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WOMEN ENTREPRENEURS IN THE UK ARMED FORCES

Cranfield Defence and Security

PhD

Academic Year: 2015

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ABSTRACT

Literature on entrepreneurship has been criticised on several grounds including a strong bias to examine masculine traits, being deeply rooted in the private sector, limited to economics, conceptualised as a specialist skill pertinent only to non-public entities, overly positivist, single causal and with a tendency to downplay the relevance of both the social and human sciences. The relatively few studies of female entrepreneurs in the public sector have been criticised on the grounds of privileging structure over agency and for ignoring new research perspectives. The literature calls for the generation of alternative viewpoints on entrepreneurship and specifically towards those that pay greater attention to the level of the individual within an institutional setting and that embraces like interaction with multiple sociological variables. To generate research outside these biases, a dynamic relational model consisting of four interactive variables (structure, agency, networks and context) was developed and then used to guide a case study on women entrepreneurs within a male dominated institution - the United Kingdom's (UK) Armed Forces.

A critical realist research methodology was used. Interviews were conducted with a stratified sample of 52 female, uniformed officers drawn from all three services (Navy, Army, Airforce). The findings revealed how women use structure, agency, networks and context to create the necessary leverage to bring about entrepreneurial institutional change based on individual goal realisation strategies. The originality of this research is threefold. Firstly, it examines female entrepreneurs in a male dominated public sector institution. Secondly, it uses a critical realist research methodology. Finally, the research develops a dynamic relational model that has wider utility. The overall net result of this research approach is to provide a richer understanding of the complex, multi-causal nature of public sector entrepreneurship that has the potential for far broader application.

Keywords:

UK Armed Forces, Women, Entrepreneurship, Structure, Agency, Networks, Context, Institutionalism, Social Capital.

ACKNOWLEDGEMENTS

I would like to convey my deepest thanks and gratitude to my supervisor Kevin Burgess (PhD) for his unswerving and meticulous support, guidance and reinforcement throughout all of the PhD process.

I would also like to express my gratitude to all of my colleagues in the field of academics and those that were just plain interested in supporting me in my endeavours from many backgrounds and standpoints. To the staff at Cranfield University, the UK Armed Forces, and all of the women who so generously gave of their time and who were so enthusiastic in telling me about their very personal perceptions of military life that formed the basis of this research.

To conclude on a very sincere note, I'd like to thank my family for tolerating my absence whilst in study. To Justine and Nathan, my children, and Nicky, my wife...for holding it all together over what can only be described as a personally challenging but ultimately highly rewarding personal journey.

PUBLICATIONS BY THE CANDIDATE ON MATTERS RELEVANT TO THE THESIS

Conferences and papers:

- McAvoy, D., & Burgess, K. (2013, April). *Barriers to female entrepreneurs in the public sector*. Paper presented at the XVII International Research Society for Public Management (ISRPM) Conference–Public Sector, Prague, Czech Republic.
- McAvoy, D. (2014, July). *Career advancement for women in the UK military*. Paper presented at the Eighteenth ISA World Congress of Sociology, Yokohama, Japan.
- McAvoy, D. (2014, May). *Entrepreneurship in defence acquisition*. Paper presented at the Defence Acquisition Conference, Shrivenham, UK.
- McAvoy, D. (2014). Female entrepreneurs in the United Kingdom Ministry of Defence. ERGOMAS Special Issue, Gender and the Military. *Res Militaries*, (submitted).
- McAvoy, D. (2014). Entrepreneurship in Defence Aquistion Book chapter. In K Burgess (Ed.), Defence Acquisition Theory, (submitted).

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LIST OF ABBREVIATIONS AND TERMS

"ACSC" Advanced Command and Staff Course
Alter Nodes connected directly with the Ego

Army British Army

CCM Constant Comparison Methodology
CONDO Contractors Deployed on Operations

CR Critical Realism/Realist

Ego Central node in a network array

EHRC Equality Human Rights Commission

MoD Ministry of Defence

Navy/RN The Royal Navy

NAch Need for Achievement

NPM New Public Management

OF4 Lieutenant Commander (RN), Lieutenant Colonel (Army), or Wing

Commander (RAF)

OF5 Captain (RN), Colonel (Army), Group Captain (RAF)

OF6 Commodore (RN), Brigadier (Army), Air Commodore (RAF)

OF7 Rear Admiral (RN), Major General (Army), Air Vice Marshall(RAF)

PJHQ Permanent Joint Headquarters

RAF Royal Air Force
UK United Kingdom

US United States

CHAPTER 1 INTRODUCTION

1.1 Background

Research into entrepreneurship and the establishment of a definitive theory on entrepreneurship continues to enjoy growing interest (Busenitz et al., 2003 Leitch et al., 2009; Zahra, 2007). In recent times the focus of research attention has shifted away from solely Economics to embrace different disciplines such as Anthropology, Psychology, Political Science and Sociology (Casson, 2003; Diefenbach, 2011; Halford & Leonard, 1999). Despite this widening interest in the entrepreneurship research agenda there remain few studies which embrace the public sector and those that do avoid multi-discipline perspectives (Kim & Aldrich, 2005; Kim, 2010; Sundin, 2011).

Whilst the concept of entrepreneurship has been given many different meanings over the years, there is no universally agreed statement that encapsulates the very essence of the field as a collective. Shane and Venkatarman (2000, p. 218) posit: "Perhaps the largest obstacle in creating a conceptual framework for the entrepreneurship field has been its definition". However, for the purposes of this study the following definition is used: "Entrepreneurship is a process by which individuals - either on their own or within organisations - pursue opportunities without regard to the resource they currently control" (Stevenson & Jarillo, 1990, p. 23).

Criticisms of earlier approaches to entrepreneurship included an over-emphasis on trait theory or personality characteristics (Gartner, 1988); limited exploration of female gender and social relationships in comparison to males (Ahl & Marlow, 2012; Ridgeway & Correll, 2004); and poor analysis of the dynamic organisational mechanisms and structures which exclude certain groups such as women (Ahl, 2006b; Ahl & Marlow, 2012; Alvarez & Barney, 2007, 2013). In exploring these criticisms the literature identified four related variables that substantiate further enquiry because they have been under-researched in the examination of entrepreneurship. These are the dynamic interplay of structure and agency (Acker, 1988; Ridgeway & Smith-Lovin, 1999), networks (Aldrich & Zimmer, 1986, Bevelander & Page, 2011; Brass, 1985) and context (Johns,

2001; Sewell, 1992; Welter, 2011). While all these authors acknowledge that the variables they have explored interact with others to influence entrepreneurial outcomes, there is as yet no research available on how all four interact with each other.

As a result of this growing awareness that the study of entrepreneurship can embrace a range of alternative theoretical perspectives, there have been increasing calls for new research directions (beyond trait theory and single causal analysis) towards multi-paradigmatic approaches that are focussed on the level of the individual (Acker, 1990; Bygrave & Hofer, 1991; Fenwick, 2003; Morris & Jones, 1999; Sexton & Bowman-Upton, 1990; Sorenson & Stuart, 2008; Welter 2011).

The literature identifies that one possible approach to enable such research between these variables and women entrepreneurs in particular, is to frame future enquiry within institutional and sociological theories that would offer wider opportunities for studying these dynamic phenomena (Bjerregaard & Lauring, 2012; Garud, Hardy, & McGuire, 2007). In combining these theoretical perspectives within the research lens of entrepreneurship gives rise to a study of these variables situated more clearly in the examination of institutional entrepreneurship (Ahl & Marlow, 2012; Suddaby, 2010). Institutional entrepreneurship within this study is described as the ability of agents to alter or change the institutional framework to more appropriately align with their intentions (Dacin, Goodstein, & Scott, 2002; DiMaggio, 1988b).

Institutional entrepreneurship therefore embraces these wider inter-field disciplines by applying existing theories and methods to the field of entrepreneurship that present approaches fail to achieve because they adopt single causal perspectives (AhI, 2006b; Diefenbach, 2011; Hughes, Jennings, Brush, Carter, & Welter, 2012; Leca & Naccache, 2006; Welter & Smallbone, 2011; Zahra & Wright, 2011). Thus by opening up the field with new insights into the social and institutional environments associated with entrepreneurship, it may be possible to understand the interactions between them that are believed to favour male over female entrepreneurs (AhI, 2006b; Rindova, Barry,

& Ketchen, 2009). Having outlined the case for further research involving the four dynamic variables (structure, agency, networks, context and the dynamic interaction between them) within an institutional setting, the next section provides greater detail on what is meant by each of these terms.

1.2 Definitions of structure, agency, networks and context

Definition of these four dynamic variables: structure, agency, networks and context within the field of the social sciences are heavily contested. These variables do not exist entirely as distinct physical entities but are terms often associated with identifying a tapestry of complex social relationships from which meaning is implied through interpretation (Sewell, 1992). Taking the notion of structure, its precise definition is ambiguous because it is said to define what it designates and is often articulated through social concepts derived through the meaning of rules and schemas (Sewell, 1992). Therefore for the purpose of this research, the term structure is taken to imply "both the medium and the outcome of the practices which constitute social systems" (Giddens, 1981, p. 27).

Agency is yet another contested term but at its most basic it is taken to mean "to act, do, set in motion" (Hartwig, 2007, p. 18). Agency is also reported as directly relating to the reflexive interpretation of structure by human agents and, as a consequence, enables individual agency that has the transformational capacity to alter structure (Giddens, 1993). Both structure and agency are important because they are said to constrain or enable individual action through the degree of an actor's embeddedness within the organisational structure, which is perceived through the interpretation of the prevailing logics of appropriateness (Hall & Taylor, 1996).

These logics of appropriateness refer to the interpretation of the institutional social systems defined through the notion of structures that shape individual behaviour (Thornton, Ocasio, & Lounsbury, 2012). Whilst little is presently known about how women understand and respond to prevailing institutional logics, an increased understanding of this topic would help create insights into what influences entrepreneurial attitudes and motives (Welter & Smallbone,

2011). One medium for conveying such logics is through the prevailing social systems that can comprise transitive routes for passing on such logics. These methods of transmission are often understood to be through networks of relationships that both empower and influence individual behaviour (Burt, 2000).

If ambiguity is a mark of the social sciences then a definition of networks faces similar imprecision because of the lack of attention paid to situating network analysis within the field of sociological enquiry (Emirbayer & Goodwin, 1994). Networks are both structurally and associatively described as the social relations between individuals through linkages or ties (Kilduff, Tsai, & Hanke, 2006). Networks provide important routes to power-holders that are essential in creating social capital and for accessing non-redundant (new) information needed to enact acceptable institutional change. Network theories also embrace topics such as network density but for the purposes of brevity this study will only focus on the implication of network linkages in order to understand how individuals may use them to enact entrepreneurial outcomes (Burt, 1997, 2000, 2005).

Finally, because the study of entrepreneurship has been generally devoid of contextualisation, the role played by the socio-cultural and political-institutional environments is underdeveloped. An understanding of context is therefore necessary to appreciate how it impacts on institutional behaviours both internally and externally. The term context in this study is taken from Johns (2006, p. 386) who defines context as "situational opportunities and constraints that affect the occurrence and meaning of organizational behaviour as well as functional relationships between variables".

Context also defines the boundaries for the study that describes the environment of the phenomena under investigation. In this thesis, the boundary of the study is the United Kingdom (UK) Armed Forces. Having set a boundary assists in providing what Johns (2006) and Cappelli & Sherer, 1991 describe as defining the situational features that are built around answers to the "who", "what" and "why" dimensions of the research to aid understanding of the findings. Therefore, the following paragraphs provide answers to why this study

chose to examine women entrepreneurs, institutions, institutions within the public sector and finally, the UK Armed Forces. In doing so it demonstrates how this study is placed within a meaningful and appropriate real world setting.

1.2.1 Why women entrepreneurs?

The study of women entrepreneurs demonstrates a continued dissatisfaction with privileging structure over agency, where the legacy of comparative approaches continue to be derived from male standpoints that perceive women as being stereotypically constrained within organisational life (Ahl, 2006b; Gupta, Turban, Wasti, & Sikdar, 2009). Both the masculine translation of entrepreneurship and the highly individualistic accounts of women are also criticised as reproducing women as gendered institutional subjects (Ahl, 2006a; Hughes et al., 2012). Gender stereotyping, patriarchal influences and the inability to access influential social networks place women at a distinct disadvantage especially when considering the entrepreneurial act of career advancement (Burt, 1998; EHRC, 2011; Tharenou, 2001).

For North (1990), entrepreneurs and interested parties exploit their institutional environment by gaining access to important networks and resources to pursue entrepreneurial objectives. An individual's purposeful actions are thus believed to be directly associated, if not entirely shaped, by their enduring social relationships that give rise to advantage within institutional contexts (P. S. Adler & Kwon, 2002; Burt, Hogarth, & Michaud, 2000; Gabbay & Leenders; 1999; Lin, 2001; Shepsle, 2005).

In comparison to men, women do not have equal access to networks, which are described as the most significant component of successful power acquisition within institutional settings (Berg, 1997; Timberlake, 2005). Even when women do access those networks that traditionally generate early promotions and other benefits for men, these networks appear to be less effective for women (Aldrich & Zimmer, 1986; Barr 1998; Brass, Galaskiewicz, Greve, & Tsai, 2004; Dorado, 2005; Gabbay & Zuckerman, 1998; Hébert & Link, 1989; Narayan & Cassidy, 2001; Podolny & Baron, 1997; Woolcock & Narayan, 2000).

The issue of gendered networks and entrepreneurship, including how women appear disadvantaged within institutional network relationships appears to be an area that has received limited attention (Bevelander & Page, 2011; Carter, Anderson, & Shaw, 2001; Emirbayer & Goodwin, 1994; Wijen & Ansari, 2007). Therefore, research that makes a particular point to examine women entrepreneurs within such environments will contribute to the present limited body of knowledge in this emerging research arena (Ahl, 2006b; Mackay, Kenny & Chappell, 2010). The focus on of women entrepreneurs does not contradict the definition for entrepreneurship defined earlier in this chapter other than to be gender specific. However, whilst the term is reasonably well defined within this thesis, institutional entrepreneurship requires greater clarity.

1.2.2 Why institutional entrepreneurship in the public sector?

Institutions in their formal context are said to be inherently stable and resistant to change based on the notion of institutional legitimacy, especially where this legitimacy is externalised across powerful controlling entities such as government (Beckert, 1999). However, whilst this view accounts for macro level institutional legitimacy, it does not address the concept of institutional change brought about through the actions of institutional entrepreneurs that seek to influence existing institutional arrangements and configurations entwined in ongoing social systems of understanding (DiMaggio, 1988a; Lawrence, 1999; Maguire, Hardy, & Lawrence, 2004).

Sociological institutionalists suggest that these dominant institutional relationships manifest themselves through institutional logics of appropriateness that regulate an actor's intentions in powerful ways, primarily by conveying ideas and practices and, in doing so, constraining an actor's choice for entrepreneurial action (Beckert, 1999). Although research has demonstrated that institutions constrain and enable individual action from a macro perspective, the study of institutions at the level of the individual remains under theorised (Hall & Taylor, 1996). Critics of institutionalism suggest that scholarly research is fixated on macro perspectives in a gender-free context that ignores important social relationships at the level of the individual, whilst in reality these

game players' attempts at purposive action within institutions are founded in ongoing systems of social relations (Granovetter, 1985).

All too often theorists involved in the study of institutionalism have omitted the study of gender and how these social interactions between the individual, structure and agency bring about change (DiMaggio, 1988a; Fligstein, 1997; Lawrence & Suddaby, 2006). Therefore, by using a sociological, institutional perspective, the relationships that oppose institutional change by women entrepreneurs in an effort to maintain stasis may become evident (Katzenstein, 1998; Kenny, 2007; Seo & Creed, 2002). Unlike private institutional settings, such as banking, there appears to be no such substantial equivalent research on women entrepreneurs within a UK public service setting (Sundin, 2011; Sundin & Tillmar, 2008).

Several other reasons have been offered for suggesting this particular focus on public rather than non public institutions to research new perspectives on entrepreneurship. Firstly, former research in public sector institutions lacks a systematic approach to the identification and subsequent modelling of public entrepreneurs within a clearly defined institutional context (Zerbinati & Souitaris, 2005). Secondly, the study of entrepreneurship in the public sector regarding the nature, boundaries and constraints that include the relationship between structure, agency and networks is still comparatively rare (Bartlett & Dibben, 2010; Klein, Mahoney, McGahan, & Pitelis, 2010). Thirdly, the examination of gender within a public institutional setting may provide important new insights on how people think about gender and thus act in respect to gender within an institutional environment (Connell, 2006). Finally, in terms of context, UK public institutions are under considerable external top down pressure to reform under the mantle of New Public Management (NPM) that has, in part, aspirations to embody entrepreneurial concepts to promote efficiency and effectiveness (Edwards, Jones, Lawton, & Llewellyn, 2002).

Therefore, it is suggested that using a sociological institutionalism lens to explore how institutional entrepreneurs achieve change in dominant and perhaps gendered institutional logics will add to the overall body of knowledge

where it is believed "that the most promising work will take place" (Dacin et al., 2002, p. 53). However, there are many varied institutions in the public sector and perhaps one of the most unexplored institutions is the UK Armed Forces that is discussed next.

1.2.3 Why research the UK Armed Forces?

Work by Aaltio, Kyro and Sundin (2008) on women, entrepreneurship and social capital suggests that women are not only at a disadvantage with regard to the gender dominant male interpretation of entrepreneurship but also from their structural position in male dominant organisations. Whilst reform in male dominated institutions of government has been initiated, such reforms are slow and face persistent barriers to progress such as the stereotypical gender division of labour and the consequential lack of access to powerful others that would otherwise enable women to influence change (Connell, 2006).

Similarly the concept of entrepreneurship theory within the public sector in terms of entrepreneurial research is still limited (Osborne & Gaebler, 1992). Taking this view further and integrating it with the impact of New Public Management (NPM), Connell, Fawcett and Meagher (2009, p.332) note that: "Neoliberalism is rhetorically gender-neutral; the career-open-to-talents is part of its agenda of organizational (*sic*) restructuring. A few women have reached elite positions in neoliberal organizations (*sic*)".

With this in mind, the idea of adopting a female focus within a male dominated public setting for this research is believed to be valid and justifiable. Firstly, current evidence suggests that women are under-represented at the highest ranks of the UK Armed Forces (EHRC, 2011). Secondly, by examining women in a male dominated institution, the UK Armed Forces, the comparison between the variables may be far more evident than investigating an institution that has a far greater percentage of women. Finally, the research problem that follows at section 1.3 is located in such an institution facing pressures of reform under the mantle of NPM.

1.3 The Research Problem

The UK Armed Forces has a long and protracted history of male dominance based on the stereotypical notion of "warrior hero". Such perceptions are reinforced, not only through the historical gender exclusion of women but also within common discourse, and continue to manifest themselves in social conventions or institutional logics of appropriateness that exclude women (Woodward, 2000). The manifestations of such masculinity are suppressive for women not only in terms of sexual harassment but the consequences of such harassment leading to female subordination often exhibiting itself in the form of bullying, harassment and even rape (CIPD, 2014; Pershing, 2003). Other subtle examples are also evident, such as the exclusion from combat roles, but potentially of even greater significance, is the continuing paucity of women promoted beyond the rank of OF5 to senior roles within the UK Armed Forces. This stark comparison between women and men in higher status positions within the UK Armed Forces compared to other UK government departments and commerce is vividly demonstrated in Figure 1.3.1.

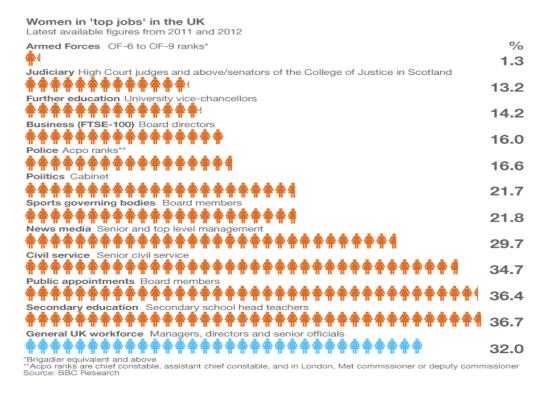


Figure 1.3.1. Women in 'top jobs' in the UK 2011-2012. (EHRC, 2011)

Most recently the deeply embedded institutional preference for selecting and promoting males over females has been highlighted in the employment tribunal case of the Royal Air Force (RAF) Nurse, Ms Wendy Williams, against the Ministry of Defence (Williams v Ministry of Defence, 2013). The findings of the tribunal determined that she was unfairly considered for promotion compared to a male candidate, who received preferential selection for senior advancement despite political legislation and internal MoD policies aimed at fairness and equity between gender groups (Equality Act; 2010; Reskin & Ross, 1995; Williams v Ministry of Defence, 2013). The following abstract from the reported findings of the case helps to illustrate the point of these deeply held logics of appropriateness that continue to favour males over females:

"The tribunal said the MoD's rationale for giving the role to Gp Capt (Group Captain; Male) 'A' [name removed for anonymity] was entirely *subjective and unsustainable*" and concluded that Gp Capt Williams "was not selected because of her sex [emphasis added]" (BBC, 2013).

This event suggests that the current institutional logics based on gender bias inherent in parts of the MoD will therefore continue to make it difficult for it to pick out and support the talent of its female entrepreneurs unless significant change occurs.

The problem facing the MoD is that, like all institutions, it has a tendency towards stasis whilst at the same time acknowledging the challenges it faces requires it to confront these deeply held logics derived from selecting its main source of talent from the dominant gender pool (Katzenstein, 1998; Kenny, 2007; Seo & Creed, 2002; Smith & Stevens, 2010). Suggested examples of these prevailing logics that are believed to advantage males over females can be identified. For instance, women continue to be isolated from key appointments such as combat roles; they operate in gendered structures; and the networks that give access to resources that lead to male advantage are not immediately accessible to these women because they lack the necessary social capital (Ahl, 2006b).

The neoliberal reforms of the UK public sector over the past three decades followed by the more recent financial austerity measures have resulted in a dramatic reduction in Armed Forces numbers. However, as the political ambition for the role played by the UK Armed Forces has not decreased, Defence desperately needs to find ways of identifying, developing and exploiting the entrepreneurial capabilities of all staff. While accessing the capabilities of a shrinking staff pool should ideally be done in a gender neutral manner, this would appear to create problems for the MoD.

The harsh reality is that women in the UK Armed Forces are the most underrepresented in senior appointments compared to many government departments without an explanation as to why this is so (EHRC, 2011). While the MoD has conducted investigations on what may be causing women not to advance as fast as men, it tends to focus on singular topics of causality, such as proportionality, leaving the gendered stereotypical views of motherhood to fill the vacuum. For instance, in the course of this study no reports were found which investigated why women were not advancing at a rate that could be reasonably expected and which took a dynamic, multi-variable perspective. Nor did the reports which had been conducted examine how the individuals who were apparently disadvantaged by the MoD's processes make sense of what was happening. The establishment of women fora by the MoD is a clear indication that the organisation has a problem. While no sound research is yet available on these *fora*, anecdotal evidence suggests that they have not been effective in their goal of providing women with new approaches to overcome deeply held masculine logics in terms of promotional acceptability.

A minority of women have achieved advancement to the higher ranks beyond OF5 but this equates to only 1.3% of the group population (approx 6 out of 500 appointments above OF5). Therefore, it appears possible for the MoD to accept women at higher ranks but not equitably in comparison to the size of the potential cohort. If this presumption is valid, that the MoD can accept women but appears reluctant to do so, then it raises questions about how these few women succeeded and others did not? For this reason, it is suggested that a

valid focus for enquiry would be to investigate how those that succeeded in promotional terms overcame the institutional logics of appropriateness, which are suggested as holding women back in order to better understand what influences entrepreneurial attitudes and motives (Welter & Smallbone, 2011).

Investigating how these women changed these dominant logics at the level of the individual concerned (by achieving promotion beyond OF5 or not), may help provide insights that the MoD could then use to instigate reforms to defeat some of its institutional impediments that women seek to overcome. This leads to the following research question:

How do female entrepreneurs interpret and respond to the dynamic relationships between structure, agency, networks and context to successfully change those institutional logics that hinder their career advancement?

In seeking to answer this, it is worth recollecting the four relevant variables that were identified in the literature as being the basis through which agency interprets the institutional logics that could constrain or enable change. Based on these four variables and their relationship with institutional logics the following four sub-propositions are proposed to assist in the understanding and answering of the research question:

Sub-proposition 1. Women who can understand and respond to the prevailing institutional logics are more likely to be able to create the necessary structural legitimacy to succeed.

Sub-proposition 2. Individual agency enhances the ability of women entrepreneurs to enact change.

Sub-proposition 3. Women use network ties to reduce path lengths and this facilitates their access to non-redundant information for the purpose of opportunity identification.

Sub-proposition 4. Context can influence the likelihood of women to realise their goals for advancement.

1.4 Research Model

Figure 1.4.1 below has been developed as an initial relational model between the variables; of structure, agency, networks and context. Its purpose is to assist in guiding the research and providing a basis for developing the model further based on the findings of the literature research, research findings, and the discussion and analysis phases of this research. The approach to researching these variables and their relationships is outlined in the research methodology section that follows.

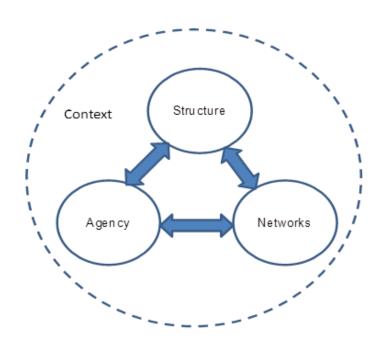


Figure 1.4.1. Initial relational model between variables

1.5 Research Methodology

Several authors, such as Ahl, 2002, Hughes et al., 2012, argue that in order to generate new insights into entrepreneurship it would be necessary to conduct research outside of the traditional approaches, based on single causality, and a positivist research paradigm supported largely by quantative rather than qualitative research approaches.

In order to address the aforementioned limitations, the following research approach has been adopted. Firstly, the research approach considers the inter-

related effects of several variables, namely structure, agency, networks and context, as a means of focusing the research attention. Secondly, a weak interpretivist standpoint was used through the adoption of a Critical Realist (CR) paradigm that looked to go beyond the empirically observable to describe "the real". Thirdly, the study examined the "real" through adherence to a subjective epistemology - an approach that has not been generally favoured in organisational studies to date (Easton, 2010).

The study involves ontological questions about an individual's social context and the responses are subsequently translated into epistemological meaning about what agents think this social reality is. For this reason, this study lends itself to an exploratory approach to uncover deeply embedded meaning which has either been ignored or under-researched to date (e.g., entrepreneurship in the public service that embraces women and institutionalism).

Because CR is weakly constructivist and anti-positivist its ontology tends to favour interpretivist approaches such as qualitative case studies in organisational studies (Easton, 2010). Therefore, this study uses the vehicle of a single collective instrumental case study to provide an independent qualitative approach to the analysis of human interaction amongst the competing variables in research (Denzin & Lincoln, 2011; Stake, 1995). The design of the study, using semi-structured interviews with individuals across a stratified layer, was based on the procedure for qualitative analysis using a critical realist orientation set out by Miles and Huberman (1994). The research methodology is more fully explained in Chapter 3 although what follows next is a brief overview on how the research question is to be progressed in this thesis.

1.6 Progressing the research question

Chapter 2 will examine the literature appertaining to the factors shown in the initial research model at Figure 1.4.1. It will specifically synthesise the literature relating to entrepreneurship, institutionalism, and the four variables in the model but will also include a fusion of other relevant literature such as social and human capital, power, gender, NPM and feminism. Chapter 2 concludes with a summary of what is known and what remains to be researched, thus identifying

gaps in knowledge or approach. Subsequently, the research methodology explained in chapter 3 will be justified and the process of gathering data for analysis described. The data will be categorised using an approach defined as Constant Comparison Methodology (Boeije, 2002) before analysis of the findings and discussion of their implications are presented in chapters 4 and 5 prior to reviewing the aims and content of the study. The following paragraph provides a brief resume of the thesis structure and chapter content.

1.7 Thesis structure

This section outlines the structure of the remaining chapters of this thesis:

Chapter 2 undertakes an in depth literature review and identifies the gaps in the literature whilst also substantiating the four research sub-propositions that collectively contribute to answering the research question defined in Section 1.2.

Chapter 3 defines the rationale behind the chosen methodology and the approach to conducting the research. It explains both the research perspective adopted and the practical methods to be utilised in undertaking the fieldwork. The stages of the study in terms of further work are then explained and described together with the selected data analysis techniques.

Chapter 4 presents the findings relating to the main research question and subpropositions.

Chapter 5 synthesises and discusses the findings illustrating how and in what ways they extend, contradict, and/or differ from what was already known. The chapter concludes with an analysis on the applicability of the initial relational model set out in Figure 1.4.1.

Chapter 6 reprises the aims and content of the study and presents the conclusions derived from the research analysis. It also outlines the areas of contribution to academic theory and to practice. The limitations of the study are also discussed, together with suggestions for future research. The chapter and

the thesis conclude with a personal note relating to the relevance and value of this thesis.

1.8 Summary

This chapter outlined the basic case for why there are good grounds to investigate women entrepreneurship within a public service institution. It further suggested the four main variables that may help provide the best account as to the causal nature of institutional entrepreneurship in general. Lastly, it argued that it order to generate new insights it was necessary to conduct investigations which used non-traditional variables and to also employ research methodologies that were rarely used in entrepreneurship studies. The following chapter is a thematic literature review which provides greater detail and justification for the case outlined so far.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter explores the literature on institutional entrepreneurship and the socially constructed dimensions of meaning and action involving structure, agency, networks and context from a gender perspective. It does so by identifying the gaps in the literature for the purpose of developing a research framework which can then be used to contribute to the academic understanding of institutional entrepreneurship. In order to identify gaps in the literature a thematic literature review of the key ideas, concepts and theories relevant to entrepreneurship and gender was conducted. The vastness of the literature covered by these three topic areas (entrepreneurship, institutionalism and gender) necessitated distilling the literature into key themes. Some of the key themes that were reviewed included:

- The origins of entrepreneurship with an emphasis on the economic perspective;
- Institutional theory, institutional entrepreneurship and institutional change;
- NPM; and
- Feminism.

The analysis conducted within this review revealed that:

- The origins of entrepreneurship research continue to maintain an overreliance on the examination of business start-ups, and personality traits, perspectives that provide little utility for advancing the field of entrepreneurship.
- The recent literature on institutional entrepreneurship identifies institutional change as an emerging research field that opens up new previously overlooked opportunities to understand the dynamic and multicausal nature of entrepreneurship.

 Female entrepreneurs are missing from the research landscape and continue to be disregarded.

A subsequent synthesis of the gaps in the review undertaken identified the following four themes as being the most relevant for the purposes of exploring the overall research aim:

- Structure that gives rise to socially constructed meaning appears in the form of schema's or institutional logics.
- Agency is integral to the understanding of structure and is augmented through the concepts of embeddedness and power.
- Networks gave individuals access to resources and non-redundant information (information that is new and most recent compared to data that is well known), based on an individual's social capital that is considered to be necessary to enact entrepreneurial change.
- Context is considered in the form of NPM and its influence on the opportunities for entrepreneurial action.

The literature revealed that all four dimensions have some level of influence or association with each other but an exploration of these relationships within the literature was not evident. Therefore, the four dimensions were then developed into an integrated model to more accurately express the assumed causal relationships entailed in this dynamic interaction. This model is illustrated at the end of Chapter 1 (Figure 1.4.1) and is shown again at the conclusion of this chapter as Figure 2.8.1. The model has two purposes. Firstly, it provides a summary of the key findings of this chapter. Secondly, it is used to provide the overall research framework, setting the boundaries and focus of this study.

2.1.1 Background

The study of entrepreneurship has its roots in economic theory based on the relationship between supply and demand in return for profit that becomes a form of payment for the entrepreneur's efforts (Acs & Audretsch, 2005). This relationship between supply and demand is a central concept in the understanding of economic theory but the role of the entrepreneur in such

theory has been a much debated topic (Koppel & Minniti, 2010). A central issue for scholars of entrepreneurship in the early days of economic theory building was the identification of who was an entrepreneur and what did he or she do. Adam Smith (1776) was possibly the first classical economist to infer the role of the entrepreneur in mainstream economics as the "invisible hand" where he related returns in terms of payment as a form of indemnity for undertaking the risk of financing the venture in question. Walras (1877) makes direct reference to the term entrepreneur in classical economics describing the entrepreneur as a coordinator and arbitrageur. Subsequently the role of the entrepreneur was to face two divergent viewpoints when neoclassical economic theory placed a greater emphasis on microeconomic rather than macroeconomic perspectives. This resulted in a division of research between the macroeconomic perspective, which focussed on the wider economy, whilst in comparison the microeconomic view focussed on the relationship between the consumer, producer and market (Kirchoff, 1991). Thus microeconomic thinking introduced into the debate a more direct linkage between end and means where value depended upon the perception of usefulness.

Central to understanding of the microeconomic research perspective was the explanation of observed or implied phenomena through the use of mathematical models based on the relationship between production, demand and price that, as a consequence, almost eradicated the role of entrepreneur from the dictionary of understanding (Casson, 2002, 2005). Ripsas (1998), for example, notes that during this divergent period there was no place for an additional role because of the assumption that rational decision-making based on complete and accurate information was possible.

The microeconomic perspective of the relationship between price, production and demand was not subsequently considered to represent the whole picture when discussing the creation, continued existence, expansion or contraction of the firm (Coase, 1937). Primarily this was because the relationship between access to complete information and perfect rational decision making omitted the influence of the human resource within the firm. This human resource was

defined as a director of resources that assessed how resources should be best applied to minimise wages whilst maximising output. These directors were therefore considered as a special class of individuals that were said to be entrepreneurs (Coase, 1937).

Alternative views to the theory of the firm were then put forward and developed in the early 20th century. Most notably Knight (1961), who was associated with the Chicago school of economics, argued that entrepreneurs are prepared to take risks in an uncertain setting. In particular he examined factors bearing upon profits realised by entrepreneurs with an emphasis not on rewards linked to "risk" bearing but linked to "uncertainty" bearing that was dependent upon the probability of likely outcomes (Ricketts, 2006).

An alternative economic school of thought at the same time was the German-Austrian school that developed an economic theory that emphasised the central role of the entrepreneur as an innovator and change agent. A leading academic in this field was Schumpeter (1942), who rejected the neoclassical economists' emphasis on the perfectly competitive market and in doing so emphasised the role of the entrepreneur in the dynamics of the competitive process.

Schumpeter's (1942) hypothesis for the entrepreneur was one of the "creation of dynamic disequilibrium" rather than the norm of equilibrium and optimisation that was put forward in classical economic theory. He articulated the task of the entrepreneur as the creator of what he termed "creative destruction". In this analogy, the entrepreneur is perceived as an innovator who brings about new combinations of opportunities that the firm could exploit. This entrepreneurial action manifests itself in the creation of new firms but, in the very process of creating these new entities, the entrepreneur also plays a role in the demise of less competitive market firms. Although Schumpeter (1934) believed that such action would inevitability lead to firm consolidation and industry concentration to a point where the utility of the entrepreneur was no longer appropriate or required, this has not been supported (Kirchoff, 1991).

A more recent school of economic thought, the modern Austrian school, diverges from Schumpeter's suggestion on the demise of the entrepreneur.

Whilst it supports the position of market equilibrium as an ultimate end state it perceives the role of the entrepreneur as an enduring factor in the achievement of such an end state. Kirzner (1973), a foremost academic in the modern Austrian school, suggested that the role of the entrepreneur was to act to enhance profitable outcomes as the beneficiary of their action whilst moving the market towards, but never actually achieving, a stable and effective equilibrium. In doing so he describes the entrepreneur as someone that is "alert to opportunities" for making profitable decisions and can, using their knowledge, "exploit this opportunity" (p. 67). This is thought to be achievable on the simple basis of buying cheap and selling dear (Casson, 1982, 2003).

