be said to pay only ‘lip service’ to equality (Gagnon and Cornelius, 2006).

An organisation’s size also impacts the extent to which it has formal policies regarding equal opportunities for recruitment and progression and equal pay. The research found that, to progress in large organisations, all employees are subject to the same process, regardless of gender and this ‘aids equality’. To some extent, this is driven by their larger, more influential client base that requires them to prove equality policies are in place before they can tender for projects. Dainty et al (2002) state that both organisations and clients should implement change in terms of equality, proposing an industrywide code of practice setting out how to address culture and practice in the industry. Although their suggestion focuses on on-site practices, these could also apply in a wider context. That being said, there are examples of good line managers, who are exemplars of best practice that could be adopted to properly embed equality within an organisation.

Reporting procedures

Overt harassment is not a widespread issue for female Qs - either in NR or the wider construction industry. Although there are isolated incidences of ‘banter’, or even more explicit comments, as discussed below, most respondents do not perceive harassment as a barrier to their career development. These findings contradict other research into women’s careers in construction (e.g. Agapiou, 2002). This may reflect the impact of the Equality Act 2010, that not only prohibits discriminatory behaviour but also gives advice regarding workplace harassment policies. The research demonstrates that large organisations have formal reporting procedures that small organisations lack. This means that any incidences of harassment, bullying and other discrimination can be addressed in confidence and, as such, are designed to address the issue and not the individual. This is much more difficult in

small organisations where the line of reporting of any incidence is either through the perpetrator or their friends and colleagues, which can compromise confidentiality. In this, the research agrees with Caplan et al (2009) who found that the size of an organisation impacts the implementation of equality and diversity issues.

The research has found that, although all the responding organisations have at least minimum equality policies in place, they are not always implemented. This is discussed in the following section.

10.2.6 How managers impact career pathways

The Equality Act 2010 imposes a minimum requirement, but some organisations do not go beyond them. Others, like NR, which values equality and views it as “morally right”, still fail to make disadvantaged employees feel that they are treated fairly and there is a gap between policy and respondents’ lived experience. Gagnon and Cornelius (2006: 68) question why those who are disadvantaged “frequently feel” that equality measures “do little to address the material reality of their experiences of discrimination, unfair treatment and marginalisation”.

In most organisations, managers are responsible for implementing policy. Whereas in small and medium-sized organisations, such as a private practice, this is likely to be a partner or director, in a large organisation decision-making is delegated to line managers (Tolbert and Hall, 2009). Large organisations have more wide-reaching policies, but there is huge variation regarding how they are implemented by individual line managers. Such inequalities in outcome impacts female QSS’ access to education and training and their ability to work flexibly. A further impact of line managers is their influence as formal or informal mentors.

Line managers impact on education and training opportunities

In NR and other large organisations, line managers are departmental budget holders whose permission is required to access education and training courses. This permission varies between them, depending on the education or training desired and the vagaries of the manager. NR provides in-house, job relevant training, the funding for which is usually approved. But obtaining permission for personal development training or even for educational courses, such as a quantity surveying degree, varies. Whereas previously degrees were funded, latterly line managers are refusing to grant permission for employees to undertake degrees or other training that is not strictly required for a respondents’ job role. Given that NR is subject to regular reorganisation, this demonstrates some lack of foresight for potential organisational needs as well as employees’ personal development. While those

who have been refused funding cannot say for sure that this has a gendered element, other research has found that women have fewer development opportunities than men (Dainty, Bagilhole and Neale, 2000; Worrall, 2012). A cited reason for this is women's assumed role as mothers who will leave the organisation (Kanter, 1977; Ng et al, 2005).

Implementation of flexible working policies

NR and the LA were unique among organisational respondents in that they operate a full flexible working policy where consideration must be given to any request for flexible or part-time working. In NR, this is subject to line managers' consent, but most are allowed it. Although there is some evidence to suggest that refusing to allow flexible working can be used to manage people out, many NR respondents make full use of this arrangement. This benefits them, their line managers and the organisation as a whole as respondents repay this by working additional hours when required. Further, they neither abuse the arrangement nor are they looking to change employers for fear of losing this ability. However, some line managers are reticent to grant permission to employees to work flexibly or at home or, when permission is granted, respondents receive 'comments' from male managers and colleagues. Whereas some respondents can ignore the comments, it discourages others from asking. No reason for the disparity was found in the research, although some respondents perceive that there is lack of trust based on men's own behaviours. This was confirmed to some extent by a respondent from private practice who indicated that not allowing flexible working was due to a lack of trust, that it should only be for more senior people and it was not always convenient for him. This was not confirmed within the wider industry where most female Qs have at least some opportunity to work from home and determined that it had little negative impact on colleagues' efficiency or attitude but had a big positive impact on respondents' own WLB and efficiency.

Support and mentoring

Although NR has a formal mentoring scheme, only one respondent has used it. Others look to their line managers for support and mentoring but the degree to which this is forthcoming varies. Evidence on the significance of mentoring, in so far as it advances careers, is not conclusive (Davidson and Cooper, 1992; Francis, 2017). This research supports the findings of Davidson and Cooper (1992), that a 'patron boss' can aid a woman's career development. This is not new, as Chapter Two demonstrated how women in surveying were helped by 'sympathetic men' in gaining access into the profession (Greed, 1991). This study supports the view that support and mentoring can help women pursue their aspirations in various ways. Examples from this research include access to education, as identified above and in career planning, but arguably the most significant effect is that such support aids

women's confidence. This varies between respondents in terms of line managers encouraging them to apply for promotion, ask for a pay rise or enabling them to find their assertive voices. This is further confirmed by the finding that those who do not have support or mentoring have to 'fend for themselves' and are 'at a crossroads' in their career trajectory.

Bird and Rhoton (2011) argue that women who receive male support emulate male approaches to work, that they 'act like a man' in order to advance and that this does not contribute to changing the underlying practices and culture that disadvantage women. This argument, which appears to denigrate both men and women, is not fully supported by this research. Both organisational and case-study respondents highlight how some high-ranking men do not act in a stereotypically masculine way and that the most supportive line managers are those who themselves have families and therefore understand the pressures faced by working mothers.

Indirect support is also provided by senior women who act as role models for others. This was particularly true of women who had been promoted on return from maternity leave. They inspire women with children, but also those without who recognise that this is also achievable for them should they choose to have a family. NR respondents without those role models are fearful of becoming a parent as they consider that it will affect their career development, and parents are reluctant to advertise the fact, for example by not having photographs of their children on their desks.

10.2.7 How organisational subcultures impact career pathways

The term 'subculture' was used by Rutherford (2011: 28) to mean "the attitudes, values, beliefs and patterns of behaviour of organizational members. It is expressed in the management style, work ideologies (what is and isn't work), language and communication, [and] informal socializing". It affects women's career pathways by regulating their access to information and career development opportunities (Burke, 2014). This research has found that it also impacts female QSs' ability to have happiness at work and WLB, regardless of organisational policies. It demonstrates that the nature and impact of organisational subcultures varies between organisation types and within organisations in terms of individual line managers and colleagues. Their success in supporting or undermining female QSs and their effect on career experiences also differs between individual women. The research has identified that significant subcultures are divided into informal networks, working hours and stereotypical gendered assumptions of male managers and colleagues.

Informal Networks

Burke (2014) asserts that industry subcultures are maintained by men to ensure less competition for promotion. This has been evident in construction, particularly as it is a male-dominated industry. Researchers such as Greed (1991; 2000), identified cultures such as the 'old boy's' network that preclude women from gaining promotion and this research has found similar ones in NR. However the impact of social contacts on career development and promotion was less conclusive within the wider industry. Moreover, some NR respondents debate whether this is only a perception because organisations are heavily male dominated. They assert that, if a line-manager wants to employ someone they know and trust, then they are more likely to know a man than a woman because there are more men. A further explanation, given by McDonald, Lin and Ao (2009), is that men are more likely than women to gain access to information about job opportunities which found consensus with some NR respondents. Nevertheless, it does not explain why some respondents assert that there are men in positions they are clearly unsuited to.

Working hours

The culture of presenteeism in the construction industry is much documented and women's perceived reluctance to work full time and long hours, as well as their perceived reluctance to travel, is said to be a barrier to their careers in the industry (Rosa et al, 2017). This research has found that few respondents work part time and, contrary to research, there is no great requirement for them to work long hours or to travel. This was true of organisational, case-study and questionnaire survey respondents. When additional hours are necessary, they are at fixed times that are planned in advance. The research finds, however, that female Qs often check emails or undertake other work in the evenings or at weekends and although few have obligations to travel, those that do so have many hours added to their working days (Burke, 2014). In this sense, the research finds that having WLB is only true with regard to having flexibility, and that there is the potential, contrary to their assertions, that they are working many more hours than they perceive. Social activities are also an aspect of WLB (Sang and Powell, 2012) and respondents working flexibly to balance work and family life do so at the expense of their social and leisure 'arena'. Nevertheless, respondents said that they are happy to accept this as a 'quid pro quo' in exchange for the ability to work flexibly.

Alvesson and Billing (2009) argue that women with children are compromised because their ability to commit many hours to paid work seriously affects their career prospects. At the same time, Nussbaum (2000) asserts that giving individuals choice over whether to prioritise their home and leisure arenas over work does not preclude them from choosing a

'workaholic' life. She asserts there is a great difference between choosing a way of life and being constrained by imposed working hours. This view finds accord with respondents, particularly those in higher ranking positions.

Stereotypical assumptions about women as mothers

Greed (2000) argues that some women are more acceptable than others to the industry, highlighting that differences in social class and hierarchy may differentiate those who are accepted and those who are not. However, this may simply be an observation that 'accepted' women are more likely to climb or fit in socially. As construction organisations are generally designed around men's requirements (Bagilhole, 2014), women said to be more likely to succeed are those who 'act like men' or are 'one of the boys' (Powell, Bagilhole and Dainty, 2009). Yet those who behave in this manner are frequently termed aggressive, or worse. Further, 'behaving like men' appears not to extend to their looks or their dress, to the extent of having to be "rock stars" if they wish to progress, which does not apply to men. This is one example of the double standards found throughout the research. For example, women should not be recruited via positive action, yet men benefit from the 'old boy's network'; women must behave like men to succeed, unless men are offended by their behaviour; women have to be 'rock stars' and men do not.

Even though the questionnaire survey respondents cited having children as a career barrier, there is little difference in the experiences of those who are mothers and those who are not. Billing and Alvesson (2009: 150) found that all women are: "ascribed this family orientation, which means that in some cases their actual situation and priorities matter less than expectations or stereotypical ideas of the organization. These may then influence selection processes disfavouring female candidates". Examples are given throughout the research of prejudice against mothers or potential mothers. Indeed, those without children are doubly impacted. First, by assumptions that they will eventually have children, and second by the assumption that, as they have no children, they are more willing to work long hours and undertake extensive travel. Those who are mothers are also impacted by stereotyped expectations such as their assumed unwillingness to bear the stress and long hours associated with progression such that they are often not told of these opportunities in the first place.

Nevertheless, the research demonstrates that there is some improvement in attitudes towards women working flexibly and at home. Men beginning to work flexibly is removing some of these prejudices (Walby, 1990; Kvande, 2017) and women are following their example. Some organisations, for example the national contractor, say they are trying to

make themselves more attractive to women by introducing flexible working. However, while they enable women to do so, men are still denied permission. This imposes a negative association on women working flexibly and it would be better to offer all employees the opportunity which would help to remove that prejudice and enable better WLB for all. This is demonstrated in NR and other organisations where men are also enabled to work flexibly, and the research has found that the ability to do so is improving for all female Qs compared to previous jobs.

Harassment and banter

While most respondents, from all sources, asserted that harassment is not a barrier to women's careers in the industry, indirect harassment still occurs through 'comments' and 'banter'. The research determined that women are expected to accept that banter is not harassment but is part of the industry's culture. Nevertheless, if women behave in the same way, they can be dismissed. Incidences of women behaving in a manner deemed unacceptable are said to be an exception but can be seen by men as a reason not to modify their own behaviour (Agapiou, 2002). When discussing whether this culture would disappear, respondents who said it was a matter of waiting until: "the dinosaurs die out" were countered by others who agree with Dainty, Bagilhole and Neale (2000) in saying that younger men become indoctrinated by senior male colleagues.

Women are likely to continue to represent only a small proportion of people in the construction industry. Therefore, Greed's (2000) critical mass theory is unlikely to be influential with regards to changing the prevailing subcultures. Challenging these, therefore, is not a question of increased volume of women, but involves educating men. Although Kronsell (2005) found that introducing even a few women into a male-dominated organisation changed men's behaviour, this is not evidenced in this research as the respondent from the small practice illustrated. Most literature recommends that women should be educated to work alongside men, but it is recognised that real change will only be effected when prevailing cultural systems are overcome (Worrall, 2012). This is in line with Cockburn's (1989) 'long agenda' theory. This idea found consensus among respondents, saying that men in the industry should be educated to enable them to work alongside women, rather than the opposite and many respondents said men who are used to working with women treat them better than those who are not. This would then fix the culture and not the women, as discussed by Burke (2014).

10.3 Contributions of the research

10.3.1 Contributions of the research to theory

The research adds to existing knowledge in six ways:

- It contributes to existing career theory - particularly why a 'one size fits all' mechanism of evaluating career trajectories and career success is unsatisfactory and, while theories of structure *or* agency may be appropriate to describe career patterns, they cannot explain them;
- It determines that aspirations and personal definitions of career success are instrumental in shaping career pathways, whereas previously these were only determined by organisations;
- It provides a new application for the CA by using it to establish and analyse a range of career pathways;
- It provides a comprehensive account of the careers of women currently working in quantity surveying, an area lacking in research;
- It determines female QSs' aspirations and definitions of career success without valuing these outcomes as more or less important to each other;
- It establishes female QSs' capability set. Combinations of capabilities in this set enable them to pursue any of their identified aspirations.

The main original contribution to knowledge of the research is its contribution to the understanding of existing career theories; principally why they are not a 'one size fits all' mechanism by which to evaluate career trajectories. The research has demonstrated that, although aspirations can change and conflict, they are major determinants of how careers develop. In using the CA, the research establishes how aspirations can be accommodated; demonstrating that the more capabilities a female QS acquires, the greater freedom she has to pursue her own definition of wellbeing. The research has demonstrated how it is not appropriate to apply a traditional career pattern to female QSs' career trajectories and that alternatives, such as protean, boundaryless or customised careers, are also unsatisfactory. The CA provides a more suitable approach in that it recognises both structure and agency and the impact of both on career pathways.

The second contribution is that of ascertaining the aspirations and capabilities of women working in a QS role. It does not compare women's experiences with men's and does not include other construction occupations. No research focusing solely on the experiences of female QSs has previously been undertaken. This is an important contribution as quantity surveying is "virtually a separate profession from the remaining surveying professions"

(Male, 1984:7). As such, and as demonstrated, it offers a variety of career pathways and the opportunity to pursue a career without any formal qualifications. This is not an option for most other construction professions.