Critics of Kirzner's perspective, whist recognising it as an important contribution to the field of entrepreneurship, argued that he failed to address the concept of these so called opportunities and from where they originated (Ucbasaran, Westhead & Wright, 2001). However, Kirzner (1973) does provide an important description of the role of the entrepreneur that is heavily debated today in relation to opportunities by describing entrepreneurship as:

"Firstly, entrepreneurship is the alertness to new opportunities. That is what entrepreneurs are like. Second entrepreneurship is a sequence of innovative actions following from the 'discovery' of the opportunity. That is what entrepreneurs do" (Koppel & Minniti, 2010, p. 88-89).

Research subsequently, but not extensively, examined cross-cutting fields of interest such as management, where further descriptors of the entrepreneur have emerged, such as innovator (Schumpeter, 1934; Weber, 1946), decision maker (Marshall, 1948; von Mises, 1949) and manager or superintendent (Hébert & Link, 1989; Marshall, 1948; Say, 1971). More recently this analysis has been more prevalent with substantive research literature appearing in the realms of Psychology, Anthropology and Sociology. In adopting such an approach, research has enquired about an entrepreneur's personality, background, traits and early experiences (J. W. Carland, Hoy, Boulton, & J. A. Carland, 1984). Alternative studies have focussed upon the behavioural aspects of entrepreneurs (Brockhaus, 1980; Brockhaus & Horwitz, 1986; Chell,

Haworth, & Brearley, 1991; Gartner, Bird, & Starr, 1992). The concept of *limited attention* is one such example that relates to the different degrees of risk tolerance and uncertainty bearing by entrepreneurs that has had much academic interest (Gifford, 2003; Kilhlstrom & Laffont, 1979; Rauch & Frese, 2000).

Whilst research attention regarding these concepts has been extensively covered within the literature, it has generally produced inconclusive findings (Gartner, 1990; Low & MacMillan, 1988a, 1988b). For instance, the risk-taking propensity of entrepreneurs compared to the population as a whole was said to be about the same as managers (Brockhaus, 1980). Personality trait theory has been also discounted as an inadequate direction for furthering the field of entrepreneurship and understanding (Gartner, 1990). However, despite this increased academic interest in the topic of entrepreneurship, said to be necessary to develop an emerging field of study in the pursuit of a substantiated theory, a precise definition of entrepreneurship remains elusive (Baretto, 1989; Cunningham & Lischeron, 1991).

One avenue of enquiry that has shown promise is within the field of behavioural theory that identifies entrepreneurs as characteristically distinctive in their particular motivational styles. McClelland (1965), a psychologist, examined the motivations of people who act in entrepreneurial ways and reported that entrepreneurs are characterised by a high need for achievement, symbolically known as "Need for Achievement" (NAch) as it is commonly referred to in the literature. He went on to advocate through decades of research that NAch is related to moderate risk taking and participation in entrepreneurial activity.

Jenkins (1987) extended the work of McClelland in her longitudinal study of NAch with respect to women, suggesting that there are important factors to be taken into account when examining the need for achievement such as the direct correlation between the specific achievement and the position that both men and women hold within the organisation and, consequently, reasons for motive gratification primarily seen through status mobility routes. Her work within the teaching profession identified that one motivational factor that appeared

prominent was an individual's motivation to access higher echelons within working environments either for reward, status or self-determination. The challenge of competing with male egos was identified as a central arousing condition that heightened the levels of NAch held by individuals and the entrepreneurial outcome of advancement.

This relatively rare focus on women within the literature on the understanding of entrepreneurship is said to cloak the continuing criticism of entrepreneurial studies as being heavily masculinised, and this includes the work of McClelland (1965), where research literature predominantly sees the male as the norm (Chappell & Waylen, 2013; Duncan & Peterson, 2010; MacKay et al., 2010; Stewart & Chester, 1982). The limited research examining women is predominantly limited to the private sector and little, if any, research has been conducted in the public sector either on entrepreneurship or women (Sundin, 2011).

There are notable recent exceptions. For example, DeTienne and Chandler (2007) discuss gender differences with respect to opportunity identification in the entrepreneurial process and make a positive contribution to the field of feminism (Bruin, Brush & Welter, 2007). However, the study of women entrepreneurs, whilst advancing considerably over the last 20 years, is still described as having some way to go before it can be seen to be on par with the so called androcentric dominant perspectives that permeate the literature (Carter et al., 2001). As such, entrepreneurship continues to be criticised for adopting a masculine bias often portraying the world of entrepreneurship as unsuitable for female stereotypes (Ahl, 2002, 2004, 2008).

Sundin (2011) emphasises a similar discussion point by highlighting not only the lack of attention paid to female entrepreneurs in mainstream journals, but also the lack of consideration given to the internal relationships in terms of structures, agency and networks, emphasising that:

"In mainstream entrepreneurship journals the gendered structures are not part of the discussion, while in women's studies, gender studies and feminist research, entrepreneurship and self-employment have seldom been part of empirical studies" (p. 631).

Gartner (1988), in his work "Who is an entrepreneur? is the wrong question", also suggests that the continuing study of entrepreneurship in the economic sense, based on an emphasis on behavioural traits, has little utility in furthering the research into entrepreneurship. In response, the study of the firm from an economic perspective as the historical norm has shifted in more recent years to the study of individuals as agents of change (Audretsch, 1995). Such a shift in perspective has faced its own challenges in maintaining a clear point of view on how the interface between the individual and contextual environment shapes entrepreneurial activity. This is believed to be as a result of many studies failing to appreciate the diversity of entrepreneurs and organisations in which they operate (Heron, Sapienza, & Smith-Cook, 1991). Consequently, very few studies have focussed on how "which type of organisation" and "which type of entrepreneur" may influence outcomes and achieve their goals (Birley & Westhead, 1990). However, this diversity is said to raise opportunities for research into entrepreneurship because there is a need to learn more about how the type of entrepreneur or type of organisation combine to influence choices for action (Chandler, 1996).

One such area in which to explore the relationship between the individual and the organisation, including entrepreneurship, is new institutional theory or neoinstituionalism (Bhide, 2000; Bruton, Ahlstrom & Li, 2010). The increased interest in institutionalism and entrepreneurship is said to reside within the general: "dissatisfaction with theories that venerate efficiency but downplay social forces as motives of organizational action" (Bruton et al., 2010, p. 423). In recognising that these elements may correlate with the degree of entrepreneurial success, it is suggested that further research in neoinstituionalism using an entrepreneurial lens of analysis should be explored (De Carolis & Saparito, 2006; Shane, 2003; Welter & Smallbone, 2011).

2.2 New Institutional Theory

The term "new institutionalism" is one that appears in ever increasing frequency in political science although there is a lack of agreement on what the term actually embraces or constitutes (Hall & Taylor, 1996). Broadly speaking, there are three main schools of thought with respect to the origins of new institutionalism that define how institutions are perceived; these are, Historical Institutionalism, Rationale Choice Institutionalism and Sociological Institutionalism (Hall & Taylor, 1996; Mackay et al., 2010). Each school of thought has a distinct approach to institutional analysis through the examination of three central tenets of comparison, namely, how institutions are formed, the relationship between institutions and behaviour, and how institutions change. However, it is by no means certain that there are any clear boundaries between the three perspectives as they often comprise overlapping but poorly defined concepts and relationships (Thelen, 1999). These three schools of thought are discussed in the next section.

2.2.1 Historical Institutionalism

Historical institutionalism was developed around the same period as Rational Choice institutionalism. Both theories therefore have similarities in their ontological viewpoint based upon a assumption that institutions have embodied routines that play a crucial role in allocating resources and structuring incentives and constraints, as experienced by those that reside within them (Thelen, 1999). Hall and Taylor (1996, p. 938) describe the historical institutionalism perspective as, "Comprising of formal or informal procedures, norms, routines and conventions embedded in the organisational structure of the policy or political party".

Historical institutionalism is defined by four major conceptual ideas. Firstly, strategies developed in the creation of the institution may endure and bring undue influence on an actor's perception of reality. Secondly, power is unevenly distributed across the social framework of the institution and can be used to explain why some groups win and others lose in particular scenarios. Thirdly, the institution is path dependant in its evolution with junctures that

illustrate major points of change from a particular path being linked to major exogenous causal factors, although this is less well understood in general (Huber & Stephens 2001). Finally, institutions are seen as part of a political causal chain that can contribute to and subsequently influence macro political outcomes.

Critics of the historical institutional viewpoint suggest that unlike rational choice and sociological perspectives, this viewpoint lacks analysis of the "micro foundations" of organisational reality (Thelen, 1999). These micro foundations involve the study of social interaction, which both rational choice and sociological institutionalism are said to embrace, albeit at different levels and premised on differing assumptions (Hall & Taylor, 1996). Like the criticism of entrepreneurship, that is also criticised for omitting the role of the individual within a sociological context, this study therefore sees little utility in the continued examination of historical institutionalism as a fruitful avenue of enquiry. However, there is no implication that it does not have a role in future research.

2.2.2 Rational Choice Institutionalism

The Rational Choice theory of institutions is one of a number of competing theories that was developed at the same time as historical institutionalism in the United States (US) (March & Olsen, 1984). Firstly, it emphasises the role of strategic interaction whereby researchers postulate that actors behave in a strategic "calculus" manner based upon the perception of the behaviours of others. Those that adopt the "calculus" perspective believe that individual behaviour aims to maximise the attainment of pre-defined goals centred on a specific preference.

Secondly, individual actors conduct themselves in a manner that maximises gain from decisions in the form of "utility-maximising" (Peters, 2005). Thus, these individuals are said to behave strategically by reviewing a range of possible options in order to determine those that will return the maximum benefit for themselves whilst still complying with institutional constraints (Hall & Taylor, 1996). As a consequence, decisions based on these personal gain

biases remain the primary motivation of individuals in realising their goals through the institutional framework.

Rational choice theorists depart from the historical perspective of institutions by tacitly recognising that behavioural elements have a role to play in explaining that dysfunctional behaviour is regulated through the institutional design that promotes more socially desirable outcomes (Ostrom, 1990). These elements of influence are conveyed through various institutional frameworks that are based around rules and procedures that reduce uncertainty, whilst at the same time, they provide incentives to cooperate, thus leading to conformity (North, 1990; Weingast, 2002; Shepsle 2005). It is argued, therefore that institutions endure when they provide more reward benefits to actors than those available through alternative arrangements (Hall, 2010; Ingram & Clay, 2000).

Mackay et al. (2010) challenge the rational choice perspective of purely deterministic and rational behaviour due to its omission of other social influences that oppose deterministic outcomes. Whilst they accept the rational choice position that structures do indeed shape individual behaviour, they also emphasise that they may also be forms for human coordination and see structures as venues for "coercion, power and domination" (p. 574). Thus, to obtain a clearer understanding of how social relationships influence meansends rationality, the field of sociological institutionalism is considered next.

2.2.3 Sociological Institutionalism

Sociological institutionalism emerged in the late 1970s when sociologists earnestly began to challenge the aspects of the social world through a distinction between formal means-ends rationality and the wider aspects of culture, involving cognitive scripts and such things as moral templates (March & Olsen, 1994; Hall & Taylor, 1996). Hitherto, the work of sociologists such as Weber (1968) focussed on the effects of "ideas", comparing aspects of logical thought, how people construct, and why they construct, viewpoints and solutions to every day issues. He recognised that there was a form of rationality that itself was influenced by the individual acting within a framework such as an institution. In this construct, Weber (1968) believed that historical and cultural

aspects of the past were central components for individuals or groups to make sense of present and future actions. He thus called for a sociological understanding of institutionalism that sought to comprehend actions and situations from "within". By adopting such an approach, the sociological institutional viewpoint provides a clearer understanding of how individuals respond and navigate through a labyrinth of regulations and rules and, in doing so, make the most economical decisions and estimates to achieve the desired means and ends (Kalberg, 1980, 2002).

This is not to say that Weber (1968) excluded the linkages between culture and organisational form but, more specifically, the sociological perspective placed greater emphasis on the "cultural" approach as opposed to the "calculus" approach. The "cultural" perspective perceives that individual behaviour is not focussed on solely strategic outcomes because these actors, as deeply embedded entities, make decisions based on their individual interpretation of a situation and not as a consequence of instrumental calculation (Hall & Taylor, 1996). A cultural approach suggests that the institution is resilient to individual action for change because it is the institution itself that structures the choices that the actor forms and makes.

R. W. Scott (1987) also developed this sociological approach in his paper on "The adolescence of Institutional Theory", making reference to Selnick's (1957) complex work that states that institutions are a reflection of historical origins that involve interactions between structure and agency and both the internal and external environments. He further suggests that institutionalism could be described as an evolving process that brings stability and structure to what would be otherwise an incoherent response by individual partisans centred on personal belief and desires based upon random self-interests. Institutions are thus encapsulated by Zucker's (1983) description of them as a product of cognitive thought and intervention where institutions are said to provide a consensus on what action and behaviour is appropriate and tolerable. In her later work, Zucker (1983) clarified that there appeared to be no place for

individuals and their personal interests acting independently of the institutional form in which they resided.

Thus, a common theme that runs through the analysis of institutionalism by sociologists is that outcomes may be best determined or predicted by structural factors and the actions of human agents (Peters, 2005). Giddens (1984) suggests that institutions are also the products of structural, human and thus social interactions involving both structure and agency which are recursive and inclusive. He earlier describes this relationship between social outcomes and systems as a "duality" where the two components defined clearly as structure and agency are in constant and developing interaction that may lead to institutional change (Giddens, 1981; Hay & Wincott, 1998). However, whilst the essentialism of the relationship between structure and agency in the understanding of institutional entrepreneurship is widely accepted, the relationship between these elements as a duality is not (Archer, 1995). A central critique of structure and agency residing as a duality is that it has the potential to conflate structure over agency and ignores alternative ontology, such as critical realism, that sees both structure and agency as a dualism (Archer, 1995, 2003; Mutch, 2005).

Mackay et al. (2010) also criticised all three neo institutional viewpoints for being susceptible to the existing gender blindness of active scholarship that: "Obviates the women as important actors and fails to provide important insights in answering real world questions about power inequalities in public and political life as well as institutional mechanisms of continuity and change" (p. 574).

In examining institutionalism, Mackay et al. (2010) make reference to a key feminist insight to institutional life by observing that "structure and agency are gendered" (p. 582). As such, they emphasise that the structure-agency question is far from settled and remains an ongoing debate within the field of new institutionalism. Examination of the relationship between structure and agency within this field, involving entrepreneurial change, may benefit from focussing on not only gender at the level of the individual but also within so-called, "Gendered institutional environments where agency is understood to

involve strategic, creative and intuitive action as well as calculating self-interest" (Mackay et al., 2010, p. 978).

Developing the idea that structure and agency are gendered, the next section examines the literature with respect to gender and entrepreneurship in general. The thesis then goes on to examine institutional entrepreneurship and then returns to the more detailed understanding of the relationship between structure and agency within these explanations.

2.3 Gender and Entrepreneurship

An emergent field of interest within the study of entrepreneurship is how organisational influences can shape entrepreneurial behaviour and consequent choices for action (Cuff, 2002; Gartner, 1989, 1995; Van de Ven, 1993). However, many studies in entrepreneurship fail to appreciate the gender perspective of entrepreneurial activity and how the institutions in which they operate shape the potential for successful outcomes (Burgess & Borgida, 1999).

Fenwick (2003) highlights that the examination of women entrepreneurs as being one type of entrepreneur requires further attention because hitherto such attention has been lacking. Often, this is said to emanate through the use of a masculine model as the contemporary bench mark comparison (Bird & Brush, 2002). The stereotyping of females as home makers, with limited academic horizons due to family discontinuities is said to be another limiting perception that researchers are overly inclined to assume as components of causality (Clow & Ricciardelli, 2011; Fiske, 1993; Fiske, Cuddy, Glick, & Xu, 2002; Hoyt, 2012). In adopting these stereotypical perspectives, scholars can be guilty of paying little attention to the spatial and contextual factors that often go unaddressed (Brush, 1992; Joyce, Woods, & Black, 1995).

Building upon these observations, Fenwick (2003) and Burgess & Borgida (1999) suggest that gender-comparative studies in relation to women entrepreneurs have thus focussed on limited psychological characteristics such as the propensity to take risks, levels of education and methods of enactment

(Aldrich, Reece, & Dubini, 1989; Meier & Masters, 1988; Rudman & Glick, 1999; Sexton & Bowman, 1990). As a result, Fenwick (2003) believes that too much of this literature continues to rely upon assumptions "grounded in individualist psychology leading to an inference that that there are distinct "women's ways" of entrepreneurial leadership" (p. 3).

Ahl (2006b) shares Fenwick's concerns but also raises a cautionary note that most studies into women and entrepreneurship have adopted a simple empirical approach and thus lack comparison and analysis to support some of the main assertions. Ahl (2006a) is also critical of research that places women as secondary to men when it comes to the examination of entrepreneurship and acknowledges that there are inherent difficulties with current literature perspectives on women entrepreneurs.

The literature on entrepreneurship in general also faces criticism by feminist scholars for the lack of attention paid to gender. At best, the literature is gender neutral, whilst the alternative explanation refers to the implicit masculinity of entrepreneurship. Furthermore, Berg (1997, p. 259) identifies that: "when studying entrepreneurs one is studying gendered individuals in gendered places". This notion of gender, place and entrepreneurship is the central proposition for Berg (1997) to develop her argument for a more comprehensive framework for examining gender and entrepreneurship that has so far been omitted in research (Kark & Eagly, 2010; Rudyk, 2010). To support this viewpoint, S. Carter (1993, as cited in Berg, 1997, p. 159) identifies that there is a major problem with attempts to adopt a gender perspective in entrepreneurship research due to, "The propensity of researchers to study female entrepreneurship in isolation, without a suitable academic context or larger theoretical framework".

S. Carter and Cannon (1992) suggest that theoretical frameworks are indeed lacking in the study of women entrepreneurs and urge future research on entrepreneurship to draw from sociological frames and debates, using more qualitative methods rather than the often positivist standpoints currently found in the field of entrepreneurial studies. Chell (1996) goes further and specifically

focuses on avenues to advance the study of institutional entrepreneurship recommending the examination of both gender and social relationships that use different research paradigms to understand who actually benefits from institutionalised arrangements.

To advance research on women and entrepreneurship, Ahl (2006b) calls for a fundamental shift in the epistemological position that examines alternative arrangements and influences on the achievement of entrepreneurial endeavours, such as using cross-field analysis, for example, associations or otherwise between gender and institutional theory, and power relations in order to advance the field of study (Ahl & Marlow, 2012).

Thus, in respect to the study of entrepreneurship that has gender as a core perspective, the consideration of gender relations that are specific to time and place are important new research avenues to explore because they have been critically overlooked (Mackay et al., 2010). Thus, adopting a neoinstitutionalism lens ought to identify the potential role of gender dynamics in broader institutional processes involving entrepreneurship that has "passed under the radar of neo institutional scholars" (Mackay et al., 2010, p. 580)

Gender, however, does not exist in isolation; it comprises a mix of relationships and understanding between the physical, virtual and cognitive elements of both organisational structure and agency (Sewell, 1992). Thus, an analysis of institutions from a gender specific perspective could enrich understanding in the key areas of institutions involving change where power and hierarchy, including the relevance of structure and agency, are seen as equal components in the process of enactment (Agrawal, 2000; Hawkesworth, 2005; Mackay et al., 2010). This notion of institutional change and its linkages with entrepreneurship and agency challenge the deterministic views of rational choice perspectives. Whilst the study of institutions provides the forum for examining the role of agency and how individuals interact to make decisions, the study of institutional entrepreneurship is said to allow for a clearer focus on how organisational actors enact institutional change (Leca & Naccache, 2006).

2.3.1 Institutional entrepreneurship

Institutions provide the framework from which actors can produce a wide range of interpretations, relationships and consequential actions (Pentland & Reuter, 1994). As such, the rejection of the idea that entrepreneurship is less about heredity in the form of traits and behaviours and more closely associated with the "psychological" aspects, has lead scholars to examine institutional entrepreneurship as a potentially more lucrative area for understanding the wider context of entrepreneurship (Veciana, 2007). Recent work by Veciana and Urbano (2008, p. 373) also suggests that a particular promising research area in the field of entrepreneurship is now focussing on how: "the institutional context affects-promotes or inhibit- the emergence of entrepreneurs". Thus, the entrepreneur within the institutional context is described by North (1990, p. 83) as, "the agent of change responding to the incentives embodied in the institutional framework".

Institutional frameworks comprise so called institutional logics. These logics are an actor's cognitive interpretations of cultural norms, rules, sanctions and policies that are said to influence individual behaviour and subsequent choices for action (Thornton, 2002; Thornton & Ocasio; 2008). Friedland and Alford (1991) view these logics as macro patterns of activity that bring meaning to an individual's interpretation of their daily lives, how they interpret their environment, and as individuals, how they respond to the institutional environment in order to establish legitimacy (Giddens, 1984; Seo & Creed, 2002). However, whilst these logics may constrain individual action, because they are based upon historically formed scripts of acceptable practice, they also provide the means through which actors can leverage resources to explore opportunities for agency and to enact change (Thornton & Ocasio, 2008; Thornton et al., 2012).

Levy and Scully (2007) consider institutional entrepreneurship to present a "paradox of embedded agency" and cite Holm's (1995) description of such a paradox with respect to the puzzle of "how actors can change institutions if their actions, intentions, and rationality are all conditioned by the very institution they

wish to change" (p. 398). This contention by scholars highlights the friction between the concept of structure and agency, its boundaries and transitions coupled with the spatial and contextual influences that lead to both contradiction and incomplete arguments regarding outcomes of any certainty (Barley & Tolbert 1997; Clemens & Cook 1999; Phillips, Lawrence & Hardy, 2004).

Institutional entrepreneurs are said to act in periods of change and frame institutions in meaningful ways that can be accepted by those involved in a manner that creates links between institutions and deeply embedded and popular discourses (DiMaggio, 1988a; Rao 1998; Perkmann & Spicer, 2007). Institutional entrepreneurs, therefore, use the appropriate and often overlapping institutional logics to promote a particular standpoint by appealing to popular discourses, such as standards, efficiency and deep, often unspoken, cognitive and collective understanding of institutional beliefs (Leca & Naccache, 2006).

Rao and Giorgi (2006) further elaborate on this proposition by describing how institutional entrepreneurs deploy pre-existing cultural logics to push forward their own institutional projects involving change contingent on political opportunity. DiMaggio (1988a) questions the inevitability of individual institutional outcomes suggesting that homogeneity rather than variance across the field is the unavoidable direction of institutional change. She captures this concept of homogenisation in the term "isomorphism", whereby institutions are said to migrate towards a standardised form over time that leaves little room for independent action (Hawley, 1968).

The idea of isomorphic change has remained key to the understanding of institutional change until comparatively recently; the deterministic path dependency idea of similarity was questioned when the role of agency was brought back into the field of discussion (Dacin et al., 2002). The resulting increase in interest in the role of agency and institutional change generated a plethora of subsequent research (Lounsbury, 2002). However, Maguire et al. (2004) in their examination of institutional entrepreneurship contend that what is actually missing from the study of institutional change is an understanding of

how institutional entrepreneurs enact institutional change and out manoeuvre dominant institutional logics that lead to institutional isomorphic perceptions.

When discussing institutional change, scholars have suggested a number of field level conditions that enable such change based on internal and external conditions (Greenwood, Suddaby, & Hinings, 2002; Holm 1995). Typically, conditions that are cited as catalysts for macro change are through exogenous shocks that create the impetus for organisational change such as political change, regulatory changes or the loss of institutional legitimacy (Durand & McGuire, 2005; Phillips et al., 2000, 2004). Alternatively, where contradictions within the internal construct of the institution exist, such as inequity or inequality between groups, this also can lead to alternative institutional arrangements thus turning actors into entrepreneurs, although relatively little is known about how, at the level of the individual, this is achieved (Haverman & Rao, 1997; Leca, Battilana & Boxenbaum, 2008; Rao, 1998).

At the level of the individual, Nee and Ingram (1998) are critical of the inadequacy of research regarding the interactive relationship between social networks of actors, the identification of opportunities and how institutional change occurs. Granovetter (1985) suggests that when examining institutional change, actors do not behave as atoms that are independent of the social context in which they reside. Those individuals that wish to enact change do so by conducting their purposeful intentions embedded within stable and enduring social systems that cannot be examined independently.

Whilst these social systems are physically intangible, they nevertheless can be used to promote an actor's entrepreneurial ideas by accessing the resources necessary to support future change activity (DiMaggio & Powell, 1983). These resources are typically described as social capital and legitimacy that is subsequently used to support an actor's ideas and intentions (Leca, Battilana, & Boxenbaum, 2008, 2009; Maguire et al., 2004; McPherson, Smith-Lovin & Cook, 2001). Unlike institutional legitimacy, individual legitimacy in this thesis is closely if not entirely synonymous with the levels of social capital accrued by the

individual that subsequently provides resources to enact change and is used interchangeably in this respect (Burt, 1998)

Shane (2003) recognises important areas, such as the relationship between structure and agency, as integral precursors for understanding how agents access the necessary social capital embedded within networks to enact change and calls for further work with regards to these key relationships. The next few sections therefore examine how structure and agency are described as the basis for interpreting institutional meaning that subsequently involves the concepts of embeddedness and power.

2.4 Structure and Agency

Mackay et al. (2010, p. 578) posit that the relationship between structure and agency can be described as: "a dynamic relationship between institutional architects, institutional subjects, and institutional environments" although, like the definition of entrepreneurship, there is yet to materialise an agreed definition of both structure and agency (Sewell, 1992). Hay and Wincott (1998) draw attention to the need to understand such relationships, if the understanding of intuitional entrepreneurship is to reach its full potential, because it is not well understood and has competing perspectives.

Sewell (1992, p. 1) emphasises that "structure is one of the most important, elusive and under theorized concepts in the social sciences". Giddens (1984), who adopts a sociological perspective of institutions, suggests that structure and agency exist as a duality, where one cannot exist without the other to bring meaning. In comparison, W. R. Scott (2004) and others such as Mutch (2005), who takes a critical realist perspective based around rational choice institutionalism, contest that structure and agency separately exist as a dualism. Thus the relationship between structure, agency, institutional entrepreneurship and the prevailing institutional logics that pervade an organisation is becoming a heavily contestable area of academic debate (Leca & Naccache, 2006).

In Sewell's (1992) interpretation of Giddens's (1984) work on "The theory of Structuration", he makes several points. Firstly, the concept of structure as a

solid and amorphous mass is discounted, along with the idea that actors operating within these structures are mere automatons of their chosen destiny without contextual interaction with the logics or schemas in place (Sewell, 1992). These schemas exist in various forms but generally emanate from or within the construct of organisational rules, processes and controls that influence the very actors within the defined area of interests bracketed by time and space (Sewell, 1992). However, in his discussion on duality and the relationship between structure and agency, he comments that structure must not be seen as unidirectional and as merely placing constraints on individual agency, because humans have capacities of knowledge and information that can be used in creative and innovative ways. As a consequence, these actors have the capacity to transform the very structures that give them the freedom to act. Referring to Giddens (1984), Sewell (1992, p. 4) emphasises that institutional logics premised on structure "must be regarded as a process, not as a steady state".

Secondly, Sewell (1992) emphasises that the actor's very knowledge of schema's makes people, individuals or groups capable of action and, in doing so, demonstrates a recursive link between structure and agency. In clarifying his point of view, Sewell (1992) focuses upon and justifies the relevance and importance of both human and non-human resources at play in the structure and agency discourse. He explains that non-human resources, such as symbols that cannot be reduced to rules and schemas, have perceived power and influence through cultural schemas that are used to interpret meaning and use.

Scholars such as Hay (1994, p. 70) suggest that "certain structural configurations of resources and constraints make it more or less possible for people to make larger or smaller 'creative' moves". However, Sewell (1992) conceives that these rules or schemas may usefully be conceptualised as having a virtual existence and that structures consist of "intersubjectively available procedures or schemas capable of being actualized or put into action in a range of different circumstances" (p. 8). In linking schemas to resources in

his justification for the duality (dual character) of structure and agency, he posits that human resources can be seen as products of schemas but that non-human resources cannot. Thus, when considering the duality of structure and agency they should be considered as composed simultaneously of schemas, which are virtual, and of resources, which are actual. Agency in this context is described as: "The choices that agents make are always within the realm of structurally provided possibilities, and are therefore patterned and comprehensible (though only rarely predicted)" (Hay, 1994, p. 64)

Agency theory, therefore, appears intimately linked to the study of social action and the interpretation of structures in which agents experience meaning. Its inclusion in institutional studies is said to be in response to the propensity of structuralists to favour structure over agency (Bandura, 1989; Garud et al., 2007). Eisenhardt (1989), Sewell (1992) and Morris, Menon and Ames (2001) examine the concept of agency in the domains of structure and culture respectively. In doing so they are able to provide an explanation as to why people have power exercised through structure and resources, both human and non-human, in addition to social position.

Sewell (1992, p. 20) suggests that: "Agency is implied by the existence of structures" and, as a consequence, actors vary in their span of influence in social relationships, often being far from uniform or consistent, based on their knowledge and access to the schemas and resources available. For example, the occupancy of different social positions, role, gender and ethnicity provides individuals in these groupings differing levels of access to the essential resources such as social capital and legitimacy (DiMaggio, 1983), that are necessary for transformative action (Sewell, 1992).

Whittington (1992) is critical of management and institutional scholars' achievements in understanding the role played by structure and agency in the process of institutional change. Partly, this is because of the lack of attention paid to the level of the individual but also because other influences, such as context, sway outcomes. He makes several points to support his assertion. Firstly, the strengths of institutional analysis at the macro level can be, and

ought to be, applied down to the level of the individual. This approach should prevent the treatment of the organisation as a discrete isolated entity without influence from diverse social influences that are both internal and external in origin.

Secondly, it is important to determine the social character of key organisational actors in terms of hierarchy and network ties, in order to understand their plural social status rather than their hierarchical position. Lastly, there is a need to identify the dominant structural properties of the organisation in order to understand which pre-existing structures are actually being selected for action. Whittington (1992, p. 708) concludes that:

Such insights will add to the understanding of both the cognitive and symbolic structures in operation emphasising that these elements are not created 'de novo' but created from the interplay and interpretation of local social systems and structural materials ...thus popular elements of 'excellent cultures' – banally, empowerment and entrepreneurship – may not be universally available.

The relationship between structure, agency and institutionalism is extended by Battilana (2006) in the identification of the enabling roles of an individual's social position and institutional entrepreneurship, in particular, tackling the concept of embedded agency within the neoinstitutional perspective. This suggests that it has failed to construct a robust theory of institutional entrepreneurship because it consistently evades the issue of providing an adequate social theory based around human interaction with defined structures and networks.

Battilana (2006) uses Bourdieu's (1990) concept of fields to justify how an individual's social position can be seen to correlate with the ability to act as an institutional entrepreneur. Bourdieu (1990) defines fields as a form of structured system defined by social position where the allocation of resources is agreed or otherwise. In particular, she perceives individuals as agents who have different viewpoints derived from their social position and this determines their propensity to achieve desired outcomes based on their ability to act within institutional systems. In adopting this perspective of fields, Battilana (2006) explores the

inherent tensions between institutional constraints and the paradox of embedded agency that is discussed next but is believed to constrain institutional entrepreneurship. In doing so, she proposes that "an individual's social position is a key variable in understanding how they are enabled to act as institutional entrepreneurs despite institutional pressures" (Battilana 2006, p. 6).

2.4.1 Embeddedness

Research on Institutional Entrepreneurship has been pivotal in bringing agency back into institutional theory and assisting in the understanding of how embedded actors can shape institutions (Leca et al., 2008). B. Smith and Stevens (2010, p. 582) state that "The primary argument for embeddedness is that actors' purposeful actions are embedded in concrete and enduring relations that effect their motives, behaviours and decision making capabilities".

Central to the discussion on the topic of embeddedness is the fact that decisions made within the organisational and social context permeate the field at a certain point in time. This is fundamentally different to the economic stance whereby relationships and social contextual issues are generally obviated for the purpose of simplification. Therefore, whilst there are many forms of embeddedness, described by Zukin and DiMaggio (1990, p. 3) as "cognitive, social, cultural and political", it is the concept of relational embeddedness as a function of these contextual and socially interactive influences, defined through institutional logics, that are believed to be the most influential in constraining an actor's ability to enact change that deviates from these appropriate logics in use (Granovetter, 1985, 1988; Zukin & DiMaggio, 1990).

Therefore, embeddedness as a concept can be utilised to assist in understanding institutional networks. In turn, it interacts with other sets of social relations or other networks to convey these logics of conformity (Ansell, 2003). These ongoing social ties between individuals are believed to shape actors' expectations, motives and decision-making processes, whilst at the same time exercise the power to sanction change (Dacin, Ventresca, & Beal, 1999; Granovetter, 1985).

A central argument for understanding embeddedness is that an individual's purposeful actions are directly associated, if not shaped entirely, by their enduring relationships. B. Smith and Stevens (2010, p. 584) encapsulate the sense of embeddedness with respect to social relationships and networks as: "The connection between actors is a hallmark of the embeddedness theory, as it forms the perspectives by which networks are formed, information is shared and decisions are made".

Embeddedness, however, does pose a conundrum for institutional entrepreneurship as it attempts to explain how actors change institutions whilst the literature suggests the very same institutions shape an actor's intentions and world view premised on compliance (Seo & Creed, 2002; Sewell, 1992). Those with structural power often can impose change but have neither the incentive or will to do so whilst those that hold peripheral positions, such as women, may have the incentive to create new institutional forms but lack the power to do so because of over-embeddedness (Hardy & Maguire, 2008). Thus, in order to understand the influence that power has on shaping social and institutional outcomes the concept is briefly discussed next.

2.4.2 Power

Power represents another intractable issue for scholars in the social science field, in particular with regard to the relationships between knowledge, power and actors (Barray, 1999). The French historian and social theorist Michel Foucault is often cited by researchers in the area of power. In Hurley's (1990) translation of Foucault's "The History of Sexuality", Foucault stresses that, "Power is not an institution, and not a structure; neither is it a certain strength we are endowed with; it is the name that one attributes to a complex strategical situation in a particular society" (Hurley, 1990, p. 93).

Foucault does, however, make reference to a general theorisation of power in his later works, suggesting that power is enveloped in relationships between actors, rather than power over objects (Infinitio, 2003). Whilst the definition of power remains elusive, examples of the notion of power do exist, such as those articulated by Shapiro, Ingols and Blake-Beard (2011) that are said to

encompass power as a result of the social influence amongst actors. Hanscome (2000) also emphasises that within the context of organisational politics the use and perception of relational and positional power between men and women act as "undeclared" forms of power that separate the relationships between gender groups and place women in the lower order of such groups.

In terms of networks, the definition of power can be associated with the degree of network centrality that actors control or have access to as a consequence of their tie relationships (Ibarra & Andrews, 1993). Research also suggests that power is a function of an individual's intent, regarding how to exercise it, and the ends that he/she wants to achieve (McGinn & Long Lingo, 2007; Valley & Long Lingo, 2001). Given that the definition of power is widely debated within the literature, this research has chosen to explore the work of Raven (2008) that embraces a sociological perspective building upon French and Raven's (1959) seminal work on social power (Friedkin, 1986).

Raven (2008, p. 1) attempts to encapsulate the meaning of relational power through an association between power, situational dependence and social influence in two distinct steps. Firstly, for social influence and situational relationships, he describes power as: "a change, in the belief, attitude, or behaviour of a person (target of influence), which results from the action of another person (the influencing agent)". Secondly, he provides a definition of social power: "as the potential for such influence, the ability of the agent or power figure to bring about such change, using resources available to him or her".

Raven (2008) describes the various forms of social power as informational, reward or coercive, legitimate, expert and referent power. These social powers are briefly described below before examining how power relationships can be interpreted as undue influences on women.

Informational Power. This leads to socially independent change where
the agent (subordinate) accepts the superior's proposal as logical and
achievable. This continues to be accepted and enacted without further
recourse by the agent.

- Reward and Coercive Power. Reward power is perceived by the agent as a form of recognition for acceptance of the task or direction to be undertaken, resulting in a positive incentive. Coercive power is the opposite of this where non-compliance results in a negative outcome for the agent. Both coercive and reward power are socially dependant as the agent responds directly to the action of those with higher power or status. However, it is necessary for this higher power to monitor the response of the agent in order to satisfy whether they are complying and responding accordingly.
- Legitimate Power. Legitimate power arises when the agent accepts the right of the superior to change behaviour and the agent acts under an obligation to do so; the rank relationship in the military would be an example of this.
- **Expert power.** The superior is perceived as having an advanced knowledge or insight into the desired reason for action.
- Referent power. Here the agent identifies with the superior either through emulation or a perception of the actions required in response to stimulus. In doing so, the agent can be perceived as possessing a shared sense of mutual purpose and thus receives gratification as a reward for sharing a common purpose.

In reviewing the literature on power and women using Raven's typology, it is suggested that both coercive power and legitimate power are not considered to be a female strength because men command more legitimate power than women. Thus, in group interactions, women are not deemed to warrant similar status, albeit the reasons are less than clear (Connell, 1987; Meeker & Weitzel-O'Neil, 1985; Ridgeway & Berger, 1986). Raven (2008) describes assertiveness as a form of coercive power used to influence others, often being perceived as uncharacteristically a male attribute rather than a caring female one. Ragins and Sundstrom's (1989) analysis of organisational and gender power identifies that women are often assigned lower power status than men and this creates barriers for women, especially in times of career transition into leadership roles.

Similarly, Dennisen (2010) and Eagly and Johnson (1990) both emphasise the consequence of gender stereotypes and the correlation of gender roles in leadership appointments where men are favoured over women. Eagly and Johnson (1995, p. 235) posit that these prescriptive ideas lead to a less favourable evaluation of women compared to men in a similar setting, suggesting: "Another manifestation of the spill over of gender roles onto organizational roles is that people who hold positions in organizations tend to have negative attitudes about women occupying managerial roles".

Roberts (2007) turns his attention towards the structural aspects of organisations to develop an alternative perspective on why it appears women are apparently disadvantaged in seeking power position appointments. Roberts's work on psychology gives rise to the assertion that the difficulty with women fulfilling powerful roles has more to do with the expectation of the position held, rather than the gender fulfilling the position, which can cloud actuality on the basis of the perceived power over others. This approach seeks to widen the debate from the assertion that gender stereotyping is a root cause for holding women back towards a more complicated and involved situation where context is important and needs to be properly understood. Carli (2001) suggests that gender role expectations create more disadvantages for women than for men because of the masculinised notions of power that pervade the literature. However, the over-use of a comparative masculine dimension, whilst possibly being a useful backdrop for illustrating a feminist standpoint when debating gender, should also be treated with some element of caution (Ramazanoglu, 1992).

Whilst the dialogue on power is extensive, an underpinning assumption is that there is no one singular perspective of power between superior and agent, as this depends largely on situational and relationship factors. However, what can be articulated with reasonable assurity is that power is sometime difficult to measure within a social context because it comprises a complex array of ideas and relationships, involving elements of power across very differing social classes, as well as gender, ethnic, social and cultural backgrounds (Weber

1968). The masculine connotations of strength and force are therefore difficult concepts to dislodge from the understanding of power. Thus women who wish to appear powerful face a double bind between masculinity and femininity. Women who appear powerful are perceived by others as unfeminine, whilst those appearing submissive to males are perceived in the normative gender role of home maker or child minder and incapable of wielding power (Chappell, 2006; Chappell & Waylen; 2013; Shapiro et al., 2011).

Power (and the subsequent influences arising from the interpretation of it in everyday use) continues to play a significant role in understanding human interaction (agency) and institutional change (Sell, Lovaglia, Mannix, Samuelson, & Wilson, 2004). In seeking to resolve ambiguities surrounding these two relationships, that encapsulate specifics such as power, authority, and legitimacy the focus on gender is said to be a good example on which to examine how these specifics are related through further research (Correll & Ridgeway, 2006; Emerson, 1964).

In endeavouring to enact institutional change, individuals as agents of change cannot and do not exist in isolation to others. They need to access resources that they may not already be in possession of in order to leverage such change. In order to understand how such influence can be gained, an analysis of the organisational networks in which individuals reside is said to be relevant (Brass & Burkhardt, 1993; Brass et al., 2004; Kark & Eagly, 2010; Krackhardt, 1990; Seibert, Kraimer & Liden, 2001). However, before going further to discuss networks; the general implications of the findings of the literature covered thus far are brought together in the following paragraphs.

The study of institutions using a sociological lens gave rise to the study of institutional entrepreneurship, embracing the idea of individual agency acting in a complex range of social relationships to enact change. However, the association between agency and institutions identified the intricate relationship between structure and agency that both enables and constrains entrepreneurial activities. These constraints were perceived by agents through the interpretation of institutional logics, leading to the paradox of embedded agency.

This paradox presented a particular conundrum for the discussion on institutional entrepreneurship because these institutional logics constrain individual action to such a point that future action outside of these logics of appropriateness cannot be considered independent of the interpretation of these rules (structure) that presently constrain action as interpreted through agency. However, to enact institutional change and to understand how individuals bring about alternative outcomes, an explanation must be found as to how individuals break out of these institutional logics that constrain independent action.

The study of institutional entrepreneurship also highlights a number of limitations to the current research on institutional change. Firstly, research tends to adopt a macro perspective based around a single causal standpoint. Secondly, women are omitted as a unit of analysis at the where they are considered, they are disadvantaged through stereotypical perceptions. Thirdly, there is an absence of understanding about how individuals can access the required resources to release themselves from the constraints of embeddedness to enact change.

Using these observations and the reviewed wider literature to this point, the following two sub-propositions are considered relevant to the investigation of the main research question:

Sub-proposition 1. Women who can understand and respond to the prevailing institutional logics are more likely to be able to create the necessary structural legitimacy to succeed.

Sub-proposition 2. Individual agency enhances the ability of women entrepreneurs to enact change.

2.5 Networks

Networks can be used to represent many different things (Wasserman, 1994) but as Borgatti, Mehra, Brass, and Labinica (2009, p. 1), identify that, "one of the most potent ideas in the social sciences is the notion that individuals are embedded in thick webs of social relations and interactions". The term

"network" is defined as a set of actors or nodes that have a relationship with each other in the form of ties, noting that the particular content of a relationship is a function of interpretation (Brass et al., 2004; Lin, 2001).

The network approach to social and organisational phenomena has thus seen an exponential rise in interest (Borgatti & Halgin, 2011; Kilduff & Krackhardt, 1994). At the macro level, Kilduff and Brass (2010) provide examples of these topics that are now receiving research interest as an evolving field of study, namely: inter firm relations (Beckman, Haunschild, & Phillips, 2004; Westphal, Boivie, & Chung, 2006); alliances (Gulati, 2007; Shipilov, 2006); initial network positions (Hallen, 2008); and network governance (Provan & Kenis, 2007). At the micro level, topics include leadership (Pastor, Meindl, & Mayo, 2002); teams (Reagans, Zuckerman, & McEvily, 2004); social influence (Sparrowe & Liden, 2005); power (Brass, 1984, 1992); promotions (Burt, 1992); and diversity (Ibarra, 1992).

With regard to institutional networks, an important hypothesis for network research is that actors are embedded in social networks that offer the opportunity for action or certain behaviour (Brass et al., 2004). Studies of such phenomena with respect to social networks originate in more recent decades from the seminal work by Granovetter (1973) and followed by that of Burt (1992, 1997). As individual researchers, Granovetter and Burt proposed concepts on networks from two very different viewpoints, Granovetter adopted a viewpoint based on the strength of weak ties, and Burt examined the theory, of networks from a structural holes perspective (Borgatti and Halgin, 2011). However, despite the exponential interest in network theorisation, there still remains a contention that is more to do with a methodology rather than the development of an independent robust theory because network theory allegedly draws its explanations from more well-known fields such as organisational studies and the social sciences (Salancik, 1995).

Granovetter's (1973) network theorisation work is directly associated with a phenomena described as the strength of weak ties, and examines the relationship of micro level interactions. The strength of the tie is broadly defined

as a relationship between two or more people, based on intimacy, relational intensity, time and other factors, such as emotional intensity (Granovetter, 1973). His early work is noted as only part of a theory of networks but sets the scene for recognising that social relationships are critical and thus indispensible to individual's opportunities. The latter is often cited as an enabling component of entrepreneurial action (Eckhardt & Shane, 2003).

Thus, several key deductions can be gleaned from Granovetter's (1973) proposition on the theory of weak ties. The stronger the tie between networks actors, the greater is the possibility that their social connections will overlap, particularly in homophilious networks (Freeman, 1979; Granovetter, 1973). The concept of a bridging tie, which links two or more groups, increases the level of innovation in groups as they collect and interpret intra-group knowledge and, in return, these actors appear more successful (McPherson et al., 2001). In this sense, Granovetter's (1973) theory is one of individual social capital, where people with weaker ties (i.e., more social capital but loosely connected) are more successful overall than those with purely strong ties (i.e., tightly connected in close groups). These strong ties are fundamentally considered as restrictive in nature and unlikely to be a source of the novel information necessary to further entrepreneurial endeavours (Welter & Smallbone, 2011).

In contrast, bridging different parts of a network, whilst important to the early work of Granovetter (1973), subsequently became a central point to the notion of structural holes developed by Burt (1992). The theory of structural holes is "concerned with ego networks—the cloud of nodes surrounding a given node, along with all the ties among them" (Borgatti & Halgin, 2011, p. 1171). Within these network settings, Burt (2004) discusses the concept of structural holes or non-redundant ties associated with a specific node. In doing so he suggests that this concept of a single multi-connected node can thus be used to obtain information from many sources on which to base decisions. Structural holes are present in an actor's network of relationships when the focal actor (or "ego") is tied to others ("alters") who are not themselves inter-connected (Burt, 1992).

In a similar way but with a difference in nomenclature, Granovetter (1973) shares Burt's (1982) theory of network structures based upon nodes. He describes this as a form of bridging between inter-related nodes. Thus, individuals acting as bridging ties are able to capitalise on their social networks in ways that others cannot. As a consequence these people occupy a type of brokering position that allows them to make linkages and identify opportunities. As such, Burt's (1992) conception of structural holes highlights the entrepreneurial role of the network actor in generating this valuable form of social structure, based on the most up to date situational information (Soda & Zaheer, 2009). This latter point is further shared by Mehra, Kilduff and Brass (2001) who suggest that significant advantage can materialise from network ties, especially those that can bridge structural holes with regards to promotion. The fundamental differences between Granovetter's and Burt's views of network analysis are captured by Borgatti and Halgin (2011, p. 1172) as:

Granovetter based his arguments using the distal cause (strength of ties) based on job attainment whilst Burt based his theories in the proximal cause (bridging ties) centred on getting promoted. The first appears counter intuitive; the second captures the causal agent directly and thus provides a stronger foundation for theory.

Aldrich and Zimmer's (1986) work on entrepreneurial perspectives of networks adopts a focus on how opportunities are afforded to embedded individuals through inter-network connections (Uzzi, 1996). A common theme that emanates from the study of individual networks is the concept of entrepreneurs acting within social networks, accessing information and coordinating resources and, thus enacting change by leveraging essential resources that are inaccessible to others (Aldrich & Zimmer, 1986; Hébert & Link, 1989).

The social network or social systems in which the entrepreneur interacts play a critical role in the entrepreneurial process (Aldrich & Zimmer, 1986; Parsons, 1951; Weber, 1997). In particular, the notion of multidimensional network ties and the concept of embeddedness but, not exclusively developed through the relationships between, trust, power relationships and legitimacy is believed to

be an important set of interconnected concepts when researching entrepreneurship. As trust builds so does social capital although the precise dependencies between these variables are not clear (Cohen & Prusak, 2001; Fukuyama, 1995; Putman, 2000). Networks are therefore important relational concepts between actors, so too is the information that is accessible to these actors and the overall utility of network relationships that can enable entrepreneurial outcomes (Kilduff & Brass, 2010).

Katz, Lazer, Arrow, and Contractor (2004) also discuss other network research standpoints that aid the understanding of the multiplicity of network theory. The variation in network perspectives covers a broad spectrum of interest such as the rational self-interest paradigm that considers the creation of associated actor ties by individuals to seek individual meaningful outcomes by utilising the resources available through these ties. Alternatively, theories of social exchange or dependency where individuals create connections to enable the ease of exchange of valued resources such as power and non-redundant information are also prevalent in the literature (Soda & Zaheer, 2009). Overall the literature suggests that individuals do not necessarily create ties for simply personal relationship reasons alone but also to create access to the resources they are offered by others in order to achieve their individual or collective intentions (Burt 1992; Granovetter 1973; Marwell & Oliver, 1993). However, network ties cannot be enforced between actor and agent and one theme that runs through network theory and has become a particular topic of interest is to explain the consequences of gender differences in network structures and the role that network homophily, discussed next, plays in network tie selection (Ibarra, 1992)

2.5.1 Homophily

Lazarsfeld and Merton's (1954) much coined phrase, epitomising the type of associations within networks that are created through such concepts as gender, race and religion is "birds of a feather flock together." This homophilious similarity is believed to facilitate clarity in communication and fosters trust and reciprocity (Brass, 1995). Indeed, the similarity-attraction hypothesis by Byrne

(1971), where individual selection on the basis that action and reaction are in accord with one's own values and beliefs, suggests that individuals are more likely to select similar others to work with because by doing so they reduce the potential areas of conflict in the relationship (Yuan & Gay, 2006).

Lazarsfeld and Merton's (1954, as cited in McPherson et al., 2001) work is built upon to gain greater clarity on the implications of homophily. In doing so McPherson et al., (2001, p. 415) expand on the simple citation above to add substance to the sociological interpretation of homophily as limiting,

people's social worlds in a way that has powerful implications for the information they receive, the attitudes they form, and the interactions they experience. Homophily in race and ethnicity creates the strongest divides in our personal environments, with age, religion, education, occupation, and gender following in roughly that order.

DiMaggio and Garip (2012) suggest that there is a direct correlation between cumulative advantage and the degree of network homophily where men benefit more than women. Within organisations homophily can be observed as a form of gendered segregation, one predominantly male and the other female, where the latter tends to establish itself on an informal basis (Brass, 1985; Ibarra, 1992). Networks created through these homophilious relationships can be described as "like minded" with a disposition to interact and share information between similar others. Consequently, whilst women, like racial minorities may be present in organisations, they can remain isolated from the non-redundant information flows that are necessary to further their relative position (Kilduff & Brass, 2010).

Kanter (1997) refers to this cultural selection as "homosocial effects" determined by the degree of similarity between actor and organisational groups. Hence, this influences the degree of integration or acceptance individuals can achieve within the network. Thus, studies that consider identity and homophily as different network formation mechanisms may help in understanding the optimal demographic composition of networks in relation to intentional outcomes.

McPherson et al. (2001) develop the idea of network or group homophily describing two distinct types, namely "Value" and "Status". Value homophily is situated and understood from the analysis of value beliefs and attitudes, whilst status homophily reflects analysis of the informal and formal ascribed status of individuals. This understanding of status also encompasses the sociodemographic elements such as race and gender that are combined with an individual's positional power within social networks (Lazarsfeld & Merton, 1954).

Whilst race and ethnicity provide the most vivid examples of homophily, gender is said to represent clear similarities (McPherson et al., 2001). McPherson et al., (2001), suggest that at the aggregated level of society as a whole, there is very little difference between men and women, setting aside the biological aspects. Neither gender illustrates advantage or disadvantage in terms of category size or difference in terms of education, income and residence. However, men have more sex homophilious networks than women and, where women are in the minority they can become isolated and remote (Brass, 1985; Ibarra, 1992, 1997). As a consequence, gender networks in work establishments become highly sex segregated with minority representatives forming almost independent parallel homophilious networks of relationships (McPherson et al., 2001).

Ibarra (1992) also found evidence for homophily in her study of male and female networks. In distinguishing types of networks, she found that women had social support and friendship network ties with other women, but they also had instrumental network ties with men (e.g., communication, advice, influence). Men, on the other hand, had homophilious ties (with other men) across multiple networks and these ties were weaker. Ibarra (1992, p. 444) suggests that when studying gender and networks, homophily can result in subliminal forms of power relationships where women are generally isolated. She further identifies that few network studies have considered the impact of homophily, how it manifests itself and the relationships it either constrains or enables for change initiatives.

Researchers have studied this baseline phenomenon most intensively among upper-level managers. Here, the findings are very consistent, with men tending to have more sex-based homophilious networks than women, especially in establishments where they are a strong majority (Brass, 1985; Ibarra 1992, 1997). Bevelander and Page (2011, p. 1) suggest:

One factor that has received limited attention in the literature is that of differences in the way men and women network and that the way women network might not only disadvantage their own professional career progression but also put other women at a disadvantage as well.

Bringing the concepts of personal networks and homophily together, Borgatti et al., (2009) posit that much of the work on antecedents of networks is based on a model centred on the concepts of social capital, where agents have choices about with whom they create social ties with and, hence, networks. This is also believed to be true of much of the work on social capital – the notion that one can invest in one's ties or position and obtain a return on that investment, particularly with regard to faster promotion (Burt, 1992, 2005). Therefore, when studying networks, the issue of gendered networks and entrepreneurship appears to be a: "seriously under researched area" (Carter et al., 2001, p. 36).

Consequently, these concepts are discussed next in order to better understand what is meant by social capital that also embraces the notion of human capital and its relationship to networks, entrepreneurship and gender.

2.6 Social Capital

The term "social capital" is often seen as a "catch all" in the social sciences rather than a precisely defined and quantifiable topic area of research (Durlauf & Fafchamps, 2004). The study of social capital has a long intellectual history, although en route to its current status, it has faced opposition and continues to face a formidable challenge (Woolcock, 1998). The inability of academics in the social sciences to agree a universally accepted definition demonstrates the relative immaturity of the field and the prevailing, competing viewpoints on the concept (Durlauf & Fafchamps, 2004; Ferri, Deakins, & Whittam, 2009).

Fukuyama (1999, p. 16) describes social capital as:

an instantiated set of informal values or norms shared among members of a group that permits them to cooperate with one another. If members of the group come to expect that others will behave reliably and honestly, then they will come to trust one another. Trust acts like a lubricant that makes any group or organization run more efficiently.

Katz et al., (2004) consider that individuals may purposefully invest in the creation of ties (and, hence, network connections) in order to specifically build social capital, citing Bourdieu and Wacquant's (1992, p. 119) description of social capital as the "Sum of the resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition". Individuals are therefore believed to be able to deploy this social capital at a suitable juncture to enable them to benefit from their investment (Lin, 2001).

With such a variety of definitions of social capital this work briefly touches upon the work of the so called 'godfathers' of social capital, namely Bourdieu, Coleman and Putman. A summary of each is extracted from Ferri et al. (2009, p141), and provided below:

- Bourdieu suggests that social capital is "the aggregation of the actual or
 potential resources which are linked to the possession of a durable
 network of more or less institutionalised relationships of mutual
 acquaintance or recognition". The focus is on an actor's ability to access
 resources and the quality of these resources.
- Coleman defines social capital as "[...] a variety of entities with two
 elements in common: they all consist of social structures and they
 facilitate certain actions of actors, whether persons or corporate actors
 within the structure".
- Putman defines social capital as "[...] to features of the social organisation, such as trust, norms and networks that can improve the efficiency of the society by facilitating coordinated action".

Schuller, Baron and Field (2000) provide an extensive critique of these three academics' work and their viewpoints are briefly distilled here. Firstly, Bourdieu (1985) appears to have introduced the term social capital into his work over a period of several years without implicitly defining what the term actually meant. Furthermore, whilst Bourdieu (1991) combined the concept of social capital with cultural capital, his work was essentially aimed at the benefits accruing to individuals by virtue of their participation in groups (Ferri et al., 2009). Bourdieu's idea of social capital is synonymous with a private possession, which can be converted into a number of forms of capital such as, cultural capital, real wealth or symbolic capital that signals social status. An individual's stock of social capital is thus a critical component of his or her power in society.

Coleman (1988) examines the relationship between social and human capital but specifically excludes elements of individualism perceived as determinants of social capital. Rather, he believes social capital to be a resource for action. His basis for this justification is that it is one way of introducing social structure into the rational action paradigm that he specifically sets out to examine in this work. Coleman's (1988) definition of social capital by its function is:

A particular kind of resource available to actor's comprising of a variety of entities with two elements in common: they all consist of aspects of social structures and they facilitate certain action of actors-whether persons or corporate actors-within the structure (p. 98).

The difference in these definitions is significant from a research standpoint (Ferri et al., 2009). Specifically, Ferri et al., (2009) suggest that Bourdieu's definition leads to complexity because the research would need to analyse the situational conditions of each individually defined social process where social capital is an enabling factor. In comparison, using Coleman's definition, any research measurement of social capital would "only need to consider" the relevance of individual motivation (Ferri et al., 2009, p. 144)

Finally, Putman's (2000) work is reviewed by Ferri et al. (2009, p. 145) and noted for "concentrating on national civic associations and the general well being of communities". As a consequence of these differing standpoints the

definition of social capital that may be best suited to the examination of entrepreneurship is that of Coleman as it adopts a focus on the individual rather than the macro relationships that reside outside of the internalised context of an organisation.

Aldrich and Zimmer (1986) examine the relation between social capital and entrepreneurship suggesting that the entrepreneur is embedded in a social network that plays a central role in the entrepreneurial process. In the broadest terms, social networks can be described as a set of actors (individuals or organisations) and a set of linkages between the actors built on trust, reciprocity and relationships that are influenced through the social context in which they operate (Rubio, 1997; Woolcock, 1998).

In their research on nascent entrepreneurs, Ferri et al. (2009) set out to establish a quantifiable measure of social capital and its relationship with entrepreneurship, noting like others that, "there is however a worrying lack of consensus on one single definition of social capital" (p. 139). In particular, they seek to contribute to understanding of the apparently intangible factors in understanding of the value or contribution of social capital in the entrepreneurial field.

Three observations can be made from the relationship between social capital and entrepreneurship. Firstly, there is a positive correlation between those entrepreneurs with higher social capital as manifested through their relationship to and position within distinct social networks (Ferri et al., 2009). Secondly, entrepreneurs invest in social relations that will, or should, produce the greatest expected value of social resource (Nahapiet & Ghoshal, 1998). Thirdly, the obligation of the constituents towards the entrepreneur within the individual's network is important and is seen as a key factor when gender, specifically female, is the central entrepreneurial actor (Reynolds & White, 1997).

Social capital is thus attracting greater cross-disciplinary interest, despite the vagaries of definition (Portes, 1998). It can refer to the collective value of all "social networks" (who people know) and the resulting inclination to do things for each other ("norms of reciprocity"). It is often described as the central

component that brings together and subsequently binds together elements, in order to create a network, whilst also being the lubricant that eases and energises network interaction (Powell & Smith-Doerr, 1994). Social capital is also closely associated with human capital, which is suggested to be an indicator of the ability of entrepreneurs to recognise opportunities and to achieve entrepreneurial outcomes (Davidsson & Honig, 2003). Thus, a brief review of human capital that is often synonymously used within social capital is undertaken next.

2.6.1 Human Capital

For several decades, entrepreneurial researchers have been interested in examining the importance of human capital in the development of entrepreneurial activities (Unger, 1987; Unger, Rauch, Frese, & Rosenbusch, 2011). The definition of human capital is difficult to precisely determine from the range of literature available, although Coleman (1988, p. 100) describes it as something that, "is created by changes in persons that brings about skills and capabilities that make them able to act in new ways".

Characteristics or components of human capital are often detailed as knowledge, skill or experience that lead to the individual enhancing their cognitive understanding of the information presented in everyday situations (Mincer, 1974). Coleman (1988) sees human capital originating within the family, whilst other academics focus on a form of economic return on investment emanating from an individual's exposure to education and training that enhances human capital for later use by that person (Becker, 1993a, 1993b).

Whilst human capital is not entirely synonymous with social capital, it is generally considered by some scholars to be a component of social capital and an indicator of entrepreneurial success (Dakhli & De Clercq, 2004, Gonzalez-Alvarez, & Solis-Rodriguez, 2011). It is nevertheless embodied in the skills and knowledge acquired by an individual, whilst social capital is a function of the relations among persons and institutional culture, structures and routines. Those with lesser levels of human capital are said to discover fewer

entrepreneurial opportunities, in particular women compared to men (Gonzalez-Alvarez, & Solis-Rodriguez, 2011).

Access to formal education is often cited as a key component of human capital creating legitimacy of credentials and to provide a qualitative measure of a person's disposition to undertake additional work for the basis of betterment (Schuller, 2001). These factors are aggregated as a potential indicator of social capital within organisations and can be a significant predictor of network membership based on the degree of social capital and human capital available to individuals (Gonzalez-Alvarez, & Solis-Rodriguez, 2011; La Due Lake & Huckfeldt, 1998). As a consequence, Gonzalez-Alvarez, & Solis-Rodriguez's, (2011) research suggests that individuals with high levels of human capital possess a greater propensity to identify and respond to entrepreneurial opportunities, noting that men appear to have higher levels of human capital than women, although it is unclear how they substantiate this observation.

The relevance of human capital to entrepreneurship is not firmly established and remains contested (Amaral, Baptista & Lima, 2011; Ucbasaran et al., 2001). Some authors believe that high levels of human capital in terms of knowledge and skill are factors that lead to more successful entrepreneurial endeavours by individuals (Boxman et al., 1991; Rees & Shah, 1986). Others academics consider that worldwide experiences rather than academic attainment is a clearer indicator of the type of human capital indicative of entrepreneurial discoveries (Blanchflower, 2004; Minniti & Bygrave, 2003). Whilst others suggest that research investigating the relationships in terms of interactions between human capital and social capital within an entrepreneurial context have largely been ignored and therefore the relationship between the two cannot be substantiated (Ottósson & Klyver, 2010).

The essential outcome from Ottósson and Klyver's, (2010) research is that further work needs to be conducted on the exploration of human and social capital from a co-productive standpoint that examines the effects on women entrepreneurs. Importantly, they believe that both social capital and human

capital are co-dependent and directly influence not only access to networks but also the ability to either create or identify opportunities for change.

2.6.2 Social Capital and networks

Bringing the concepts of social capital and networks back together at this point in the literature review, Burt's (1992) seminal piece of work on social capital and structural holes examines how access to information is believed to be a key enabler for the entrepreneur to base his or her decisions upon. He goes on to explain that as a consequence of this access it can enable individuals to source the necessary timely, accurate, legitimate and full (e.g., non-redundant or new) information to maximise the benefits arising from timely decision making (Burt, 1992). The suggested critical attribute of the entrepreneur is their ability to synthesise such information in order to use these so called opportunities to gain leverage in some form.

Timberlake (2005) reviews a later piece of work by Burt et al. (2000) in respect to social capital, networks and the role of gender. In doing so, he describes how individuals in the workplace gain social capital by taking advantage of the organisational holes that exist between important parts of the organisation. As a result individuals that are able to connect parts of the organisation can produce benefits either for the organisation, group or individual. This control or access to information is achieved through accruing the necessary social capital that comprises, amongst other descriptors, a complex array of power and trust that subsequently allows individuals to achieve importance within the institution or organisation compared to others (Burt et al., 2000).

Women, it is suggested, do not have equal access to social capital as men as they are excluded, or may exclude themselves, from the social networks that are the most significant component of successful power acquisition in this respect (Berg, 1997; Field, 2003; Lin, 1999; Timberlake, 2005). However, even when women do access those networks that traditionally generate early promotions and other benefits for men, these networks are not considered as effective for women as they are for men (Barr 1998). Work by Metz and Tharenou (2001) identified such an example within the banking sector in

Australia, where only 6% of senior executives were female. Whilst they attempted to determine the relationship between human, social capital and access to higher levels, their findings were inconclusive.

Similarly, the same access to higher echelons within public service are reflected in the so called 'missing women' identified in the Equality and Human Rights Committee Report (EHRC, 2011). Illustrating their findings in Table 2.1 the EHRC report suggests that "women either leave the workforce or remain trapped in the marzipan layer below senior management leaving the higher ranks to be dominated by men" (EHRC, 2011, p. 1).

Extracting further data reveals that by using the starkest of representative data in the UK Armed Forces, the EHRC estimate a total of 245 missing women in senior military appointments. This figure is based on an assumption that all 500 senior appointments within the military are freely open to women. It also suggests that if nothing is done to achieve greater access and to increase opportunities for promotion for women then, on present rates of increasing percentages, this attainment figure will take on average over 100 years to achieve (EHRC, 2011, p. 12).

Table 2.1. Women in Top Jobs 2010/2011

Armed Forces OF6-OF9 Ranks	1.3%
Judiciary	13.2%
Further Education university vice chancellors	14.2%
Business FTSE 100	16%
Police Acpo ranks	16.6%
Politics cabinet	21.7%
Sports Governing Body	21.8%
News media	29.9%
Civil service	34.7%
Public appointments	36.4%
Secondary Education	36.7%
General UK workforce	32%

Adapted from "Sex and Power" (EHRC, 2011, p. 5-6).

A possible explanation for such variance between men and women in senior positions within the military could be, in part, what Timberlake (2005) identifies as a disparity between women's and men's social network relationships. Timberlake substantiates this view by suggesting that women have a propensity to form tight small and strongly tied social groupings whilst men form the converse, and create a proliferation of weak tie relationships which they directly benefit from in comparison to women. Alternatively, research by Aldrich and Zimmer (1986) offers a different perspective relating to women and advancement by positing that women and men have fundamentally different networks and hence different levels of access to information, as a consequence, they form different opinions on the validity of opportunities because they anticipate the problems associated with their successful enactment.

Ibarra (1997) also suggests that women acquire social capital in a manner that differs markedly from men who negotiate and navigate structural nodes in the

organisation to attain power and information. According to Ibarra (1997), women can gain access to both male and female networks by bringing something of value, such as information or expertise to their relationships although a methodology to assess the content and value of the offering is not expanded upon. A key disadvantage for women in the attainment of network ties, especially in settings with few women, is that women create homogenous network relationships and inadvertently isolate themselves from the wider influential others (Adler, 2002; Adler & Kwon, 2002; Lin, 1999; Moore, 1990; Renzulli, Aldrich & Moody, 2000). This observation is not absolutely definitive. For example, Bevelander and Page (2011, p. 623) highlight the need for further investigative research into gender and networks by commenting:

One factor that has received limited attention in the literature is that of differences in the way men and women network and that the way women network might not only disadvantage their own professional career progression but also put other women at a disadvantage as well.

In contrast to Timberlake (2005), AhI (2008) provides a critique of social capital theory and gender research by suggesting that the concept of social capital and the notion of gender residing within it makes an "uneasy companion" when examining women entrepreneurs. Her key point for resolution is that research ought to change the viewing angle from essentially a position that takes gender as a variable to one where gender is taken as the starting point. She thus emphasises the pressing need for research to explain why and how women's entrepreneurship remains differently configured to that of men's.

Aaltio et al. (2008) in their work on women entrepreneurship and social capital support the need to broaden research in this area by examining the complexities and challenges faced by women entrepreneurs in relation to aspects of social capital and the consequence of network ties. They suggest that women are not only at a disadvantage with regard to the gender dominant male interpretation of entrepreneurship but also from their structural position in organisations. Thus, women are often not positioned closely enough to those that have considerable influence compared to their male counterparts, who

benefit from this type of cognitive proximity or association (Carli, 1999, 2001). They go on to emphasise that the gendered nature of social capital and the networks that women have access to compared to men are rarely considered in entrepreneurial research.

Ferri et al., (2009) contribute to this line of enquiry and identify several points of interest. Firstly, there is a positive correlation between entrepreneurs with higher social capital as manifested through their relationship and position within distinct social networks promulgated by tie strength. Secondly, an individual's proximity to network "egos" via short path lengths are perceived as being critical to accessing non-redundant information for the basis of decision-making. Thirdly, entrepreneurs invest in social relations that (will or should) produce the greatest expected value of social resource within networks. Finally, the obligations of the entrepreneur created through the acquisition of social capital within the individual's network are important for providing and leveraging resources.

Aaltio et al., (2008), look to other components that impact on the levels of network access that women share in common when seeking to succeed in entrepreneurial endeavours. Turning to both the cognitive and structural elements of organisational meaning, their work illustrates the complexities and challenges faced by women entrepreneurs in relation to aspects of accruing social capital and gaining access to important networks, suggesting that women are at a disadvantage with respect to their social position relevant to those that control power, that is, their male counterparts.

Drawing together the observations on networks within the literature at this point, the following network proposition to support the examination of the research question is defined as:

Sub-proposition 3. Women use network ties to reduce path lengths and this facilitates their access to non-redundant information for the purpose of opportunity identification.

The analysis of gender, networks and indeed structure and agency reviewed thus far are, however, all vulnerable to a central criticism that defines craftful research and hence meaning which is said to be a lack of contextualisation (Borgatti et al., 2009; Daft, 1983; Welter, 2011). As an example the inclusion of context in entrepreneurship research that exists external to the individual can influence how the entrepreneur responds to stimuli and thus influences understanding and meaning (Welter, 2011). Context is said to be a fundamental building block for researchers to make sense of their observations and to overcome the propensity to rely on implicit assumptions that actually defy description (Johns, 2006; Sewell, 1992; Welter, 2011). The literature on context is therefore briefly reviewed next.

2.7 Context

The meaning of context is sometimes difficult to elucidate as it comprises a multiplicity of elements from the individual through to the organisational and political. Mowday and Sutton (1993, p. 158) characterise context as "Stimuli and phenomena that surround and thus exist in the environment external to the individual, most often at a different level of analysis". Johns's (2006, p, 386) definition, amongst others, suggests that context "involves the situational opportunities and constraints that affect behaviour and who subsequently participates".

Context is portrayed in both the substantive sense dealing with the who, what and where of the research unit of analysis, and in the methodological sense, the methods by which the researcher gathers data, introduces bias, and how they interpret observations on undefined assumptions (Johns, 2001, 2006). Indeed, the subtlety of contextual influence can be invisible to the actors and by the researchers. Contexts can disguise each other; although, by recognising the influence of context in research it is possible to better appreciate the subtle and powerful effects on observations by either direct or indirect influences (Johns, 2006; Whetten, 2009; Zahra, 2007).

Zahra and Wright (2011, p. 74) note that by "capitalising on context, it becomes possible to document key differences between men and women and how they

go about discerning and exploiting opportunities". It is also particularly relevant when researching institutional contexts where it may be possible to gain greater insights on institutional entrepreneurship in the public domain (Welter & Smallbone, 2011). Highlighting the importance of contextualising entrepreneurship to improve overall understanding of the phenomena, Welter (2011, p. 165) notes that researchers ought to:

Acknowledge the context in which entrepreneurship takes place, as observers have a tendency to underestimate the influence of external factors and overestimate the influence of internal or personal factors when making judgements about the behaviour of other individuals.

In order to assist in the clarification of the meaning of context, Johns (2001) uses a number of descriptors, namely, the salience of situational features, situational strength, cross level effect, configuration bundle or stimuli, an event, shaper of meaning. The full explanation of the categories of context described in relation to the examination of organisational behaviour can be reviewed in Johns's (2006) paper "The Essential Impact of Context on Organisational Behaviour". However, in essence Johns (2006, p. 386), describes context as an important element for examining the: "Situational opportunities and constraints that affect the occurrence and meaning of organizational behaviour as well as functional relationships between variables".

He separates this proposition for describing context into two major streams, both interactional, rather than operating in isolation to each other, namely the omnibus and discrete contexts. The omnibus context allows researchers to understand and articulate the relevant setting of the organisation or phenomena under observation, whilst the discrete context refers to the specific situational variables that impact or influence behaviour, including relationships between variables.

The omnibus context brackets the observed "who" in terms of race, sex and religion, but more specifically Johns (2006, p. 391) suggests when studying the "who" variable: "Gender provides a good example. The distribution of the sexes

in the workplace can be a potent if subtle contextual variable. Furthermore, men and women often face very different work and non work contexts".