Its use in career development is a new application for the CA. It has enabled identification of the capability set applicable to female QSs. Although the CA has been applied in many disparate areas such as poverty (Sen, 1992, 1999; 2009; Nussbaum, 2000), health (Abel and Frohlich, 2012), education (Walker and Unterhalter, 2007; Hart, 2012); the school to work transition process (Holborough, 2015) and equality (Robeyns, 2003; 2005a; Gagnon and Cornelius, 2006), its use in this research differs from most of the previous CA research in that a hypothetical capability set was produced, contextualised and examined to identify a final capability set for female QSs (section 9.2).

A further original contribution of the research is its identification of three career pathways for female QSs, labelled the traditional, adapted traditional and transferred pathways. A finding is that a female QS will not necessarily remain on one pathway for the entirety of her career due to changing aspirations and personal circumstances. This has wider generalisability that extends beyond women's experiences and can be applied to career pathways in other occupations.

The CA's constructive approach to women's career development in construction, is a further impact of the research. The use of specific conversion factors, particularly Sen's fourth conversion factor, conceptualised as cultural factors, highlights how men and women perceive different issues. For example, 'banter' versus 'harassment'; presenteeism; definitions of success and gendered assumptions regarding women as mothers, or potential mothers. As established in Chapter Four, Sen (1992: 89) asks: "should a person's position be judged positively, in terms of the level of achievement, or negatively, in terms of the shortfall, [compared to] what she could have maximally achieved?". This research has chosen to look at careers of female QSs in terms of what they can achieve. This is discussed further in section 10.4.

10.3.2 Contributions of the research to practice:

This research builds on earlier work regarding women's careers in construction but diverges from it by taking an alternative approach to the issue of career success. Whilst other research acknowledges intrinsic definitions of success, it nevertheless judges women's careers on extrinsic values focusing on women's underachievement or lack of progression or success. By asking female QSs themselves about their aspirations and how they perceive

career success, a different picture emerges. The extrinsic measures of hierarchical progression still feature, but other factors such as equality, WLB and simply 'being happy at work' are significant. Many respondents do not consider that those further up a hierarchy, or who earn more money, are more successful. Although this research does not seek to understand why women do not choose careers in construction or why they leave the industry, it nevertheless adds greater depth of understanding of the experiences of women and mechanisms that enable a better career experience.

Ultimately, the framework created for this research encompasses the values of female QSs. It provides a starting point, and a roadmap, for construction organisations to develop their policies and how the application of these can develop their cultures regarding the careers of women in their organisations; namely, ascertaining valued outcomes and then addressing the factors that enable their achievement.

10.4 How the capability approach aids understanding of female QS's career pathways

10.4.1 Implications for the Capabilities Approach

The thesis demonstrates how the CA can be useful for careers research. However, the research has also aided development of the approach itself. The CA provides a framework that is strengthened by research in different disciplines and exploring: "the more challenging implications of Sen's work ... makes the capabilities approach even more provocative and promising" (Evans, 2002: 54). As a theoretically incomplete approach, extending it from basic human development to levels of self-actualisation increases the scope of its application.

A finding of this research is that, although many organisations have equality policies in place, they are not always implemented by line managers. In having policies, organisations may believe they have 'done' equality, paying only lip service to change (Gagnon and Cornelius, 2006). Further, there are good and bad policies. For example, the medium private practice has a policy whereby no-one is allowed to work from home, a policy likely to impact female QSs more than male.

Sen and other CA researchers have looked to policy and legal changes to improve the well-being of those less advantaged (Evans, 2002). According to Robeyns (2005a: 94) the CA is a "broad normative framework for the evaluation and assessment of individual well-being and social arrangements, the design of policies and proposals about social change in

society". In demonstrating that policies are not always implemented, this research diverges from other interpretations (e.g. Nussbaum, 2000) where capabilities are the source of policy provisions. It highlights that this top-down approach would benefit from the input of a bottom-up agency approach based on individuals' values. Using the CA in this research has highlighted that individuals' values differ, enabling understanding of the gap between aspirations and reality and potentially to narrow it through relevant equality and diversity policies – and to ensure that these are implemented.

The research addresses the criticisms of the CA as an agency-based, individualistic approach by using the concept of situated agency to confirm that neither the organisation nor the individual is key in career development. The CA argues for "people being allowed to decide freely what traditions they wish or do not wish to follow" rather than being forced to "obey the decisions by ... authorities who enforce traditions - real or imagined" (Sen, 1999: 32). However, the structure and culture of construction organisations continue to have implications for how women's careers develop. The heavily male-dominated nature of the industry perpetuates rulemaking in favour of traditional career trajectories (Bourdieu, 1977). Even though women in construction may have a different value framework they have to conform to the existing structures and culture. The research helps to understand the transition from the top-down policy-based approach to how policies are applied in real life using universal values rather than those of the dominant group. The research has found that introducing equality policies has not induced equality in line with Sen's (1992:12) famous question of "equality of what?".

Focusing on acquiring capabilities to pursue desired outcomes within an organisation leads to a more realistic application of the CA in that it contextualises capabilities within the structural, social and cultural factors that condition them. These factors, which contribute to both the expansion and restriction in the acquisition of capabilities, can be used by organisations to form and implement capability-based policies.

The use of the CA in careers research thus represents an improvement on approaches that highlight structure or those that are agency-based because it enables understanding of how the prevailing environment imposes constraints on choice, and the changes needed to widen choice. The CA provides an evaluative space to examine the extent to which policies enhance or diminish the acquisition of capabilities such that the individual becomes the centre of relevant policy rather than organisational processes.

This research further removes the focus of the CA from individuals by highlighting the power of collective mobilisation through establishing a set of capabilities that enables all female QSs to pursue their valued outcomes. If those in a weaker position can develop their own goals but base them on shared positions and life circumstances, then shared strategies for pursuing those preferences can be developed. According to Bourdieu (1977) it is in collective action that real change can be effected, and the expansion of individual capabilities depends on the expansion of collective capabilities. Although the CA promotes freedom of the individual (Sen 2009), there is no clarity on the dividing line between individual freedom and group freedom. Thus the research enhances the CA by enabling exploration of how groups can promote changes that aid individuals.

Finally, this research addresses a cited issue with the CA that individuals may have to compromise between capabilities and that expanding the freedoms for one person, or group of people, can lead to a reduction in freedoms for others. This is not the case in career development where all QSs can acquire all capabilities in the set to pursue any aspiration. Further, the CA is based on individuals' ability to expand their capabilities which, for female QSs, depends on eliminating oppression and providing a 'safety net' within organisations in the form of policies, practices and culture. Furthering women's rights aids the development of organisations. The research demonstrates that, for organisations to develop so that women can pursue desired outcomes, they must do more than pay lip service to equality and acknowledge the diversity of their workforce. Women's career development is subject to different influences than most men's, although trade unions and other collective groups can act to force change, ensuring that more progressive policies are enacted.

Therefore, it is possible to extend situated agency, although individual career decision-making remains contextualised by the choices available and women's perceptions of their own interests and well-being. Thus, although women have career aspirations, they remain constrained by factors such as normative, stereotyped ideas about what women want from their careers. Furthermore, their aspirations are also shaped by prevailing norms and the perception of the choices that are available.

10.4.2 Strengths and weaknesses of the CA in career development

Using the CA in women's career development is a novel use of the approach and this section reflects on its strengths and weaknesses in this application. Capabilities as a concept are mechanisms used to conceptualise how individuals can pursue well-being (Sen, 1984, 1992). However, well-being is subjective and is not always achieved by fulfilling one's aspirations (Appiah, 2005) as this achievement does not reflect inequalities that have

occurred. Therefore, the CA has not only enabled identification of female QSs' career aspirations but also allows examination of their agency in pursuing them in relation to the constraining and enabling structures of construction organisations. The core components of the CA: resources, conversion factors, capabilities and functionings are broad. However, they provide a framework to guide the research to identify individual well-being and the elements of organisational structures that have the most impact on different elements of well-being. Contextualising the CA to the capabilities of female QSs allows identification of the complex relationships that emerge from the analyses. For example, it enables an understanding of how aspirations impact respondents' career pathways regardless of their resources (i.e. qualifications and experience) while showing that their pursuit of aspirations is moderated by organisational structures and culture. The CA has enabled recognition of the fact that, while patterns in these factors can be identified, there remains individual variation such that an enabling factor for one female QS may not apply to another. Tomlinson et al (2013) suggest that the enabling and constraining nature of industry structures is directly related – i.e. enabling one individual is directly related to the constraints imposed on another. This research does not support that view. Switching focus to that of identifying how to enable women's careers, without constraining others, means that the CA can be used as a tool to address the underrepresentation of women in the industry.

The results demonstrate that there are few predictors of how a female QS's pathway will evolve but, by using the CA, pre-conceived ideas about career pathways can be set aside. It provides a 'roadmap' for female QSs' employment that can be adopted by organisations to identify their needs and the ways in which their careers can be enabled. That this requires a shift in organisational practice and culture is not denied, but adoption of the framework will equalise women's career opportunities as well as those of some men.

The research has shown the importance of relationships within and outside of work as being important for subjective well-being. The capabilities approach is invoked to bring these ideas together into the concept of situated agency. This conceptualisation of individual and organisational level pressures highlights not only the options that are available but also people's perceptions of their own interests and well-being. It represents an improvement on traditional and boundaryless approaches by providing a framework for data collection and analysis and does not take traditional, extrinsic outcomes as the norm. It enables understanding regarding how organisations both enable and constrain choice and identifies changes that will widen women's career opportunities.

While the use of the capabilities approach is appropriate in this research, it is not without concerns, not least that it is complex to operationalise. Sen (1989) and Robeyns (2003) recognise that there is overlap between capabilities but in this context, there were further overlaps between resources, capabilities, conversion factors and functionings. For example, qualifications and educational opportunities featured in each of these elements and working hours also must be differentiated between aspects that are a personal factor, a capability and a conversion factor. Concentrating on the means to achieve outcomes, rather than the nature of the outcomes themselves, adds to the difficulty (Graham, 2011). Further, capabilities, functionings and conversion factors are difficult concepts, that even Sen (1992) agrees can be confusing.

The CA as a tool to conceptualise women's careers in quantity surveying focuses primarily on the capabilities around which the thesis is structured. The basic premise being that, by acquiring a greater number of capabilities, a female QSs' possible range of outcomes is increased. Identifying the freedoms that enable female QSs to pursue well-being, highlights the conditions that enable career development; this is a different approach to trying to understand why women in construction lack career success. The aim in using the CA as the framework for the research was to identify where women can make use of their own individual agency while addressing the structural constraints that limit them.

Added to this is that the conditions necessary for individual development fall into internal and external categories. Internal conditions are within the control of the individual, with external conditions being causalities that are not necessarily within the control of the individual and could impinge on their development. When joining an organisation, women may anticipate that it will create an enabling environment with mechanisms (i.e. policies) in place to surmount external conditions. This research demonstrates how organisations continue to fail to help women overcome these external factors that limit their opportunities. For men, the prevailing structures continue to have in-built systems that protect and enable them in their career development. This research adds to the framework of the CA by demonstrating how the social context shapes social processes – in this case, career development and how individuals decide the choices that lead them to pursue their aspirations.

10.5 limitations of the research and recommendations for further research

10.5.1 Limitations

Like all research projects, there are areas of improvement. Unfortunately, only a cross-sectional perspective on aspirations could be obtained, albeit that respondents represented a range of age groups. Longitudinal data would have enabled evaluation of how individuals' aspirations change over time and the specific nature of that change.

A good cross section of organisational respondents were interviewed, but it is regrettable that an interview with a partner from a large private practice could not be obtained. Given the importance of organisational size and the distinctions between contractors and private practice, this would have completed that perspective and allowed exploration in more depth of the distinction between large and small practices. The same might also be said of the inability to obtain the perspective of a subcontractor.

The questionnaire survey sample was not obtained randomly. In sampling from two populations, the RICS database and LinkedIn, there was a good range of respondents, but random sampling was not possible. It is also likely that the research attracted respondents who have a great interest in equality issues in the construction industry and this may have skewed the results. This may explain why there are few strong relationships identified within the data analysis.

10.5.2 Recommendations for further research

This research identifies four areas of further research. The first is that these data were collected from female QSs, or women in a QS role. However, the CA could be used as a framework to examine the careers of women in other construction occupations. Further, it would be interesting to use the CA to ascertain whether male QSs' aspirations are different to women's and whether an identical capability set would be obtained. Differences in how conversion factors impact different genders or other minority groups can also be undertaken.

Secondly, NR is a very specific construction organisation and therefore the same study undertaken within another construction organisation may produce different results. Further, a comparison between a contractor's organisation and a private practice could be undertaken. This would ascertain a richer picture of the factors affecting female QS's ability to acquire the capabilities in her set.

Thirdly, the same approach could be used in other industries to provide a deeper understanding of both the application of the CA in careers studies and the forms of inequality that exist.

Finally Covid -19, the world-wide pandemic that, at the time of writing (August 2020) is still ongoing, has meant that approaches to working at home with the aid of technology have changed. Research could be undertaken in the future to ascertain how this has impacted the careers of women in the construction industry who wish to pursue WLB as an aspiration.

10.6 Final thoughts

This research has contributed to the study of women in the construction industry. It recommends that women's aspirations should be considered by employing organisations and that career pathways should not be assumed to be traditional and hierarchical. Aspirations are a defining feature of this research in that, where previously organisations determined career pathways, individuals' aspirations can be an overriding determinant. Careers are built by pursuing aspirations and the impact of organisations is the ease with which this can be done. Although this research is about women, the CA can also be applied to the career pathways of men, especially those who do not wish to pursue the traditional pathway.

The research also suggests that equality AND diversity need to be taken into account in careers; equality in the sense of equal opportunities to progress and diversity in considering the particular needs of women and/or 'non-traditional' men. In trusting employees to know what they want from their careers, organisations can enable those goals to be pursued and reap the benefits of all employees being able to assess how they prioritise and balance the three arenas of work, home and leisure.

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Appendices

Appendix A – Demographics and brief biographies of Case-study Participants

BIOGRAPHIES

Amelia

Amelia is fifty-four she is partnered and has no children and no other caring responsibilities. Amelia has worked for NR for 24 years having left a different career outside of the construction industry. She initially worked in finance and then moved into the commercial part of the business, moving up from assistant commercial manager, to commercial manager and then across to estimating manager. She has no formal QS qualifications. She is salary Band Three.

She has always worked full-time, and her ambition is to retire! She says that quite often there were people who were already chosen for roles and promotions and the interview was just going through a process, although it is changing now.

When asked what career success meant to her, she said: "I'm quite pleased that I have got to this level really, being what I am at this moment in time. Because I have always felt that I have lacked confidence and it isn't easy in a male-dominated environment, and to pretend that you are ok with everything. So, I am quite pleased at the level that I've got to".

Anna

Anna is fifty-eight, she is divorced, and her children are adult, and she has no other caring responsibilities. Anna joined NR aged 17 as a trainee administrator. She then worked as an administrator in several different departments in NR before she moved into the commercial management team, still in administration. However, when she realised that she was providing figures to commercial managers and they were being inserted into the official reports unaltered. It was then that, aged 32, she asked to train as a QS. She undertook the 5-year part time QS degree, sponsored by NR, and achieved a first. She is not chartered and has never been interested in pursuing this.