Secondly, he uses the term "where", that attempts to place the "who" within a macro or micro organisational setting such as a third world village or a government institution as examples. Thirdly, he points to a specific period of observation, here referenced as "time", that is considered important for understanding how social relationships develop and also for understanding how internal or external stimuli have changed over time, including social trends. Finally the "why" is an explanation of the purpose of the research that itself may impact on the research findings in terms of the respondent's attitudes, and subsequently, how that information is translated into meaningful findings that are free from bias by the researchers themselves.

The second stream of context developed by Johns (2006) is the discrete context and relates to contextual variables that shape behaviour. Thus, by knowing a person's occupation, whether they are employed for example either in government or commerce, their position or title or their sector such as white collar worker or manual labourer, will influence the research findings and subsequent interpretation. At times, identifying the appropriate context to include is problematical, but when researching public institutions Hedegaard and Ahl (2013) suggest that the sub-context of NPM within institutions, such as their examination of Swedish healthcare for example, provides a contextual setting that can be used to examine not only the relationship between structures and agency, but also gender equality and forms of control.

The central proposition embedded within the work of Johns (2006) and that of others (Blair & Hunt, 1986; Cappelli & Sherer, 1991; Gaudine & Saks, 2001; Hattrup & Jackson, 1996) is that the lack of contextualisation is quite possibly the root cause of the sometime weak and variable relationships observed. For Johns (2006), this merely reflects the importance of incorporating context within sound research and this includes research in entrepreneurship that follows next.

2.7.1 Context and entrepreneurship

In a calling for new research directions on women, Ahl (2006b) suggests that there is now a pressing need to develop alternative research perspectives and approaches if the field of entrepreneurship in this area is not to meet with a dead end. This is epitomised by repetition of common themes through the adoption of a singularly recursive epistemological standpoint that renders most explanations of findings as merely descriptive rather than explanatory (Ahl & Marlow, 2012). Zahra (2007, p. 444) further criticises extant research for "failing to invoke theory in innovative ways that enrich the academic conversation".

Similarly, other scholars such as Griffin (2007) and more recently Welter (2011) emphasise the need to examine entrepreneurship through a contextual lens by introducing the manifold facets of context in order to understand entrepreneurship in greater detail. In doing so, this would allow the examination of the cross-cutting influences between the higher and lower orders in an organisation where social interaction occurs.

The inherent danger of not adequately addressing context in research, including that of entrepreneurship and many other fields, is suggested by Zahra (2007) to leave the field of entrepreneurship in danger of missing an opportunity to, "enrich their theory building when they overlook the characteristics of the phenomena they study in terms of their newness, uniqueness, magnitude, frequency, and complexity" (p. 445).

Daft (1983) and Cappelli and Sherer (1991) capture the need for greater contextualisation in all aspects of research because as Daft (1983, p. 543) suggests: "it becomes painfully clear that many authors have never seen or witnessed the effects or phenomena about which they write".

In particular, the lack of emphasis on the spatial component when framing context fails to appreciate that the process of context is itself recursive in nature. As a consequence, observations that link everyday decisions directly alter the interpretations of the present based on the interpretive past describing context as "a salience of situational features", (Johns, 2006, p. 387). The

subsequent range of interpretations possible is believed to be directly influenced through an individual's cognitive viewpoint that forms a recursive relationship between the agent and researcher.

Context has many facets, too many to detail in one research paper, but importantly, Johns (2001, 2006) identifies that the subtlety of contextual influence can be invisible to the actors themselves and equally contexts can subtly disguise each other. Perhaps more relevant here is the concept of context where entrepreneurial endeavours are intertwined with social influences. Berg (1997) and Mirchandani (1999) recognise that there are several gender aspects to the understanding of how context influences an individual's perception such as, spatial and cognitive dimensions, that have not yet received sufficient attention in research especially with respect to women.

There are, however, real challenges when attempting to contextualise entrepreneurship as discussed by Welter (2011). Firstly, the examination of discrete contexts that have hitherto tended to have dominated entrepreneurial research may not be relevant in research. Secondly, over-contextualisation is every bit of a risk as under-contextualised research. Finally, shifting the research perspective from the individual to a combination of individuals within a defined context, will undoubtedly question mainstream entrepreneurship research and future research methods.

Sundin (2011) draws a simple distinction that illuminates the requirement to clearly define context by comparing public entrepreneurship with private enterprise entrepreneurship where the former lacks investigative research. Therefore, to imply that both forms of entrepreneurship are identical is without foundation. However, the scope of context is vast and therefore to draw some inferences from understanding the implications of context on women and entrepreneurship in the public sector, this literature review is limited to aspects of external context. The elements focussed upon are the more recent, in comparative institutional terms, macro contextual influences on public institutions such as Neoliberalism and NPM that shape understanding for individuals and are discussed next.

2.7.2 Entrepreneurship in the public sector

Kearney, Hisrich, and Roche (2009) identify that whilst the term entrepreneurship is not new in the private sector; its reference in the public sector is increasingly being used today and has been over the previous two decades. In developing the requirement for a clearer understanding about entrepreneurship in the public sector there are a number of suggested causal reasons: firstly, public entities are under increasing pressure to do more with less; the effects of the neoliberalism agenda, increasing demand from their constituents, reduction in the workforce and hence the requirement to maximise all resources to reduce costs (Kearney, Hisrich, & Roche, 2010).

Thus, the study of public sector entrepreneurship is considered by Kearney et al., (2009) in their paper as "a relevant and timely comparative analysis between private and public sector entrepreneurship as it emerges as a field of academic enquiry" (p. 27). However, they qualify their observations by suggesting also, like private entrepreneurship, that definitions of public and private sector entrepreneurship are often limited and diverse.

Adopting a similar approach, Short, Moss and Lumpkin (2009) suggest that there has been limited development and progress on public sector entrepreneurship thus making it an important field of enquiry for future research. Entrepreneurship in the public sector is both enabled and constrained by political and institutional context, and whilst studies of public economics, history and international affairs respond to major changes in public interests and public institutions, there is little work done on the problems of entrepreneurship as government departments undergo major change (Cohen & Eimicke, 2000; Klein et al., 2010).

Boyett (1996) suggests therefore that the structural changes in the UK public sector alone provide the catalyst for entrepreneurial activity. Whilst such entrepreneurship is related in part to leadership characteristics as determinants of entrepreneurial innovation and probability, it is also necessary to determine the meaning and perhaps, as described by Boyett (1996), the 'new species' of public sector entrepreneur. However, definitions of public entrepreneurship

remain elusive and whilst there are commonalities between forms of entrepreneurship across public sector bodies it should also be borne in mind that it is, "important to recognize that there are significant differences in organizational realities, suggesting that the goals, objectives, constraints, approaches and outcomes associated with successful entrepreneurs are unique in public sector organizations" (Kearney et al., 2009, p. 28).

Kuratko and Audretsch (2009) also develop an alternative viewpoint on public entrepreneurship by linking the concepts of strategic management and entrepreneurship together. In doing so, they highlight that entrepreneurship is a dynamic process involving risk, change and creativity, although they contend that it should not be contrived as merely a non-public sector speciality.

As such, Bernier and Hafsi (2007) cite Stevenson and Jarillo's (1990) suggestion that it is better to think of entrepreneurship as a process by which individuals—either on their own or within organisations—"pursue opportunities without regard to the resources they currently control" (p. 489). In setting out their work they draw significant distinctions between the private and public environments that are generally reported in the literature and provide conceptual evidence to the general belief that entrepreneurship in the public sector is a misnomer unless certain conditions are created (Morris & Jones, 1999). Nevertheless, it appears overall poorly understood and researched and this includes how the context of NPM, based on the UK Government's neoliberlist agenda, invokes entrepreneurial standpoints (Mackinnon, 2000).

2.7.3 Neoliberalism

Since the 1970s the public sector has been continuously coaxed to improve the efficiency and effectiveness of its performance set against the backdrop of a neoliberal reform agenda emanating from the Thatcher era in the UK, Reagan in the US and others further field, with a primary goal of deregulating national economies (Steger & Roy. 2010). Amongst other initiatives within the neoliberal agenda 'privatisation' has loomed large, acting as the catalyst to open up hitherto off limit government departments, such as Defence, which has seen an

escalation of contract support in the neoliberal march towards profitability (Harvey, 2005).

According to Harvey (2005), aspects of social capital, human capital and tenure were subsequently swept away in the pursuit of neoliberalism as flexibility of employees became centre stage for employers, prior Trade Union rights were diminished if not abolished and the drive to deliver the "disposable worker" on the basis of minimalist state intervention, developed in part with entrepreneurial individuals in mind were pursued. The underpinning framework for neoliberalism is broadly built on five underpinning values: "the individual; freedom of choice; market security; laissez faire, and minimal government" (Larner, 2000, p. 7). The implementation of this creates what Mackinnon (2000, p. 298) describes as a "simulacra of markets" within the public sector that links inputs to outputs and subsequent performance, which serve the neoliberal agenda.

As a consequence, a key tenet of the neoliberalism agenda within government is one of less government. Importantly, the neo-Foucauldian literature on government suggests that this does not constitute less governance (Foucault, 1991; Rose & Miller, 1992). Neoliberalism problematises the role of the state but also in doing so it subsequently "encourages both institutions and individuals to conform to the norms of the market" (Larner, 2000, p. 12). This has enabled women to enter the labour market in greater numbers. Women, including those adopting second wave feminist positions, see gender equality and advances in employment opportunities but with unforeseen realities. Larner (2000) notes as a potential consequence:

"Moreover, women who opt for motherhood now find their labour devalued in a context where paid work appears to be all, whereas those who choose not to have children contend with the legacy of earlier formulations and are seen as 'un-natural women'" (p. 20).

The shift from local government to local governance has also seen the implementation of various initiatives across internal departments, such as the professionalisation of accountancy at all levels, based on strict budgetary

discipline and financial reporting, and the adoption of Key Performance Indicators and managerialism as methodologies for organisational change (MacKinnon, 2000). In the early 1980s through to the 1990s, the Conservative party exploited such managerial techniques across government departments under the mantle of NPM. Mackinnon (2000, p. 302) suggests that this was based on a political rationality that "neoliberalism extolled the need for local initiative and entrepreneurial flair in the face of global competition and technological change".

The critics of managerialism, influenced in part by the work of Foucault, have raised concerns by other scholars, such as Bevir, 1999; Jessop, 1990; and Barry, Chandler, and Clark, 2001, over the apparent neglect of the role of agency acting within the framework of institutional rules on the basis that social interaction and institutional outcomes cannot be truly autonomous nor singularly delivered in isolation. NPM as a contextual basis therefore provides an interesting field of research combining gender, entrepreneurship and institutional interaction (Ashburner, Fitzgerald, & Pettigrew, 1996).

2.7.4 New Public Management (NPM) and Entrepreneurship

Traditional ideas of the Weberian state have been under intense scrutiny with a view to exploiting the inherent capabilities of an organisation through a process of regulatory liberation (Osborne & Plastrik, 1998). The relaxation of central control, the focus on objective setting and empowerment of middle management combined with a process of decentralisation whilst retaining a focus on public accountability sets the suggested conditions for governmental department reform (Hood, 1991). As a consequence of the policy shift and approach instigated by NPM, the UK public services have sustained top downward pressure for continued change (Ashburner, et al., 1996).

Since the early ideas in the 1970s through to neoliberalist shifts in the Thatcher era, public institutional efficiency and effectiveness has been at the heart of the government reform agenda (Osborne & Gaebler, 1992). In return for the adoption of the NPM agenda, organisations absorb fewer resources through a process of innovation and exploitation of new ideas (Dunn & Miller, 2007;

Osborne & Plastrik, 1998). Whilst understanding that the public sector and private sector are not the same, there have been nevertheless considerable endeavours by government to pick the best ideas from the private sector to deliver greater efficiency, effectiveness and ultimately state answerability than hitherto, whilst still retaining accountability (Flynn, 2007; Pollitt & Bouckaert, 2011).

New organisational forms and cultures are, therefore, said to have emerged as a consequence of this shift in paradigm but the study of this remains relatively under analysed (Deem, 1998; McGinn & Patterson, 2005). Public sector institutions are, therefore, believed to be important research sites as "there is both a dearth of theory and of evidence" (Ferlie et al., 1996, p. 2). Pollitt (1993) in his broader analysis of NPM brings a collective update to the discourse on NPM noting its universal adoption but not as an identical embodiment across nation states. Pollitt and Bouckaert (2011) emphasise that NPM has a strong desire to inculcate professionals with new attitudes, values, priorities and self-understanding that has its emphasis on profit centre management, performance management, quality management, business planning and culture management (Thomas & Davies, 2002a, b). However there is singularly not one style or format for NPM and, thus, it is difficult to observe and measure (Pollitt & Bouckaert, 2011).

Overall, government has pursued the neoliberal agenda and is moving away from bureaucratic and inefficient departments towards the aspirational goal of using entrepreneurial ideas to deliver more effective and efficient public services (Clarke & Newman, 1997; Osborne, 1998, 2010). NPM is, therefore, believed to be responsible through the adoption of entrepreneurial neomanagerialism standpoints, which reflect the up-scaling of pure managerialism, to incorporate amongst other things the role of agency within the public sector, for the establishment of rational decision making by creating what is believed to be internal neoliberal departmental markets (Terry, 1998).

The study of the public sector in terms of entrepreneurial research is still rare (Osborne & Gaebler, 1992). In contrast to both the enthusiasm and widespread

belief in the applicability of entrepreneurial practices to the public sector, there are still ongoing debates and doubts about their suitability to public organisations especially given the differences in objectives, obligations, accountability and responsibilities to stakeholders (Denhart & Denhart, 2002).

Public entrepreneurism is, however, difficult to quantify without an overarching frame of reference in place (Cornelius, Landstrom, & Persson, 2006; Sundin & Tillmar, 2010). In descriptive terms alone, like entrepreneurship in the for profit sector, the term in the public sector appears as an all encompassing "catch all" where innovative successes are grouped under such a banner. Boyett (1996) examines if a new strain of entrepreneur exists within the public sector compared with the description of entrepreneurs in main stream literature, establishing yet another view of the public entrepreneur. Similarly the determination of successful entrepreneurial endeavours is based often, if not solely, on the study of successful outcomes and often avoids discussing the context and associations that conversely inhibit entrepreneurial activity, such as formal and informal institutional contexts (Salimath & Cullen, 2010).

In recognising that government institutions are highly formalised and hierarchical in the main, often steeped in cultural influences, some would argue that entrepreneurship in its current guise challenges many of the core values built on power, subordination and control of such structures (Cohen & Eimicke, 2000). In a similar vein, Sundin (2011), whilst developing her academic viewpoint centred on the Swedish public sector, identifies that there is significant interplay between the actors and their organisational context that must be set within the social and gender context if any meaningful deductions are to be drawn about how public entrepreneurship functions. There is now an increasing acceptance of the importance of taking a gender perspective for understanding the enactment of NPM in public service organizations that is still comparatively rare (Sundin & Tillmar 2010; Thomas & Davies, 2002b).

Hughes et al. (2012), who jointly develop Ahl's (2006b) earlier call for new directions on women entrepreneurs, posit that women still appear to be a group that seldom receive attention in academic debate and where they do become a

point of interest, it is without context and the accounts are "highly individualistic" (p. 431). Within NPM discourse and research, Thomas and Davies (2002b) highlight this point also suggesting that NPM merely serves to reinforce masculinity through new forms of gendered substructures. As such the "expectations of women to take advantage of organisational opportunities are not realistic" (Sundin, 2011, p. 636). The NPM concept of determined "managerialism" is a case in hand, where the nature of work manifests itself within the UK police force as an unstinting self-sacrifice work ethic of a long hours culture that reinforces competitive masculinity through presenteeism with, "the competitive masculine subject is one who devotes his or her life and identity to the organization, to the exclusion of the private sphere" (Thomas & Davies, 2002b, p. 187).

Thus, the concept of gendered status within the context of NPM has implications for research in the public sector that may serve to reinforce the asymmetrical power relations within the organisation. Theorizing about NPM has thus tended to present a deterministic account, where individuals appear to be represented as manikins, decoupled from the discourses of change, reacting to a 'given' NPM imposed upon them (Barry et al., 2001; Thomas & Davies, 2002b). Davies and Thomas (2002b) suggest that this is not the case and emphasise a need to move away from deterministic accounts of individuals responding or being influenced in a purely passive way. The recursive association between individual, structure and schemas is very relevant to the understanding of when, where and by who entrepreneurial acts or otherwise occur. Using gender as an example, they note that when researching female identity within public services:

differences are constituted in discourse and disciplinary practices and, as individuals (whether knowingly or not) we contribute to the process by turning ourselves into particular gendered subjects, so that we come to think as ourselves and interact with others, in ways that reflect dominant understandings of what is meant to be either a woman or a man. (Thomas & Davies 2002, p. 181)

Similarly, Stivers (2002) asks whether research into NPM appears to ignore feminist approaches suggesting that the adoption of a feminist research lens facilitates alternative viewpoints that are much needed to understand gender and NPM. McGinn and Patterson (2005, p. 931) adopt a feminist perspective to examining public administration bodies noting, "if police work is gender coded as masculine, how will female bodies ever 'fit' the job? If elementary school teaching is coded as feminine, how will male bodies 'fit'?". Similarly, Hood (1991) contextualises the apparent dilemmas females may face where managerialism is the emphasis for embedding NPM within organisations by suggesting:

"A focus on outputs allied with heavy 'hands-on' demands on managers is often claimed to downgrade equity considerations, particularly in its implications for the ability of female managers to reach top positions in the public service" (p. 10).

Thomas and Davies (2002b) also identify that although there are a few important exceptions, the literature on NPM lacks a nuanced and empirically informed understanding of its daily enactment in specific organizational settings. O'Toole (1997) calls for greater attention to be paid to networks that have received little attention in public administration, because relatively little is known about networks in public administration. He goes on to suggest, therefore, that: "the challenge for scholars is to conduct research that illuminates this neglected aspect of contemporary administration" (O'Toole, 1997, p. 45).

Therefore, further research with respect to networks and career advancement would add value to the overall body of knowledge. In particular, with regard as to how entrepreneurship and the exogenous influences on institutions, such as NPM, influence an individual's endeavour to bring about institutional change (Burt, 1992; Gabbay & Zuckerman, 1998; O'Toole, 1997; Podolny & Baron, 1997). In order to explore these observations and to support researching the central research question the following proposition on context is defined:

Sub-proposition 4. Context can influence the likelihood of women to realise their goals for advancement.

2.7.5 Feminism

Research with a focus on gender would be incomplete without a discussion on feminism as a background that has been a topic of academic debate in the understanding of social studies dating as far back as the 14th century (Lerner, 1993). The theme of gender politics, where the term gender implies the notion of women without necessarily invoking the overtones of radical feminist campaigners, is now increasingly coming under scholarly review (Fitzpatrick, 1990; Gordon, 1994; Lindsey 2005; Ritzer, 2008; J. W. Scott, 1986). The challenge in examining gender obscurity and male dominance to inform scholarly debate and theory building is advocated to be more easily represented through the feminist research lens (Sydie, 1994).

Advocates of feminist approaches to the study of women is a key debate for feminists that challenges the reasons why women appear excluded or inadequately reviewed across a broad range of sociological discourse (Bendl, 2010). Sydie (1994) provides a resume of earlier sociologist's works, such as Durkheim, Weber and Marx, and attempts to identify whether or not these sociological theorists specifically included women as part of their social theory construction. As an example, Weber's model of power and authority is believed to be built specifically around male models that informed the prior building blocks of early sociology theory. Consequently, the role of the female was bracketed conveniently within the earlier viewpoint that roles within the patriarchy household were natural occurrences and hence male and female relationships could be explained by biological factors alone (Sydie, 1994).

Given the wide range of feminist viewpoints, it is perhaps relevant to briefly describe their key theoretical standpoints in order to broadly understand the particular research lens that scholars may have chosen to review their work. The liberal feminist tradition considered by Eisenstein (1981) formed the basis of feminist evolution centred on the proposition that both men and women are essentially equal and that the state is responsible for the equality of access and treatment (Calas & Smircich, 1996). Essentially, any subordination of women is derived from structural barriers that can be overcome (Ahl, 2008).

In comparison, radical feminism on the other hand expresses the belief that women are fundamentally oppressed by men and that the work place, as an example, is shaped and organised by men around men to the exclusion of women. As a consequence women are subordinated and deprived of access to power positions and those of influence (Ahl, 2008). In particular radical feminist perspectives up until the 1970s in America were thought to be the basis of the often undesirable face of feminism that lingers in people's minds today (Echols,1989). For example, Zucker and Bay-Cheng (2010) illustrate such a view when discussing women's subordination: "Positions such as sexism is the fundamental human oppression, and that men (rather than social forces such as capitalism) are the oppressors of women" (p. 1901).

Alternative feminist viewpoints, such as standpoint feminism, where the subjective social position is a factor in research are also important to recognise. Standpoint feminism adopts a view where women essentially experience and see the world differently than men, not through biological differences but through the belief that women are excluded from power through social and hierarchical subordination to men on the basis of access to positions and perceptions of gender capabilities (Zalewski, 1993). Alternative post-modern feminist scholars appear to critique standpoint feminism by refusing to accept that there is an either /or translation of the observed. Their premise is based on the concept of multiple truths and multiple meanings that challenge the concept of determining if there is only one way to be a woman. However, not all females are outwardly feminists and are described as 'non labellers'—"those that don't appear to support feminist ideals or hold a feminist identity but do hold feminist values" (Zucker & Bay-Cheng, 2010, p. 1896).

The specific origins of the term feminism are certainly debatable and the precise meaning of the term feminism evades definitional consensus (Offen, 1988). Hoffman (2001) attempts to draw several feminist theories together to arrive at a definitive definition such as "ideological" feminism that includes liberalism and radical feminist perspectives along with others such as feminist empiricism, standpoint and post-modernism theories. These varied strands have proved

problematic when seeking to create or define a single theory thus definitions are dependent upon a wide range of individual and theoretical viewpoints and as an end result, there appears to be no one concise definition that can embrace all perspectives (Delmar. 1986).

A simple empirical analysis of the roles that the majority of women hold across all nations and cultures provides strong support to the foundational assumption of feminist theory, namely, that sexist structures exclude women from most opportunities such as employment, status, and ability to generate independent income, not to mention the horrendous rate of violence perpetrated upon them by men, thereby making it even harder to get out of their more limited life choices. However, working from an undefined feminist theory baseline, that does not necessarily share the value of the philosophy of social science by suggesting that only women are able to interpret the conditions of other women, makes its inclusion almost, if not entirely unmanageable, for this research.

Thus, whilst feminism is not to be adopted as a specific research lens in this research, this is not to suggest that it has no value in extending the findings of the research at a later date. Indeed, the adoption of a feminist perspective compared to an entrepreneurial perspective may offer fresh insights as to how women can obtain career advancement.

2.8 Conclusion

Research into entrepreneurship, and in particular, research that examines women entrepreneurs, has faced increasing calls in recent years for it to be taken in new directions (Ahl, 2006b; Hughes et al., 2012). Rindova et al. (2009), Meyer (2006) and Johns (2006), suggest that these new enquiries should be focussed upon the wider social processes including structural and contextual influences that shape meaning and understanding when entrepreneurs endeavour to bring about institutional change.

One recent avenue of research that opens up possibilities to address some of these recommendations for alternative research paradigms has been in the field of neoinstitutionalism involving institutional change (Leca et al., 2009).

Adopting such a research perspective seeks to improve the relational understanding between structure, agency and how institutions change using an entrepreneurial perspective. In addition, it may also address the over emphasis on the masculine connotations of control and influence that currently pervade entrepreneurial discourse when it comes to the study of women entrepreneurs (Chappell & Waylen, 2013).

A common thread that runs through the literature on entrepreneurship is the absence of gender, and where women are discussed they appear as though they have inherent defects although in reality little is known about them (Fenwick, 2003). Social roles and social position that imply power, status and individual legitimacy are also said to contribute to the creative moves by entrepreneurs. However, a greater understanding of institutional structures and social systems such as networks is required in order to understand how these women out-manoeuvre institutional logics of control (Battilana, 2006).

Entrepreneurs acting within institutions, therefore provide an interesting research dilemma between structure and agency because it represents a paradox between institutional determinism and agency (Seo & Creed, 2002). The relationship between these two entities can be observed within social networks that are said to be accessible on the basis of an individual's social capital which is itself the product of structure and agency within different spatial and temporal settings. As social networks evolve, it appears that women are, or can be, disadvantaged in comparison to men in areas of assessment, appointments or promotion (Burt, 1992; Gabbay & Zuckerman, 1998). Network theory thus provides one of the most potent ideas in the social sciences that assist in the observation of individuals embedded within a thick web of social relations involving both structure and agency that are considered to be gendered (Borgatti, et al., 2009; Hawksworth, 2005).

The examination of these concepts (structure, agency and networks) however, lacks an appreciation of context (Johns, 2006). An understanding of context and how it can influence meaning not only assists in generating a clearer research approach but can also greatly assist in the synthesis of findings

(Johns, 2006). Thus, adopting an exogenous institutional contextual perspective in the form of NPM potentially offers opportunities for developing the research body of knowledge on entrepreneurship where such study involving context and the other three variables within the public sector is still rare (Sundin & Tillmar, 2010).

A key feminist insight to political life is that "structure and agency are gendered" and the examination of this relationship within a gendered context may advance the field of entrepreneurship and neoinstituionalism. However, a feminist research lens is not to be adopted as it would add unmanageable layers of complexity to an already complex topic.

Thus, the initial relational model to facilitate the development of a suitable research methodology for this research is based on the relationship between structure, agency, networks and context within a public institutional setting, the UK Armed Forces. Within this institutional setting the focus is on gender and how women enable institutional change as a representation of entrepreneurial endeavours when seeking promotion. This relationship is broadly represented in Figure 2.8.1 and will be used to investigate the central research proposition and the four sub-propositions identified from the literature research, these are:

Research Question: How do female entrepreneurs interpret and respond to the dynamic relationships between structure, agency, networks and context to successfully change those institutional logics that hinder their career advancement?

Sub-proposition 1. Women who can understand and respond to the prevailing institutional logics are more likely to be able to create the necessary structural legitimacy to succeed.

Sub-proposition 2. Individual agency enhances the ability of women entrepreneurs to enact change.

Sub-proposition 3. Women use network ties to reduce path lengths and this facilitates their access to non-redundant information for the purpose of opportunity identification.

Sub-proposition 4. Context can influence the likelihood of women to realise their goals for advancement.

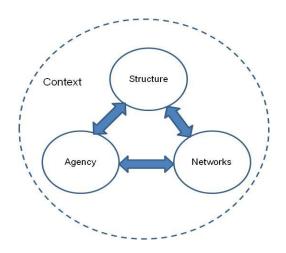


Figure 2.8.1. Initial relational model between variables

This literature review demonstrated that in order to generate new knowledge two things were required. The first was to determine and use variables that have been under-examined to date and especially the dynamic relationship between these variables. The summary, Figure 2.8.1, suggests this first requirement has been met.

The second requirement was to use a non-traditional approach, or as Chell (1996, p. 10) suggests:

What is needed is a multi-paradigmatic approach in which local economic conditions and institutional frameworks can be described initially, with follow up investigative work assuming interpretive/radical structural paradigms to examine threads of local culture, socio-economy, gender and power.

Chapter three now explains how this second challenge of using a less common research approach was addressed.

CHAPTER 3 RESEARCH FRAMEWORK

3.1 Introduction

The literature review in Chapter 2 demonstrated that the study of entrepreneurship had several systematic biases in terms of foundational assumptions, topics areas and research methods. Furthermore, several authors (Ahl, 2001, Hughes, et al., 2012) argued that in order to generate new insights into entrepreneurship it would be necessary to conduct research outside of these traditional approaches. This chapter provides an overview of the overall research framework that was developed and applied in line with requirements needed to research entrepreneurship from non-traditional perspectives. Whilst acknowledging that the primary purpose of this chapter is to explain and justify the selection of the specific research methodology chosen, this discussion is located within the context of a research framework. The framework is employed in order to first explain the wider contextual factors which exert an influence on the selection of a specific methodology used.

Figure 3.1.1 below, provides a representation of the overall research framework that for the purposes of simplification comprises four major components of which the research methodology is the third.

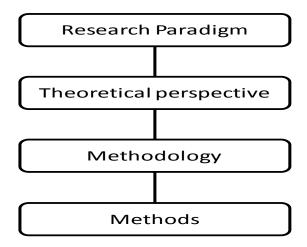


Figure 3.1.1. Research Framework

Adapted from The foundations of social research: Meaning and perspective in the research process by M. Crotty, 1998, London: Sage.

The key point to understanding Figure 3.1.1 and the discussions that follow is that there are a range of options available under each of the four components shown. A detailed explanation as to rationale for what was chosen for each component follows in subsequent sections of this chapter. Furthermore, an explanation as to the internal coherence between the four components is also provided and this subsequently leads to an explanation as to why the chosen research methodology was considered to be best suited to answering the following overall research proposition and sub-propositions.

- Research question. How do female entrepreneurs interpret and respond to the dynamic relationships between structure, agency, networks and context to successfully change those institutional logics that hinder their career advancement?
- Sub-proposition 1. Women who can understand and respond to the prevailing institutional logics are more likely to be able to create the necessary structural legitimacy to succeed.
- Sub-proposition 2. Individual agency enhances the ability of women entrepreneurs to enact change.
- Sub-proposition 3. Women use network ties to reduce path lengths and this facilitates their access to non redundant information for the purpose of opportunity identification.
- Sub-proposition 4. Context can influence the likelihood of women to realise their goals for advancement.

Following an explanation of the rationale for the overall research framework, the chapter then provides specific details of the actual study, such as the organisation, data sources, sampling, and how the analysis was conducted.

3.2 Research Methodology Components

3.2.1 Research Paradigm (Ontology and Epistemology).

It is generally accepted that any theory regarding knowledge is underpinned by presuppositions about what the world is like. Furthermore, it is assumed that that the deepest level at which these presuppositions can be analysed and examined are to be found in paradigms. Hence, as implied in Figure 3.1.1 above, it is necessary to understand the research paradigm being used before developing a detailed research methodology. Failure to evoke these deeply held, but not necessarily consciously understood, presumptions runs the risk of creating a misalignment between the research paradigm and the research methodology. For instance, the researchers may unknowingly impose their metaphysical assumptions on how they interpret the data, which is one reason why it is important for them to understand and declare their research paradigm.

Prior to detailing the research paradigm chosen, a brief explanation of what is meant by the term "paradigm" and its relevance to research follows. As the word "paradigm" has moved into common language it has frequently taken on multiple meanings, most of which tend to express an idea very different to that used by Kuhn (1962) in his seminal work on the philosophy of structure and meaning. J. Smith (1989) for example claims the term is presently used in three distinct ways. These are:

Paradigm 1. This is a single dominant disciplinary framework within which science is conducted. Such paradigms are *incommensurable* (impossible to measure) because they involve radically different assumptions about what makes knowledge useful. This aligns with Kuhn's prescriptive definitions.

Paradigm 2. This is a half way house between Paradigm 1 and Paradigm 3 (which follows). It ignores Kuhn's exclusion that a paradigm has to be dominant, whilst accepting the notion of incommensurability that refers to an acceptance that findings may be immeasurable in a scientific sense.

Paradigm 3. This is used for a model of the world, a school of thought, theoretical perspective or set of problems. This term is synonymous with a 'model' of a particular aspect of social life and therefore has a broad interpretation and multiple meanings.

As implied by the above definitions, the stance taken on incommensurability is central to determining which definition to apply. Perhaps the most frequently cited work on this topic is that of Burrell and Morgan (1979) who advocated paradigmatic incommensurability – Paradigm 1. As the dominance of these authors has waned over the past decade, an increasing body of literature has advocated ending the paradigm wars in order to generate greater productive research outcomes (e.g., Bryman, 2008a, 2008b; Stanovich, 1990). The view taken in this study is that the dimensions used (structure, agency, networks and context) can be a way of focusing attention rather than as a means of definitive classification. This view is justified on the grounds that there is as yet no conclusive way to judge the virtues of one paradigm over another, the definition used in the research takes the middle road as defined in Paradigm 2.

With respect to distinguishing a paradigm from a research paradigm, Burgess, Kerr, and Houghton (2013) examined the various definitions used to classify research paradigms. They concluded that the simplest and most effective classification scheme was that developed by Johnson and Duberley (2000) and as shown in Figure 3.2.1 below. They argued that as epistemology and ontology were the two most important concepts which could be used to define a paradigm, the Johnson and Duberley schema was the most useful of all presently available schema classifications. Johnson and Duberley's (2000) definition in terms of incommensurability aligns between Paradigm 1 and Paradigm 2 definitions above. However, for the purposes of this research it will be interpreted as complying with a Paradigm 2 definition. A brief explanation of the various ontological and epistemological standpoints available to a researcher follows before explaining the specific paradigmatic view taken in this study.

Figure 3.2.1 provides a graphic representation of Johnson and Duberley's schema (adapted from Johnson & Duberley, 2000, p. 180).

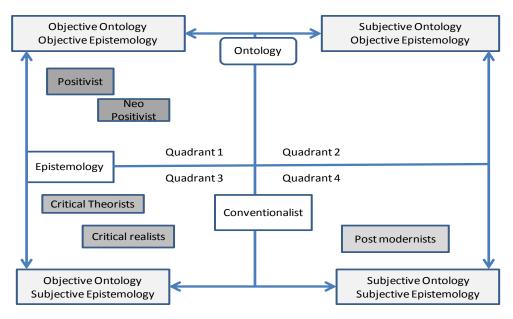


Figure 3.2.1. Adaptation of Johnson and Duberley's schema

To interpret the schema in Figure 3.2.1, a central tenet to its understanding is that a specific research paradigm can comprise different ontological and epistemological positions but not so broadly that anything goes. Ontology is defined as the researcher's belief in what constitutes or represents reality whilst epistemology is considered to be a framework for validating a particular belief as true (Johnson & Duberley, 2000). Therefore a positivist that demonstrates an objective ontology and epistemology would, in Johnson and Duberley's schema, fit in to quadrant 1. No theory has yet found to exist to support a subjective ontology and objective epistemology so quadrant 2 is empty. Quadrant 3, covers numerous theoretical approaches but is considered particularly relevant to those that adopt a critical realist (CR) approach (Kerr, Burgess, & Houghton, 2014; Richardson & Robinson, 2007; Sim & Van Loon, 2009). Finally quadrant 4, that demonstrates theoretical perspectives based on subjective ontology's and epistemology's such as found with post-modernism.

The utility of Johnson and Duberley's (2000) model is that it makes evident that both the ontological and epistemological positions have a profound impact on how research is conducted, analysed for meaning and used to support claims of truth (Burgesss, Kerr, & Houghton, 2013). At its most basic, this debate is often expressed as a choice between a positivist and an interpretivist stance (Saunders, Lewis, & Thornhill, 2003; Schwandt, 1998; J. Smith, 1989). For the

purposes of this research an interpretivist stance is broken down into two stances. Linking these two stances to Figure 3.2.1, a weak interpretivist stance would fit into Quadrant 3 while a strong constructivist stance would fit into Quadrant 4.

The research paradigm chosen for this study is that of CR, which falls under Quadrant 3. CR has several variations. The version of CR used in this thesis is the philosophical approach associated with Roy Bhaskar (1978) that combines a general philosophy of science (transcendental realism) with a philosophy of social science (critical naturalism) to describe an interface between the natural and social worlds. CR holds that objects of knowledge (perception, etc.) are relatively or absolutely independent of our knowledge of them (Hartwig, 2007).

Within the CR paradigm the world is defined as existing in a stratified reality consisting of three levels—the real, the actual and the empirical. Natural and social structures have emergent powers which are irreducible to those of their constituent parts (Ackroyd & Fleetwood, 2000). Realist philosophers of science such as Bhaskar (1978) assume that the natural and social world alike do not consist of discrete atomistic events whose regular co-occurrences are the task of scientists to record (Bergene, 2007). Rather these events are caused by complex structures existing independently of the scientists' knowledge of them (Ackroyd & Fleetwood, 2000). Hence, the adopted stance of the CR paradigm is to hold an objective realist ontology and a subjective epistemology in research. Critical realists place great emphasis on the distinction between ontology and epistemology as they do not wish to fall into the "epistemic fallacy" they ascribe to positivists (McAnulla, 2006). This fallacy involves transposing what is an ontological matter into an epistemological matter (Van Bouwel, 2003). In other words, statements about being are reduced to statements about knowledge.

While not immediately obvious, this distinction also has links into another key assumption of CR, namely an "open system" perspective as opposed to that of positivism which according to CR has a "closed system", context-free, perspective. Closed systems can generate laws, open systems can only

generate tendencies. It is for this reason that CR is context-sensitive (Bergene, 2007). In order to generate universal laws positivism tends to downplay context whereas CR takes the opposite position. Because CR considers that as emergent properties of complex systems involving human relations are frequently altering what is empirically observable any attempt at generating universal laws are viewed as suspect.

CR assumes that the emergent powers exhibited in open systems involve not only wider contextual variables, but in a large part, a dynamic, causal relationship between agency (the choices that agents make based on structurally provided possibilities) and structure itself where structure is perceived as "a set of simultaneously constraining and enabling rules and which are implemented in human interaction" (Ackroyd & Fleetwood, 2000, p. 30). In order to better understand how causation works the research focus of CR is primarily on the generative mechanisms that underlie these emergent powers (Dean, Joseph, & Norrie, 2005). Creating this understanding involves working with a stratified ontology consisting of the real (the mechanisms that generate phenomena at the level of the actual), the actual (the events that occur) and the empirical (our experiences of these events). This multi-layered view of reality allows context to be an active player in the nature of the world. Context is given such importance in CR both because of the role played by the emergent properties in an open system (hence likely to emerge with changes in context) and because it does not limit causal powers to people in the first place (e.g., a natural disaster or a currency crisis are examples of positive causality) (Peters, Pressey, Vanharanta, & Johnston, 2013).

CR also argues that there is a complex dialectical relationship between knowledge (the transitive dimension) and the objects of knowledge (the intransitive dimension) (Peters et al., 2013). For example, in the current study this involves making a clear distinction between sex and gender. Sex represents a real foundation onto which different accounts of gender are read or constructed (socially). The former is viewed as the intransitive component of knowledge while the latter is the social construction (transitive) of knowledge

(New, 2005). However, both are treated as part of the real. CR treats mental phenomena as part of reality, not as separate from it (Maxwell, 2012). Social constructions are created, reinforced or transformed into structures, within an open system, and because agents treat these socially constructed structures as real, they then in fact have real consequences. This is a key distinction between "constructivists who do not see social structures as real whereas [critical] realists do. However, critical realists would qualify this by recognising that social structures, unlike natural structures, "do not exist independently of the agent's conceptions of what they are doing in their activity" (Peters et al., 2013, p. 339).

Therefore, CR treats physical and social science as differing in their objects of knowledge. While the former exist and operate irrespective of human structures the latter only operate in relation to the actions, practices and beliefs of agents. Therefore, in order to understand the reality behind phenomena such as inequality between the sexes it is necessary to investigate the generative mechanisms which cause them (Lipscomb, 2006).

CR argues that understanding these mechanisms in turn involves looking beyond that which is empirically observable into factors such as the agency, structure and context. Because of CR's adherence to a subjective epistemology finding, its ability to describe "the real" which sits behind the empirically observable is not seen as easily. In the case of this study, it involves ontological questions about what social reality is being translated into, epistemological questions about what agents think that social reality is. For this reason, this study lends itself to an exploratory approach to uncovering deeply embedded meaning because it is looking at a complex phenomenon and in content areas which have either been ignored or under-researched to date (e.g., entrepreneurship in the public service that embraces women and institutionalism). Because CR is weakly constructivist and anti-positivist its ontology tends to favour interpretivist approaches such as qualitative, case studies in organisations (Easton, 2010). This point will be revisited in Section 3.2.3.

The reasons for selecting a CR research paradigm over a positivist or postmodernist one are as follows. First, postmodernism is not considered to be able to effectively deal with research into complex social phenomena (Maxwell, 2012). This does not suggest it does not have a place in theory building but it may not be the most appropriate perspective to use in this type of study because of its reliance on a hermeneutic approach to social science, rather than arguing for a causal account of structures acting upon individuals. Secondly, the exploratory nature excludes a hypo-deductive approach which is based more on testing an existing theory. Thirdly, an inductive study within a positivist tradition is also rejected on the grounds of privileging a closed system, reductionist, and context free perspective. Finally as shown in the Literature Review (Chapter 2), as the bulk of studies to date have been carried out within a positivist, predominately quantitative tradition (Ahl, 2006b; Hughes et al., 2012), doing more of the same is unlikely to generate fresh insights. Thus a positivist approach is discounted as it provides little utility to advance the field of interest. The philosophical assumptions of CR have been therefore assessed as offering the research paradigm which best aligns with the proposed research.

3.2.2 Theoretical Perspective.

For the purposes of this research framework the term theoretical perspective is used to refer to the theory being examined in relation to the phenomena under investigation. It therefore differs from Crotty's (1988) framework from which it was adopted. The latter is used to refer to aspects of the research theory. This was not seen as necessary as all of these aspects are covered off in other parts of the research framework. However, it was seen as necessary to comment on the potential limitations associated with the causal theories being investigated. Different types of theories impose different research methodology requirements.

The literature review demonstrated that entrepreneurship can be covered using contributions from many different theories and perspectives such as, but subsequently excluded the inclusion of feminism as a perspective. It is therefore more accurate to describe entrepreneurship as a multi-dimensional

phenomena fitting under the broad term entrepreneurship. All of the theories to be examined in this study have and continue to be explored through a range of methods including those consistent with CR requirements.

Theory building is said to be based on the interpretation and substantiation of a series of related constructs that presents a systematic interpretation of a phenomena that underpins the relationship between variables that may, as a consequence of these relationships, have a predictive or solely explanatory capacity (Kerlinger, 1973). Aspirationally, achieving this predictive capacity is rarely realisable within the social sciences especially where qualitative research is used, such as CR (Sayer, 2000). CR does not see an ability to make prediction-based theories because it is sensitive to context that comprises analysis of responses that are framed spatially and cognitively. Therefore the ability to achieve consistency is considered to be remote (Cartwright, 1999).

An additional complexity for the building of a single theory in this research is due to the broad nature of the theories that permeate the initial relational research model shown in Chapter 2, Figure 2.8.1. This research embraces several theories such as institutionalism, entrepreneurship and institutional change as examples and therefore what is being examined at the theory level is best described as a meta-theory. Stated simply, meta-theory is a theory about theory (Wallis, 2010). What distinguishes meta-theory from other definitions of theory is in its willingness to use multiple theories and to employ a broad range of research methodologies. To that end, a meta-theory would appear to offer some hope around advancing knowledge creation by reducing the various perspectives generated by different disciplines and research traditions (Burgess & Ekström, 2014). It therefore most aptly defines the sort of theory being explored in this study.

3.2.3 Methodology

Like just about every other term used in social science, there is no agreed definition on methodology. Rather than divert attention to this wider debate, discussion on methodology is limited to defining and justifying the definition chosen for this study. The distinction between methodology and methods is key

here. Methodology is a "higher order term that refers to the logical principles that must govern the use of methods in order that the philosophy/theory embraced by the approach is properly respected and appropriately put into practice" (Jackson, 2003, p. 43). Jackson's definition is justified for use in this study on the grounds that it highlights the importance of alignment of a methodology with the research paradigm (approach) and theory. Critically, "Methodology is not detachable from the philosophy/theory" (Jackson, 2003, p. 43).

The methodology chosen for this study was that of Miles and Huberman (1994) who have developed an overall methodology in line with CR principles. A case study is viewed as one component of the overall methodology. Case studies are ideal research approaches for the development of qualitative research data involving human interaction within the real world (Ritchie, Lewis, Nicholls, & Ormston, 2013). Robson (2002, p. 178) defined a case study as, "A strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence".

The methodology developed by these authors aligns well with CR's underlying philosophical and theoretical assumptions on theory development. For instance (Miles & Huberman, 1994, p. 159) state that, "the components of a causal map are of a different nature than a disembodied beta coefficient or partial correlation; they are not probabilistic, but specific and determinate, grounded in the understanding of events over time in the concrete local context". They also advocate the use of qualitative research for exploratory studies such as the one developed in this thesis.

The qualitative research methodology that embraces the CR perspective is well documented in the work of Miles and Huberman (1994) and provides a thorough exposition on the analytical approaches that can be adopted to understand the causal influences of relationships from a critical theoretical perspective. Thus the work of Miles and Huberman (1994) was taken as the

main reference document for developing the research methods to ensure consistency with a CR standpoint and to avoid variation.

3.2.4 Methods

Methods are better conceptualised as tools aimed at achieving more specific, procedural research outcomes. As such these tools can usually be detached from any specific methodology and used in the service of many. Therefore, if different methodologies study the same phenomena and use the same tools the primary data produced will most likely be similar if not identical. The key difference is therefore not found in the tools used or primary data produced but rather in the differences embedded in the three preceding components of the research framework. These differences result in a very different treatment analysis of the primary data and conclusions reached.

The debate over the adoption of a qualitative or quantitative approach to researching sociological-based phenomenon has been long standing but with no clear resolution on which method is the most suitable to apply to a particular research enquiry (Easterby-Smith, Thorpe, & Lowe, 1991). The most suitable approach to use is therefore largely at the judgement of the researcher who is charged with adopting the most apposite approach to address the research question in focus.

In the field of entrepreneurship research there has been a heavy reliance on quantitative data analysis at the so called expense of the qualitative dimension. As a consequence, it is said that the much needed alternative perspective of entrepreneurship studies is being driven out of academic insights achievable through other methodologies that embraces the social sciences through the analysis of relationships and decision-making (Bygrave, 1988). Whilst Bygrave's criticism of the dominance of quantitative research perspectives is based on the study of the economic facet of entrepreneurship, he does make the point that the general absence of articles based on qualitative methodologies leaves the field of entrepreneurship in a stagnating position.

Whilst quantitative and qualitative approaches defy complete definition they are said to differ in significant ways such as their analytical objectives, the types of data collected and the degree of flexibility they offer in the study design (Jablin & Putnam, 2000). Qualitative approaches involve the interpretation of phenomena based on the meaning that individuals provide in their responses, constructed from their individual perspectives and cognition. In comparison, quantitative analysis places a focus on hypothesis testing formed from analysis using objective methods (Fakis, Hilliam, Stoneley, & Townend, 2014).

Studies in entrepreneurship that have adopted a qualitative methodology have reported a number of problems such as the inability to convince the academic audience on a key point of rigour and the consequential legitimacy of the findings emanating from such observation (Adler & Adler, 1994; Busenitz, et al., 2003; Denzin, 1989; Denzin, & Lincoln, 2005). In response, the research in entrepreneurship has seen a convergence towards the 'normal sciences' (Kuhn, 1996) but this is premised on the belief that the study of entrepreneurship and how it is measured constitutes measurable entities and leaves little room for any form of inductive or interpretivist or nonpositivist involvement (Leitch, Hill, & Harrison, 2009; Stahl, 2007).

It was clear from the literature review and the propositions that were developed, that the initial relational model (Figure 2.8.1), was based on an individual's cognitive interpretations of both the physical and virtual meaning of reality. As these relationships between structure, agency, networks and context are said to be shaped by an individual's judgement (Casson, 2002), their ability to create or recognise opportunities is seen as a product of these causal relationships (Stevenson & Jarillo, 1990). In order to it investigate such relationships a qualitative viewpoint was considered to be an appropriate and more flexible approach to capturing the meaning behind an individual's actions based on an open question set rather than a closed set.

This choice of research approach thus allows the researcher's standpoint on the potential casual relationships between the variables to be taken into account in the highly contextualised nature of the field under study (Gray, 2013). Figure

3.2.2 summarises the discussion on methodology thus far before the next section explains how the chosen methods were applied.

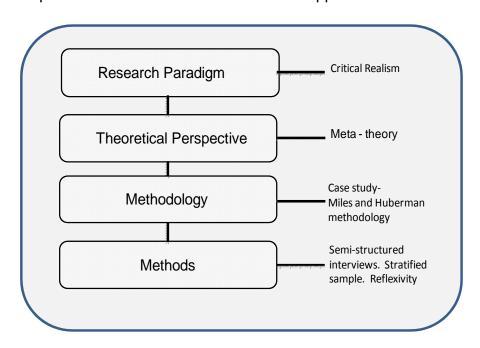


Figure 3.2.2. A Developed Research Approach

Adapted from The foundations of social research: Meaning and perspective in the research process by M. Crotty, 1998, London: Sage.

3.2.5 Details of the chosen method

This study used the vehicle of a single collective instrumental case study to provide an independent qualitative approach to the analysis of human interaction amongst the competing variables in research (Denzin & Lincoln, 2011; Stake, 1995). A collective instrumental case study, as defined by Stake (1995, 1998), was chosen rather than the alternative case study frameworks such as the intrinsic approach. This choice was made because the collective instrumental case study approach can accommodate multiple stakeholders and elements of enquiry in parallel. It also allows a transactional method of enquiry that can support a weak interpretivist approach by allowing interaction between the participants and the researcher, thus exploring answers to questions such as the "Why" and "How" of which both can be considered as pertinent elements for understanding in this type of research methodology approach (Hyett et al., 2014).

Furthermore, an advantage of defining a research focus of examining women within a stratified layer at the outer boundary of OF6 in the UK Armed Forces, where the majority of women have been unable to penetrate, has provided very clear case study boundaries that are considered essential for the use of case study methodologies (Yin, 2014). Thus, to ensure that the research sample offered the widest manageable spread of women service personnel involvement at the appropriate rank, to minimise the time required of the respondents, and "to understand the complex relationship between factors within a social setting", a case study approach was adopted (Denscombe, 2010, p5).

3.2.5.1 Pilot Case Study

To enhance the validity and reliability of the overall study a pilot study was conducted (Lancaster, Dodd & Williamson, 2004). The pilot involved administering the semi-structured questionnaire to three subjects (from two services – British Army [Army] and RAF) who were representative of the target population. The purpose of the pilot study was to:

- Conduct an overall quality assurance of the core research process. In this instance, it was conducted by the doctoral student with his supervisor present and provided a review of all steps in the interview and immediate post-interview process (refer below to reflexivity).
- Assess the clarity of the research questions based on the number of clarifications requested by the candidates.
- Assess the relevance of the data analysis techniques and the time involved in coding responses, grouping and synthesising results to reveal any issues or problems.
- Determine the length of time to complete all phases of the research so that the total time of the full research study could be assessed as viable or not.
- Develop a more refined and detailed research plan.
- Practise reflexivity using a post-interview reflection period and log book to capture non-verbal signals as an example.

The learning points generated from the pilot studies were then incorporated in the full case study approach that involved the selection of candidates through to the analysis of the data. The pilot study, combined with my previous military experience of serving with all three services, lead me to the conclusion that the same issues appeared to be common to all services. This suggested that the design of multiple case studies by service (Royal Navy [Navy], Army and RAF) was therefore not required. Focus groups were initially considered on the grounds of being able to capture more data in a shorter time frame. However, a group approach was discounted on the following grounds. Firstly, the unit of analysis that is much criticised as being overlooked in entrepreneurial research is that of the individual within their social context (Seo & Creed, 2002). Secondly, the ability to identify the respondent's contextual interpretation of meaning was considered implausible in groups, even in groups as small as Thirdly, this was to be an exploratory study using a CR three or four. perspective seeking to identify responses and associations conveyed through individual meaning at the level of the real, and therefore a group approach would be unlikely to facilitate a more informed analysis (Archer, Bhaskar, Collier, Lawson, & Norrie, 2013). Finally, the group approach is possibly more difficult to administer and coordinate across multiple entities and therefore was considered unsuitable for the purpose of maintaining the anonymity of candidates (Saunders, Lewis, & Thornhill, 2003).

Although there are critics of the case study approach (Collis, 2009; Miles, 1979) because of questions regarding the reliability and consistency of the data collected, such an approach was considered the most appropriate in this exploratory research. The following sections provide more granularity of the study detail.

3.2.5.2 Case study detail

This section details how the case study was conducted in terms of population sample, how the primary and secondary data was gathered, and the method for data analysis described as the Constant Comparison Methodology (CCM). The

remaining sections in this chapter discuss the ethical considerations, data reliability and reflexivity before concluding.

3.2.5.2.1 Population sample.

The UK Armed Forces has approximately 160,000 personnel of which 10% are women (MoD, 2014). In the interests of resource limitations the sample range was limited to those subjects with characteristics deemed relevant for addressing the research requirements of the propositions. A stratified sample drawn from the ranks of (OF4 to OF6) was used. This involved the use of 'non-probability' sampling (Robson, 2002).

Non-probability sampling has a focus on aspects of commonality based on, for example, demographics, ethnicity and gender that is crucial bounding for later data analysis (Mason, 2002; Miles & Huberman, 1994). Characteristics of qualitative sampling are expressed by Miles and Huberman (1994, p. 27) as purposive: "with small samples of people nested within their context". To achieve a purposeful sample the boundaries of the population sample needs to be considered carefully and this was assessed from the pilot study in terms of time, relevance to the research question and homogeneity. Thus, if a choice were made to research all officers in the UK Armed Forces, this would also include males and this was not the focus of the research that had a specific focus on females, so this would not have been appropriate for this research.

Ritchie et al. (2013) identify the work of Patton (2002); Bryman (2001), and others, to explain the variations in approaches which should be read if a deeper understanding of non-probability sampling is needed. However, the approach selected for the sample in this study was developed from the work of Patton (2002) who identifies a form of sampling known as "stratified purposive" sampling and this aligns with the CR perspective on qualitative research described by Miles and Huberman (1994). Stratified purposive sampling is described as a hybrid approach where a particular element of the research can or may be a variable, whilst the research group itself is reasonably homogenous that allows a comparison of results.

Table 3.1 below illustrates the range of sample chosen by grade and rank across the three services. The initial approach was only to access those female officers at the grade of OF5 (Colonel equivalent) but this proved problematical for a number of reasons. First, there were insufficient women respondents available at the proposed level of OF5 to provide a large enough cohort of individual perspectives across the three services. Second, as awareness of this proposed research spread many officers at the next subordinate rank OF4 (Lieutenant Colonel equivalent) expressed a very strong desire to be involved. In total 78 officers volunteered to be interviewed. Due to logistical and time constraints only 55 officers that included 3 male officers and one female OF6 were interviewed.

Table 3.1. Military Grades and Ranks

Service	Ran k	Grade	Male	Female
The Royal Navy	OF6	Commodore	0	0
	OF5	Captain	1	2
	OF4	Commander		14
The Army	OF6	Brigadier	0	0
	OF5	Colonel	1	3
	OF4	Lieutenant Colonel		13
The Royal Air Force	OF6	Air Commodore	0	1
	OF5	Group Captain	1	5
	OF4	Wing Commander		14
Totals			3	52

The three male subjects and the female OF6 were initially included at the pilot study phase to determine if there were some issues that may have been missed by relying exclusively on females for the pilot study. However, as the study progressed it became apparent that containing the study to females would

produce sufficiently rich data and that gender comparisons were unlikely to add much more by way of understanding to the phenomena under investigation.

3.2.5.2.2 Semi-structured interviews

Qualitative research within the research methods literature identifies three approaches to the conduct of interviews that seek to understand meaning in the social relationship world, these are: structured, semi-structured and unstructured interviews (Mack, Woodsong, MacQueen, Guest, & Namey, 2005). One of the most utilised techniques to uncover such meaning in qualitative interviews is the semi-structured interview (Dawson, 2009).

The utility of semi-structured interviews is attributable to the level of flexibility it affords to the researcher to alter an initial set of questions in response to the candidates' responses. This allows the researcher to delve more deeply on specific elements if they so wish and enables the exploration of emerging questions that may be considered a more appropriate line of enquiry (Collis et al., 2003).

A total of 55 interviews were conducted almost exclusively at the respondents chosen venue. Given the importance that CR attributes to context it was considered that conducting interviews in the subjects normal work environment would be more likely to produce data more relevant to their everyday experiences. To ensure greater quality assurance of the process, the candidate's supervisor attended approximately a third of the interviews. The supervisor then provided a process review for all of these interviews that he attended.

The overall process consisted of the steps depicted in Figure 3.2.3 and supported in the relevant Appendices as indicated in the figure.

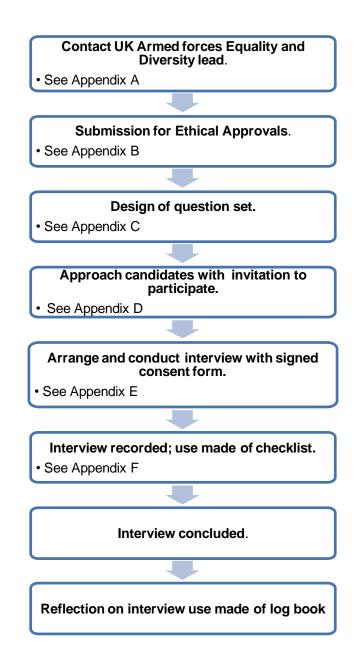


Figure 3.2.3. Steps to Data gathering

The research ethical arrangements were achieved by complying with both MoD and Cranfield University requirements, explaining the process to each individual and obtaining a signed consent form. The ethical arrangements are more fully explained in the following ethics section in this chapter.

Immediately after each interview, time was also taken to reflect without the candidate on the notes taken in the interview notebook that included the unspoken responses by the interviewee that added further meaning to their responses. This was relevant because it built upon the use of direct

observation that as Huberman and Miles (1985) and Patton (2002) describe as facilitating the going beyond the spoken word to investigate deeper contextual issues with the respondents. The use of these notes aided the analysis of the situational factors that, as a consequence, either changed the range or order of questions compared to other respondent's records. However, critics of direct observation techniques to enhance enquiry consider that it has some limitations that should be considered because its inclusion can lead to generalisations and a lack of repeatability in the findings (Mays & Pope, 1995). Others, such as Patton (2002) emphasise that the very nature of a candidate being interviewed may also distort an individual's response as they seek to appease the researcher in what is fundamentally unknown and unfamiliar.

Triangulation was also employed to enhance the understanding of an individual's response. This involved reviewing a range of associated documentation such as people policies, appointment lists and procedural arrangement for promotion. As awareness increased of these policies and processes it was possible to more readily understand what certain acronyms and referenced policies actually meant and this helped to develop trust and legitimacy in the process, question sets and the researcher. After the interviews the recorded data was sent for transcription before analysis.

3.3 Data analysis

Miles and Huberman (1994) describe data analysis as progressively focussing and funnelling information gathered to understand its true meaning. In order to achieve this in a managed way a data plan was developed that followed the logical steps depicted in Figure 3.3.1.

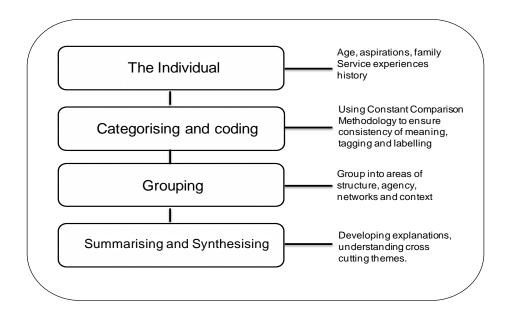


Figure 3.3.1. Steps in Data Analysis

A number of points are relative to the data analysis process. Firstly the CCM developed by Glaser and Strauss (1967, 2009) is an approach to qualitative research that involves open coding, axial coding and selective coding that focuses on data collection mediums such as transcriptions, field notes and interpretations (Boeije,2002). CCM is described by Tesch, (1990, p. 96, as cited in Boeije, 2002, p. 392) as:

The method of comparing and contrasting is used for practically all intellectual tasks during analysis: forming categories, establishing the boundaries of the categories, assigning the segments to categories, summarizing the content of each category, finding negative evidence, etc. The goal is to discern conceptual similarities, to refine the discriminative power of categories, and to discover patterns.

CCM is a recursive process based upon initial classification and coding of the data for a redefined subset of transcripts, for this research the subset size was taken as three. Therefore, after three transcripts had been codified a review of the subset was undertaken to ensure the codification was consistent. The initial subset of three was then followed by a further codification of a new subset and the process repeated. As a consequence, some initial coding and classification was altered to ensure that a consistent interpretation of the findings was

obtained. This required active assimilation and creativity in meaning that is said to allow the researcher to explore new interpretations whilst at the same time maintaining consistency (Strauss & Corbin, 1998).

3.4 Reliability, Validity, Reflexivity

Putting theory into practice and then to subsequently draw meaningful deductions using a qualitative research based methodology can be exposed to criticisms over the reliability and validity of the reported findings (Miles and Huberman, 1994). These criticisms centre on the lack of repeatability (reliability) or the accuracy of participants accounts in reflecting reality (validity). The achievement of both reliability and validity is however problematic in a number of reported ways. Firstly, there are no agreed criteria for assuring both reliability and validity in qualitative research, just good practice (Miles & Huberman, 1994). Secondly, the lack of an expressed reflective stance limits the ability of readers to understand what beliefs and biases the researcher holds that may influence interpretation of the qualitative findings (Koch & Harrington, 1998). Reflexivity is therefore an important element of rigour in the qualitative field of research and assists in explaining the declared or implied processes underpinning the methods in use by positioning the researcher's ontological perspectives that inform the reported findings (Koch & Harrington, 1998). The following paragraphs elucidate the reliability, validity and reflexivity perspectives of this research.

3.4.1 Reliability

Reliability in research generally implies the ability to replicate findings if another similar study using comparable techniques and methodologies was undertaken. However, the ability to achieve this required replication has been consistently questioned within qualitative research as a misnomer, partly because of the interpretative nature of the social sciences and also due to the lack of a stable context that is not repeatable (Holstein & Gubrium, 1997; Lincoln & Guba, 1985).

The term reliability is not often discussed in qualitative research but is commonly believed to include other terms that have entered the lexicon of qualitative research, such as, validity, trustworthiness and repeatability (Ritchie et al., 2013). However, whilst there is not one definitive set of constructs to assure the reliability of the identified phenomena there is an understanding of the research steps that may give the assurance that where practicable the findings are repeatable. These steps, taken from the work of Ritchie et al. (2013) are depicted in the first column of Table 3.2 below. The second column provides evidence of the approach taken in this research and the last column in the table provides an assessment of the repeatability and hence implied reliability of the research findings.

Table 3.2. Building in Reliability to Qualitative Research

Criteria	Research Approach	Repeatable
Unbiased sample selection	Stratified sample where individuals were selected by rank and service. As individuals they were random entities and an equitable balance was achieved across each service where possible.	Yes
Consistency of fieldwork	Defined plan, process and approach. Use of external verification throughout the research. All exposed to the same questionnaire and within their own context. Reflexivity of interviews used (one third with supervisor and the remaining two thirds using a structured review process)	Yes
Systematic analysis	Use of coding and tagging of findings using Constant Comparison Methodology	Yes
Interpretation of findings	Matched to understanding of literature. Referred back to some candidates for clarification.	Yes but influenced by the researchers perspective
Equal coverage of all perspectives	Standard question set	In part. Subject to candidates individual context of meaning

3.4.2 Validity

Validity in research findings is often defined as the correctness of the findings or alternatively, the credibility or plausibility of the research findings (Creswell & Miller, 2000; Glaser & Strauss, 1967; Ritchie et al., 2013). The primary concern of validity in qualitative research focuses on the ability to answer the question posed by Richie et al., (2013, p. 274): "Are we accurately reflecting the phenomena under study as perceived by the study population?".

In answering this question, there are a range of approaches defined by Creswell and Miller (2000) that can be adopted depending upon the lens of the researcher and the research paradigm. The term lens refers to the manner in which the researcher seeks validity in their account of the findings, either by using the research data to compare the interpretation of an individual's account with that found in the final report, or through other means such as reflexivity or the use of an external source to review the work.

Table 3.3 depicts the relationship between the research lens and paradigm and the possible way that researchers can achieve validity in their work. With respect to this research, the paradigm adopted was a critical paradigm and it was considered that due to the candidate's previous involvement in the military, a researcher reflexivity lens would be more appropriate in the establishment of validity for this research.

Table 3.3. Validity; alignment between qualitative lens and paradigm assumptions

Paradigm assumption/Lens	Postpositivist or Systematic Paradigm	Constructivist Paradigm	Oritical Paradigm
Lens of the Researcher	Triangulation	Disconfirming evidence	Researcher reflexivity
Lens of Study Participants	Member checking	Prolonged engage- ment in the field	Collaboration
Lens of People Ex- ternal to the Study (Reviewers, Readers)	The audit trail	Thick, rich description	Peer debriefing

Adapted from "Determining validity in qualitative inquiry" by J.W. Creswell, & D. L.Miller, 2000, *Theory into Practice*, 39(3), p. 126.

The use of reflexivity in the process of validation uses the lens of the researcher to reflect on beliefs and biases early in the research process that may influence interpretation and engagement of participants. This is considered particularly important for researchers to understand so they can appreciate such biases within the research findings (Creswell & Miller, 2000). A more detailed explanation of reflexivity now follows which given its highly personal nature is presented in the first person.

3.4.3 Reflexivity.

Social research, especially such research that includes a qualitative approach, is heavily inter-related with the experiences of both the researched and the researcher that can lead to bias. Reflexivity is therefore seen as one method by which to ameliorate these potential biases and if successfully accomplished can lead to a deeper understanding of individual meaning. This section focuses on two particular challenges that had to be overcome during this research, these were: the avoidance of researcher bias that was considerably heightened due to the researcher's past military background at the level of OF5 within the Army. Secondly, in researching women as a male it was necessary to understand possible deeply held beliefs (which could be construed as knowledge) based on context that could influence the subsequent interpretation of the findings. These two elements are amplified in the following paragraphs drawing on the approach used by Johnson (2009).

Based on these two self-identified factors a personal view was taken to use my experiences as a basis for reflection by following the processes defined in Johnson (2009) that reflects on her individual experiences and subsequent approach to using reflexivity during research. This involved: the identification and framing of the research issue, using a reflexive approach when gathering data, in discussions, and when analysing and writing up results as other researchers have done (Clingerman, 2006; Warr, 2004). This approach was important for creating a basis for comparison between my deeply held and often undeclared inner beliefs and values to facilitate my interpretation of the findings: in the words of Johnson (2009), aiding the interpretation of the meanings and

behaviours to possibly gain an intuitive insight to the implied meaning of respondents actions and discourse (Holland, 2007; Hubbard, Backett-Milburn, & Kemmer, 2001; Perry, Thurston, & Green, 2004; Rager, 2005). In recognising and adopting this approach to reflexivity several advantages, disadvantages and moments of self-enlightenment were identified; these are briefly covered in the next sub-section.

3.4.3.1 Advantages and disadvantages.

My previous military experience was a distinct advantage when it came to understanding the dialogue of the interview and understanding the broad contextual environment which individuals declared in their answers. Acronyms were familiar and in general most described processes were understandable without over-enquiry. I was also aware that "within the field of qualitative research it was perceived to be essential for the researcher to develop a research relationship that would allow them to actively work with participants to interpret their reflections" (Johnson, 2009, p. 31). This was achieved by seeking clarity in explanations that allowed the participant to confirm or elaborate upon if a partial explanation was offered (Dickson-Swift, James, Kippen, & Liamputtong Rice, 2006; Sword, 1999). This was felt to be an important technique as it kept me as a research student and not as an ex-senior officer whilst also developing trust between the parties concerned.

Throughout the whole interview process I was particularly careful not to declare my previous background and initially sought mentoring in the interview process from my supervisor to ensure that my background did not encroach onto the contextual setting of the interview in the form of power and status inequalities (e.g., when interviewing OF4 officers). However, my background was not always consciously controllable and at times it appeared impossible in the initial phases to refrain from "jumping in" to the empty spaces left in the conversations based on an autocratic dimension in my natural frame of reference.

Methods to address this behaviour were previously considered in the approach to interviewing where I was accompanied by my supervisor as a neutral participant and observer. This helped in the initial phases by identifying how my

internal beliefs permeated the interview relationships and thus could be addressed. When the supervisor was not present, use was made of a checklist (see Appendix F) that was used to identify if these inner beliefs and values may have influenced the interview process and my thoughts at the time.

I was also very conscious that I was a male studying females and the validity of such findings emanating from this relationship was questionable from a feminist viewpoint. A viewpoint that suggests it is impossible for males to research female perspectives because they do not possess the experiences necessary to interpret true meaning (Maguire, 1987). In some respects I thought this to be advantageous as I had no feminine pre-disposition on what was right or wrong although, I could equally be guilty or overlaying male predispositions towards women.

The most effective way for me to address this concern was by keeping a research journal. It was important for me to establish this at the beginning of my post-doctoral research to ensure that I could justify my decisions regarding my personal experiences with this particular topic, and to make it clear that this was something I had considered in-depth. I wanted to be explicit from the outset that my experience is a part of who I am, and as such, it was not possible for me to disregard it totally whilst conducting the research. Journal keeping has allowed me a freedom to record my initial reactions and decisions and to be able to review the factors behind the decision-making processes. This was achieved by not only facilitating a repository of thoughts, observations and ideas emanating from the interviews but also the internalised thoughts that I referenced in the process of interpretation. The latter was not infallible but at least I did have a purposeful and structured approach to recording the pertinent points of my reflections.

An important factor that is prominent in qualitative research is the ability to create trust and confidence between the participant and the researcher (Johnson, 2009). Such trust and confidence can directly affect the validity and reliability of the findings as reported by the interview candidates. Whilst personal approaches are highly influential in achieving this outcome, other

elements such as confidentiality based upon research ethics also play a vital role in building this trust relationship that is discussed next.

3.5 Ethics

Research that involves human subjects has a requirement placed upon it to protect individual rights and confidentiality that embraces privacy and consent (Denscombe, 2005). Ethical requirements in research are not new and can be found in international policies such as for obtaining research consent as detailed in the Helsinki Declaration (World Medical Association, 2009), national guidelines for the conduct of ethical research (United Kingdom Research Council), University policies and a range of other funding and approval committees. Ethical considerations are not a "bolt on" to research; they are integral to the establishment of successful and ethical research (Guilleman & Gillam, 2004; Sproull, 2002). Thus this brief section details how ethical approval was sought, the ethical areas considered most relevant for his research and how they were addressed.

At the very start of this research a statement of ethical intent was embedded within the research proposal although the very process to submit and achieve ethical approval from Cranfield University and the MoD were starkly different in terms of process, detail and time. Two areas that required a substantial amount of involvement with the MoD process was the level of supporting detail required for the ethics committee and the subsequent time it took to follow up questions and achieve ethics approval. In comparison, the Cranfield University ethics approval, whilst not being readily accessible or indeed identifiable at the outset, appeared to be no more complicated than a simple email. This latter observation gave both me and my supervisor cause for concern but through careful tutelage and the backdrop of a rather more robust MoD process; there was confidence that the ethical process adopted was suitable for the research approach detailed herein.

Ethical responsibilities do not end with approval, they need to be applied throughout the entire research journey and subsequent archival of data (Iphofen, 2011; Israel & Hay, 2006; Mertens & Ginsberg, 2008). Table 3.4

provides a resume of the chosen ethical requirements pertinent to my research to ensure ethical compliance.