She has spent the twenty years since she graduated working in various capacities for NR, mainly data analysis. Her current position is systems manager for track and signalling and she is also a BAME counsellor for NR. She is a salary Band Three.

She has always worked full-time, even when she had small children. At aged 58, her ambition now is to retire! She says that she has not always been given jobs that she has applied for but acknowledges that it was because the job was not right for her rather than because she was a woman.

When asked what career success meant to her, she said: "Although I have been keen to get promotions, they have often been about the challenge of the work more than the promotion in itself. More money has obviously meant more stability for the family, but I don't especially judge my career success by that. Yes, the promotion to some extent, having additional responsibility but not necessarily the money of itself."

Beth

Beth is thirty-five. She has a partner and also has a child under 10. She has no other caring responsibilities. Prior to working for NR, Beth worked in an unrelated industry and was attracted to NR because of its flexible working policy, opportunities for promotion and because it was unusual. She has worked for NR for 15 years, initially joining a track gang, working on site, as she wanted to be a track engineer. She transferred to an office-based role when she had her child. She has moved horizontally to gain experience and has also had vertical promotions. She is currently a contracts manager at salary Band Four. Beth is studying part time for a business degree, funded by NR – she has previously gained other, formal qualifications also funded by NR.

She has always worked full-time. Her aspiration is to gain promotion to become a decision maker – not just to gain the prestige of a higher position and personal achievement but also to be a role model.

When asked what career success meant to her, she said: "I define career success as doing a job that is fulfilling and the individual gets all that they want out of it ... I like work, I like the team I work with, I like the job I do, and I can't ask for much more ... it's not so much a single thing it's very much the people around you. Whether that's the boss, whether that's the team or the people that work directly for you. So, for me an individual success is made up of that - not just what I do".

Bryony

Bryony is forty-one. She is married with two children under 10. She has no other caring responsibilities. Prior to working for NR, Bryony worked in an unrelated industry and joined NR as a temp in an administrative role. She has worked for NR for 14 years, and in that

time decided to train as a QS. When her boss at NR refused to fund her degree, she handed in her notice but was asked to rescind it by another team who paid for her to do the degree. In the meantime, she has climbed upward and is now a senior commercial manager, salary Band Three. At the time of interview, Bryony was being mentored by her boss for her APC examination to gain chartered status of the RICS. I sat on a mock panel to aid in this process as I am an APC examiner. Bryony works full time although worked part time (working 4 days per week) for a few years after the birth of her first child. She negotiated more flexi time by agreeing to return to a five-day week, in exchange for leaving earlier to collect her children.

When asked what career success meant to her, she said: "Career success for me is that what is expected of me and my peers is rewarded in the same way. So, we do the same job and we are rewarded with the same salary". She continued "I'm not interested in a big car and a big salary, if that means somebody is going to call me at 9 o'clock at night".

Caroline

Caroline is in her mid-forties. She is single and has no children or other caring responsibilities. She is a European national but has been in the UK for around 10 years. Prior to working for NR, Caroline worked in several different industries, in IT roles. She joined NR 2 years ago as a track engineer and has recently been promoted to a data manager, quantifying materials for the track works. She is salary Band Four.

She has a degree in an unrelated subject and is keen to get the relevant QS qualifications, although at this point does not want to go through the process of becoming chartered. Caroline works full time.

When asked what career success meant to her, she said: "Knowledge not money. To be happy in your work and with the people you have to work with. What keeps you in a place is not the job first it is the people. You want to progress - you don't want to be stuck in a situation. But a progression could be another department, for something else something different. I am not talking about going to a higher position but that will come with the knowledge".

Ceri

Ceri is 23. She is single and has no children, she lives with her parents and has no caring responsibilities. Prior to working for NR, just after she left school, Ceri worked in accountancy. She joined NR, after seeing the job advertised and said that she was not even

going to go for the interview as she did not feel confident of getting it. She was attracted by the finance aspect. She has worked for NR for 3 years and is one of the few in the respondent sample who actually has the job title of QS and is salary Band Four. Since joining, her salary has risen drastically as she was undertaking a higher role than she had been getting paid for; the introduction of the salary bands gave her this increase so that she is now paid in line with the work she is undertaking. She said when she started the job, she thought she had made a mistake as she was not being supported in her role but is much more confident now that she is being managed properly.

Ceri has no formal QS qualifications but would like to obtain them and is trying to obtain funding to undertake a part – time degree. She works full-time.

Ceri's definition of career success is "I think being where you want to be. In a position that you are happy to be in and doing what you want to be doing. It's not necessarily what other people think it is ... I don't know, I think it's individual isn't it? My success could be a different idea to yours. Is that right?"

Diana

Diana is thirty-eight. She is married with two children, one under 10. She has no other caring responsibilities. Prior to working for NR, Diana worked in an unrelated industry and joined NR in an administrative role. In the 10 years that she has worked for NR, she progressed to commercial assistant, assistant commercial manager, project manager and is now a commercial manager. She is salary Band Four. In that time, Diana has undertaken a PT QS degree. She is not chartered and currently has no plans to obtain chartered status.

Diana works full time. Initially when offered the opportunity to work from home for one day a week, she declined as she did not want to be the "woman who works at home because she's got kids" but when some of the men in the office began to take advantage of it, she accepted the opportunity and feels that her work-life balance has improved dramatically because of it. In a similar vein she does not keep photographs of her children on her desk, because she feels there is a stigma regarding women with children.

She feels that she has not been supported in her progression because she is an expert in the computer system and the management do not want to lose her due to her efficiency. She says that most assistant commercial managers are women as it is easier for men to progress.

Her definition of career success is: "Being in a job that you enjoy with the prospect of development / promotion should you want it. Being paid fairly for the work you do".

Donna

Donna is in her mid-forties. She is married with one teenage child. She has no other caring responsibilities. Donna has worked for NR for 3 years, moving from a contractor's organisation – having worked for several contractors previously. She joined NR because she felt it was a reliable and secure job. She has a QS degree and is working towards membership of the Institute of Civil Engineering Surveyors (ICES). Her degree was completed prior to joining NR, but they are enabling her chartership.

Donna works full-time but works from home for one day a week which she is grateful for as she has a long commute. She is a Band Four commercial manager and has a supplementary role as a workplace mediator.

When asked what career success meant to her, she said: "Progression is an element of success, but enjoyment is also important. Titles and money come at a cost. Coming to work isn't a chore and that is also success. I wouldn't give that up, not even for a promotion".

Fiona

Fiona is in her mid-forties. She is single and has no children or other caring responsibilities. She has worked for NR for 2 ½ years having joined after being there on a secondment. Fiona is a European national and did not know what a QS was until she came to this country. She obtained an MSc in QS on a 'conversion' course for non-cognate degree holders. She is MRICS and an RICS APC assessor. Prior to joining NR, she worked for several private practices and obtained her chartered status with them. She is now an estimating manager, salary Band Three.

Fiona works full-time and will work from home if she needs to get a task done in peace and quiet. She likes to be in the office as she is a social creature, she says. She says that most people know her because she is female, foreign and outspoken. She considers that if the favourable terms and conditions of working for NR were more widely known, then more women would want to work for them.

When asked about career success, she said: "while I look to move upwards, although not to CEO level... I have always looked to have job variety but if that doesn't work out how I'd like then I have left that job. Promotion gets away from the boring detail of the job and now I am

estimating manager I do little of the day to day grind.” She was told that “being a woman was significant in why I didn’t get promoted”, although this was a previous company.

Georgina

Georgina is in her mid-forties. She is married and has two children, one under 10 and the other a teenager. She has no other caring responsibilities. She has worked for NR for 16 years. Prior to which she worked for a range of consultants and contractors. She joined after being there on a secondment. Georgina has a degree in QS, and an MSc. She has several charterships, some of which are as a fellow. The degrees were obtained prior to joining NR, with the charterships being gained whilst there. She is a salary Band Two, but her actual position is withheld as it is an identifier. She has been in this role for a year, having gradually progressed upwards as well as horizontally “to gain that experience”.

Georgina works full-time and will work from home if she needs to get a task done in peace and quiet. She has strong views on flexible working as, she says, “everybody wants Friday off so who is left to deliver?”.

When asked about career success, she said: “I suppose that is different for each individual isn’t it? I would probably say that career success is doing something that you love that you probably feel you are making some difference, and that your skills are used in the right way. I mean, I don’t define it by ‘I must be managing director – or whatever’. I think it’s the fact that you’ve got pride in what you are producing. And I suppose in a way you can actually say that you are with people that you like being with, as well, really”. She said that if she gets the job above hers, and “if I get there, that will be me done”.

Helen

Helen is in her late fifties. She is married with grown up children. She has no caring responsibilities but is aware that she may have to care for elderly parents in the near future. She has worked for NR for 17 years, prior to which she worked for a contractor outside of the UK. Helen completed a degree in QS when she came to the UK and is MRICS, undertaking these studies in her own time. She is a salary Band Three and is a senior programme commercial manager in signalling and has been in this role for 2 years.

Helen works full-time and will work from home if she needs to get a task done in peace and quiet. She prefers not to work at home as she likes the social interaction she has at work.

When asked about career success, she said: “When I first came to the UK, I never thought success, I didn't have like a five year plan, I didn't have any plan. I knew that I had to get experience at work ... I never rushed. I saw promotion opportunities, commercial manager senior commercial manager but it wasn't like that ... I need to move upwards, but I am not constantly looking for the next opportunity”.

Isobel

Isobel is in her mid-forties. She is married with two children under 12 and no other caring responsibilities. She has worked for NR for 17 years, prior to which she worked for a number of major building contractors. Isobel has a QS degree completed prior to joining NR and is a member of ICES. She is a salary Band Two and is a programme commercial manager. She has been in the role for 4 years and moved area to undertake her current position to improve on her work-life balance. Both of her maternity leaves were undertaken whilst at NR and she was promoted immediately on returning from the second.

Isobel works full-time and will work from home if she needs to get a task done in peace and quiet. She understands that others may think that if individuals say they are working at home, they are not actually working but considers that it is more productive.

When asked about career success, she said: This is hard, if you had asked me that question 15 years ago, I would have given you a different answer to the one I am giving now but, to me, it is about getting to a point in the organisation where you're the decision maker, a key contributor, perhaps viewed as an expert in your field. But my home life is more to me than my job. So, the success of my career is about getting the balance of being successful enough to satisfy my ego, my status and my brain, but not to the detriment of my life”.

Jackie

Jackie is in her late fifties. She is married with no children and no other caring responsibilities. She has worked for NR for 12 years, prior to which she worked in the commercial department of a number of national services providers. Jackie has an MBA which she completed prior to joining NR and is currently pursuing membership of the RICS. She is a salary Band Two and is a programme commercial manager, a role she has had for under a year. All of Jackie's moves since joining NR have been sideways and perceives her lack of relevant qualification is stopping her from gaining promotion.

Jackie works full-time and rarely works from home, saying that she finds the buzz of the office relaxing, and the silence at home too overbearing.

When asked about career success, she said: "I'm the boss and I like that - I like the profile and I like to swim in a big fish-pond ... I enjoy looking upwards, I like the profile that this job affords. I have been at this level for 11 years, and in this 11 years I have mellowed but not in a staunchy, podgy way but in a 'let it go' kind of way. I have still got the kind of role that people dream of. And I just need to let it go. And I talk of having the role that I have always dreamed of, and hopefully moving on to the next great thing, and wanting to spring out of bed, they are the important things - not promotion".

Kathy

Kathy is in her early twenties. She is married with no children and no other caring responsibilities. She has worked for NR for less than one year, prior to which she briefly worked as an intern with a construction company having recently finished university where she did a degree that, whilst not quantity surveying, is construction related. She is keen to undertake a master's 'conversion' course but is struggling to obtain the funding. She is a salary Band Five and is an assistant commercial manager. She decided to become a QS on the advice of one of her university lecturers.

Kathy works full-time and rarely works from home; she says that she finds it difficult when her manager works at home as she misses the guidance she needs.

When asked about career success, she said: "I think, for me, the one thing I have ever said is that I would love to be chartered and I would love to be a senior commercial manager. So that is my 8-year plan, that is what I would see as success in my career. To be chartered and to be higher than I am now, I don't want to be at the same level in 4 or 5 years' time, I want to see myself going up the ladder".

Laura

Laura is in her early forties. She is married with a teenage child and no other caring responsibilities. She has worked for NR for 19 years, and in her current role for 3 years. Laura is not a QS but has a role that could be undertaken by a QS, being largely concerned with post-contract accounting. She is a salary Band One having undertaken a series of both sideways and upwards moves. She became Band One after covering a role for 5 years that she had been told she wasn't ready to apply for.

Laura works full-time and tries to have regular days working from home, something she is also encouraging her team to do as it makes them more efficient.

When asked about career success, she said: “when I started, I wanted to be the financial controller, that was my career goal, But I got there when I was 32 and thought ‘oh dear what am I going to do now?’. And it was at that point I think what I defined as career success changed. Up until that point, I had been really driven to move up the organisation and that was my dream job, but now I just want to make a difference and be seen to be making a difference and to do a good job”.

Mary

Mary is in her mid-thirties. She is partnered with 2 children under 10 and no other caring responsibilities. She has worked for NR for 3 years, always in her current role. Mary is not a QS but has a role that could be undertaken by a QS, albeit a rather niche role which is largely concerned with procurement policy. She is a salary Band Three. She previously worked in a different sector.

Although Mary works full-time, she only spends two days in the office and the other three she works from home, organising her work around the children.

When asked about career success, she said: “personally, I don't think that I am done in terms of where I need to be from a seniority point of view. If people ask me what I want to do I say that, if I have to stay in Network Rail for the rest of Eternity, being Company Secretary, chairman, or CEO is eventually where I would like to go. I don't see any point in aiming low. Aim really high and then beat yourself up for not reaching it”.

Nadia

Nadia is in her late thirties. She is married with a small child and is pregnant with no other caring responsibilities. She has worked for NR for just over a year, and previously worked for a private quantity surveying practice. Nadia is MRICS and is a commercial manager, salary Band Four. She joined NR for reasons of work-life balance as she was able to work part time.

Because she is part time, she avoids working from home as being in the office aids efficiency because you can have instant conversations with colleagues about an issue rather than waiting for an email.

Nadia's definition of career success is: “I think for me work life balance is important, because I get to do both. My husband, who is a QS, is the complete opposite - his is probably more

about salary and car and I'm happy supporting him in that, but for me personally it is about work life balance”.

Olivia

Olivia is in her mid-forties. She is single with no children or other caring responsibilities. She has worked for NR for 4 years, having begun working for the company as a consultant. Olivia is a commercial manager, at salary Band Four and is MRICS. She previously worked for a subcontractor and a consultancy, having only decided to become a QS when she was in her late twenties.

Olivia works full-time and joined NR as her previous job involved a lot of travelling and she wanted to gain some work-life balance. Although she can work flexibly and at home, her line manager and male colleagues make her feel uncomfortable about it.

Olivia's definition of career success, she said: “so career success for me is to get the support to enable you to progress to where you aspire to be. So, you might not want to aspire to become director, but it is knowing that there is somebody there to support you if you did want to go that far”.