Table 3.4. Chosen ethical approach

Requirement	Approach	Comments
Confidentiality and Privacy	Use of code book. Alternative interview locations. Direct contact	Code book retained separate to the data files. Use of alpha numeric coding sequence. Single contact emails and a choice of interview venues offered. No contact made through a third party organisation but directly one to one.
Informed consent	Signed consent form	Opening discussions explained the purpose of ethical approval, identified who had provided approval and how individuals could contact them to raise queries or concerns. Ability to opt out, raise complaints or withdraw from the study at anytime. Consent forms held for 5 years and then destroyed. Informing in a manner to avoid implied coercion or remuneration in any form.
Conduct	Pre-explanation at start of interview, allowed an observer if wanted	Details of Cranfield University's complaints procedures provided should they wish to raise issues or subsequently withdraw their contribution at a later date.
Publication	Seek MoD approval	Circulated to the MoD for prior approval.
Archival	Retained electronically and hard	Transcribed data held on secure Cranfield University servers without code book information. Hard copy typed transcripts held in archive library vault. All data to be destroyed in 2020. Archival procedure of the Economic and Social Research Council (ESRC) followed
Personal information	Retained for 5 years	As above. Also includes the requirements of the Data Protection Act
Reporting and Dissemination	Ensure ethical moral principles in approach to analysis and reporting	Reflection on analysis to make it fair, impartial and to maintain anonymity. Use of critical reviews of work by other PhD colleagues

3.6 Conclusion

The literature review provided clear evidence of the need for entrepreneurship studies to break out of the pattern of research that has to date comprised overwhelming positivist, (frequently quantitative) studies which assumed an individualist (agency), male, private sector, trait theory logic, whilst measuring outcomes almost exclusively in economic terms. This chapter demonstrated how the research approach taken broke away from this dominant research

pattern. The first three components in research framework (Figure 3.1) demonstrated where this research adopted a less traditional research stance. Firstly, it used a CR research paradigm. Secondly it adopted a meta-theory approach to the cross-cutting nature of the various perspectives and theories identified in the literature. Thirdly, it employed a qualitative case study methodology consistent with Miles and Huberman CR methodology and acknowledged that this was appropriate for the research of open social systems. Finally, as several different methods are common to numerous methodologies no distinction was made on the fourth component of the research framework.

The research approach taken in this chapter sought to address all major risks which could adversely impact on the credibility of the research data and how they were collected including the subsequent analysis of the data and the findings generated by the overall process. The treatment of these risks included addressing all ethical concerns and conducting a pilot study, a process which ensured the researcher engaged in a reflexivity process in order to reduce potential systematic bias. This was complemented through the use of tape-recording and then transcribing interviews thereby ensuring an accurate record of the subject's responses and the application of the CCM (Glaser & Strauss, 1997; Miles & Huberman, 1994). This approach not only sought to address the risks associated with data analysis but also ensured alignment with the preceding components of the research framework.

The next chapter details the findings that were generated by the application of the research methodology developed in this chapter.

CHAPTER 4 FINDINGS

4.1 Structure

4.1.1 Introduction

The purpose of this chapter is to provide details on the research findings which were generated following the testing of the following propositions. In adopting this approach, the following proposition P1.1 and key findings F 1.1 to F1.5 from the research on structure are shown below:

- P1.1. Women who can understand and respond to the prevailing institutional logics are more likely to be able to create the necessary structural legitimacy to succeed.
- F1.1. Formal structure was considered by women as objective and not subjective in meaning.
- F1.2. Women adopted a "calculus" approach to role selection to increase legitimacy.
- F1.3. Women in the Navy and Army felt more constrained by structural logics defined through culture, elite status and power than those in the RAF.
- F1.4. Women created opportunities for entrepreneurial action by accessing structural positions close to powerful others.
- F1.5. Context influenced the opportunities available for women to achieve advancement.

The subsequent findings are separated under the following main headings; formal and informal structures, culture as structure, power – position, and finally, other informal structures and macro influences before a summary.

4.1.2 Formal structure

The notion of structure was clearly articulated by most of the women who described it in the form of hard physical entities such as objects, buildings and titles that included symbols and artefacts. This formal framework of entities was

portrayed within a hierarchy that reflected the concept of authority and status. Typically referenced examples were badges of rank and titles of organisations such as: Ministry of Defence (MoD), Navy Command Headquarters, Headquarters Land Forces and Headquarters Air Command. The relationship between these organisations is illustrated in Figure 4.1.1 below:

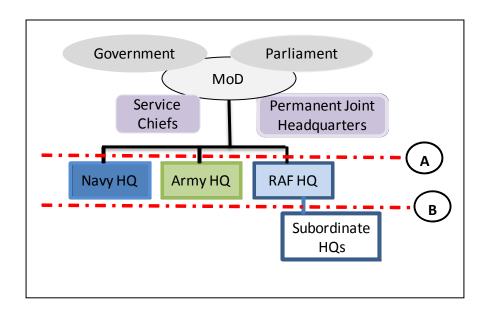


Figure 4.1.1. Reported Institutional Structure

Note. HQ = headquarters; Mod – Ministry of Defence.

Structure was also reported as being based foremost on formal policies and rules for the following purposes. Firstly, maintaining order and to exercise sanction if required. Secondly, to bring order and cohesion to the overall armed force in the form of a common understanding on purpose and processes. Finally, to act as framework for expected behaviours based around discipline, efficiency and effectiveness. Evidence of how these influences shape individuals understanding of the prevailing institutional structural logics are provided in the following extracts:

You'll get your legs chopped from under you. (2AF4, line 175)

It's what is expected of you. (8AF5, line 156)

You wouldn't be able to do that. (17NF4, line 210)

Appointments within Permanent Joint Headquarters (PJHQ), MoD, and those on combat operations were considered to be the most influential appointments to be held by most of the women interviewed. Several women considered that their ability to secure such appointments in these higher order establishments conveyed to powerful others their suitability to be selected for advancement. They also reported that such appointments in these areas increased their visibility with those of higher status and this was an important career consideration by those aspiring to seek advancement. In comparison, appointments in other headquarters were in least demand, and were only reported as being relevant for career advancement if the role was operationally focussed rather than support orientated, such as those roles described as logistics or administration.

Table 4.1 indicates the reported preferences by individual women for service within the overall structure that is illustrated in Figure 4.1.1. The two annotations 'A' and 'B' shown on Figure 4.1.1 assist in categorising the responses shown in Table 4.1. Those structures shown at the top of the figure reflect a higher level of positional power and status than those lower down towards the bottom. Thus, it can be observed from Table 4.1 that the highest reported preference for service was above line 'A' with significantly less between lines 'A' and 'B' and relatively few below line 'B'.

Table 4.1. Service Preference

	Above line A	Below line A but above B	Below line B	Operational appointments
RN	23	8	4	18
Army	22	9	3	19
RAF	17	8	5	8

Structural position was portrayed by many of the women as an important indicator of an inherent belief that the career structure selection process was, by

appointing them to certain roles, conveying their future potential as implied in the following extracts:

Appointments indicate potential for later appointments...if you haven't completed a job in; let's say in PJHQ, then that can raise concerns over wider employability. I'm not too sure why, but that is what I believe anyway. (4AF4, line 237- 246).

You simply have to return to sea, if not then a spell in the MoD would do you no harm...otherwise you'll not feature on the career radar. (26FN4, line 420-423)

There are certainly appointments that indicate potential, PJHQ is one for the RAF as it can place you in a different operational context and adds an important string to your bow. (44FR5, line 366-374).

This sense of career potential featured largely in many of the respondents' replies and created a tension between the formal career structure and the desired career path that these women considered they were capable of attaining. However, in order to be considered for certain roles the requirements of the formal career structure were required to be met in order to provide the requisite institutional legitimacy to progress. The formal career structure is discussed next.

4.1.3 Formal career structure

The ability to advance in career terms for the majority of women beyond OF 5 was dependent upon two elements. The first was described as the "Golden Escalator", a method of Defence matching people to important high status roles in a suitably time sensitive manner. The second was a selective course titled the "Advanced Command and Staff Course" ("ACSC"). These were mutually inclusive determinants for advancement that many of the women believed were necessary to access those roles above the line 'A' in Figure 4.1.1. However, there was no evidence found in the MoD's career guidance documentation to support this position. Therefore, there appeared to be no direct limitation on any individual (man or woman), accessing these perceived high level appointments.

The reported findings did suggest that the career structure was an important institutional construct that dictated the pace of advancement for both male and female officers alike. Within this career tempo, the career progression system of all three services included what was cognitively described as the "Golden Escalator". This appeared to operate in parallel to the needs of the formal structure by identifying the preconditions for being appointed to important roles. Most women viewed the "Golden Escalator" as the real determinant of promotion as illustrated by the following quote:

If the system puts you on the escalator the trick is to stay on it as coming off has dire consequences for your career. (47RF5, line 168-169)

In comparison to the notion of an escalator the career based course titled "ACSC" was identified as a selective course by individuals. Nominations to attend "ACSC" were undertaken by service specific boards based on a service or capbadge quota system. These were important career boards as attendance on "ACSC" appeared to be an indicator of career potential and ultimate success. The selection boards that allocated places on the course comprised almost entirely of senior males in all three services. Most women considered that selection for "ACSC" was central to conveying the implied social capital, legitimacy, and human capital necessary for advancement. Attendance at "ACSC" also appeared to facilitate access via the "Golden Escalator" to high status roles such as MoD or PJHQ. From the respondents interviewed the number of females that reported attainment on "ACSC" as an important factor for increasing their perceived legitimacy is provided in Table 4.2 below. The disparity between the numbers that were selected and those who believed it was important are reflected in the following quotes:

Men in combat roles take priority at "ACSC"...despite what others say...we are lucky to get a place. (32AF4, line 180-185)

If you're in a support role and a woman...the odds for attending "ACSC" is stacked against you. (42NF5, line 223-227)

You need to get the right reports and recommendations prior to being considered by a scheduled filter board for "ACSC"...you don't apply as

such...the best reports are from those that are known to have previously done well in their careers post "ACSC". (24RF5, line 211-219)

Table 4.2. Relevance of "ACSC" to women's military career

	"ACSC" Important for higher grade appointments	Selected for "ACSC"	Perceived legitimacy of "ACSC"
RN	15	5	High
Army	15	5	High
RAF	18	8	High

Table 4.2 also indicates that the course "ACSC" also implied high levels of legitimacy by all of these women. Achievement on "ACSC" not only conveyed the individual's legitimacy for advancement to the highest ranks but also gave individuals access to positions within the higher layers of the structure that carried more power and status.

Thus achievement at "ACSC" demonstrated two key points. Firstly, an individual's legitimacy for advancement compared to others that were not selected was reportedly higher. This is illustrated in Table 4.2 and conveyed in following quote:

If you're deemed unsuitable for "ACSC"...then you're unsuitable for a raft of appointments... so you will be on an uphill struggle to get beyond OF5. (44FR6,line 288-290)

Secondly, the ability to be appointed to these higher appointments (above line A in Fig 4.1), defined through the process of the so called individuals belief of a "Golden Escalator", reinforced that such a career process was widely accepted and common place. The following quote links these two concepts together:

The priority for course attendance on "ACSC" and the allocation of the best appointments after "ACSC" go to those on the "Golden Escalator" if you are in the top 10%, which I was...although I didn't get any of the

really crunchy jobs...those went to the stabbers and stranglers...and you won't find any females there because they pre-qualify the roles as combat preferred [Combat or Infantry males]. (11AF4, line 205-209)

Whilst these structures had real consequences for these women the data showed that many of the women sought to enhance their legitimacy for advancement through alternative approaches. This was believed by some women to be necessary because of an inability to be selected for "ACSC" due to combat and infantry officers (male) taking preferential positions on "ACSC". These alternative approaches to legitimacy building were through the use of informal structures discussed next.

4.1.4 Informal structures

The notion of legitimacy that affects returns to social capital (Burt, 1998) was reported by most of the respondents as a combination of acceptance based on compliance with formal rules, codes of conduct and possible sanction. In several of the reports, the coincidence of hard structural legitimacy as described by "doing the right type of role" (11FA4, line 243) and cognitively perceived legitimacy "doing the appropriate thing in the role" (16FN5, line 393), gave rise to reports of higher levels of perceived social capital. This was particularly accentuated when women sought to secure appointments in previous male dominated roles that had associated with them connotations of working extended hours, or as often quoted, "going the extra mile" (41FR4, line 301). Several respondents also declared that higher status roles were important because they conveyed recognition that women were as equally effective as their male contemporaries in these important male dominated appointments. The following two quotes illustrate this point:

To be seen as capable as my male contemporaries. (36FA4, line 291) My first appointment after "ACSC" was in PJHQ... with Afghanistan just getting underway... I would ideally have liked a J3 (current operational planning) appointment but that was not on offer so I took the most equivalent as future plans (J5)... irrespective of the long, really long

hours... I knew that it would bode well for me if I did well... especially as I'll be the second female to secure this role. (29FN4, line 181-192)

Current policies such as that promulgated from the MOD (2010) review on women in combat roles excluded women from the majority of close combat roles. Most women particularly disliked this exclusion because they had not been involved with the report and they largely considered the report was a reinforcement of male dominant logic based on patriarchy. As a consequence, women believed that they were inhibited from accessing those appointments that were considered as providing higher levels of social capital.

In response to this structural constraint, some women sought appointments in outer office locations in support of powerful males, or as close as allowable to active operational situations in order to improve their overall social capital and legitimacy. However, a common concern reported by the women who sought appointments near powerful males or in operational roles related to a perceived risk in "over promoting oneself" and "misjudging the senior officer concerned". In such circumstances these respondents believed that such perceptions by their immediate superior or the superior's close associates of equal or higher status would lead to a loss of social capital.

Individuals who reported this viewpoint minimised the likelihood of this risk occurring by conducting extensive research on future superiors to determine the chances of a mismatch occurring. The following examples help demonstrate this point:

It's no good arriving...when the person you wanted to work with is going (14FA5, line 589)

I was offered the role I wanted... but not the boss...the two needs to be compatible if you want to get on (23FN5, line 541-542).

I've worked for him before...but he wouldn't be as good for me as others (37FR5, line 499-501).

Whilst role selection was an important interaction with structure for these women, the findings also identified that structure in the form of culture and

power, including outside influences, could also influence promotion outcomes. These aspects are discussed next beginning with culture as a form of structure.

4.1.5 Culture as structure

Cultural variances between the services were widely reported and reflected upon by most women during the findings. In comparing the reported culture between the services the women in the Army and the Navy reported a culture of largely shared similarities. These similarities manifested themselves in the notion of prominent leadership, enduring physical discomfort, experiencing hardship in remote austere operating environments with harsh outcomes in terms of self sacrifice. Overall, they reflected a very masculine environment around the central theme of operational experience. In comparison, women in the RAF were not so harsh in descriptive terms and portrayed a less assertive environment built generally on consensus with no particular male overtones as dominant features other than to support the flying airframes. Personal sacrifice and service in austere conditions were acknowledged as military factors by all respondents but these were not dominant responses in the data obtained from the RAF female cohort.

Culture as a form of structure was widely reported through the interpretation of policy, rules and norms but most women also demonstrated a high degree of reflexivity in the translation and subsequent responses to these norms and policies. The notion of reflexivity reportedly allowed these women to understand how the interpretation of these institutional requirements could be translated into the appropriate actions and responses to attain compliance. The following quotes help articulate these points:

I know there are rules...but it's how literally they are interpreted and applied. (12AF4, line 921-922)

Mission Command is a good example of being encouraged to think outside of the box...but actually you need to understand it is a box within a box. (27NF4, line 803-809)

Harassment can be an issue...the rules allow complaints to be investigated...although this does not consider career implications. (14AF4, line 721-726)

In more general terms, culture was commonly reported as the interpretation of symbology such as rank and authority that rewarded compliant activity with institutional norms. Behaviours that were non-compliant with the dominant culture met with coercion through the disciplinary processes. Compliant responses between most of these women and the institutions appeared deeply embedded as can be inferred from the following comments:

This is what we do and it's expected of you as an officer. (15AF5, line 631)

I wouldn't even contemplate doing it any other way...unless I had approval. (25NF5, line 673-635)

If you want to get on then you just have to dig deep...some say put up and shut up. (39RF4, line 720-722)

Culture was also reported as a multi-dimensional concept with women in the Navy and Army often delineating between their professional areas of expertise, comparison with others, and also an assessment of their contribution to the parent service. This was less obvious with the RAF and can be best portrayed from the following quotes:

I am a logistician by profession but I'm not a blanket stacker (stores related logistics)...no I'm a mechanical engineer and keep the tanks on the road. (5AF04, line 147-149)

I'm a doctor in the Navy, not a nurse. I deliver a prognosis that can save a patient's life... whilst nurses are vital to patient care they are not doctors... we get aboard all types of ships (29FN04, line 286-288)

We all contribute to keeping the airframe aloft...the Pilots are considered the elite and whilst we may jostle for positions of importance the reality is that we all need each other. (37RF05, line 382-386)

Table 4.3 summarises how cultural dominance was perceived by these women in their respective services. The terms used in the heading of Table 4.3 are now explained. A professional culture appeared bespoke to a particular fraternity such as medicine and law but these two specific professions were reported as being dominated by senior males. Combat as a cultural group was distinctively reportedly as male with expressions of courage and bravery linked to the concept of war fighting. This culture was reported as the most dominant of cultures across the respondents in the Navy and Army that were interviewed although this was less evident in the RAF responses. In comparison, noncombat roles appeared as a culture focused upon supporting others with the dominant attributes of pragmatism and intelligence. This group also appeared secondary to the combat culture but superior to the professional culture.

Table 4.3. Cultural variation by service

	Professional	Combat Role	Non-Combat
Navy	A		•
Army	A		•
RAF	A		0

Note. ▲ indicates the existence of an externally recognised culture separate to service culture; ■ indicates a superior prevalent culture; ○ • indicates a subordinate culture to the prevalent culture. Filled circle denotes strong existence of a subordinate culture, empty circle some existence of a subordinate culture

4.1.5.1 Culture as authority

The majority of the Navy and Army respondents considered that a superior's rank was a highly influential notion of strength and authority, "inevitably orders were orders to be obeyed without question" was one response. The ability therefore for individuals to "push back" to structurally endorsed power was not deemed to be possible by the women in these two services, indeed to do so was considered by a few as "a severe career limiting experience".

The RAF respondents did not indicate such a controlling inevitability. As an example; a few women in the RAF reported that officers quickly associated with their immediate senior officers as "Boss" whereas the Army was by rank such as "Brigadier" or when known reasonably well "Sir". In responding to these so

called "rules of the game" most women across all three services also reflected subtle differences in application. The Navy and Army referred to an autocratic translation centred on discipline and maintaining order. In comparison the RAF responded with a considered view as the following comment demonstrates:

The RAF is vastly different from the other two services. Don't get me wrong I have friends in both but we believe ourselves to be intellectually superior and use rules and procedures as guiding principles for the interpretation and use by knowledgeable individuals ... we've never quite understood why the others adopt such an autocratic style? (42RF5 line 490-496).

Culture as an interpretation of structure was also clearly identifiable within each service through a form of male dominant figure described as the so called "elites" which are discussed next.

4.1.5.2 Elite status

Reports across all three services identified that an elite group existed with regards to promotion that excluded women. These so called elites were characterised through high levels of promotion, connections to influential others, and were considered to be a source of future leaders of the specific service in which they currently served.

Table 4.3 illustrates that all three services reported a particularly strong notion of an elite culture that appeared to be closely aligned to the raison d'être of the organisation. The majority of the women reported that male elites existed in their specific service. For instance, the Navy favoured Warfare Officers such as Captain's of Type 45 destroyers. The Army favoured Combat Arms such as Infantry or Armoured Corps. Finally, the RAF reinforced pilots as the powerful elite. Overall, the understanding of the elite status appears to be deeply embedded within these females understanding of cultural norms as the following extracts elucidate:

Can you imagine the Chief of the Air Staff as a woman ... hell would have frozen over by then! (35RF4, line 765-770)

Women don't drive real warships. (16RF4, line 650)

Women are said to be good leaders...which in the eyes of the Army does not constitute good military commanders. (9AF4, line 595-598)

The notion of elite status extended beyond a gender preference into a concept of entitlement such as those who could or could not command ships, and field units where those in support roles in the Navy and Army, such as logisticians, felt particularly disadvantaged in promotion terms. Women who held similar support roles in the RAF did not have the same sense of disadvantage, partially because they perceived their role as almost as essential as the pilot themselves. The differential in power therefore between elite status and support roles, that the majority of these women occupied, was much smaller in comparative terms in the RAF when compared to the other services. The following statement helps illuminate this perspective:

In all honesty there's not that many appointments closed to women in the RAF. (45FR5, line 852-856)

Figure 4.1.2 uses a force field diagram to illustrate the differences across the services in the perceived strength of the relationship between elite status concepts and support roles. It demonstrates that for the Navy and Army the dominant culture is embedded within the elite status whilst for the RAF it is considered that neither elite nor support fields have a majority influence.

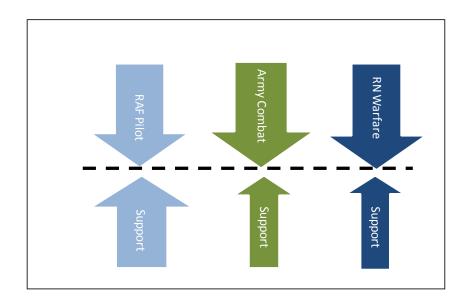


Figure 4.1.2. Strength of Elite dominance by Service

The major finding is that despite differences across the three services the notion of elite status transcended the cultural architecture of all services. Elite status was linked to power and positions within the individual service structural hierarchies. Findings in this respect are discussed next.

4.1.6 Positional Power

Structures were reported as inferring power and authority across all three services. Most women reported a clearly defined hierarchal structure that was dominated by senior males in the Navy and Army and sparsely populated with females above OF5 in the RAF. Whilst numbers of OF5 and above were low in the RAF, several of the women acknowledged that the percentages of women at these higher levels had improved over recent years. Conversely, the number of women in the Navy and Army at a grade above OF5 had declined to zero. Those in the Navy and Army commented that the sheer scale of males in elite categories severely disadvantaged their efforts to be accepted as an equal.

Whilst structurally the position to which these women were appointed was earlier described in this research as important for social capital building, the research also identified that certain elements of positional power inferred through their superior's status were also important considerations for advancement. In reviewing the data on the relationships between these women

and their superiors a number of common responses across all services were offered such as:

He's a great boss to work for... a brain the size of a planet... and I know that people consider that he's on the way to the top...let's hope I can get on his shirt tails. (5FA4, line 910-914)

My boss is a real task master...he either likes you or hates you...he takes no prisoners... he's well respected across the service ...so a good report from him actually means something to others. (24FN4, line 1020-1205)

My boss is a breath of fresh air...door always open...interested in what you have to say and supportive. (39FR5, line 898-906)

Table 4.4 provides a resume of the reported power relationships that were interpreted by these women between themselves and their current immediate superiors. In examining the transcripts it was possible to discern subtle differences in the types of power relationships perceived by the women interviewed as shown in Table 4.4 below and expanded upon in the following paragraph.

Table 4.4. Power relationships between superior and agent

	Coercive	Legitimate	Referent	Reward
Navy	High	High	High	Low
Army	High	High	High	Low
RAF	Low	Medium	High	High

The power descriptors in the heading of Table 4.4 are those defined by Raven (2008) in the literature review. Using information collated in the above table, women in the RAF anticipated higher reward expectancy than those women in the Navy and Army. Coercive power or the threat of sanction for non-compliance appeared higher in the Navy and Army than in the RAF. The levels of legitimate power based on the right of superiors to give orders were higher in the Navy and Army compared to the RAF. Finally, the majority of women

across all services reported a referent power relationship between themselves and powerful others who were namely those powerful males for whom they often worked under. The most common explanation offered for this reported power relationship was for the purpose of building individual legitimacy, which also embraced social capital building. The idea of legitimacy and social capital was perceived by these women as one of the most critical factors needed to achieve success because it allowed them access to important networks and relationships. The findings relating to legitimacy and social capital are discussed in greater detail next.

4.1.7 Legitimacy and Social Capital Building

The combination of structural position and the association with the role holders of elite status was widely reported as an adopted strategy of engagement by several women across all services to enhance their legitimacy and social capital. Using a network theory analogy this was achieved by securing roles close to so called "egos" appointments that are central nodes within a network that others wish to be connected to. Thus, the women in the research actively sought positions in close proximity to these "egos" for the purpose of developing legitimacy and social capital. The following quote provides an illustration:

I really wanted the operational planning appointment (believed to be a highly prestigious structural position) but a male colleague of mine got there first as he is destined for greater heights...so I put up with second best in the same headquarters...it's a strong appointment though and the boss is well respected throughout the forces...the next General...so I think it'll help me so I don't really mind that much. (41FR04, line 520-528)

Access to these powerful "egos" was considered by some women to be a priority for a number of reasons. Firstly, to gain access to and recognition of the implied status and referent power held by the "egos" themselves. Secondly, such appointments provided higher levels of connectivity arising from these positions to other important and influential networks that placed these women in so-called bridging roles. Such appointments allowed these individuals access

to important non-redundant information not available to others as the following quote illustrates:

The subtle nuances and important information that can keep you ahead of the game... not only in what was happening but also what was being thought about ahead of others... it was much easier to plan your next move based on this type of inside information. (20FA5, line 691-702)

Thirdly, several women reported that they could be seen in these roles not only as women in their own right but "fitting in as a competent and capable officer" (29FN4, line 600), whilst also standing out for the purpose of being "recognised...rather than ignored" (18FN4, line 676-678). Although to achieve the degree of fit between self and the prevailing male institutional logics of appropriateness to secure such roles necessitated, as one woman commented:

Making the right impression is a bit of give and take...sometimes it's Ok to be feminine...but most of the time it's not. (6FA4, line 480- 482)

There were differences between the services with the regard to the perceived level of fit between gender and role position. Notably, women in the Navy and Army reported a greater sense of difficulty in matching expectations of the male elite and securing associated roles. In comparison those in the RAF were not as pronounced. However, securing these positions close to powerful others or as an ideal, actual male role, was still an important declaration of intent made by these women as can be observed in the section that follows.

4.1.7.1 Securing Male Roles

The notion of securing an appointment previously dominated by a male was a recurring theme for most women and this was an unexpected observation. The relative importance attached by several women to securing appointments historically held by males can be described as a motivational career goal as can be inferred from the following quotation:

Getting a male dominated appointment...implies status, achievement and institutional acceptance...in short you've arrived. (22NF5, line 469- 484)

Individuals also reported that by securing these positions they could gain access to important information, higher implied levels of legitimacy and social capital as a function of the specific role chosen. The data also suggested that for some women the ability to follow a female predecessor made the process of acceptance in the role easier as the following quote implies:

I am really lucky to be getting this job because it's highly rated as being one of the jewels in a tri service environment (a competitive role between the three services)...the first woman to secure the role replaced the now OF 7 (3 ranks higher than respondent) in the Permanent Joint Operating Headquarters and must be close to promotion now...the current one, a female also will have done equally well I also expect...it's hard, demanding and full of testosterone...or so they tell me?. (32FR4, line 521-528)

Table 4.5 summarises the preferences for service across three categories, close to elites, close to combat roles and non-combat roles. It can be observed that for the Navy and Army the powerful elites and combat categories were reported as being highly desirable for the purpose of building legitimacy and social capital whilst non-combat roles less so. In comparison, the RAF also valued positions close to powerful elites but reported both combat and non-combat equally desirable alternatives.

Table 4.5. Appointment preferences

	Close to powerful elites	Combat Role	Non-Combat
Navy	High	High	Low
Army	High	High	Low
RAF	High	Medium	Medium

Whilst none of the women interviewed reported being a member of the so called "chosen few" or 'Elite' status group several women did report a strategy to secure a career pattern not too dissimilar to these male elites. Most women across all three services reported past roles such as operational appointments,

working for senior male officers of the elite group and working in a highly legitimised headquarters as typically desirable and or accomplished examples.

The observations from the data with respect to the OF5 respondents interviewed highlight a number of points. Firstly, almost all of the current OF5 officers had served at least once as junior officer with an influential superior. Secondly, more than three quarters of the OF 5 cohort had prior service in a senior headquarters above line B described in Figure 4.1.1 and half of these held appointments above line A in Figure 4.1.1. Thirdly, nearly all of these women had held outer office appointments next to powerful elites. Finally, the majority reported that they had purposefully sought these types of roles during their career as part of their own longitudinal career plan. The following extracts provide some illustrative examples:

I asked to be posted to that particular appointment because I used to be his Adjutant (outer office role)...so I was an easy fit for this current role (in outer office)...and I knew I'd get a good report...his earlier report on me got me on "ACSC". (7FA5, line 620-622)

I served with him on several occasions, once as his military assistant...I believe he asked for me to do this job? (16FN5 line 570-574)

I've served with him twice in junior roles...we get on really well. (33FR5, line 654-655)

Securing the reportedly important roles next to powerful superiors was a critical consideration by these women. However, to secure such important appointments several women reported developing a linkage with an "alter" titled within this thesis as the "gatekeeper". The term "gatekeeper" describes a network position that is tightly associated with powerful others in a network of connections and relationships that can leverage the necessary power to assign individuals to specific roles and is discussed next.

4.1.7.2 Gatekeeper

The gatekeeper was identified as a source of information for facilitating individual decision-making on career choices and held the power to assign

agents to roles that could align to an individual's career strategies. The relevance of the gatekeeper for some candidates is encapsulated in the following quotes:

What you need are appointments as close to the elite as can be perceived... you could leave this to chance...but the higher the appointment desired the greater the risk of crashing and burning if you judge it wrong...accessing the gatekeeper can help you get it right. (35F5, line 430-438)

I used to be an appointments desk officer (gatekeeper)... I knew the important networks the dislikes and likes...I did however use my prior knowledge of the gatekeeper role to ensure my desk officer could help me get the important roles I needed. (19FR5, line 560-569)

The gatekeeper had access to rich information in the form of non-redundant information obtained from powerful male networks. These particular networks were responsible for selecting individuals for promotion and future appointments across the three services. The gatekeeper could facilitate opportunity identification by matching individual aspirations with information they had access to. Due to the gatekeeper's unique bridging position, between the appointments and selection boards and the candidates themselves, they could assist in shaping future career outcomes by offering suggested candidates to these boards to fill high profile emerging requirements. Those that accessed gatekeepers reported having greater access and awareness of rich sources of career information compared to those that did not.

A minority of women reported that they did not engage with the gatekeeper but qualified their standpoint on the basis that they believed in a meritocracy based advancement process. For these women, the idea of an individual career strategy was a misnomer as they did not believe that there was a requirement for personal planning in their career appointments. These individuals recognised important roles and structures but portrayed an acceptance that the selection process was fair and they would be selected on their merits and past performance. This group of women left others to decide on their capability to be

promoted. In contrast women who had held gatekeeper roles suggested that a total belief in a meritocracy was not justified. For instance:

Merit alone ...and how well you did the job... will only get you so far...which is quite likely where the mass of others get to... rather than going to appointments where they can be defined as more capable than others...and that gets you noticed ahead of others. (26FN5, line 495 - 504)

Figure 4.1.3 illustrates three pathways (A, B and C) that give rise to differing levels of legitimacy. Route A was reported by the minority of females as the most desirable but least likely to succeed due to the dominance of males especially in the Navy and Army. Route B was the optimum desired expectation for those sensing the potential to move ahead beyond OF5. Route C tended towards those that held their belief in a meritocracy based system.

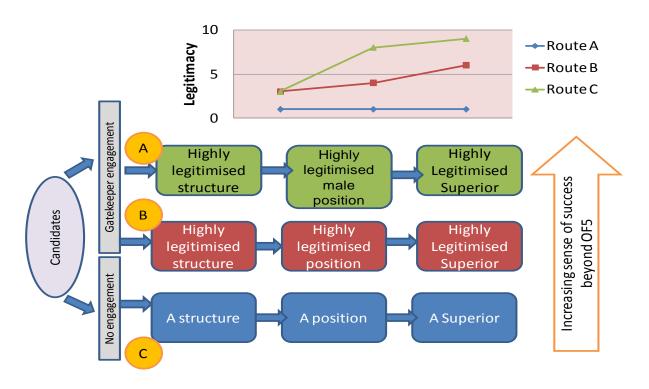


Figure 4.1.3. Legitimacy through career choices

4.1.8 Other Informal structures

Informal structures were also identified as venues for social exchange that could convey high levels of institutional legitimacy. Two examples referenced by the majority of respondents were the Officers' Mess and male centric sports clubs such as rugby. These were reported as being heavily legitimised within the relevant institutional context. These two specific components of structure, the Officers' mess and sports clubs are discussed below before drawing this section's summary of findings together.

The Officers' Mess was highly symbolic and a male orientated venue where women reported a fine line between being perceived as a "Lady...or a female officer" (33FN4 line 360) and which neither stereotypical description served any positive purpose for women's acceptance in the Forces. However, the importance of conforming to mess rules and protocols for example was referenced by most female candidates as an essential fact of being known and for gaining acceptance by the senior male majority.

Internally held beliefs about the suitability of a masculinised Officers' Mess appeared frequently in the data. The majority of women perceived the status of women in the Officers' Mess as unequal. The following quotes provide an illustration of this observation:

I often go to the Mess but not necessarily as an equal because that would contradict preconceived ideas about what women dressed in. (19AF4, line 565-570)

I've served in support of combat arms and at mess functions they still cringingly have all the male officers stand up at dinner evenings and 'toast the ladies'... I was going to stand up also as an officer but somehow... as a minority it felt so wrong and anti-establishment....I don't know why? (12AF4, line 600-621)

For some women the Officers' Mess was deeply defined through historical masculine stereotypical structures and cultures such as rules on etiquette that "separated the woman from the officer" 1AF5 line 625. In such situations

women reported a strategy of appeasement rather than rebellion when in disagreement. Whilst others sought change they did so through formal routes that avoided confrontation. To achieve influence in addressing inequalities several women secured roles on committees to persuade influential males to adopt alternative approaches on the basis of equality. This reportedly was most influential and avoided a direct rebuke to the institutional process in the open, which they believed would have resulted in a negative response overall.

In comparison to the Officers' Mess, membership of sports clubs was reported as advantageous by the majority of the women interviewed in the Army and Navy compared to the RAF. The emphasis on sports and their constituent governing boards was cited by several women as structures for the creation of the necessary legitimacy to be a viable candidate for promotion.

However, these male sports dominated boards were described as extremely difficult to penetrate especially those that, like combat, could be associated with male characteristics such as physical contact sports like rugby. In these types of sports women were generally omitted from membership both on and off the field. Commenting on their endeavours the following poignant extract is relevant to this observation:

When you talk about structure there is the formal and semi formal in my eyes...and one of these particular semi formal entities are sports bodies...indeed it is a well known piece of knowledge that if men played this particular sport then they'd be promoted...do you know what; I can't play the sport but I've managed to get on that sports board...if you asked me 5 years ago if I thought it necessary to get recognised to do so I'd of said no...But sadly it's true...they still ignore me but at least I'm there. (24FN4 line 755-785)

Several macro influences were also reported by the women as having an impact on the structure of the services in relation to advancement and gender equality. The main three identified in the data were government agenda, contractors on the battlefield and legislation. The findings in respect to these areas are discussed in the following paragraphs.

4.1.8.1 Macro influences on structures

The largest reported external influence referenced in the data was the impending reduction in Armed forces personnel as a consequence of the UK Government's agenda to reduce costs. With the Forces becoming smaller there was an increased perception that employment of females would receive wider attention with consequential positive effects. Whilst previous reports on earlier attempts at restructuring maintained the so called status quo on the employment of women, the majority of respondents believed that this situation could not be sustained. In terms of the perceived impact by individual service the women in the Navy and the Army reported only a small positive incremental change whilst the women in the RAF perceived acceleration towards a proportionality fairer representation across all rank structures.

The increasing use of contractors on the battlefield and within the home bases were also reported by women in the Army as influencing the size and shape of the UK Armed Forces by replacing uniform personnel with civilian support. Qualitatively women assessed that this would reduce the number of posts available for serving officers overall. The perception was that under the impending reforms women could be disadvantaged more than their male colleagues. The following quotes suggest that while large reductions were taking place the male elites in the services were more protected than lower ranks and female officers:

Redundancy is in full swing...but I haven't seen a reduction in senior male officers. (22FA5, line 850-855)

We've only 19 ships and 260 Captains, nearly all male, to command them. (28FN4, line 780)

Finally, legislation was also highlighted by many of the women as making an important contribution to how the services were required to change their attitude to women and equality. Family friendly policies and access to external agencies for redress of complaints was reported as making the structure more open to what "life is really like on the inside" (8FA4, line 475).

Several women noted that external structural influences impacted upon institutional norms. For instance the increased awareness of the civilian complaints procedure was seen as a new opportunity to seek fairer representation. This was not only with respect to gender but also employment through the use of external tribunals where several high profile cases such as the recent case of a nurse (*Williams v Ministry of Defence*, 2013) has recently found "in favour of the woman plaintiff over the establishment" (14FR5 line 715), as one woman phrased it. These external organisations whilst appearing accessible were not widely believed to be without consequences by the majority of women. Several women commented that there were definitive risks in pursuing such recourse as exemplified in the following statements.

It directly challenges the structural control that the institution has over you...and that can be terminal in career terms. (4FA4, line 777-778)

Complaining outside of the services runs contrary to the deeply held beliefs by others that the services believes it has a structural answer for most eventualities...but sadly this currently doesn't include women (29FN5, line 820-825)

4.1.9 Section Summary

Structure in the form of "ACSC" and the "Golden Escalator" can be seen as objective and not subjective in nature and reflected a male bias in the selection and appointment process. In response, women sought to secure roles close to powerful elites to benefit from the implied status and access to non-redundant information for the purpose of legitimacy building and decision-making.

Across the services structural logics in the form of culture, elite status and power of males appeared more dominant for women in the Navy and Army than those women in the RAF. Women overall created opportunities to alter accessibility to a range of highly legitimised appointments by seeking to replace males in these roles and also by securing positions within structures close to powerful elites. Other descriptions of structure that were considered important

were sports boards for those sports that aligned cognitively with dominant male themes such as rugby.

The "gatekeeper" was identified as an important source of career advantage because they straddled the divide between the individual and the appointment boards and thus could facilitate the placement of these women into roles of greater career relevance. Other macro contextual influences on the reported structure were the recent restructuring of the UK Armed Forces, increasing contractorisation of the battlefield and access to external agencies such as tribunals to seek redress for complaints. Regarding the latter, whilst widely accepted as progress by the majority of the women, it also met with caution as there were perceived negative consequences of using such an agency to raise complaints rather than the institutional systems in place.

As discussed in the literature chapter academics have been guilty in privileging structure over agency in their analysis. Therefore, to avoid similar accusations the next section examines agency independent of structure.

4.2 Agency

This section explores the findings reported on Agency independently of structure as defined in the methodology. The following proposition that was used to base the findings upon P2.1 is shown below:

P2.1. Individual agency enhances the ability of women entrepreneurs to enact change.

In examining this proposition, the following key findings were identified from the data analysed and are shown as F2.1 to F2.4:

- F2.1. Both the belief of self-efficacy and goal setting were found to be important for enabling an individual to realise advancement.
- F2.2. Women were highly reflective in their decision-making and this shaped their choice of individual goal enactment plans.

- F2.3. Women sought to accrue cognitive social capital through the use of sponsors, power positions and the use of socio-emotional responses.
- F2.4. Social capital could be eroded through the implications associated with caring for dependencies.

The data that supports these four findings is discussed in the following section starting with belief of self-efficacy.

4.2.1 Belief of Self-efficacy

The analysis of the findings demonstrated that for a significant number of the women the concept of self-belief was based on their inner beliefs. Thus, the majority of the women concerned across all three services clearly demonstrated in the findings that they were highly motivated and personally of the belief that they were capable of progressing to the highest ranks as the following quotes indicate:

I wouldn't have joined if I didn't think it would be a challenge...I've worked dammed hard to get this far and to be recognised...and achieve this rank on time (OF5)...I have at least one more rank in me. (45FA5, line 479-484)

I believe that I need to get promoted as part of my inner beliefs...that's what motivates me...deep down I enjoy that status that goes with it...doing a good job and reaping the rewards. (6FA4, line 150-157)

Self-efficacy was portrayed through such verbal constructs used in the discourse as "motivated to succeed", "focussed on achievement", "I can achieve", "I'm eminently capable" and "clever enough to cope", as characteristically common responses by individuals. The findings also demonstrate that for these women the notion of self-efficacy and the realisation of these beliefs comprised of two elements; firstly, a highly internalised assessment of their own capabilities and secondly; a strategy to externalise their belief to further their intentions.

The women across all three services declared also that they considered themselves different from the general female population outside of the military and this was used to reinforce their belief of self-efficacy as the following quotes illustrate:

I think I'm different in terms of my values...after all I did join the military whilst my friends went into law. (9FA4, line 280-283)

I wouldn't have adopted a career in the military...if I thought it wasn't the right thing for me. (18FN4, line 178-184)

I came in late to the services...it looked as though I could realise my potential far better than outside. (38FR5, line 109-112)

These findings reinforced several of the respondents' level of self-confidence to succeed not as a sign of sacrifice or naivety but one based on conviction that they could be the very best, even in male dominated environments. This also involved the importance of creating the right image to succeed in the eyes of their superiors as an important method of communicating or as described by most of the women "self-promotion...because no one else will do it for you" (2FA4, line 364-365).

Measures to establish or reaffirm self-efficacy were described as securing the resources of sponsors, using weak ties and network linkages as a route to endorsement and self-promotion. This also included the choreographing of resources such as a wide range of sponsors across a broad spectrum of service to support individual scenarios that were used to reinforce images of self in the eyes of important senior male elites. A similar example to the data found occurred post interview, when the recent interviewee passed her immediate superior whilst escorting the interviewer and the supervisor out of the building. This encounter, that eloquently illustrates how the belief of self-efficacy by an interviewee was conveyed to a superior post-interview, is reported as follows:

Hello sir, these are the two important people from Cranfield University that I told you about. They wanted to interview me in relation to the potential for women to succeed to the highest ranks, as part of a service sponsored PhD...and I have been helping with their important study on

interviewing successful females in the UK Armed Forces. (32FR5, line 480-492)

Whilst belief of self-efficacy appeared high in most of the respondents, their belief of goal actualisation varied across the group as a whole with a distinct negative expectation for women in the Navy and the Army compared to those women in the RAF. During the interviews the negative connotations were physically noticeable with commentary punctuated with exasperated sighs and facial expressions of disappointment. Whilst a full analysis of the root causes for these negativities cannot be ascertained from the reported findings, it was possible to aggregate the findings that relate self-belief to actualisation for each service in question. This is shown in Table 4.6 that illustrates a very low assessment of actualisation for those women in the Navy and Army compared to self-belief of attainment for those women in the RAF. In comparison women in the RAF expressed a much higher belief in actualisation overall.

Table 4.6. Self-belief and Goal actualisation

	Level of self-belief beyond OF5	Ability to actualise goals
Navy	High	Low
Army	High	Low
RAF	High	High

The findings also demonstrated that self-efficacy was translated into actualisation through a two-step approach, firstly, by the setting of individual goals or objectives based on an individual's understanding of possible outcomes, and secondly, by developing strategies to realise these goals. The findings in support of these two aspects are discussed next.

4.2.2 Goal setting

The focus of the findings in this sub-section centres on the relationship between the level of perceived and expressed self-belief and how this was translated or reflected in individual goals. Women reported varying levels of goal setting but it became clear that securing future high profile appointments was a common theme across most of the women in all three services as illustrated in the following examples:

You have to demonstrate not only the ability to lead but also the ability to influence strategically in your career...a MoD appointment gives you that. (8FA4, line 978-984)

There are certain appointments that carry more weight so I target them. (18FN5, 1012).

I needed a command tick then a high profile appointment in PJHQ. (33FR4, line 840)

Goals that were described by several of the interviewees could therefore be separated into a number of strands and the most commonly referenced goals are categorised and collated in Table 4.7 below:

Table 4.7. Goal categories

Goal Focus	Indicative strength of Goal	Belief in realisation of the goal	Remarks
Career attainment.	High	Low-Navy Low-Army Medium-RAF	The majority had high aspirations of promotion.
Recognition by powerful others.	High	Low-Navy Low-Army High-RAF	Army and Navy reported a greater desire for recognition by powerful others than those in the RAF.
Empowerment, trust.	Medium	Medium-navy Medium-Army High-RAF	A high desire to be trusted and not always in supporting roles.
Need to achieve.	High	N/A	Achievement in their career was important.

Goals, however, were not entirely fixed and were adapted according to an individual's assessment of potential success based upon the envisaged support possible from people of influence that could assist in there enactment. The findings with respect to goal realisation are discussed next.

4.2.3 Goal realisation

Developing upon the idea of goal setting, the identification of strategies to support the successful achievement of individually endorsed goals became apparent during the analysis of the data. These strategies for goal realisation were based partly on institutional requirements such as course attendance or career milestones but also on a range of self-reflected options for the fulfilment of their own goals that they valued highly.

Individual strategies to enact their goals were described as primarily aimed at securing institutional legitimacy. This appeared closely aligned to the findings in the section on structure with the majority of the females reporting to seek appointments in positions of centrality close to powerful others. These findings will not be repeated here but they are considered relevant to the discussion on agency in Chapter 5. However, legitimacy building was also an important facet of goal realisation because it enabled access to essential areas for support and non-redundant information.

The data presented in Table 4.7 demonstrates that women in the Navy and Army were less likely to believe in the actualisation of their goals than those women in the RAF. The following statements help indicate how this was deduced:

I'm ambitious to get promoted but I wouldn't go for such appointments...I've been there before...I have my eyes on some other similar appointments...those others are reserved for the really high flyers. (1FA4, line 298-312)

I wish they would consider opening up more appointments...I believe I have got what it takes...apart from looking like the master race [males]. (12FN4, line 375-382)

I'd certainly apply for any role at OF5 that I really wanted and thought was good for my promotion and had a chance of getting...I see no reason why not?.(43FR5, line 423-429)

When synthesising the data on goal realisation it was possible to identify that the majority of the women across all three services adopted a highly reflexive approach to assessing the possibilities of their service environment, endorsing or facilitating, the realisation of their individual objectives as indicated:

I tend to think about what I'd like to do next...and then sound out some important seniors...not by stipulating what I want but rather sensing what they think is achievable from their viewpoint. (6AF4, line 418- 423)

Quite frankly I wouldn't ask for what is not possible. (18FN5, line 532)

If there is an appointment that I think suits my skill set then I'd ask the desk officer outright...they can soon let you know about the likelihood of success. (45FR5, line 763-772)

The data also provides an insight on the highly interactive nature of goals realisation based on the assessment of numerous symbolic and informational inputs. This can be encapsulated in the following extract:

Sometimes you need to parallel process in situations where you are trying to develop an image... not only do you think about whom you are talking to but where they sit in the power structures...but also assessing what they think they are perceiving about you whilst you're talking. (21FN5, line 549-562)

In adopting a cognitively based planning criteria for goal realisation most of the women generated internalised multiple career scenarios based on their individual interpretation of the prevailing institutional logics of appropriateness. These logics were widely reported as constraining an individual's action and undermined their perceived ability to act. Therefore, a common approach by some women was to firstly reflect on their possible options then to subsequently

socialise their ideas across a range of resources to gauge acceptability, feedback and the level of risk involved in their enactment. The ability to access and leverage these resources to enable outcomes through the aggregation of both cognitive social capital and human capital is considered next.

4.2.4 Social capital

Several of the women believed that they could influence the outcomes of their efforts by firstly, choreographing the order in which they engaged resources and secondly, by using feedback from these resources to develop their goal realisation strategies. These resources comprised homogenous groupings of male colleagues and a range of senior sponsors for the purpose of translating their goals into realisable plans. In this way it is believed that they could achieve validation and verification of their plans by using sponsors for interpreting plans against institutional logics of appropriateness, providing feedback on the goals specified by these women and, where appropriate, supporting their exploitation.

Table 4.8 illustrates the range of resources used and how they were reportedly utilised. The term "sensing" was identified in the data as a form of feedback that was used to assess the plans of other colleagues for comparative purposes. The use of male superiors was also identified both for sensing and adaption where the term "adaption" refers to a modification of an individual's original goal intention. This was found to be a common finding across all three services as the following quotes suggest:

I run most career options past my boss but only in general terms...he laughs at some...so they get shelved straight away. (11FA, line 580-588) I know my boss favoured me doing an appointments job next...I hadn't thought of it before he mentioned it...I can see why though. (26FN4, line 950-958)

I listen to his advice a lot...he has guided me in the right direction thus far. (31FR4, line 1124-1126)

The use of powerful elites to enable goal realisation was also a consistent finding across the services. Most women conveyed that the emphasis on this connection with powerful elites was to utilise their own social capital to influence these powerful elites in supporting them in their goal realisation plans. This involved communicating their plans as aspirations and subsequently adjusting these plans when feedback was provided from the elites. The simple quote below illustrates this point:

I've known him for years (talking about a senior powerful male)...I often talk things through with him...he makes suggestions and I make alterations... and therefore I know what I am asking for is viable in the bigger picture. (35FR5, line 1170-1176)

Finally, other resources used by women as "support", to test the validity of their goal realisation plans were their partners and close family. Most of the partners and close family were either still serving or ex-military and reportedly could understand the institutional logics these women were experiencing. Comments such as those that follow were common place and appeared as an immediate resource of social capital for the purpose of reflection:

He's great for downloading issues into...having been in the military he gets it you see? (13FA4, line 1430-1437)

When I can't seem to move forward at work...he just nudges me in the right direction, he's senior to me but more to the point, he's objective, a male and sees it from the other side. (29FR5, line 1257-1262)

Table 4.8 Approaches to goal realisation strategies

	Male Contemporaries	Male superiors	Powerful elites	Partners
Navy	Sensing	Sensing/adapting	Influencing/ adapting	Supporting
Army	Sensing	Sensing/adapting	Influencing/ adapting	Supporting
RAF	Sensing	Sensing/adapting	Influencing/ adapting	Supporting

Social capital based on a belief of shared representations and understandings was evident throughout the findings. In synthesising the reported findings, there appeared to be an externalised series of repertoires that were important for some individuals to substantiate in their interactions with others. A synthesis of the data obtained is summarised in Table 4.9, which lists for comparison the key words that women used as positive indicators of social capital and those that conveyed negative inferences for the accrual of social capital.

Table 4.9. Key words that influence social capital

	Positives offered	Negatives suppressed
Women	 Leadership Reliable Cheerful Intelligent Capable Aspirational Agility in appointments Career focussed Determined 	 Family Constrained in appointments Home Emotional Fearful Gender Sensitive

Individuals also developed social capital in a number of ways. Intimacy was one example where women used gender to their advantage as the following quotes illustrate:

Well if you don't use some of your attributes some of the time...you may not appear as a woman...used carefully it can smooth things over. (13FA4, line 1124- 1126)

I have fluttered my eyes at times I must admit. (22FN4, line 1324)

Yes I have used my femininity to mange frictional moments...to diffuse certain situations when they initially question your competency (44FR5, line 1223-1227)

Several of the women reported continuing to develop social capital with powerful sponsors throughout their career. The ability to form relationships built on trust and reciprocity appeared as a tangible form of cognitive social capital for most of these women. Overall, women sought to build their social capital through their association with powerful others by performing to the highest standards. As a consequence of these associations there was an expectation by these women that they could potentially leverage these resources, in the form of social capital, to enable their goals at a future date.

An example of how one woman reinforced the use of this intimacy, trust and reciprocity relationship is provided below:

My boss is very high up... and he was having a chat with me last week about who was going to be the next OF6...as I know I'm a contender I said I would be heartbroken if it were not me.... I also showed him a job advert from the papers with a top London consultancy that had approached me... I'm not sure if I will leave...time will tell. (17FA5, line 1145-1157)

It can be observed that this candidate uses the word "heartbroken" to convey intimacy, having a "chat" implies trust but, at the same time, the officer contrasts the demand for her abilities elsewhere to capitalise on her self perceived social capital; in short, the individual concerned displays reciprocity if rewarded through promotion by implying that she will stay, if not, she'll leave for a company who already recognise her higher potential.

4.2.5 Sustaining social capital

Several of the women reported their ability to complete set tasks; perform as well as the men, achieve higher grades on annual reports and develop a range of important sponsors as key attributes to the generation and sustainment of social capital. However, social capital was also sensitive to the influences of daily interaction where the women suggested (in the data) that it could be lost faster than it was gained. The findings demonstrated that social capital could be influenced through social relationships where women in the Army were particularly vulnerable to having partners deemed to be from a lower status group as the following extract illustrates:

I married a junior Non Commissioned Officer...I took him to the Mess dinner night...never again it was humiliating for me and him...nothing was said directly but the disquiet just oozed across the gathering. (6FA4, line 1341-1345)

For women in all three services the maintenance of social capital required their work output, performance and behaviours to surpass those assessed and required as necessary by their male contemporaries. Other reports of managing social capital were related to how they responded to inappropriate behaviour including response to male chauvinistic or sexist comments that pervaded mainly the respondent responses from the Navy and the Army in comparison with the RAF.

When faced with such situations women believed they needed to choose how they responded or they could be at risk of losing social capital if they were perceived as an alien member of the team. Should the response to these situations be handled poorly in the eyes of male superiors then, as some women recollected, they ran a real risk of being ostracised from the group membership and having to spend considerable resources to regain acceptability. Common responses to inappropriate behaviour by male members was reported by a few women as "Give them as good as I got" (16FA5, line 1123), although this was not a prevalent response. The majority of women interviewed tended to absorb such approaches or used alternative forms of leverage such as socio-emotional techniques to diffuse gender assessments as will be discussed next.

4.2.5.1 Socio-emotional techniques.

Several of the women declared the use of socio-emotional techniques to seek favouritism or to persuade their male contemporaries or superiors on their acceptability in the organisation. The findings suggest that a large proportion of women used socio-emotional responses to suppress feelings for fear of retribution or to promote acceptability by replicating masculine responses.

Suppression was defined within the findings as a response to facilitate group acceptability and to minimise the divergence between the male dominant group

and the female officer. This was reported to prevent the possible reinforcement of male stereotypical views concerning so called "emotional women" (36FR5, line 1452). This type of response had a lower frequency of reporting in the findings for those in the RAF compared to the Navy and Army officers where the notion of masculinity was reportedly higher as an institutional logic of appropriateness. Such experiential reflections to support these assertions were evident when women first reported joining a ship's company or a combat active unit where the unit was a close combat type of unit. The following quotes illustrate this observation:

In this unit they'd be hard on you if you showed emotions...they make no delineation between genders...as long as you behave and respond like a man. (20FA5, line 1212-1220)

The culture on board in the initial weeks at sea can be very unforgiving...there is no room for baggage... everyone has a place and a role to play...you just have to live up to expectations. (19FA4, line 1325-1326)

Typically, the suppression of emotions such as tearfulness or irritation were widely reported as necessary if an individual's status and power was not to be undermined. Emotion of this kind was said to convey weakness, insecurity and was well known to many of the respondents to reinforce masculine beliefs about femininity. Hence women appeared to have developed internalised repertoires or responses to such situations that allowed them to navigate a range of confrontational eventualities and situations. As one woman acknowledged:

As a woman it's something you come to learn to respond to...in sometimes a cold and calculating way. (5FA4, line 983-990)

The suppression of certain emotions appeared necessary for gaining social acceptability. A variety of responses were evident ranging from the flirtatious and vulnerable through to the more focussed, objective orientated engagements. Examples described in the findings ranged from appearing apologetic for mistakes, conveying empathic responses when in times of tension or demonstrating warmth and compassion as a form of understanding.

Several women acknowledged that these socio-emotional responses were important for leveraging advantage and maintaining social capital overall.

The basis of these overall responses appeared to centre on either gaining greater accommodation with their superiors, making dialogue with important others easier, portraying feminine attributes to facilitate gender congruence and to secure professional relationships. Deeply embedded within these reasons for emotional engagement was to secure social acceptability based on a recognition of the prejudices and reactions that reportedly formed part of the organisations basic "frame of reference". However, no matter for what purpose these socio-emotional responses were utilised, it appeared very evident that a woman's credibility was still vulnerable to the negative external latent stereotypical views of women such as carer or mother as examples.

4.2.6 Human capital

In examining human capital in the form of educational attainment in the majority of cases a common response was identified. The simple notion of academic attainment from external agencies as human capital was not reported as relevant for promotion to the highest ranks. The data suggested that the academic component of human capital for each individual service was enshrined within a single course named the "ACSC". "ACSC" was perceived as the pre-requisite for generating sufficient social and institutional capital to create the legitimacy to hold future important appointments or positions of status. Whilst several of the candidates that did not attain entry to "ACSC" endeavoured to improve their social capital by attendance on alternate military sponsored master courses, it appeared that this did not give rise to the same levels of human capital. As a former gatekeeper who appointed individuals to specific roles commented:

The first hurdle is attendance at "ACSC"... if you don't make the cut then quite frankly you will always be in the also ran category of senior officers minds... you see the roles that count are prescriptive and one of the filters for selection is Staff College ("ACSC"). (32FN5, line 1175-1181)

Leadership style as human capital also pervaded the discussions where women chose to reflect a greater listening approach rather than a rhetorical male type approach of "barking instructions". Several of the women perceived such rhetoric was a hangover of male bombastic attitudes that were formed through intra-group communications to dominate others. However, the women in the Navy and Army widely acknowledged that heroic forms of leadership were highly valued by their services whilst those women in the RAF looked to intellectual leadership as a more institutionally acceptable form.

The origins of human capital were many and varied and Table 4.10 draws together the most salient observations for review in the following paragraphs.

Table 4.10. Source and value of human capital

Reported origins	Perceived influence on reported Human Capital			
	Navy	Army	RAF	Remarks
Heroic leadership	High	High	Low	Aggressive, assertive and robust were typical words to describe males in the category
Intellectual leadership	Low	Low	High	Women believed that they were more intellectual than their male contemporaries
"ACSC"	High	High	High	Major contributor to human capital
Other Qualifications	Low	Low	Medium	Only slightly more applicable in the professional areas such as doctors but not as powerful as "ACSC"
Family	Low	Low	Medium	Generally reported as a distinct negative on both social capital and human capital due to stereotypical preconceptions of paternity

Human capital appeared multifaceted and ranged from the institutional symbology of "ACSC" that surpassed in institutional terms any complementary academic alternative. In its most simplistic form, human capital as described in these findings was firstly an enabler; it opened up access to others and new opportunities but it also gave access to important others for which women

needed access to allow the accomplishment of their near-future goals. Thus, "ACSC" enabled access to higher status roles that were important for these women to enact their goals.

Two observations are made based upon the data that supports Table 4.10. Firstly, it was identified that professional academic qualifications did not reinforce human capital. Secondly, women considered that they lost human and social capital when they undertook caring responsibilities. In response to the latter, women either sacrificed the idea of having children or made alternative arrangements to appear compliant with institutional norms through the use of nannies and other means. Table 4.11 summarises these findings based on the spread of ages against life choices. The term life choices refers to: (a) those with children, (b) those with children that adopt alternative measures for caring whilst returning to work, and (c) an indication of individuals future intentions to raise children across most of the cohort interviewed.

Table 4.11. Age and Life choices

Age	No in range	Children <4	Intention to have children	Secondary care (nannies)
<32	2	1	0	1
>32-35	12	5	2	5
>35 -38	26	10	6	10
>38	8	1	0	1

4.2.7 Summary of section

Self-belief of efficacy was widely reported as an important individualistic element for career advancement by several of the women throughout the findings. The notion of self-belief was underpinned by a series of highly internalised goals that required the adept use of resources and sponsors to enable their enactment.

The enactment of goals appeared as a two-phased approach based on a highly reflexive approach. Firstly, individuals created plans for enactment by considering their own perspectives of the institutional environment. Secondly, these plans were communicated to powerful others to test their robustness and acceptability before acting out. An important enabler to access these powerful elites and subsequently to act out their goals was the attainment of the necessary social capital to do so.

Women acquired social capital through their close association with powerful male elites and through male sponsors that created opportunities for career advancement through the accrual of social capital. Access to these resources was facilitated by attendance on "ACSC" that also inferred the required legitimacy and human capital for advancement. Social capital was not a fixed entity and could be eroded in a number of ways especially with regards to caring responsibilities. Overall, women recognised the institutional implication for their career prospects should they have children or other external institutional commitments which had perceived negative inferences with respect to career succession. In response, some women chose to forego having children or they accommodated family and career by developing solutions that offered the minimum divergence from the prevailing institutional logics of appropriateness.

The creation of social capital through agency is said to be an important consideration for understanding the relevance of networks within institutions. Not only is social capital created through network relationships in the form of ties but also access to non redundant information to gain advantage that is discussed next.

4.3 Network Findings

4.3.1 Introduction

This section explores networks as seen from the perspective of the individual. It has an emphasis on how networks were deciphered for the purpose of

legitimacy building and social capital generation based on proposition 3.1 defined below that specifically sought to explore networks:

P. 3.1. Women use network ties to reduce path lengths and this facilitates their access to non-redundant information for the purpose of opportunity identification.

The key findings that were generated from the data are shown under F.3.1 through to F.3.4 as follows:

- F3.1. The network connections available to women were reported as less equitable for women compared to men.
- F3.2. Women used weak ties in networks to access non-redundant information. Using networks in this manner helped women to take advantage of opportunities for advancement by accessing non-redundant information.
- F3.3. Incongruent role positions positively influenced the level of social capital believed to be necessary for advancement.
- F3.4. Women could lose network connections and social capital if they had caring responsibilities.

The data that supports these key findings is discussed in the following sections starting with how networks were identified.

4.3.2 Identifying networks

Individuals held different perceptions of what constituted a network. In defining networks a number of variations in status and relevance were offered and which are presented in Table 4.12. This table orders the networks into groupings for further analysis and ease of reference. Women conveyed that the 1st order networks were the most powerful in terms of the levels of perceived legitimacy and expert power that these 1st order networks held. These networks established both internal and external legitimacy by publishing their findings in the internal environment and the external environment through publications such as the London Gazette and the MoD (2014) diversity dash board.

However, the process of selection and the evidence to ascertain how people were selected was not published in the internal or external domains. Overall these 1st order networks were highly influential in selecting people for promotion although from the cohort interviewed these 1st order networks were not accessible by these women who were isolated from them.

The 2nd order networks were perceived as subordinate to 1st order networks because women perceived them as advisors to 1st order boards and not deciders, although they were acknowledged as being influential in respect to providing advice to the 1st order board. Membership of these networks could not easily be identified by any of the women interviewed and where access had been achieved to named individuals of these networks; it was achieved indirectly through other male ties. These individuals were defined as 'sponsors' in this research. They were highly supportive of an individual's intentions to seek promotion and could access 2nd order networks directly

Finally, 3rd order networks that involved kin and general friendship were described by the women as a loose federation of individuals not directly linked to the 1st or 2nd order networks and carried less influence over an individual's career than the other networks.

Table 4.12. Reported Networks by relevance and access

Title	Description	Clearly identifiable	Relevance	Level of engagement
Promotion and Selection Board	1 st Order network	Identifiable, highly legitimised. Composition of board is with senior elite status groupings.	High.	Low. No direct access. Access only achievable through the 2nd order networks
Pre-filter boards	2 nd Order network	Women had knowledge of board and were aware of some members.	High; Considered highly influential with 1 st order networks.	Low. Limited direct access normally through sponsors.
Kinship and friendship	3 rd Order network	Clearly identifiable but sometimes transitional in nature.	Sometimes relevant for promotion.	Transitional.

Women, predominately in the Navy and Army, were particularly critical of what they perceived as a lack of equity in the selection process by the 1st and 2nd order networks beyond OF5. The percentage of RAF respondents that held similar views was far less than in the other two services. The following comments are illustrative of the perceived lack of objectivity in the selection process:

They are not supposed to know your gender...but it's hard to miss it when the report reflects your gender with phrases ...like pleasant and sensitive! (IFA5, line 421-434)

They are a chosen few that will always get through...irrespective of how good they are. (9FN19, line 719)

I wouldn't have a problem with the boards if we thought that they could see us as equals to males or at least hear about us as often as they hear about males. (21FA4, line 599-601)

Drawing on secondary data, this notion of bias appears to be substantiated in a recent employment tribunal (*Williams v Ministry of Defence*, 2013). The tribunal found that undue influence occurred between the 1st and 2nd order networks which disregarded policies on equality and made subjective judgements about a particular female nurse's suitability for promotion to OF5. The full exposition of the findings is not provided here because of word constraints.

Most respondents reported an interest in gaining access to these 1st and especially 2nd order networks. Their motivation to do so was because they considered that such access could give them the necessary legitimacy and social capital to secure appointments that they believed necessary for promotion. Several women reported that they considered themselves to be purposefully excluded from these networks compared to their male contemporaries. For instance, no data was found on women claiming to have engaged directly in the 1st order networks. Likewise, a considerable number of others did not report any access directly with 2nd order networks unless a sponsor was part of their network that could access powerful elites. This latter

group was largely reported but not entirely by the RAF respondents. The degree of connectivity between individuals is portrayed in the following quotes with the first two illustrating a lack of connectivity compared to the third:

You normally find out what is happening on promotion well after the choice or criteria for selection is decided... but it's always too late to help Army. (5FA5, line 506)

Getting the 'inside track' is damn difficult if you are not well connected...which is difficult with those that carry the weight at these boards. Navy.(15FN4, line 950-956)

I know of an OF6 female that has attended these boards...she is a good listener and gives you some good inside advice on where to look next for jobs [RAF]. (42FR5, line 834-844)

The inability by the women in the Navy and Army to access the 1st and 2nd order networks was reported by these women to be due to the absence of network connections with important network egos (those that held a central powerful position in a network). In comparison, women in the RAF had both female and male ego ties in 2nd order networks. Table 4.13 shows the aggregated data and the ability to access these ties by service.

Table 4.13. Reported Network Ties

	Ties to 1st order networks	Access to 2nd order networks	Access to 2nd order networks via sponsors
Navy	None	Few 2	2
Army	None	Few 3	2
RAF	None	Several 8	6

4.3.3 Weak Ties

Most literature on same sex ties, predicted that maintaining these ties would weaken opposite sex ties. Contrary findings were made in this study. With some minor exceptions, the majority of the women had extensive, weak tie male friendships rather than female connections. Whilst these women were eager to maintain female friendships they did not want to further dilute their weak ties

with other females because they believed that this could have potential adverse consequences for their careers. The following comments help elucidate this point:

I know of other females from my early days...we catch up when our paths cross...but I certainly have males as my closest network connections...I don't want to appear too clique. (2AF4, line 435-438)

Yes I know lots of other women in passing...but I get more information from the men such as my immediate colleagues...and I know and trust what they have to say on career opportunities. (31FN4, line 632-667)

I occasionally chat to the female civil servant...but for those women in the RAF that I know it's only a fleeting hello...men gossip more than women anyway. (45FR5, line 721-724)

Ties with males were reported by most females as appearing strongest within their immediate cohort and these tie relationships were considered as important sources of information. Information was carried on a so called "Grape vine" that conveyed information regarding relationships and prospects of their contemporaries and the wider organisation. This quote encapsulates this observation:

Sometimes it's difficult to find out what is happening if you don't get the inside track... you pick up so much information from male colleagues on which you can base your own future choices upon... it's a sort of information network where you hear what others are up to. (42FA4, line 835-845)

The creation of weak ties with the powerful elites were also considered important by most of the women for accessing resources that may be used to advance their own plans for promotion. Access to these elites was achieved through a range of engagement strategies, such as, the use of shared heterogeneous connections or through previous work experience with senior male elites. These connections were reported as providing access to the important information necessary for assisting in career decision-making that would be otherwise unavailable. Women reported:

He was my boss and head of branch [2nd order network ego]...he knows a lot of influential people and I use him a lot to sound out his opinion on future roles...I'm pretty sure he would discuss this with others. (43FR5, line 878-886)

My husband is an 'Elite' OF7...I know all of his friends...and they know me. (19FR5, line 726-734)

Had I not been in regular contact with OF6...I would have missed the opportunity to put my name forward. (36FR5, line 896-898)

Other sources of network connections were reported but one in particular that was discussed in section 4.1.7.2 was the so called "gatekeeper". The term "gatekeeper" is used here to replace three descriptions of the same role in the findings such as drafting officer, assignments officer and desk officer. The gatekeeper was an important weak tie relationship for several of these women across all three services. The specific gatekeeper was different for each service, but across all three services the gatekeeper was reported as having direct access to 1st and 2nd order networks. Thus, creating a network tie with the gatekeeper reportedly gave some women access to non-redundant information or forthcoming opportunities not yet widely known about across the services community. The subtly of this tie relationship is that it could be established from whatever position the women held. The following quote helps illustrate how the gatekeeper relationship could be utilised to gain potential advantage over others not so connected:

I heard about an appointment before others using the gatekeeper...you don't normally do so through normal means...I've done that type of job before so I know its value for understanding what the 'big wigs' [elites in 2nd order and 1st order networks] are thinking...I was quick to put my name forward for an important role and managed to secure it thanks to their (gatekeeper's) involvement. (29FN4, line 890-899)

You're at a distinct disadvantage if you can't connect with the gatekeeper...I've done that job before and its give and take so the relationship is certainly not always one-way...if you keep on taking they'll

end up not giving and really put you in a place that could cramp your style. (41FR5, line 1023-1026)

I've never been one to approach the gatekeeper like some others...I can now understand why... as those that do... appear to get on. (17FA4, line 609-611)

The establishment of weak ties relationships was also dependent upon the level of social capital in the form of trust that could be established between these women and their network connections. In the example above, regarding the relationship with the network gatekeeper and those women that had previous experience of this role, several commented that both trust and reciprocity were important factors in the relationship (as indicated by "give and take" in the second quote above). However, for the majority of the women in the research it was their current hierarchical position that appeared as important for generating important ties with others.

4.3.4 Network Congruence

Network congruence was a prominent aspect of the discussion by several of the women respondents to question 3 of the questionnaire at Appendix C that sought to identify important influences on an individual's career. Table 4.14 illustrates the number of women that reported their current roles as either congruent or incongruent to their service context. This shows that the majority of women resided within stereotypical congruent defined roles where women considered role congruence as an alignment with female stereotypical roles and incongruent roles with highly masculine roles such as combat. The recent publication of the "The Defence People and Training Strategy 2014" reinforces this structure by commenting:

Women are already the majority in training within medical schools. (p. 3, footnote 21)

Table 4.14. Distribution of roles by congruency

	Highly Incongruent	Incongruent	Congruent	Remarks
Navy	0	2	12	Support roles = congruence
Army	2	3	10	Support roles = congruence
RAF	0	6	8	Command is incongruent for RAF females.

Overall, the women reported that they sought roles that were typically male in nature such as command appointments or operational appointments. These positions placed individuals in close proximity with combat roles such as the "Operational Planner". A very few women also undertook roles that were considered extreme for women to hold, such as special forces, but these were only evident in a very small element of the Army respondents. One female commenting:

I do the job that I am in because it plays to my personal strengths... but quite frankly the very mention of what I do even makes men step back a little... I'm fortunate because my branch recognises the role that I have played in supporting the services... and of course it hasn't harmed their or my image either. (15FA4, line 489-497)

Figure 4.3.1 provides a graphical representation of the estimated reported social capital obtained through structural position based on the congruence or incongruence of the role held by these women. Those women that appeared highly incongruent (Special Forces) accrued the most network social capital whilst those appearing role congruent, such as administrative staff, reflected the lowest level of social capital. It can also be observed that those women that sought positions formerly filled by males, defined as male typical in Figure 4.3.1, such as a Command appointment, also benefited from their relative role incongruence.

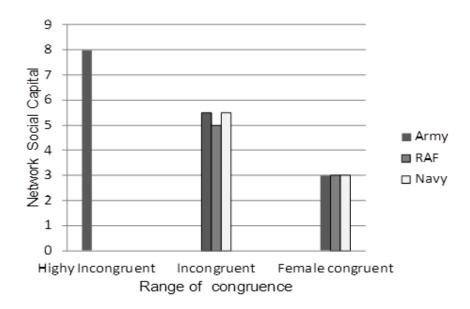


Figure 4.3.1. Role congruence versus network social capital

Role incongruence was cited by most women as providing the necessary 'jump start' (42 FR4, line826) to network access with powerful elites. Such an example can be captured in the following quote:

I never thought I could secure an appointment (a male typical role) within MoD...this one was out of the blue and I heard about it through my desk officer (gatekeeper)... whom I know well ...he put me forward and won the day...I'm the first woman to achieve this role. (24FN4, line 729-736)

Whilst the findings in the research could be used to illustrate how role incongruence amplified perceived network social capital it could also demonstrate how such social capital was lost.