Penny

Penny is in her early forties. She is married with two children under 10 and no other caring responsibilities. She has worked for NR for 10 years, and in her current role for under a year. Penny is not a QS but is now a commercial manager at salary Band Five. She has undertaken a variety of different jobs in NR, always at Band Five equivalent but her longevity in the organisation means that she earns more than a Band Four so is reluctant to be promoted as it would mean more responsibility for no additional money.

Penny works full-time and prefers not to work at home but will be flexible if her children are ill. Her current boss is good about her working flexibly, but she has not always had a good experience regarding working from home.

When asked about career success, she said: “success means achieving what you want to achieve, to move up if you want to move up and get promoted because you're learning and you're progressing. I haven't moved up, I've moved around. I did want to move up before the kids but it didn't happen and now I still would like to move up but my priorities have changed and if they expected me to do loads more hours, or expected me to be at meetings

at 8 o'clock in the morning ... so for me it is about being happy at what you doing and achieving and gaining more skills”.

Rosie

Rosie is in her early twenties. She is partnered with no children and no other caring responsibilities. She has worked for NR for just over a year and is a commercial assistant, but as a consultant (temporary worker) at salary Band Five equivalent. Rosie is not yet a QS but is hoping to receive a permanent contract and then to undertake a QS degree.

Rosie works full-time and does not usually work at home but does arrive in the office early to leave early. She arrives at 6:45 every day but will leave at 3 but she feels uncomfortable when she receives comments about why she is going early.

Rosie’s definition of career success is to: “get a qualification to get to the next step where I want to be next in my journey. I think as well with the success it's having someone there to tell you that you are doing well and give you feedback, because they will know that you are successful”.

Sue

Sue is in her mid-fifties. She is married with no children or other caring responsibilities. She has worked for NR for 4 years, and in her current role for 2 ½ years. Sue is a commercial manager at salary Band Four. She said that she is on her “third career” and became a QS after undertaking an NR sponsored master’s in project management. She is not MRICS and, although she was once interested in undertaking the APC, she does not think she will now do so.

Sue works full-time and will work at home if she has to but does not do it very often believing that “people don’t like you working at home”.

When asked about career success, she said: “career success is reaching a level that you feel stretches you but that you're comfortable with. As I reach [a position] that I feel comfortable with I then say no I need to change because it has to challenge me. you need to feel that you are challenged otherwise it's all too easy and you may as well not get up in the morning”.

Tessa

Tessa is in her early twenties. She is single with no children or other caring responsibilities. She has worked for NR for 2 ½ years, and in her current role for 2 months. Tessa has a non-cognate degree but is hoping to pursue a quantity surveying qualification in due course. She is a commercial manager and salary Band Four. NR is her second job having previously spent several months with a quantity surveying practice.

Tessa works full-time and tries to have regular days working from home, something she is also encouraging her team to do as it makes them more efficient.

When asked about career success, she said: “at my stage I think it is just getting to the stage where I am ... because I am aiming to go as far up the ladder as I can, and I am quite ambitious about that, but not necessarily speeding. I am quite happy where I am at the moment but just having that level where people know that you know what you're talking about”.

Vanessa

Vanessa is in her mid-forties. She is married with 3 children under 10 but no other caring responsibilities. She has worked for NR for 3 years, having previously worked for contractors. Vanessa has a Post Graduate diploma in quantity surveying and is pursuing chartered membership of the RICS. Her current role is as a commercial manager, managing subcontractors, at salary Band Four.

Vanessa works full-time, she joined NR for WLB as she was working up to 60 hours a week with the contractor. She works flexibly and that includes working 1 day a week at home.

When asked about career success, she said: “it's difficult. It is different for everybody. It's where you strive to be and if you get where you want to be as a person then you're successful”.

Wendy

Wendy is in her early forties. She is divorced with 2 children under 10 and no other caring responsibilities. She has worked for NR for 3 years, having previously worked for a contractor, and is a commercial manager, at salary Band Four, managing subcontractors. She has a quantity surveying degree and is in the process of pursuing chartered membership of the RICS.

Wendy works full-time, although her hours are slightly condensed from Monday – Wednesday, which she makes up on the other days. This is to accommodate childcare responsibilities. She rarely works at home.

When asked about career success, she said: “I suppose to be happy in your work environment. I can't imagine dreading coming into work every day. And to feel like you're achieving something - whatever that is. Things like awarding a contract and then taking it through to final account. It's quite a nice process to see something built that you have had a hand in; something tangible”.

Xanthe

Xanthe is in her early thirties. She is married with 2 children under 5 and no other caring responsibilities. She has worked for NR for 3 years, having previously worked in private practice, and works as an assistant commercial manager, salary Band Five. She has a construction management degree and a PG diploma in quantity surveying. She is currently pursuing chartered status of the ICES.

Xanthe works full-time, but has a flexible working agreement, working 30 hours between Monday and Thursday, and on a Friday, she only works school hours and from home, this is to accommodate childcare responsibilities.

When asked about career success, she said: “for me I don't see career success as moving up a ladder all the time, for me it is being happy with what I'm doing and if I'm happy doing this then I'll become a successful”.

Yvonne

Yvonne is in her early forties. She is married with one child under 10 and no other caring responsibilities. She has worked for NR for 3 years; her previous roles are not construction related. Yvonne is a senior commercial manager, salary Band Three. She has no construction related qualifications and is pursuing membership of the RICS.

Yvonne works full-time and can work at home whenever she needs to.

When asked about career success, she said: “For me, I'm not desperate to get to director level in any way shape or form, that's not my goal. To be quite honest, I would have been more than probably have been happy to stay as a QS for the next 5 years, but the job came up and I was encouraged to apply. So, for me, it's happiness and contentment it's not

necessarily climbing up that big long ladder. I see myself as more probably making a sideways step in years to come, but it might not even be until my son is at secondary school”.

Zoe

Zoe is in her late thirties. She is married, but her partner works overseas much of the time. She has a teenage child and one under 12 and no other caring responsibilities. She has worked for NR for 7 years; her previous roles are not construction related. Zoe is only one of two respondents with the title ‘quantity surveyor’. She is a salary Band Four. Zoe has no construction related qualifications but is interested in obtaining “something further and higher”.

Zoe works full-time but can work at home, sometimes at short notice, whenever she needs to.

When asked about career success, she said: “I think career success has changed and I think it's changed quite massively for me. I think when I was 18, 19, 20, I wanted to take over the world, but as you get older and have the kids and stuff like that, that sort of thing changes doesn't it. I think being able to be as flexible as we are is a big seller and being able to have a career that I am happy with, and a job that I feel happy with that challenges me”.

Summary of respondents

Demographic	Sub-division	Respondents
Salary band:	1	Laura.
	2	Isobel, Georgina, Jackie.
	3	Amelia, Anna, Bryony, Diana, Fiona, Helen, Mary, Sue, Yvonne.
	4	Beth, Caroline, Ceri, Donna, Nadia, Olivia, Tessa, Vanessa, Wendy, Zoe.
	5	Kathy, Penny, Rosie, Xanthe.
Age:	20 – 29	Ceri, Kathy, Rosie, Tessa.
	30 – 39	Beth, Diana, Mary, Nadia, Xanthe, Zoe.
	40 - 49	Bryony, Caroline, Donna, Fiona, Georgina, Isobel, Laura, Penny, Olivia, Vanessa, Wendy, Yvonne.
	50 - 59	Amelia, Anna, Helen, Jackie, Sue.
Marital status	Married / partnered	Amelia, Beth, Bryony, Ceri, Diana, Donna, Georgina, Helen, Isobel, Jackie, Laura, Kathy, Mary, Nadia, Penny, Rosie, Sue, Vanessa, Xanthe, Yvonne, Zoe.
	Single / divorced	Anna, Caroline, Fiona, Olivia, Tessa, Wendy.
Children:	Dependent	Beth, Bryony, Diana, Donna, Georgina, Isobel, Laura, Mary, Nadia, Penny, Vanessa, Wendy, Xanthe, Yvonne, Zoe.
	No dependent	Amelia, Anna, Caroline, Ceri, Fiona, Helen, Jackie, Kathy, Olivia, Rosie, Sue, Tessa.
Chartership	MRICS / FRICS	Bryony, Fiona, Georgina, Helen, Isobel, Nadia, Olivia.
	Working towards RICS	Diana, Donna, Jackie, Vanessa, Xanthe, Wendy.
	Aspire to RICS	Ceri, Kathy, Rosie, Tessa, Zoe.
	Other chartership	Laura.
	No aspiration / other chartership aspiration	Amelia, Anna, Beth, Caroline, Mary, Penny, Sue, Yvonne.
Previous construction organisations	Contractor	Donna, Helen, Isobel, Kathy, Rosie, Vanessa, Wendy.
	Private practice	Fiona, Nadia, Tessa, Xanthe.
	Consultancy	Georgina, Olivia.
	None	Amelia, Anna, Beth, Bryony, Caroline, Ceri, Diana, Jackie, Laura, Mary, Sue, Yvonne, Zoe.
Length of time at NR	1 – 2 years	Kathy, Nadia.
	2 – 5 years	Caroline, Ceri, Donna, Fiona, Mary, Olivia, Rosie, Sue, Tessa, Vanessa, Wendy, Xanthe, Yvonne.
	5 – 10 years	Zoe.
	Over 10 years	Amelia, Anna, Beth, Bryony, Diana, Georgina, Helen, Isobel, Jackie, Laura, Penny.

Table 18 – demographic information for case-study respondents

Structure of NR management salary grades

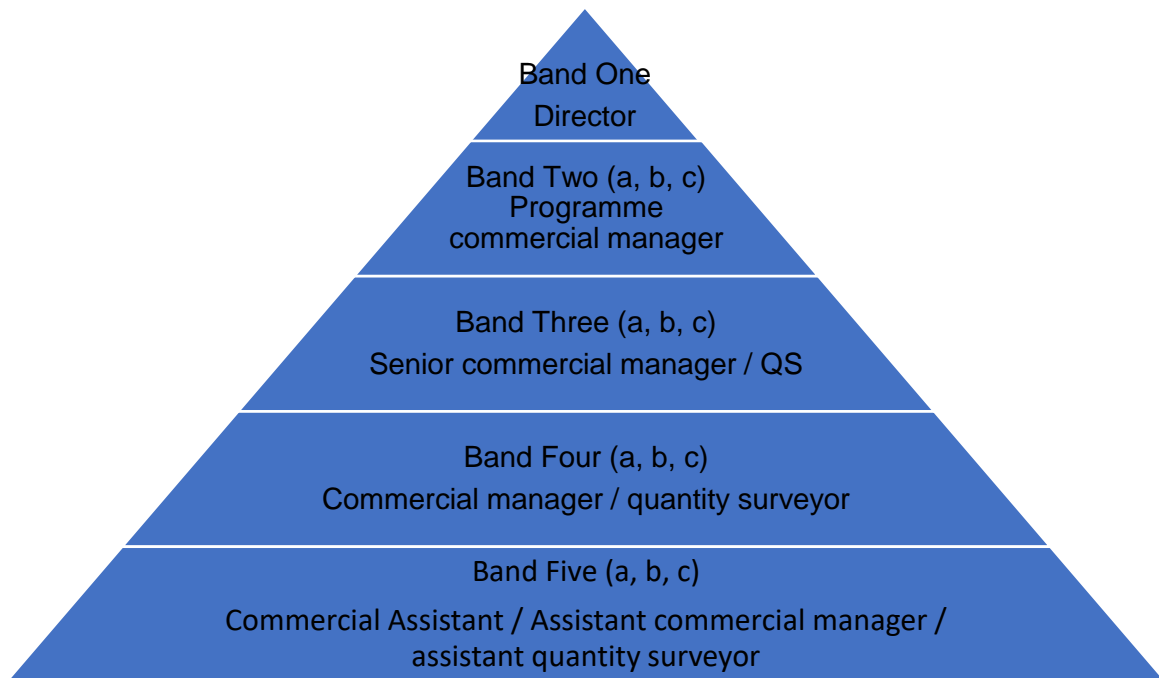


Figure 17: Structure of NR management grade salary bands relating to case-study respondents

Appendix B - Demographic information of questionnaire survey respondents

Age:

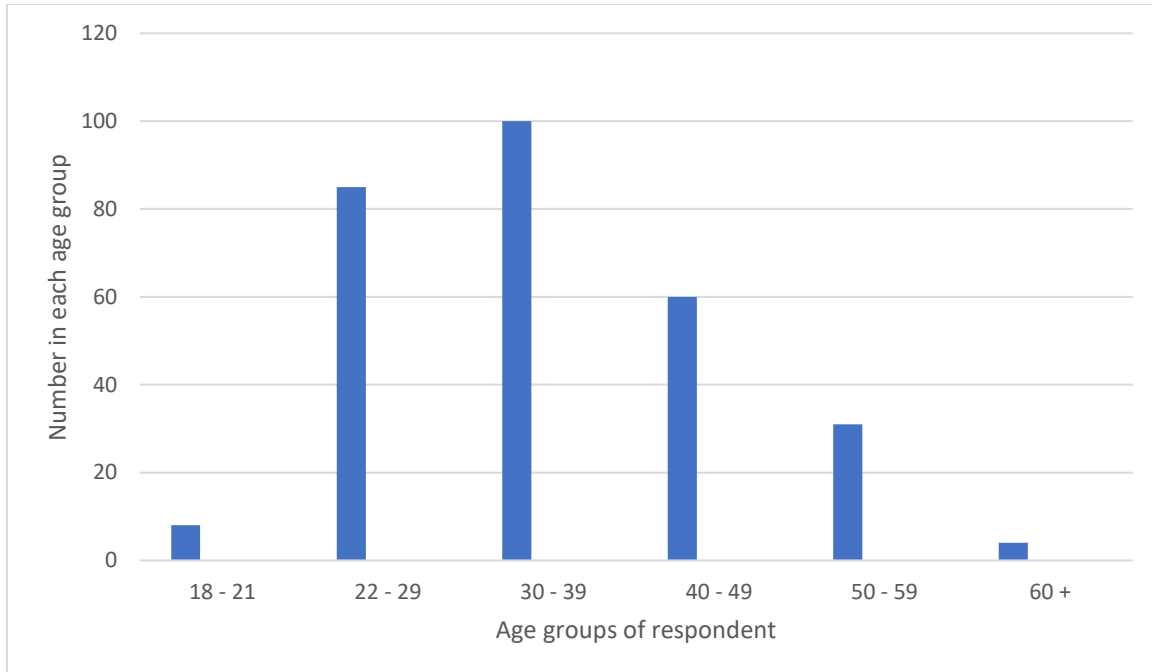


Figure 18: Age of respondents

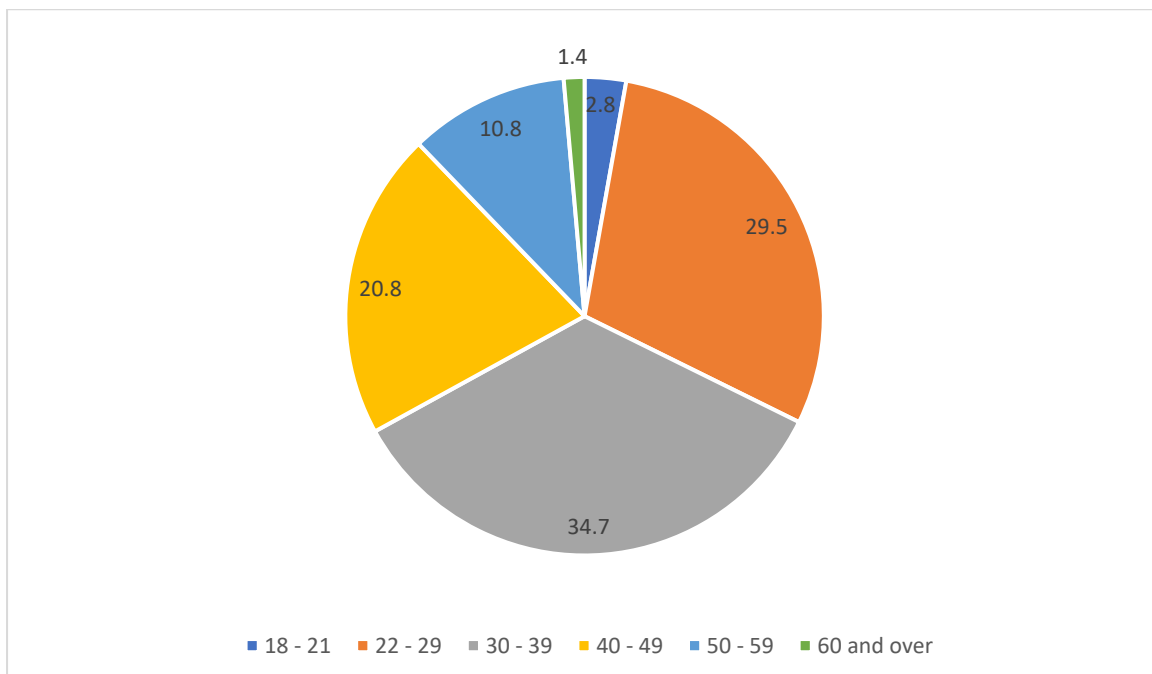


Figure 19: Age of respondents expressed as a percentage

Marital status:

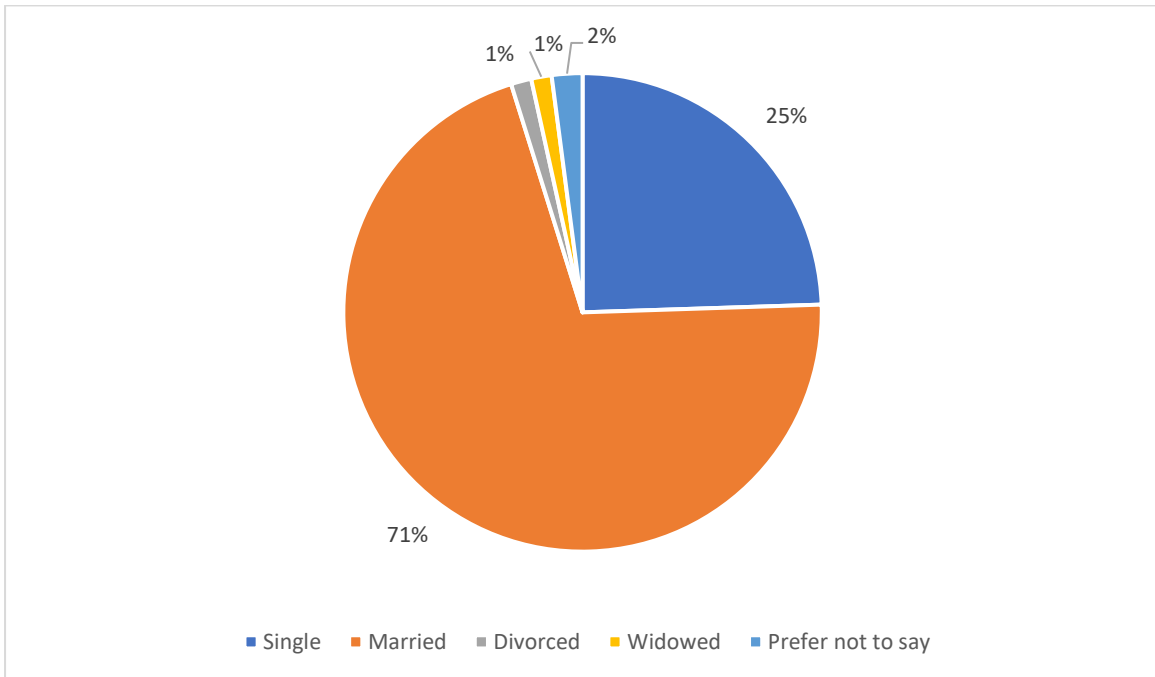


Figure 20: Marital status of respondents expressed as a percentage

Children:

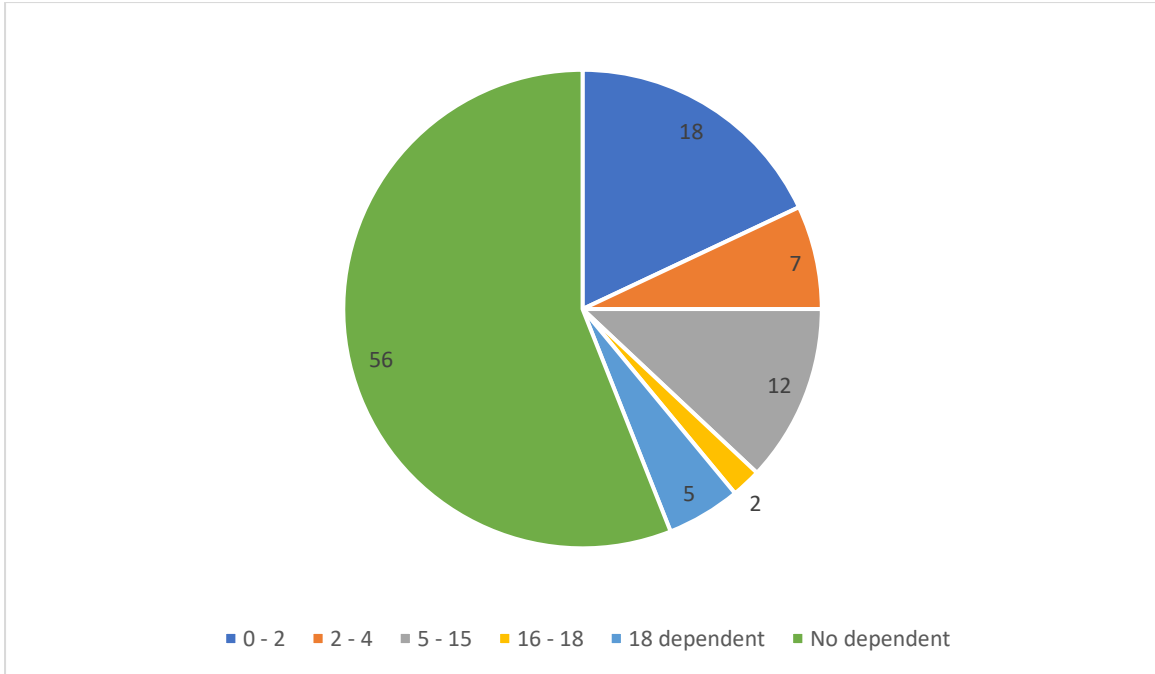


Figure 21: Percentage of respondents' with youngest child in each age range

Ethnicity:

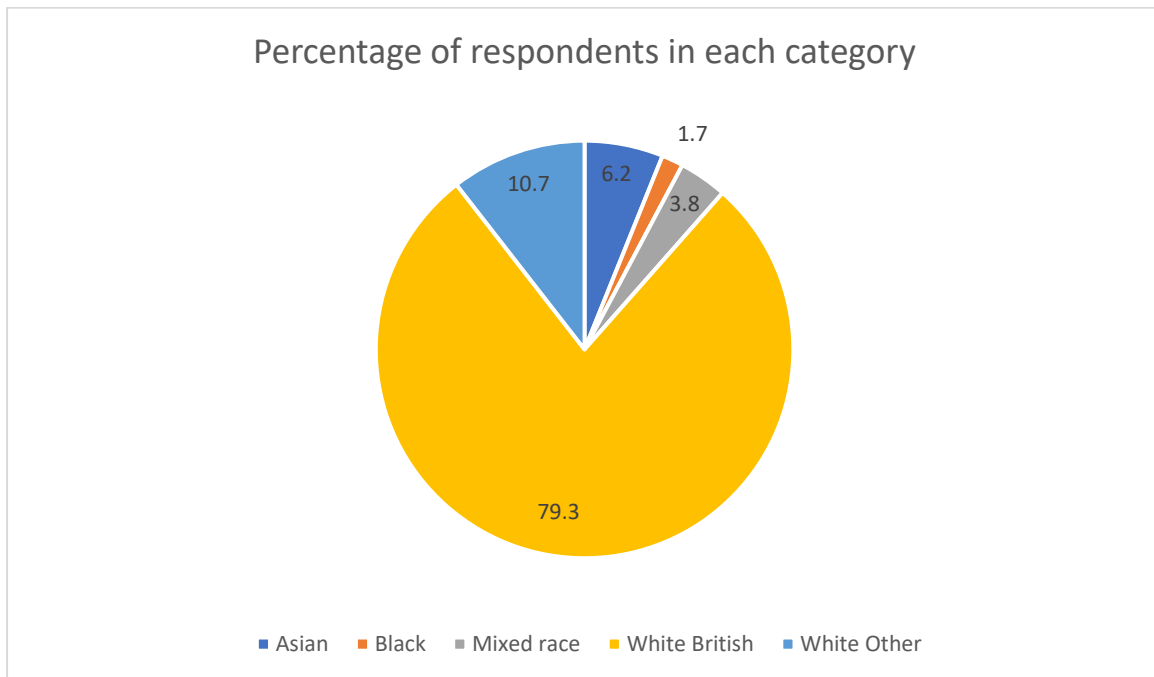


Figure 22: Ethnicity of questionnaire survey respondents expressed as a percentage

Qualifications:

Qualification:	No. of respondents
Undergraduate degree (E.g. BSc / BA)	245
Higher degree (e.g. MSc / MA / PhD)	92
Vocational qualifications (e.g. HNC /D)	51
Chartered member of the RICS (MRICS / FRICS)	144
Other construction charterships (e.g. MCIOB, MCICES)	33
Other professional qualifications	41
No vocational or technical qualifications	7

Table 19: Qualifications of questionnaire survey respondents

Age

Age	contractor	Private Practice	Other	Total
18 – 30	43	45	10	98
30 – 50	60	71	21	152
50 and over	8	17	10	35
Total	111	133	41	285

Table 20: Age profile of respondents to the questionnaire survey

Appendix C – Table indicating the sequence of educational reforms of the RICS

Year	Report or other initiative	Effect
1948	The IQS introduced qualifying examinations.	Entry requirements in terms of O and A levels similar to those of the RICS except that they had 6 routes of entry, including by means of obtaining an HNC / HND.
1950	The Watson Committee Report	Recommended that those with degrees in estate management from either Cambridge or London Universities were eligible for election to Professional Associate after fulfilling two years' approved professional training (Male, 1983). Other, approved, cognate degrees gained partial exemption from the Institution's examinations (Thompson, 1968; Male, 1983).
1960	The Wells Committee report	Reappraised education and training for the profession. Concluded that, due to recruiting individuals of a lower academic ability than they desired, they recommended a dual system of entry for school leavers. 'O' level standards were raised but concessions were given for those with approved 'A' levels. Also recommended that the profession should be a defined discipline at Higher Education level with senior members of the profession contributing to teaching.
1964 – 65	IQS	Initiated a Test of Professional Competence (TPC)
1966	RICS	A further change in entry standards due to the changing national educational standards. A minimum requirement of five subjects at GCE, including two at 'A' level, placing entry requirements on a par with those of other university courses. Criticisms that the raised minimum requirements for entry excluded many who might otherwise have succeeded through the old pupillage system (Nisbet, 1989), especially given that, in 1972, only around 19% of 18-year olds achieved 1 or more pass at A level (Bolton, 2012).
1967	The Eve Report	A “watershed in RICS educational policy” (Male, 1983: 26). Concluded that all future professional surveyors should hold a degree, obtained either by full-time or sandwich courses, aiming to create a line between practical training, provided by the degree courses, and professional experience.
1970	Government	Education provision changed again, when 30 Polytechnics were formed (Ashworth, Hogg and Higgs, 2013) offering vocational degrees, including in quantity surveying. Seen by some as somewhat less than a university degree (Davis, 1979), their strong vocational focus and their validation by the Council for National Academic Awards (CNAA), as well as the influence on their

		<p>content by professional bodies, meant that they had a closer relationship to industrial and commercial needs.</p> <p>They were more than training courses, intending to develop skills such as critical thinking, to produce a more-rounded graduate (Ashworth, Hogg and Higgs, 2013).</p>
1971	"The future role of the QS" report	<p>Specified that quantity surveying training should include subjects such as construction economics, cost planning, programming, design economics and data communication and computer usage.</p> <p>This indicated a shift away from the purely technical measure and value functions towards advisory, managerial competencies (Male, 1983).</p>
1973 – 1975	IQS	<p>Applications into the IQS by means of obtaining the RICS' own qualifications increased significantly.</p> <p>Possibly as a result of the introduction by the RICS of the TPC assessment in 1973, as the mechanism to gaining corporate membership, which could be undertaken after a minimum of 3 years post-graduate experience (Male, 1983)</p>
1978	The Brett-Jones report	<p>Concluded, amongst other things, that the two-tier profession (of professionals and technicians), had failed to materialise as the role of technician was unattractive compared to professional status.</p> <p>Also commented that EEC membership may force the RICS to adopt a full-time degree route to professional status.</p>
1980s	RICS	<p>The RICS' own examinations ended, and full or part-time degrees became the route into surveying.</p>
1984	RICS	<p>All chartered surveyors must undertake Continuing Professional Development (CPD) which is not only mandatory but must be registered, with evidence to be supplied if asked.</p>
1992	Government	<p>The Further and Higher Education Act of 1992 meant that Polytechnics became universities awarding their own degrees. These are accredited by the RICS.</p>
1992	RICS QS divisional council	<p>Recommended that education providers for Qs should focus primarily on core skills (such as quantification, management and communication) with the addition of primary and secondary levels of expertise.</p> <p>Primary expertise includes services such as cost management and procurement management and secondary expertise includes, for example, law and construction technology (Seeley, 2014).</p>
1994	RICS	<p>TPC replaced by the Assessment of Professional Competence (APC), because the TPC was considered less structured and its pass rate was too low (Seeley, 2014).</p> <p>Assessment changed from a 48-hour paper with a practice problem to a 1-hour presentation and a panel interview, which has achieved increased success (Seeley, 2014). Additional factors in the improved success rate are thought to be the requirement to complete a more structured logbook and diary of experience, together with an interim submission halfway through the structured training period (Seeley, 2014).</p>

Appendix D - Ethics approvals and participant information sheets

D.1 Emails to and from Network Rail

From: Denise Bowes [<mailto:denise.bowes@btopenworld.com>]
Sent: 07 March 2017 15:00
To: Diversity and Inclusion
Subject: PhD Thesis regarding female QSs from Network Rail

Hello

My name is Denise Bowes and I am a PhD researcher at the University of Westminster. I am in the process of researching a thesis entitled "A capabilities approach to women's careers in Quantity Surveying: Opportunities and constraints". The thesis intends to take a positive stance regarding opportunities for women in construction and engineering – focussing on Quantity Surveying.

I am enquiring as to whether it would be possible to use Network Rail as a case study for my research. This would involve carrying out confidential interviews with women in Network Rail who either trained as a QS or work in a QS role (whether or not this is their title). At the moment Network Rail is the only company I have approached in this matter, and I have chosen to ask you due to the policy of diversity and inclusion that you have and because the range of work carried out in building and engineering provides an excellent snapshot of the construction industry as a whole.

I should be grateful for the opportunity to discuss this further, and am willing to travel and / or phone in order to do so.

Thank you for your time.

Regards

Denise Bowes.

From: Diversity and inclusion team organiser NR
Sent: 08 March 2017 12:28
To: Diversity and Inclusion Business manager
Subject: FW: PhD Thesis regarding female QSs from Network Rail

Hello X

Can I pass this to you?

Kind Regards

Team Organiser
Diversity & Inclusion

Network Rail | The Quadrant MK | Furtzon Building Floor 1
Elder Gate | Milton Keynes | MK9 1EN |
Diversity and Inclusion Champion

From: Diversity and Inclusion Business manager [<mailto:XX@networkrail.co.uk>]
Sent: 08 March 2017 14:40
To: denise.bowes@btopenworld.com
Subject: RE: PhD Thesis regarding female Qs from Network Rail

Hi Denise

My colleague X sent over to me your email and I have passed this on to our property team who are going to see if we have any female Surveyors across the wider business who may be able to assist.

We will come back to you.

Kind regards

Diversity and Inclusion Business Manager

From: [Denise Bowes](#)
Sent: 14/03/2017 16:53
To: Diversity and Inclusion Business manager Network Rail
Cc: Public affairs officer
Subject: RE: PhD Thesis regarding female Qs from Network Rail

Hi XX,

Thank you so much – that is great news. Who would I liaise with regarding access?

Additionally, would it be possible to conduct a short interview with you or someone else from your department regarding the overall policy for women in Network Rail? I am able to travel and am available at your convenience.

Kind regards

Denise

From: XX Diversity and inclusion business manager, NR[<mailto:XX@networkrail.co.uk>]
Sent: 13 March 2017 15:36
To: Denise Bowes <denise.bowes@btopenworld.com>
Cc: XX Public affairs officer <XX@networkrail.co.uk>
Subject: RE: PhD Thesis regarding female Qs from Network Rail

Denise

Just to confirm that I have checked with XX, Head of Public Affairs and she is happy for you to carry out the research, particularly if contributions will be anonymous.

Kind regards

XX
Diversity and Inclusion Business Manager

D.2 Participant information sheet and consent

PARTICIPATION INFORMATION SHEET

Research: Women's career pathways in quantity surveying

Researcher: Denise Bowes, University of Westminster

Supervisor: Sylvia Snijders, Linda Clarke and Melahat Sahin-Dikmen, University of Westminster

You are being invited to take part in a research study regarding the careers of female quantity surveyors. The study intends to take a positive look at female QSs' careers, exploring respondents' career history, aspirations and definitions of career success.

The aim of this research is to understand how aspirations and organisations impact on the career pathways of female QSs.

The study will involve you:

- Participating and consenting to an interview with me on the above topic. It will take approximately 1½ hours and will be recorded.
- For this study, follow up interviews may be undertaken to support information already collected.

Please note:

1. Participation is entirely voluntary.
2. You have the right to withdraw at any time without giving a reason.
3. You have the right to ask for your data to be withdrawn as long as this is practical, and for personal information to be destroyed.
4. You do not have to answer any question if you do not wish to – please note: harassment in the workplace is the focus of one question.
5. Your responses will be confidential. You will remain anonymous and your name will not be published. No individuals will be identifiable from any collated data, written report of the research, or any publications arising from it.

6. All personal data will be kept separate from any information provided physically, and in password protected files electronically.
7. If you wish you can receive information on the results of the research.
8. The researcher can be contacted after participation by email
(w1580226@my.westminster.ac.uk)

CONSENT FORM

Title of study: A capabilities approach to women's pathways in quantity surveying: opportunities and constraints.

Lead Researcher: Denise Bowes

I have read the information in the Participant Information Sheet, and I am willing to act as a participant in the above research study.

First Name (PRINT): _____

Last Name (PRINT): _____

Email (PRINT) _____

Phone (PRINT) _____

Participant Signature: _____

Date: _____

This consent form will be stored separately from any data you provide so that your responses remain anonymous.

I have provided an appropriate explanation of the study to the participant

Researcher Signature _____

D.3 Ethics approval – University of Westminster

The screenshot shows a web browser window with the address bar displaying <https://research.westminster.ac.uk/q06vq/ethics-application-eth1617-1170>. The page content is as follows:

- Ben Shaw requested more information** 20 Apr 2017, 17:34
- Denise Bowes resubmitted application after providing more information** 03 May 2017, 21:11
- Ben Shaw added a note:** 14 Aug 2017, 17:53

The note from Ben Shaw reads:

Dear Denise,
Apologies for the delay in approving this ethics applications.
I have approved it but I think it is a Class 1 application not Class 2. I think your answer 'yes' to questions 4 and 6.2 have triggered it being class 2.
Question 4 refers to participants in a clinical setting who are being subjected to a 'treatment' rather than participants in social science research based methodologies. You could have answered 'no' to this.
Question 6.2 is more marginal. There is a possibility of psychological stress or anxiety given the topic matter but I think the interview format and approach you propose to minimise distress is appropriate. Should a participant have experienced sexual harassment it may be that discussion in an interview would be of benefit to the individual. Of course they should not be pressed to discuss it if they don't wish to.
In regard to interviewing people you know you may find the following reference useful: Tracy McConnell-Henry and Ainsley James and Ysanne Chapman and Karen, F. (2010). "Researching with people you know: Issues in interviewing." Contemporary Nurse 34(1): 2-9. It's available at <http://www.tandfonline.com/doi/pdf/10.5172/conu.2009.34.1.002>
Good luck with the research.
Ben

- Ben Shaw approved the application** 14 Aug 2017, 17:53
- Ben Shaw sent a formal notification to the researcher** 14 Aug 2017, 17:53

The Windows taskbar at the bottom shows the search bar with "Type here to search", several application icons, and the system tray with the date "30/06/2020" and time "12:46".

Appendix E – Case study protocol

1. Background
 - a) identify previous research on the topic
 - b) define the main research question being addressed by this study
 - c) identify any additional research questions that will be addressed
 - d) identify the research propositions and the unit of analysis;
2. Design
 - a) identify the case and whether to have a single-case study, multiple-case study or as part of mixed methods research; link to the research questions
 - b) describe the object of study
 - c) identify any propositions or sub-questions derived from each research question and the measures to be used to investigate the propositions
3. Case Selection
 - a) Criteria for case selection
4. Case Study Procedures
 - a) Establish the procedure regarding access to case study participants, including participant information sheets and ethical approvals;
5. Data Collection
 - a) identify the data to be collected
 - b) define a data collection plan - including recordings and notes
 - c) define how the data will be stored
 - d) conduct a pilot case study
 - e) draft the questions to be asked
 - f) collect information regarding case study organisation.
6. Analysis
 - a) identify the coding criteria for interpreting the findings
 - b) identify which data elements are used to address which research question/sub question/proposition and how the data elements will be combined to answer the question
 - c) Use appropriate analysis techniques to build explanations, observe patterns of answers, explore alternative interpretations, understand why relationships exist and reasons for commonalities, be mindful of new information;
 - d) the analysis should take place as the case study task progresses
 - e) Compare findings with existing similar and conflicting literature and triangulate findings with other data sources; validation of findings;

f) Appreciate when closure is reached (i.e. any further evidence/data only marginally adds to the research);

g) Write the analysis and organise the structure of the analysis,

7. Plan Validity

a) construct validity - show that the correct operational measures are planned for the concepts being studied. Tactics for ensuring this include using multiple sources of evidence, establishing chains of evidence, expert reviews of draft protocols and reports

b) internal validity - show a causal relationship between outcomes and intervention/treatment (for explanatory or causal studies only).

c) external validity – identify the domain to which study finding can be generalized. Tactics include using theory for single-case studies and using multiple-case studies to investigate outcomes in different contexts.

8. Study Limitations - Specify residual validity issues including potential conflicts of interest (i.e. that are inherent in the problem, rather than arising from the plan).

9. Reporting - identify target audience, relationship to larger studies

Appendix F - Case-study interview Questions

Checklist

A. PERSONAL INFORMATION

A.1 PERSONAL DETAILS

- A.1.1 Name?
- A.1.2 Age group?
- A.1.3 Marital status?
- A.1.4 Children?
- A.1.5 Do you support any family members with disabilities / illnesses?
- A.1.6 Which ethnic group do you belong to?
- A.1.7 Do you have any disability or other health problem?
- A.1.8 Which office are you based in for Network Rail?
- A.1.9 What is your highest qualification?
- A.1.10 Have you ever had a career break and why?
- A.1.11 Were there any difficulties returning to work?

B. EDUCATIONAL AND WORK HISTORY

B.1 Current work role.

- B.1.1 What is your current job title and position
- B.1.2 What duties do you undertake
- B.1.3 How long have you done this job for?
- B.1.4 Previous jobs with NR?
- B.1.5 Why did you choose to become a QS / undertake a QS type role?
 - B.1.5.1 Tell me a little of your family background – any connection with construction?
 - B.1.5.2 What did your father do for a living (if not given above)?

B.2 Educational History

- B.2.1 Briefly describe your educational history (type of high school / university / post grad).
- B.2.2 Are you Chartered – RICS / CIOB?
- B.2.3 If no – do you wish to be and does NR enable you to get the experience you need?
 - B.2.2.4 If yes – what CPD do you undertake?
 - B.2.3 Other Development courses undertaken?
 - B.2.3.1 Are these funded by NR?

B.3 Previous Work History

B.3.1 Briefly describe your work history

B.3.1.1 Organisations

B.3.1.2 Positions

B.3.1.3 Work Roles / duties

C. CURRENT WORKING ARRANGEMENTS

C.1 Working time

C.1.1 Which of the following best describes your current work arrangement?

- Full time
- Part time
- Other arrangement

C.1.2 Which of the following arrangements have you used, are available to you if you needed them or would you use in the future?

- Flexi time / job share
- Change from full to part time
- Condensed hours
- Working at home
- Term time only
- Other

C1.3 If you use or have used any of these arrangements, what has been your experience in terms of the effect on

- Efficiency
- Other colleagues
- Work: life balance
- Career progression

C1.4 Do you ever work longer than your contracted hours, (either evenings or weekends), if so why?

Prompt: Could Be:

- Variable hours worked

- Pressure of work
- Excessive workload
- Other

C1.5 Do you ever have to stay away from home for work?

C1.6 How many hours do you travel to and from work each day? Are you happy with this number of hours?

C1.7 Are you left to plan your own time / activities at work

D. WORK:LIFE BALANCE

D.1 Personal circumstances

D.1.1 (If they have children) What are your childcare arrangements

D.1.2 Do you have other caring responsibilities (i.e. elderly parents)?

D.1.3 If yes, what are the arrangements between work and these responsibilities? For example, how receptive is your line manager regarding the following?

- My line manager/supervisor is supportive of requests for maternity/paternity leave
- My line manager/supervisor is supportive of requests for flexible working (e.g. requests for part-time working, job share, compressed hours).
- I feel that equality strategies are fully embraced by line managers
- Anything else?

D.2 Work: Life balance

D.2.1 What are your non-work goals and are you able to pursue them?

D.2.2 Are you satisfied with your work/life balance, In terms of:

- Fulfilling commitments outside of work because of the amount of time spent at work
- Feeling that your job is secure in this organisation
- Feeling that you are expected to be in the office during all contracted hours or feel under pressure to spend longer than your contracted hours in the office
- Think your workload is in excess of what you can undertake in your contracted hours

D.2.3 What would make the biggest positive difference to your work life balance?

E. YOUR CAREER

E.1 Definitions

E.1.1 How would you define career success?

E.1.2 How would you define career progression?

E.2 Career goals

E.2.1 What are your career goals / aspirations?

E.2.2 Do you feel in control of your career planning?

E.2.3 What do you think people need to do to achieve vertical progression in your kind of job i.e. to a promotion? Such as

- Put in long hours
- Show presence at work
- Obtain higher qualifications
- Broader range of experience
- Specific training
- Better social connections
- other

E.2.4 What do you think people need to do to achieve horizontal progression in your kind of job i.e. a change of job role / department? Such as

- Put in long hours
- Show presence at work
- Obtain higher qualifications
- Broader range of experience
- Specific training
- Better social connections
- other

E2.5 Do you think Network Rail actively encourage women to take up career development opportunities?

E.2.6 To what extent do you consider any of the following aspects of your employment might be a barrier to women's career progression?

Such as

- Working hours
- Traveling to / for work
- Demanding work schedule
- Male dominated macho culture
- Harassment
- Other

E.2.7 Do you think the equality characteristics listed below are a barrier to the progress of your career? For example:

- Age
- Disability

- Gender
- Race / ethnicity
- Parenthood
- Etc.

F. ORGANISATIONAL ENVIRONMENT

F.1 Inclusivity

F.1.1 Are you aware of the law regarding equality and diversity, in terms of issues such as

- Maternity / paternity leave.
- Harassment
- Sex equality

F.1.2 Are you aware of Network Rail's policies on equality and diversity?

F.1.3 Have you been on any diversity training within the last 12 months?

If 'yes', what was the subject of this training

If 'no', are you aware of what diversity training are available to you in your current role?

F.1.4 Is there any area regarding equality and diversity in which you would like more training?

F.1.5 Are you aware or do you know how to find out about the following policies / campaigns such as the flexible working charter, working from home policy, equal opportunities policy?

F.1.6 As far as you are aware, are you paid the same as equivalent male colleagues?

F.1.7 Are you treated the same as male colleagues?

F.1.8 Do you feel supported at work – i.e. listened to and treated with respect.

F.1.9 Are you happy to come to work?

F.1.10 Are your opinions sought by colleagues and line managers?

F.1.11 Do you feel you have a voice?

F.1.12 Do you feel respected?

F.1.13 Does work improve your self-esteem?

F.1.14 Do you feel trusted to do your job?

F.1.13 What measures do you consider would help to increase the proportion of women in the industry / organisation? For example:

- Employing dedicated managers/coordinators to monitor and ensure equality in recruitment and subcontracting
- Incorporating suppliers' diversity track record as part of tendering
- Promoting equality representatives/champions to be kept informed of equality processes and to liaise with those from target groups on issues of concern

- Setting high equality targets, rejecting dominant construction employment orthodoxies, and taking profile-raising initiatives
- Introducing a gender audit template, embracing all employed on the project, including contractors and subcontractors
- Requiring training in equality awareness
- Introducing more effective family-friendly policies
- Using social media to communicate policies and stimulate debate on improving equality and showcasing achievements of women on the project

F.1.14 Do you think Network Rail sets a good example for employing women in the construction industry and why?

F.2 Discrimination / harassment / bullying

F.2.1 Have you experienced any discrimination, harassment or bullying since you've been in employment:

In Network Rail:

Elsewhere:

F.2.2 Would you know what to do if you wanted to complain about how you were being treated in relation to equality and diversity issues?

- Yes
- No
- Not sure

F.2.3 What actions could Network Rail take to promote equality and diversity?

F.3 Mentoring/networking/social relations

F.3.1 Does NR have a mentoring scheme that you know of and do you participate – either as a mentor or as a mentee at present?

F.3.2 Are there any incentives for mentoring?

F.4 Networking and social relations

F.4.1 What opportunities for networking are there within Network Rail?

F.4.2 Do you take up these opportunities?

F.4.3 Are any other social activities organised within work teams / departments

F.4.4 Do you have good social relationships with your colleagues?

F.4.5 Do you pursue networking opportunities through an alternative body such as the RICS?

G: Is there anything else?

Appendix G – Questionnaire survey

Survey of the careers of female Quantity Surveyors 2018

This survey is conducted in partial completion of a PhD thesis from the University of Westminster and is being distributed to all female Quantity Surveyors and women who work in QS roles, even if not formally qualified as a QS.

All responses are anonymous and will be treated in the strictest confidence

Thank you for taking part in this survey - your answers will greatly contribute to the understanding of careers of female Quantity Surveyors and their roles.

The questionnaire contains six sections of different lengths and should take no longer than 20 minutes to complete.

SECTION A - ABOUT YOUR RECENT WORK IN THE CONSTRUCTION INDUSTRY

This section focuses on your last three employments - your current (or most recent) job or role, and your two jobs (or roles) prior to that (even if within the same organisation).

A1. In your last three roles, what type(s) of organisation(s) have you worked for?

Organisation	Current role	Previous role	Two roles ago
Large contractor or subcontractor (employing 250 people or more)			
Medium sized contractor or subcontractor (employing 50 to fewer than 250 people)			
Small contractor or subcontractor (employing fewer than 50 people)			
Large private practice (employing 250 people or more)			
Medium sized private practice (employing 50 to fewer than 250 people)			
Small private practice (employing fewer than 50 people)			
Housing organisation			
Client based organisation			
Educational organisation (e.g. a university)			
Other (please see below)			

A2. If 'other' what was the nature of the organisation(s)?

A3. Which of the following categories applies to the work you have undertaken in your last three roles? (Please tick all that apply)

Competency / job function	Current role	Previous role	Two roles ago
Building information modelling (BIM) management			
Capital allowances			
Commercial management of construction			
Conflict avoidance, management and dispute resolution procedures			
Construction technology and environmental services			
Contract administration			
Design economics and cost planning			
Insurance			
Procurement and tendering			
Programming and planning			
Project evaluation			
Project financial control and reporting			
Quantification and costing of construction works			
Risk management			
Other (please see below)			

A4 If 'other' please state

A5. What level of hierarchy have you achieved in your last three roles? (Please tick one box in each column)

Level of hierarchy	Current role	Previous role	Two roles ago
Trainee			
Graduate			
Quantity Surveyor			
Commercial manager / project QS			
Senior quantity surveyor / commercial manager			
Associate Partner / senior manager			

Associate director			
Director			
Other (please see below)			

A6 If 'other' please state

A7. How many years in total have you worked in each of your last three roles? (Please tick one box only in each column).

Number of years in role	Current role	Previous role	Two roles ago
Less than 1 year			
1 to less than 2 years			
2 to less than 5 years			
5 to less than 10 years			
10 years or more			

A8. Which of the following phrases best describes your working arrangements in these roles? (Please tick one option only for each column).

Working time arrangements	Current role	Previous role	Two roles ago
Permanent full time (35 hours per week or more)			
Permanent part time (less than 20 hours per week)			
Permanent part time (20 to 34 hours per week)			
Temporary - with no agreed end date			
Fixed period - with an agreed end date			

A9. On average how many additional hours would you be expected to work each week? (Please tick one box in each column)

	Current role	Previous role	Two roles ago
Fewer than one			
Between one and five			
Between five and ten			
Between ten and twenty			
More than twenty			

A10. In your last three roles, when you have worked additional hours, how are you compensated? (Please select one option only in each column).

Payment for additional hours worked	Current role	Previous role	Two roles ago
I receive payment for additional hours worked			
I receive time off in lieu for additional hours worked			
I received a combination of payment and time off in lieu			
I receive no compensation for additional hours worked			
I do not work additional hours			

A11. In your three most recent roles, how frequently are, or were, you able to work from home? (Please tick one option only in each column).

Ability to work from home	Current role	Previous role	Two roles ago
I am not able to work from home			
I am able to work from home occasionally (e.g. if there is a domestic emergency)			
I am able to work from home if I have a major piece of work to undertake where I need a quiet space			
I have a regular period of time where I work from home (e.g. one or two fixed days a week)			
I am able to work from home as I choose, but require permission from a line manager			
I am able to work from home but choose not to			

A12. If you work from home, what effect does it on each of the following: (please tick one option in each row).

Effect of working from home on:	High adverse effect	Some adverse effect	No obvious effect	Some positive effect	High positive effect
Your own efficiency					
Other colleagues' attitude					
Other colleagues' efficiency					
Your work-life balance					
Career progression					

A13. In your last three roles, did you ever have to stay away from home for work purposes?
(Please tick one option in each column)

Do you ever have to stay away from home for work purposes?	Current role	Previous role	Two roles ago
Yes - more than 10 days a month			
Yes - 5 to fewer than 10 days a month			
Yes - 1 to fewer than 5 days a month			
Rarely (a few days per year)			
Never			

A14. In your last three roles, how far have you had to travel to get from home to your main place of work (Please tick one option in each column).

Journey time to work	Current role	Previous role	Two roles ago
A journey time of under 30 minutes each way			
A journey time of 30 - under 60 minutes each way			
A journey time of 60 minutes or more each way			

A15. What were the reason(s) for applying for your three most recent roles? (Please tick all that apply).

	Current role	Previous role	Two roles ago
Increase in salary			
Promotion, with an increase in salary			
Promotion without an increase in salary			
To gain work experience			
Changed working time arrangements (e.g. full time to part time)			
Greater flexibility			
Change location			
Problems with co-workers			
Unsupportive management			
Redundancy			
Other (please see below)			

A16. If 'other' please state

SECTION B. THINKING ABOUT YOUR CURRENT ROLE ONLY

This section deals with your experiences in your current job.

B1. On a scale of 1 to 5, how satisfied are you with the amount of pay you currently receive. Where 1 is not at all satisfied, I believe I should be paid more and 5 is very satisfied

B2. On a scale of 1 to 5, how much control do you have over the work that you have to do? Where 1 equals someone else tells me what to do and 5 is I have total control over the work that I do

B3. On a scale of 1 to 5, how satisfied are you with this amount of control. Where 1 is not at all satisfied, I would like more say in the work I do and 5 is I am satisfied that this amount of control is about right for me at this point.

B4. On a scale of 1 to 5, how would you rate your job satisfaction? Where 1 is not at satisfied and 5 is very satisfied.

B5. On a scale of 1 to 5, to what extent do you think your skills are suitable for the job that you do. Where 1 is my job matches the skills that I have and 5 is my skills are higher than required for the job that I do

B6. Within your organisation, which are the three most important factors in how women in your kind of job achieve promotion? (please select three only)

- Women who seek promotion usually have to work many more hours than their basic contract;
- Women who seek promotion have to be able to work full time;
- Women who seek promotion need higher qualifications;
- Women who seek promotion need to be chartered;
- Women who seek promotion need to have good social connections;
- Women who seek promotion should have a broad range of experience.

B7. Is there another factor you believe to be significant in how women achieve promotion in your organisation?

B8. In your current employment, are female QSs paid at least the same as equivalent male colleagues?

- Yes, they are paid at least the same;

- No - they are paid less;
- Don't know.

B9. In your current role, do female Qs receive at least the same level of bonus as equivalent male colleagues?

- Yes, they receive at least the same bonus;
- No, they receive less bonus;
- Don't know.

B10. In your current employment, are female Qs treated at least the same as equivalent male colleagues?

- Yes
- No
- Don't know

B11. In your current employment, do you think female Qs are as likely to be promoted as equivalent male colleagues?

- Yes
- No
- Don't know

B12. In your current employment do managers seek the opinions of female Qs at least as often as equivalent male colleagues?

- Yes
- No
- Don't know

SECTION C: WORK: LIFE BALANCE

Thinking about the balance between your time at work and your leisure time.

C1. On a scale of 1 to 5, to what extent do your personal obligations impact on your work
Where 1 is my personal obligations do not impact on my work and 5 is my personal obligations greatly affect my ability to do my job

C2. On a scale of 1 to 5, to what extent does your work impact on your home or leisure time? Where 1 is my work has little impact on my leisure time and 5 is my work impacts greatly on my leisure time

C3. On a scale of 1 to 5, to what extent do you feel obliged to spend longer than your contracted hours at work, where 1 is not at all obliged 5 is greatly obliged Where 1 is I do not feel obliged to work longer hours and 5 is I regularly feel obliged to work longer hours

C4. Which three of the following factors would make the biggest positive difference to your work: life balance? (Please select three only)

- Using technology, such as Skype meetings to reduce the need to attend meetings in person;
- To have a reduced workload;
- Less travelling to and from work;
- Less travelling for work (i.e. working away from home);
- More time flexibility;
- To be able to work fewer hours.

C5. Is there any other factor that would make a positive differences to your work-life balance?

SECTION D: YOUR CAREER

Thinking about the whole of your career, from when you first decided to become a Quantity Surveyor and looking into the future.

D1. Why did you choose to become a quantity surveyor? (Please tick all that apply).

- A family member was a QS;
- A family member worked in construction, though not as a QS;
- Careers advisor suggested it;
- Good at maths;
- Good salaries;
- Interested in buildings;
- Job security;
- To make a difference / be a role model;
- To obtain a career without attending university full time;
- Unusual career for a woman;
- Variety of work / many job roles;
- Wanted a job that wasn't being in the office all day.

D2. What are your current career aspirations? (please tick the three most relevant)

- To be a partner / director / decision maker;
- To earn more money;
- To be a role model;
- To be happy in my work;
- To have choices;
- To have variety in my work;
- To have flexibility in my working time;
- To have good work-life balance;
- To improve my skills / knowledge as a QS.

D3. Is there anything else you would include as a career aspiration?

D4. To what extent do you agree with each of the following as a representation of a successful career? (Please tick one option in each row only).

Representations of a successful career	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Becoming partner or director of a business, or setting up your own business					
Being fulfilled in your work, regardless of hierarchical position or salary					
Earning a high salary					
Having an expensive company car					
Having a good work: life balance					
Having choices regarding the direction of your career path					
Having the opportunity to undertake a variety of work experiences					
Making a difference - either to other people or to a business					

D5. Is there anything else you would consider defining a successful career?

D6. From the following, which three do you consider most enable the career progression of female QSs? (Please select three only)

- Acquiring further and higher qualifications;
- An increase in the volume of women into the profession;
- The introduction of a greater use of technology, such as Skype;
- Having managers who acknowledge the needs of individuals;
- Having a wider social network;
- Increasing one's range of experience;
- Introducing childcare facilities (e.g. creches in the workplace);
- Mentoring;
- Positive recruitment strategies.

D8. To what extent do you agree that the following are barriers to women's careers as a QS? (Please tick one option in each row).

Barriers to women's careers as a QS	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
A desire for flexible working time					
A desire to not have to travel away from home for work purposes					
Biased attitude of management towards women					
Being unwilling to take on the stress that comes with promotion					
Harassment					
Having children					
Having a partner who is unwilling or unable to be supportive					
Lack of appropriate skills					
Lack of female role models					
Lack of qualifications					
Male dominated 'macho' culture					
Poor social network / contacts					

D9. Is there anything else that you consider would be a barrier to women's careers in quantity surveying?

SECTION E: EDUCATION AND TRAINING

This section considers the training you have received, or would like to receive, since you left compulsory education

E1. Which, if any, of the following academic, vocational or professional qualifications have you obtained (Please tick all that apply)

- A first degree;
- A higher degree;
- Vocational qualifications;
- Chartered member of the RICS;
- Other professional qualifications;
- No vocational or technical qualifications.

E2. How much training or Continuous Professional Development (CPD) did you undertake in 2017? (Please tick one option only).

- Less than 20 hours per annum;
- 20 – 30 hours per annum;
- 30 – 50 hours per annum;
- 50 + hours per annum.

E3. Who pays for your CPD or training? (Please tick the most relevant option only).

- I pay for my additional training;
- My employer pays for my additional training;
- My employer pays for some of my additional training.
- I only undertake free training.

E4. To what extent are you satisfied with the amount of CPD or training you undertake?

- Very dissatisfied;
- Dissatisfied
- Neither satisfied nor dissatisfied;
- Satisfied;
- Very satisfied.

SECTION F: ABOUT YOU

F1. How old are you? (Please tick one box only)

- 18 – 21;
- 22 – 29;
- 30 – 39;
- 40 – 49;
- 50 – 59;
- 60 +

F2. Which of the following describes your current status? (Please tick one box only)

- Single;
- Married / partnered;
- Divorced / separated;
- Widowed;
- Prefer not to say.

F3. Please indicate if you have any children in the following age groups (please tick all that apply)

- 0 – 2;
- 2 – 4;
- 5 – 11;
- 12 – 15;
- 15 – 18;
- 18 + but still dependent;
- No dependent children.

F4. If you have children who need care, who would you consider to be their primary carer?
(Please tick one option only)

- I am their primary carer;
- My partner is their primary carer;
- My partner and I are equal carers;
- A third party does the day to day care;
- N/A

F5. Have you ever had a career break? (Please tick one option only).

- Yes – education;
- Yes – maternity;

- Yes – other;
- No

F6. On a scale of 1 to 5, to what extent do you consider that your career break effected your career progression. Where 1 is that my career break had a high adverse effect on my career progression and 5 is no effect on my career progression

F7. Do you look after or give help or support to any family members or friends who have a long-term physical or mental illness or disability, or who have age-related issues (Please tick one option only)?

- Yes;
- No

F8. If 'yes' to the above question, please explain the extent

F9. Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months? (Please tick one option only)

- Yes – please indicate;
- No.

F10. To which ethnic group do you belong?

F11. Do you have any final comments that you would like to make about your career as a female QS?

Appendix H – Email with link to questionnaire survey

Dear

Please would you help with an exciting piece of research which aims to understand the careers of women in Quantity Surveying? Your views on the roles undertaken by women in the profession and the meaning of career success will be an invaluable contribution in the counterargument to literature on women in construction which says that we do not progress and do not achieve career success in the industry.

The following link is a survey which forms part of my PhD thesis undertaken through ProBE at the University of Westminster; it should take no more than 20 minutes to complete:

[https://docs.google.com/forms/d/e/1FAIpQLSfMfy4cAMixQVNRf3- I25CZopZGJ-2u-VLlx6Z7QOE1hOUpA/viewform?usp=sf link](https://docs.google.com/forms/d/e/1FAIpQLSfMfy4cAMixQVNRf3- I25CZopZGJ-2u-VLlx6Z7QOE1hOUpA/viewform?usp=sf_link)

Your details were obtained through LinkedIn; however, all responses are anonymous and will thus be treated with the strictest confidence.

This is likely to be the biggest survey ever undertaken of female QSs in the UK. In order to widen participation even further, I should be grateful if you would forward this email and / or link to any female QSs you know, particularly those who are unlikely to have their details on the RICS database.

Thank you for your cooperation - and here is the link again.

[https://docs.google.com/forms/d/e/1FAIpQLSfMfy4cAMixQVNRf3- I25CZopZGJ-2u-VLlx6Z7QOE1hOUpA/viewform?usp=sf link](https://docs.google.com/forms/d/e/1FAIpQLSfMfy4cAMixQVNRf3- I25CZopZGJ-2u-VLlx6Z7QOE1hOUpA/viewform?usp=sf_link)

Kind Regards

Denise Bowes

Appendix I – Interview schedule, macro level interviews

Personal information

A. PERSONAL DETAILS

A.1.1 Name?

A.1.2 Company Name

A.1.3 Company business (i.e. consultant, contractor etc.)

A.1.4 What is your current position?

A.1.5 How long have you held this position?

B. Company details

B.1 Company Structure

B.1.1 Company background

B.1.2 Total Number of employees

B.1.3 Ratio of men: women

B.1.4 Total number of QSs

B.1.5 Total number of women in QS roles

B.1.6 Types of role undertaken by QSs

B.1.7 Is the percentage of women employed at the moment typical of your company generally? What are the changes to the number / percentage of women in recent years?

B.1.8 Do you have a quota of female employees that you are aiming for? Is this age or grade related?

B.1.9 Do you have a quota of females employed as QSs and is this age or grade related?

B.2 Company Policies

B.2.1 Does the company have a diversity and inclusion policy, what does it provide for Maternity / paternity?

B.2.2 Do individuals take more or less than their statutory entitlement

B.2.3 What are the company views on positive discrimination

B.2.4 How does the company deal with any complaints regarding discrimination, harassment or bullying

B.2.5 Are employees informed of how to complain about how they are being treated in relation to equality and diversity issues?

- Yes
- No
- Not sure

B.2.5 What further actions do you think could be taken to promote equality and diversity?

Working Arrangements

C.1 Working time

C.1.1 What are the work arrangements available to all in your company?

C.1.2 How much are the following arrangements used by men and women in the organisation?

- Flexible working
- Changing to part time
- Condensed hours
- Working at home
- etc

C.1.3 Of the arrangements used, what has been the effect on:

- worker efficiency
- other colleagues
- their WLB
- career progression

C.1.4 Do employees work longer than their contracted hours, (either evenings or weekends), if so why?

Prompt: Could Be:

- Variable hours worked
- Pressure of work
- Excessive workload
- Other

C1.5 Are employees ever required to stay away from home for work?

If yes:

- Do they have the choice not to?
- Any benefits / challenges in this?

C1.6 Do most employees – but particularly women – travel far to and from work each day?

C1.7 Are female Qs left to plan their own time / activities at work

C1.8 If flexibility / home working is allowed, what checks are in place to ensure that work is done?

C1.9 Do you facilitate working at home? For example, by providing laptops.

C1.10 Are there Health and Safety considerations for homeworking and how do these affect workers and company

Work: Life BALANCE

D.1 Personal circumstances

D.1 What are the arrangements between work and employees' caring responsibilities (children and / or elderly or sick relatives)? For example, how receptive is your line manager regarding the following?

- The company is supportive of requests for maternity/paternity leave
- The company is supportive of requests for flexible working (e.g. requests for part-time working, job share, compressed hours).
- I feel that equality strategies are fully embraced by the company
- Anything else?

D.2 Work: Life balance

D.2.1 Are employees able to be satisfied with their work/life balance, In terms of:

- Fulfilling commitments outside of work because of the amount of time spent at work
- Feeling that their job is secure in this organisation
- Feeling that they are expected to be in the office during all contracted hours or feel under pressure to spend longer than their contracted hours in the office
- Think their workload is in excess of what they can undertake in your contracted hours

D.2.2 What would make the biggest positive difference to the work life balance of employees?

CAREER

E.1 Definitions of success / progression

E.1.1 How would you define career success?

E.1.2 How would you define career progression?

E.2 Career planning

E.2.1 Does the company help employees with regard to career planning?

E.2.2 What do you think people need to do to achieve vertical progression in your organisation i.e. to a promotion? Such as

- Put in long hours
- Show presence at work
- Obtain higher qualifications
- Broader range of experience
- Specific training
- Better social connections
- other

E.2.4 What do you think people need to do to achieve horizontal progression in your organisation i.e. a change of job role / department? Such as

- Put in long hours
- Show presence at work
- Obtain higher qualifications
- Broader range of experience
- Specific training
- Better social connections
- other

E2.5 Do you think your organisation actively encourage women to take up career development opportunities?

E.2.6 To what extent do you consider any of the following aspects of their employment might be a barrier to women's career progression?

Such as

- Working hours
- Traveling to / for work
- Demanding work schedule
- Male dominated macho culture

- Harassment
- Other

E.2.7 Do you think any equality characteristics listed below are a barrier to the progress of women's careers in your organisation? Age, disability, gender, ethnicity, etc.

Organisational environment

F.1 Inclusivity

F.1.1 Are employees made aware of the law regarding equality and diversity, in terms of issues such as

- Maternity / paternity leave.
- Harassment
- Sex equality

F.1.2 Are employees made aware of the organisations policies on equality and diversity?

F.1.3 Has diversity training been undertaken within the last 12 months? If 'yes', what was the subject of this training? If 'no', are there plans to make diversity training available?

F.1.4 Is there any area regarding equality and diversity in which you think the company should provide more training?

F.1.5 Are employees made aware of, or how to find out about, policies / campaigns, such as the flexible working charter, equal opportunities, etc.?

F.1.6 As far as you are aware, are female QSs paid the same as equivalent male colleagues?

F.1.7 Are they treated the same as male colleagues?

F.1.8 Do you feel that female QSs are listened to and treated with respect.

F.1.9 Are their opinions sought by colleagues and line managers?

F.1.10 Do they have a voice?

F.1.11 What measures do you consider would help to increase the proportion of women in the industry / organisation?

For example:

- Employing dedicated managers/coordinators to monitor and ensure equality in recruitment and subcontracting
- Incorporating suppliers' diversity track record as part of tendering
- Promoting equality representatives/champions to be kept informed of equality processes and to liaise with those from target groups on issues of concern

- Setting high equality targets, rejecting dominant construction employment orthodoxies, and taking profile-raising initiatives
- Introducing a gender audit template, embracing all employed on the project, including contractors and subcontractors
- Requiring training in equality awareness
- Introducing more effective family-friendly policies
- Using social media to communicate policies and stimulate debate on improving equality and showcasing achievements of women on the project

F.1.12 Do you think your company sets a good example for employing women in the construction industry and why?

F.2 Discrimination / harassment / bullying

F.2.1 Have there been incidences of discrimination, harassment or bullying in the company

F.3 Mentoring/networking/social relations

F.3.1 Does your company have a mentoring scheme?

F.3.2 Are there any incentives for mentoring?

F.4 Networking and social relations

F.4.1 What opportunities for networking are there within the company?

F.4.2 What is the uptake of these opportunities?

F.4.3 Are any other social activities organised within work teams / departments

F.4.5 Are employees encouraged to pursue networking opportunities through an alternative body such as the RICS?

Appendix J

Nvivo coding framework

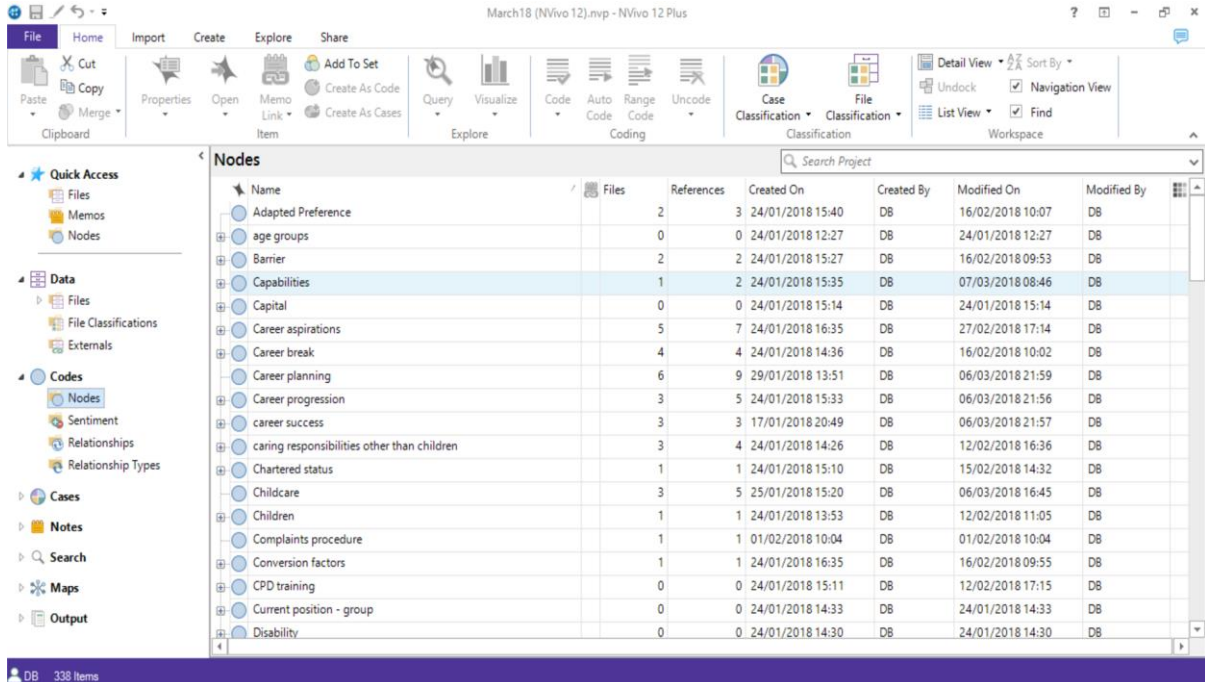


Figure 23: Screenshot indicating an example of parent nodes within the Nvivo coding framework

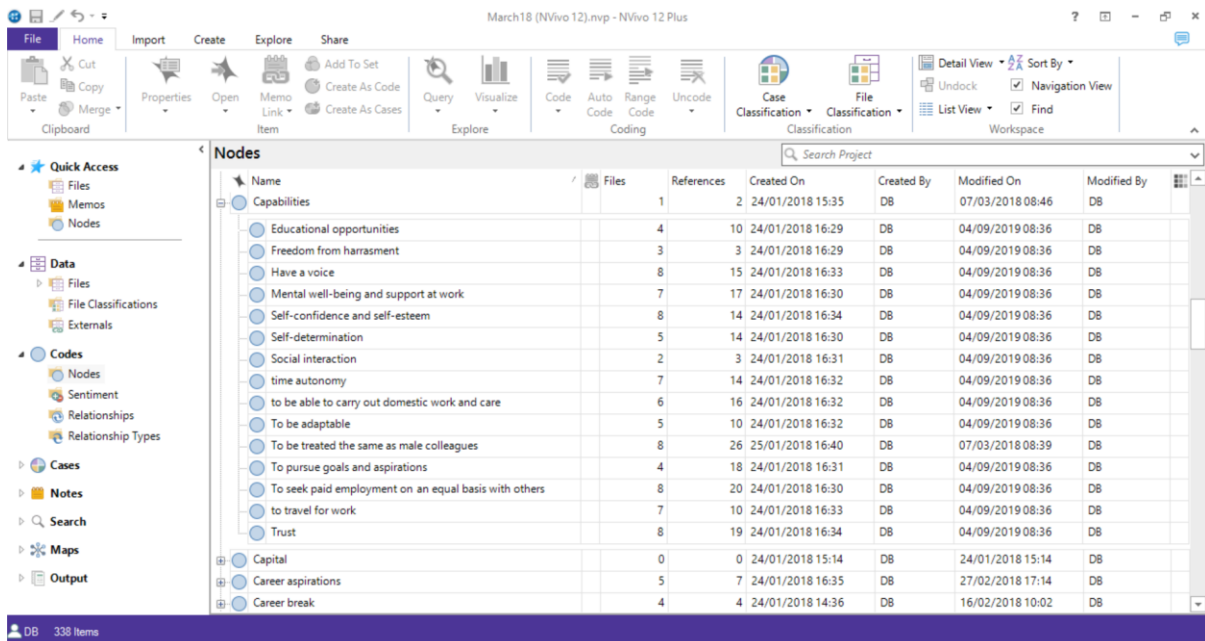


Figure 24: Screenshot indicating an example of parent and child nodes of the Nvivo coding framework

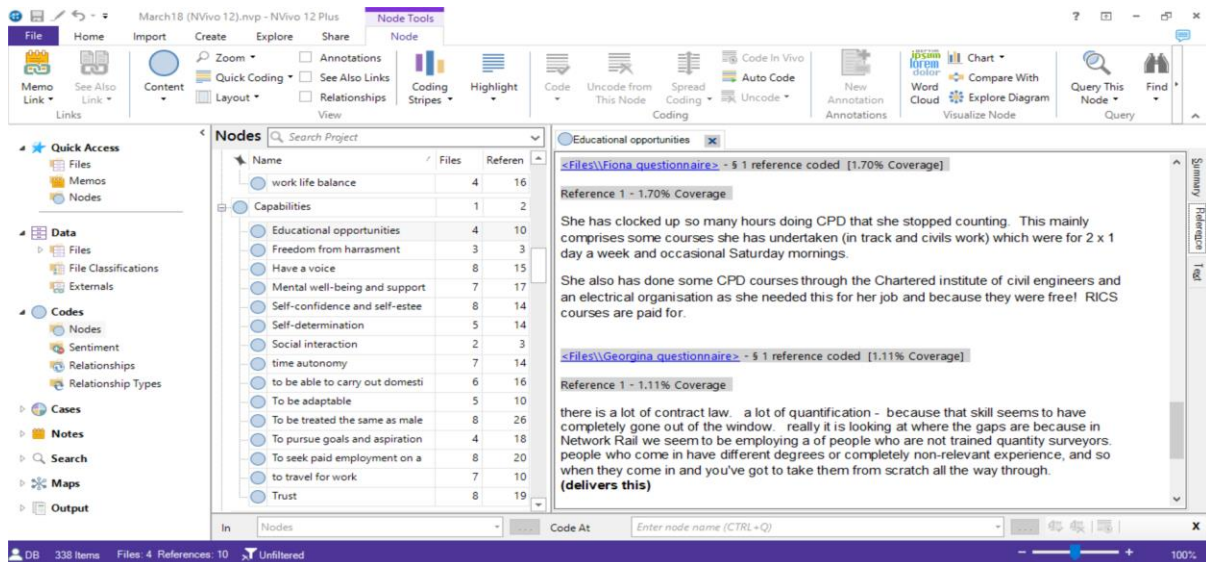


Figure 25: Screenshot indicating an example of the content of one child node