4.3.5 Loss of network social capital

Not all the respondents reported success in accumulating and maintaining the social capital perceived to be necessary for the fulfilment of their personal goals. Women that reported having caring responsibilities outside of the service context that appeared as incompatible with the service environment portrayed a distinct disruption to their accumulated network social capital. At times this was reported to lead to a form of social exclusion from those earlier networks that

they relied upon for social capital building. The following two quotes help illustrate such responses:

Since having a baby the branch sponsor has shut me out.... when I told him I was pregnant he just shouted that I had messed his plans completely up! (33FN4, line 891-894)

I know my boss thought he was being sympathetic but to write me up as a mum in my annual report really fired my rockets... It took an age to get him to understand that such comments were not of any use to me... we don't say men have children do we? (40FR5, line 698-707)

Unless these women responded with so called "solutions" to this network incongruence, thus reinstating a homophilious disposition towards the network, they quickly lost status and membership. The most often referenced entity where this abrupt interface appeared was between the individual and the appointments gatekeeper that appeared to hold the bridging role between deeply embedded networks linked to promotion and institutional beliefs.

These apparent consequences of such responsibilities as caring for other family members can be illustrated in a revised representation of network social capital is shown in Figure 4.3.2. This figure illustrates that for those women that occupied 'male typical' roles they reported a greater loss of social capital in relation to the other two categories. This was particularly prominent for the women in the Navy and Army compared to the RAF.

In comparison, the loss of network social capital for women who held highly incongruent roles and for those that held congruent female roles was less pronounced in comparison.

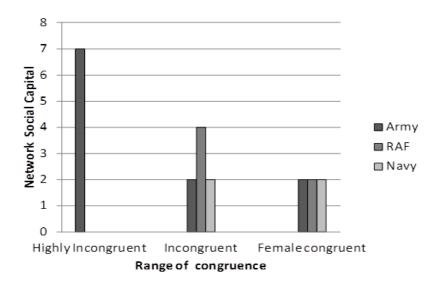


Figure 4.3.2. Impact of caring on Network social capital

Women also reported that the institutional appointments system accentuated the impact of family dependencies by assigning the individuals concerned to home based locations and into female stereotypical roles overall. Whilst, most women considered that there was a need for "some relief from active duty" at the appropriate time, the current approach only served to differentiate women from men, excluded them from maintaining a voice and resulted in negative longitudinal effects on their career through the lack of role continuity.

Women who experienced such occurrences also reported that prior established network ties with heterogeneous groupings were lost and an increase in homogenous connections replaced them. Thus, the consequence of the institution responding to the immediate needs of these women for some short-term stability was reported as having long-term consequences for their careers.

4.3.6 Summary

The 1st order and 2nd order boards that selected individuals for promotion were not considered by those women interviewed to be as equitable for women as they were for men. This was especially so for women in the Navy and Army but less so for women in the RAF. This inequality appeared to be reinforced by the lack of access to board members by these women that could otherwise provide them with the necessary legitimacy and social capital to become more visible.

Overall, almost all of the women had weak ties with males contrary to the findings in the literature. Ties to a role position termed the 'gatekeeper' that was mostly reported as male across all three services, gave several women access to non-redundant information regarding future appointment opportunities. This information was reported by those connected women with the "gatekeeper" as unavailable to those with no connection to this role position.

Women also experienced different levels of social capital in relation to how stereotypical or not a role or appointment was seen to be perceived by males. The greater the role appeared as incongruent for a female to hold, such as Special Forces, the higher the level of reported social capital from the women who held these roles compared to other women. Those women that were appointed to highly congruent roles such as administrative roles had lower reported social capital.

Women that declared that they had caring responsibilities external to the service environment experienced a severe degradation in their levels of network social capital. This was particularly evident in those roles that were neither highly incongruent nor congruent. The institutional response to appoint women with caring responsibilities to highly congruent female roles was reported by many women as reinforcing the differentiation between men and women.

An important consideration before discussing and analysing the reported findings in chapter 5 that follows is to obtain an appreciation of the contextual setting that these women were experiencing. As context can shape meaning and understanding not only for the respondents, but also the researcher, the relevant findings on context are reported next.

4.4 Context

This section reports the findings relating to context as told by the respondents concerned. The range of phenomena covered under the heading of context is so vast as to be beyond the scope of this study. Context refers to physical objects, various technologies, social activities as well as numerous other symbols and artefacts of status which have an effect on an organisation.

Context relates to phenomena both within and outside of an organisation. For the purposes of this study the definition of context is limited to phenomena whose origins are external to the MoD. These externally occurring phenomena have direct and indirect causal relationships with phenomena occurring within an organisation. However, in the interests of enhancing conceptual and definitional clarity, the term context henceforth is limited exclusively to the study of external factors. The proposition developed in Chapter 2 that was used to explore this perspective is repeated below:

P4.1. Context can influence the likelihood of women to realise their goals for advancement.

The key findings are detailed in F4.1 through to F4.2 below:

F4.1 Enforced structural change does not change the prevailing internal institutional logics.

F4.2 The NPM reform agenda is not gender neutral in terms of its likely longterm effects.

4.4.1 Institutional context

At the time of this research the macro contextual setting for the UK Armed Forces was one of major restructuring, with over 30,000 redundancies that were driven by macro government policies to reduce costs in times of economic austerity. Almost all of the women reported that there would be little change to their daily routine as a consequence of these reductions based on their beliefs that the current structural associations, policies and the normative rules and concepts underpinning the operation of the institution, remained secure. As several candidates noted:

I've been around long enough to remember Strategic Defence and Security Review 1! (a review that imposed similar size reductions in 1997)...we got smaller but nothing really changed. (17FA5, line 220-228)

I'm not sure if it will make that much difference as to how I perceive the Armed Forces... yes we'll be smaller...and this gets confused with agility. (31FN4, line 140-147)

Redundancies didn't really strip out many Air Marshalls, Generals or Admirals and to the best of my knowledge... the main headquarters remain intact... so I can't really tell you if I perceive that much has changed. (44FR6, line 172-184)

Whilst restructuring was widely reported as business as usual there were a few women who considered the context of restructuring as a possible opportunity for accelerated advancement compared to the majority that perceived that it was a constraint or threat to women. These context based opportunities are discussed briefly next:

4.4.1.1 Restructuring as an opportunity

Several women reported that restructuring would provide additional opportunities to accelerate their career advancement prospects. These opportunities could be divided into two main perspectives. Firstly, the reductions would make women more prominent and therefore directly visible to the male elites. The ability of the services to continually prevent women from active combat roles would be increasingly more difficult to sustain because of fewer numbers of personnel and greater commitments to operations. These perceptions of creating opportunities are captured in the following quotes:

Reductions will force the molecules tighter together... and rather standing behind three ranks of men we may be in the front rank. (14FA4, line 107-109)

If the pressure for output increases... which it will, then there's less space for others to hide... women will become visible just by contributing the same and not being obscured by men. (35FN4, line142-148)

Secondly, as a result of structural change and staff reductions, several of the women perceived that future appointments that they would be asked to fill would have a higher profile than those currently held. This would also increase

the exposure of women to more senior males and higher status appointments. Some commentary that reflects this understanding is as follows:

You'll have direct access to seniors instead of a convoluted journey. (20FA5, line 125)

Everyone will be in high demand...there'll be no room for stowaways so women will be noticed. (28FN5, line 109-114)

Senior officers will be able to see you contribution rather than have it filtered through layers of males. (37FR5, line 227)

The women also looked to a change in policy that would allow females access to combat roles. Whilst the women interviewed were hopeful that they could be allowed to access combat roles they were also sceptical that such policies would indeed lead to change in how women were viewed by men within the hierarchy of the services in the short to medium term. One woman described the situation as "a really big missed opportunity for defence" (36FR4, line 201). However, not all women perceived that change would produce such benefits and suggested that such restructuring was a potential threat to their promotion chances. This issue of perceived threat is described next.

4.4.1.2 Restructuring as a threat

The majority of women acknowledged that organisational restructuring had the potential to address present gender disadvantages. However, this view was also muted with a belief that the most likely outcome was to maintain the status quo, which necessitated women continuing to generate male based evidence as the evaluation criteria for promotion. This, they believed, would continue to disadvantage assessments made in their reports. Poor reports combined with increased competition for fewer positions would mean that men would continue to receive a comparative advantage over women for senior roles. As one candidate suggested:

My worry about restructuring is that promotion for all will become really, really competitive... which is fine... but what will happen is that the bar for

promotion will be raised for all... but the men will still be getting a leg up by their chums. (9FA5 lines, 270-277)

Individual service cultures were also reported as intractable issues where changes in the external contexts were unlikely to alter these cultures quickly. Women often referenced the concept of historical origins for those in the Navy and Army with a more optimistic response from those in the RAF in this respect. Two simple quotes help illustrate this point on culture:

I can see change going on...we're changing shape...but actually very little has changed at this level. (6FA4, line 398)

The titles are changing...but in reality...when it comes to gender...women are still 'camp followers' in the minds of our superiors. (3FA4, line 290-296)

Restructuring of the services was widely described by the women as being both an internal process and an externally motivated process. To substantiate their viewpoint many of the women identified that they strongly believed that there was also a deliberate, less visible, MoD strategy to outsource elements other than combat to industry. This agenda of outsourcing and reform comes under the title of New Public Management (NPM) which is briefly discussed next.

4.4.1.3 New Public Management and change

Women in all three service commented on the persistence of the government to introduce privatised services in support of the military. Those in the Army cited heavy transport drivers and depot support functions being privatised. Those in the Navy referenced the outsourcing of naval bases to major private businesses and those in the RAF made reference to the contractorisation of helicopter and fast jet support as examples. The following quote illustrates one women's view on the future of contractors within defence and on operations where the latter were described as "Contractors Deployed on Operations" (CONDO):

The main support to the helicopters is now fully contractorised...they are also out in Afghanistan... I can see these contractors routinely backfilling us after the 3rd rotation [12-18 months]. (18FR5 line 575-579)

Most of the women interviewed acknowledged the basis of such support as a cost saving exercise but they also raised some concerns that the encroachment of CONDO may lead to degradation in support to the front line. This concern surrounded the implication of CONDO encroaching upon the military support domains where the majority of women were to be found. Without such appointments to gain the perceived requisite social capital and legitimacy for advancement, women considered that they would be disadvantaged compared to their male contemporaries in combat roles.

CONDO was widely accepted as part of the government agenda but there was a particular reliance that the military would still be required in these areas, especially where there was a high threat from the enemy and high operational tempo. In this respect, the women in the Navy appeared the most confident that the role of the military aboard ship would remain military. The Army and RAF were reasonably content that combat operations would remain military although, they acknowledged that eventually the more benign operational areas would be heavily contractorised at some point.

Overall, there was some rejection of the idea that the operational domain would be diluted with contractors anymore than it currently has been. However, what became apparent during these conversations was the importance that women placed on the securing roles within the operational domain defined herein as service "in situ" context compared to the opposite "out of situ" context. These two elements are reviewed next.

4.4.2 Service "in situ"

The term "in situ" is described as that service experience that is closely and implicitly aligned to the raison d'être of the service institution where individuals are current members. For example, the Navy perceived "in situ' context" service as experience at sea; the Army reported service in combat; whilst the RAF perceived service in support of flying.

Both the Navy and Army also emphasised active service such as combat by using descriptive terms such as "the real stuff... what we are trained to do...

close with the enemy...fight with the ship". In comparison, the RAF had a broader perspective and whilst pilots and navigators were described as an elite category there appeared many other roles that supported flying that also conveyed 'in situ' context service defined as support roles. Support roles in the RAF therefore appeared to convey a greater level of legitimacy in comparison to support roles in the Navy and Army. For example, engineers, logisticians and air traffic controllers in the RAF were reported as equals based on their contribution to the role rather than the geographical context in which they served.

Figure 4.4.1 provides an illustration of the reported assessment of service legitimacy that accrued to individuals when they experienced service defined as "in situ" context. Roles in close proximity to combat were widely believed to be advantageous to an individual's career advancement and were classified as an example of "in situ". Whilst the enhancement of "in situ" legitimacy was reported by these women as also applicable to their male contemporaries, there was a strong belief by these women that such service by women accentuated a positive difference between those women that held or experienced "in situ" roles and those that did not. Therefore, Figure 4.4.1 illustrates that service "in situ" leads to an overall positive perception of legitimacy across all three services.

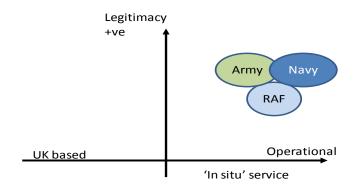


Figure 4.4.1. "In Situ" context and resulting legitimacy

4.4.3 Service "out of situ"

In comparison to "in situ" service, the corollary "out of situ" service was expressed by several of the women as an attenuator of legitimacy and this

appeared especially so for women in the Navy and Army compared to those in the RAF. There was strong recognition within the Navy and Army cohorts of respondents that home based appointments for women were not perceived as an essential element of macro institutional need, but rather one where, "men would expect us to be... at home" (19FN4, line 520-521).

Several of the women who had served on active duty returned to a home-based location and to roles which appeared to reinforce stereotypical views on women. As a consequence, home based roles almost completely negated any advantage perceived as originating from the prior operational roles. Whilst some women did require more stable appointments in certain circumstances (e.g., caring for children) they strongly rebuked males in power for translating such requirements as a sign of lower commitment to their employment or as a limitation to their wider employability that was often suggested to be the case.

Service "out of situ" was also widely reported as appearing in annual career reports with many women commenting that such inclusion acted as a "severe career limiter" (23FN5, line 579). This was further reinforced by so called "well meaning but inept bosses…but I'm never too sure if they are codifying their deeper beliefs about women in the services" (1FA4, line 480-485). A few examples of this codification of possible deeper meaning are shown below:

I know I have elderly relatives but what has that got to do with my performance as an officer.... Why would you put that in a report?. (40FR5, line 588)

I don't think highlighting that juggling a family and a busy job in my annual report did me any favours. (38FR5 line, 628 - 629)

I know I'm getting married next year...but no one who will read the report is invited! (17FA4 line, 861 - 867)

The reported impact of the relationship with the dominant institutional logics of the service and the environment of actual service thus attenuated the level of the legitimacy perceived by women in the Navy and Army compared to those in the RAF. Figure 4.4.2 below, illustrates how service "out of situ" was reported as attenuating legitimacy. It indicates that women in the Navy and Army appear to suffer disproportionally in roles which are either described as home or shore based, but this was less so for the women in the RAF who retained a net positive level of legitimacy as reported in the findings. There was insufficient evidence to suggest the timing of this degradation. However, women did report that an annual report on their performance, which was reviewed by a promotion board in the same year of their "in situ" experience, would help maximise their chances of promotion.

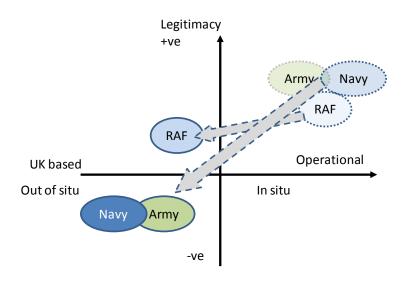


Figure 4.4.2. "Out of Situ" service and resulting legitimacy

4.4.4 Gender as context

In the examination of the findings it also became evident that the majority of the responses were framed within a gender context. This could be identified through the descriptions of a masculine dominated hierarchy and the discourse used in many of their responses by referring to male colleagues, male superiors and the reference to how emotions were suppressed at times of tension. Other indications demonstrated an underlying note of aggression as reported through such statements as, "fastest runner... best shot...better than...sissy or wimp". As previously described, social emotional techniques to disarm aggressive verbal confrontations (4.2.5.1), were used to gain social acceptance by females. This approach, combined with the use of a range of masculinised vocabulary

was considered to communicate a more masculine image in order to enhance an individual's social capital.

A reported form of gender segregation was also evident in the findings, not only due to the exclusion of women from certain roles in which they could acquire higher levels of legitimacy. Variations of segregation were also evident in several women's recollections of how they were spoken to, as examples: "patronised on occasions" and generally "helped with physical tasks". In recollecting their experiences some women also prefaced their comments with terms such as brutal, courageous and heroic. Similar references were also made as a matter of routine to their line managers (mainly all male) as superior with titles such as Commander, General, and Captain; all of which implied masculine origins that appeared to be reinforced in dialogue.

Few women denied that when it came to an assessment of individual strength and the concept of brutal force the male contemporary sometimes had the physical advantage. The majority of women, however, reported that due to the changing nature of the UK Armed Forces other facets of a woman's ability were often overlooked such as their intelligence. Several women considered themselves intellectually superior to males in the areas of problem solving and persuasion but this appeared not to be factor measured or considered in the promotion process.

As an illustration, almost all of the women who attended the "ACSC" course reported completing the course within the top 10%, a course that assessed intellectual capacity and the ability of an individual to think strategically. Logic would assume that these women should report a comparative range of appointments in those roles that attracted such potential such as PJHQ or MoD, but this was not the case. Overall women reported that they often faced hidden barriers such as male categorising of roles as "Combat preferred" that were widely reported as "Males only" by women in the research study.

4.4.5 Summary

Context was reported in a number of different ways ranging from the macro to the meso level of the institution. At the macro level the UK Armed Forces were experiencing a substantial restructuring that was consequently perceived at the individual level to offer both opportunities and threats for individuals and women across the services.

The specific service environment in which individual respondents resided also brought the implied meaning of context for these individuals into focus. Thus women in the Navy and Army compared to the RAF reported higher levels of institutional legitimacy arising from "in situ" context service such as operations than compared to "out of situ" service' such as home-based appointments. This further reinforced a perception that the UK Armed Forces was indeed a gendered institution, but not uniformly, with women in the Navy and Army experiencing greater contextual disadvantage compared to their contemporaries in the RAF.

The expansion of NPM as an external contextual influence also raised concerns for these women over the implications for future promotion. Their concerns centred on the replacement of military roles that were predominantly held by females close to operational context that attracted high levels of legitimacy believed to be relevant for advancement. A collective analysis and discussion of this chapter's findings is now provided in Chapter 5 that follows.

CHAPTER 5 ANALYSIS AND DISCUSSION

5.1 Introduction

The purpose of this chapter is to analyse, refine and discuss the implications of the findings in Chapter 4. As a result of the analysis and discussion in this chapter, Figure 2.8.1 was modified to provide a deeper understanding of how the variables (structure, agency, networks and context) were spatially and cognitively related to the level of the individual. As suggested by the findings and explained in greater depth in this chapter, the model (Figure 2.8.1) was based on a macro view of the relationships rather than the individual perspective sought.

The discussion which follows explains how this new model was reached and why it overcomes the limitations of Figure 2.8.1. The new model developed at the end of this chapter as Figure 5.6.2 retains the four variables of the original model namely structure, agency, networks and context. However, the graphic representation has been altered to more accurately reflect the nuances discovered as a result of this study. Context is now shown as a cross-cutting variable that exerts influence on the other three dimensions for reasons to be explained in the remainder of this chapter. The revised model at the end of this chapter is therefore offered as a model which has greater explanatory power for the findings of this study based on the discussions that follow.

5.2 Structure

5.2.1 Introduction

This section on structure examines the findings in chapter 4 section 4.1 based on the Proposition No 1.1 repeated below:

P.1.1 Women who can understand and respond to the prevailing institutional logics are more likely to be able to create the necessary structural legitimacy to succeed.

As claimed in the literature and confirmed in the findings, structure is an important factor in understanding the entrepreneurial behaviour of women in an institutional setting. Structure both enables and constrains individual action based on the level of legitimacy they cognitively convey on individuals through compliance with prevailing institutional logics (Heikkila & Isett, 2004). These logics are defined through a collective understanding of a unified set of beliefs that condition actors' choices for sense-making and subsequent action. Logics are thus closely defined by the institutional order in which they are cognitively constructed (Friedland & Alford, 1991). Legitimacy is also tightly coupled to this concept of logics and is perceived as an interpretation between alignment and conformity with prevailing institutional social norms, expectations and beliefs. Suchman (1995, p. 565) defined institutional legitimacy as:

"Legitimacy is a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions".

Examination of the above proposition through a neoinstitutional lens, that includes sociological perspectives, was therefore considered appropriate because a sociological framework places a greater emphasis on how the cognitive interpretation of symbols and rituals both enable and constrain opportunities for change (Heikkila & Isett, 2004). Thus, by adopting a sociological perspective for the analysis of the findings in Chapter 4, it was thought that the analysis of structure would provide new insights and therefore, "reveal different and genuine dimensions of behaviour" (Hall & Taylor, 1996, p. 995).

The following four elements from the findings in Chapter 4 on structure were identified as relevant to this research. Firstly, formal structural logics could be considered as objective and not subjective in nature and these logics reflected a male bias. Secondly, several women adopted a "calculus" approach to legitimacy building based on self-interest. Thirdly, structural logics defined through culture were more dominant for women in the Navy and Army than those in the RAF. Finally, women could change structural logics over time by

successfully securing previous male appointments on an enduring basis. These four elements are now analysed in greater depth.

5.2.2 Formal Structure

Structure was reported by these women in a number of ways such as a series of controls that influenced and directed their careers or as a means for accessing positions of importance to accrue the necessary institutional legitimacy for advancement (section 4.1.2 and Figure 4.1.1). Structure was also reported through references to rituals, norms and symbols such as badges of rank and internalised hierarchal structures. These structures were not only physical, in terms of location, but also cultural where so called "Elites" defined as Warfare Officer (Navy), Combat (Army) and Pilot (RAF) were seen as dominant male symbols of power (section 4.1.5.2). Formal structure was also reported as a form of institutional commitment to compliance, order and control based upon efficiency and effectiveness. These inferences were often found in expressions such as "you wouldn't do it that way" or "you'll get your legs chopped from under you" or "it's what is expected of you" as indicators of this formal structure that imposed a constraining action upon these women (Meyer & Rowan, 1977).

Two important career transition points were identified as structure by these women that allowed individuals conditional access to future important roles. These were defined as the "ACSC", a selective military course and secondly, a career progression system called the "Golden Escalator" that mapped individuals to higher status appointments (section 4.1.3). The structures of "ACSC" and the "Golden Escalator" were reported as being mutually inclusive in that "ACSC" allowed access to a range of higher order appointments on the "Golden Escalator". These appointments were believed to attract higher levels of institutional legitimacy by the respondents as reflected in both Table 4.1 and Table 4.2. However, the women interviewed also identified that the ability to be fairly assigned to "ACSC" in comparison to their male contemporaries was questionable. This point is reflected in the following extract from the findings:

Men in combat roles take priority at "ACSC"...despite what others say.

If you're in a support role and a woman... then the odds for attending "ACSC" are stacked against you. (15FA line 395 – 406)

Those who were successful at attending "ACSC" also presented clearly defined strategies to develop sufficient onward legitimacy through close association with powerful males and most notably the appointments defined through the concept of the "Golden Escalator" (section 4.1.3). At the empirical level the "Golden Escalator" did not exist as an identifiable entity but for individuals at the level of the real it did exist for the majority of the women. Identification of the "Golden Escalator" was portrayed through a particular pattern of appointments and structural location in close proximity with powerful others. Furthermore, the qualification for certain roles as "Combat preferred" merely masked a "Males only" bias.

Adopting a critical realist perspective therefore allows these two elements, "ACSC" and the "Golden Escalator", to be defined as objective elements of structure because they appear to these women as a product of others' past experiences (Archer, 1995; Leca & Naccache, 2006). Thus, by defining structure as objective rather than subjective clarifies those institutional logics based on past experiences that currently define what an acceptable route for career progression is. To be more precise, these two elements are tangible realisations of embedded institutional logics regarding what is deemed by the institution as the required legitimacy for advancing to the higher echelons. As the findings indicate women reported less favourable access to the career course "ACSC" compared to males (section 4.1.3). As such, this limits career progression for women and exposes the embedded gender biases in the structural logics of the UK Armed Forces that favours men over women.

This finding strongly aligns with the viewpoint expressed by feminist academics such as Mackay et al., (2010), that structure is "indeed gendered". However, by defining both "ACSC" and the "Golden Escalator" as objective parts of structure, something that has real attributes rather than subjective based on interpretation, creates tension with the main body of literature on entrepreneurship. It creates this tension because what is advocated in these findings is that structure and

agency are seen as a dualism, whilst for Giddens (1991) and more recently Sarason, Dean, & Dillard (2006), both structure and agency resides as a duality and therefore as individual elements they do not exist in isolation (Giddens, 1991; Sarason et al., 2006).

Giddens (1991) for example articulates a relationship between structure, agency and entrepreneurship in his work on structuration theory by explaining that structures are products of social systems and thus the actors themselves. As such structures are instantiated at one specific moment in time by agents, they cannot pre-exist as individual objects of meaning until they are interpreted by the actor concerned. This description thus leaves little room, if any, to observe structure as constructed from meaning based on the actions of previous agents, which is not what these findings demonstrate. By using a critical realist perspective these findings suggest that both "ACSC" and the "Golden Escalator" are pre-defined and are shaped and substantiated in meaning by previous agents experiences with them (Archer, 1995, 2003). The following extracts from section 4.1.3 help illustrate this point:

You need to get the right reports and recommendations prior to being considered by a scheduled filter board for "ACSC"...you don't apply as such...the best reports are from those that are known to have previously done well in their careers post "ACSC". (24RF5, line 211-219)

The priority for course attendance on "ACSC" and the allocation of the best appointments after "ACSC" go to those on the "Golden Escalator" if you are in the top 10%, which I was...although I didn't get any of the really crunchy jobs...those went to the stabbers and stranglers...and you won't find any females there because they pre-qualify the roles as combat preferred [Combat or Infantry males]. (11AF4, line 205-209)

A number of observations can be made using a CR lens. Firstly, whilst preparation for selection involved social interaction (get the right reports and recommendation), the actual process of selection did not require social interaction (you don't apply). Secondly, the reference to who writes the "best reports" reinforces the tradition of successful people do "ACSC" and the most

successful people that go to "ACSC" are likely to be males because there are few if any females at a more senior level. Thirdly, in the second quote, the ability to rise to the top infers a pre-designated process to do so but males get the best jobs irrespective of where women come on the course. The "crunchy jobs" referred to in the second quotation were those believed to be on the so called "Golden Escalator", that consequentially, conveyed a greater probability of career success than other appointments. These observations therefore look beyond the surface into the domain of the real by suggesting that both "ACSC" and the "Golden Escalator" are structures that have powers of causality for these women's attainment (Leca & Naccache, 2006).

Research also suggests that institutions shape actions of agents through institutional logics that convey meaning in the form of legitimacy to their social reality (Friedland & Alford, 1991; Thornton, 2002). Thus, as institutions are said to be the rules of the game and institutional logics are the principles of the game, institutional legitimacy can be considered as the rewards of playing the game that leads to a possible deduction that structures have powers of causality (Leca & Naccache, 2006).

Thus, extending the idea of structure as being established on past events and these events in turn favour males over females, the findings demonstrate that the women appeared to understand the value of institutional legitimacy and have responded to it accordingly by using informal structures as alternatives to formal structures (section 4.1.4). Whilst arguably these women may not agree with the inherent male preference embedded in these formal structures, their response appears to suggest that they had little choice but to do so in order to maintain institutional legitimacy.

To illustrate this observation the following extract from the findings (section 4.1.7) is provided:

I really wanted the operational planning appointment (believed to be a highly prestigious position) but a male colleague of mine got there first as he is destined for greater heights... so I to put up with second best in the same headquarters...it's a strong appointment though and the boss is well respected throughout the forces...the next General...so I think it'll help me so I don't really mind that much. (41FR 04, line 520-528)

Three levels of awareness can be drawn from this comment. Firstly, the initial objective was to secure an operational appointment that inferred high levels of male legitimacy but because of inherent institutional logics depicted through the "Golden Escalator" this was assigned to a male. Secondly, qualifying her assigned role as second best reinforces Acker's (1990) viewpoint that structural placements for women are generally lower than males. Finally, an important element of gaining institutional acceptance was to take a lower role. These roles were closely associated with powerful others that held elite status and by doing so, there was the potential for these women to benefit from the possible referent power and hence legitimacy that could be expected from working with a male elite (Raven, 2008).

Women also responded to these formal structural impediments in various other ways such as making themselves known to senior officers by joining male dominated sports boards (section 4.1.8), but these attempts to gain access to important structural venues were still intolerant of women in general.

Thus, throughout Chapter 4 it can be observed that most individuals sought to maximise their attainment of institutional legitimacy through purposeful selection of appointments in these formal structures. Furthermore selection did not appear as a result of chance but centred on a purposeful strategy of engagement over a longitudinal period of service to secure previously held male roles (see sections 4.1.7 and 4.1.7.1). This observation can be substantiated by the following extract:

I asked to be posted to that particular appointment because I used to be his Adjutant (outer office role)...so I was an easy fit for this current role (in outer office)...and I knew I'd get a good report...his earlier report on me got me on "ACSC". (7FA5, line 620-622)

The reference to "I asked to be posted" shows a deliberate strategy to gain a role which would give legitimacy. "I used to be his Adjutant" is a clear indication of understanding how to use "referent power" to gain further legitimacy (French & Raven, 1959; Raven, 2008). Finally, the reference to getting a "good report" which then "got me on "ACSC"" shows that familiarity through prior experience to gain advantage was a purposeful strategy to gain access to male structures.

Other interviewees reported a unique relationship with a structural position called the "gatekeeper" that referred to an appointment that managed their career as detailed in section 4.1.7.2. In terms of structure, this appointment held a pivotal position because it enabled individuals to enact their choices for action by facilitating the matching of roles with powerful others. The "gatekeeper" role also played a substantial part in an individual's reflexive ability by removing information asymmetries that are regarded as particular gender constraints to accessing important institutional information on which to base decisions (Bruin et al., 2007).

The combined effect is demonstrated in Figure 4.1.3 of the findings and shows that this purposeful approach enhanced the level of legitimacy of individuals compared to those women that left selection to chance alone. This degree of self calculation by individuals thus closely aligns with the "calculus" description defined by Hall and Taylor (1996).

The "calculus" perspective focuses on the principal aspects of human behaviour that are based on strategic calculation where behaviour is directed towards maximising attainment of pre-defined internalised goals (Hall & Taylor, 1996; Shepsle, 2005). Thus, individuals are said to behave strategically. They achieve this through a review of a range of possible options in order to determine those that will return the maximum benefit. In this research, the benefit can be broadly perceived as accruing sufficient institutional legitimacy to be considered for advancement compared to their male contemporaries. In drawing parallels with the field of entrepreneurship, this accrual of benefit closely relates to the critical resource needed by entrepreneurs to deploy in order to enact change (Dacin et al., 2002; DiMaggio, 1988b)

The "calculus" approach also recognises that institutional logics directly affect the ability to enact change because such logics inherently are established to maintain equilibrium. This tension does not imply that change is not possible, rational choices made by actors within the institution can alter the underlying logics but goal attainment will not be totally realisable (Shepsle, 2006).

In comparison, those women that considered the service promotion system as a meritocracy (section 4.1.7.2), and emphasised their inner beliefs about the appropriateness of the selection system, appeared not to be as hopeful of promotion compared to those that adopted a "calculus" approach. This does not mean that these individuals did not have goals, but it could indicate that as actors they were deeply embedded within the dominant male structures. The possible implications of such embeddedness may be to constrain the expectancy of promotion for these women due to the interpretation of the prevailing culture that privileged males over females (Giddens, 1982). The next section examines the possible implications of structure and culture using a sociological institutional perspective.

5.2.3 Structure and Culture

In the examination of institutions, sociological institutionalism adopts a focus on how social interaction creates both individual and collective meaning through which unconscious cognitive interpretations guide an individual's responses and behaviour (W. R. Scott & Meyer 1994). Unlike rational choice institutionalism that tends towards the achievement of collective consensus of behaviour and choice based on identifiable institutional logics, sociological institutionalism recognises that individual choice can be based on the cognitive interpretation of culturally specific practices based on social interaction and internalised norms, which in turn are based on internalised beliefs (Hall & Taylor, 1996).

These cognitive beliefs are reinforced through the subconscious acceptance of taken for granted responses, rewards and penalties that are both an outcome of structure and, in themselves, a form of structure at both the macro, and individual levels of engagement (DiMaggio & Powell 1983; Sewell, 1992;

Zucker, 1983, 1987). This perspective was illustrated in the responses by several women when discussing the large variances among the cultural interpretations of their service environment. The RAF candidates portrayed themselves as distinctly culturally different from the Navy and Army colleagues (section 4.1.5). This was further demonstrated in the findings where the cultural dominance between elite status males such as the Warfare officers detailed in section 4.1.5.2, and support roles such as logisticians, where the majority of women resided, was clearly evident.

Analysis of these particular findings regarding elite status as indicated in Figure 4.1.2 suggest that the Navy and Army indirectly disadvantage women not only through structure by obviating service in certain roles (MoD, 2010), but also as a consequence of policies that create structures that continue to omit women. The impact of the same policies of excluding women had reportedly significantly less impact on those women in the RAF, possibly because fewer roles excluded women compared to the Navy and Army. Therefore, the consequences of preventing women accessing these important roles (i.e., Combat or Warship Commander) is to create deeply embedded conditioning effects on individual behaviour and perceptions about what can and can't be allowed to happen (Delbridge & Edwards, 2013). As such, those women in the Navy and Army that may wish to be promoted, but at the level of the real in CR terms, they perceive this as highly unlikely. Such a perception is also reinforced by the continuing absence of female OF6 officers and beyond in these two services compared to those in the RAF.

This exclusion of women from influential roles has wide ranging implications for women in the Navy and Army as they perceive that the majority of institutional legitimacy is related to such elite roles, or at the very minimum, linkages to these roles (section 4.1.7). The following comments are believed to imply such conditioning:

Women don't drive real ships. (16RF4, line 650)

Women are said to be good leaders...which in the eyes of the Army does not constitute good military commanders. (9AF4, line 595-598)

Can you imagine the Chief of the Air staff as a woman...Hell would need to freeze over by then. (35FR4, line 765-770)

Thus, women in the Navy and Army appear to be structurally at a disadvantage compared to those in the RAF. The first two quotes relate to the next promotion rank at OF6 for these women in the Navy and Army where women are currently absent. These first two quotes also reinforce the "cultural" perception constructed from individual sense making of nuances, structures and a myriad of other social information within the Navy and Army that suggests that women are excluded not on their ability, but gender.

Such underlying gender interpretations thus become embedded as logics that precondition others within the wider institutional context and become intolerant to change (Bourdieu, 1990). In comparison, the RAF comment was focused at a more strategic level of succession some three rank grades above the women interviewed. Thus even though elite status positions in the RAF were still widely recognised as dominated by males (section 4.1.5.2) the RAF had more OF6 positions open to women (in absolute and percentage terms) than the other two services that had none. Furthermore, the RAF had in 2014 for the first time in their history appointed a female to the level of OF7.

In using a CR approach the comparative analysis between the services reflect at the empirical level that the women in the Navy and Army experienced a distinct gender bias in role selection. This manifested itself in gender disadvantage because of the lack of access to highly legitimised roles. At the level of the actual, MoD policies, norms and selection processes reinforce these disadvantages. Whilst at the level of the real, these biases pervaded the institutional logics that provided the framework for understanding the appropriateness of women in certain roles across these two services.

In comparison, whilst experiencing some disadvantage in roles, the RAF women did not consider this as a significant impediment to promotion (section 4.1.5.2). Therefore the MoD exclusion policy on women in Combat had a minimal effect on these individuals' perceptions of gender equity as can be

interpreted in the quotes in section 4.1.5.2. Thus gender exclusion in the RAF's institutional logics of appropriateness was less of a gender bias issue.

There are notable exceptions to this observation as illustrated in a recent employment tribunal case between a female RAF nurse and the MoD [RAF]. The Employment Tribunal (*Williams v Ministry of Defence*, 2013) report covered a successful claim by a female nurse disadvantaged in career terms. Whilst not explicit in its terminology, the inference that can be clearly established is that as a consequence of a dominant cultural logic within the RAF's medical profession, a male doctor candidate was considered more appropriate for the appointment at OF6 than the similarly experienced and qualified female nurse. In particular the report identifies that irrespective of rules aimed at equity and fairness this particular case illustrated that this did not prevent unbiased decision making by the entirely male selection board as the following extract illuminates:

Failed to have regard to the claimant's appraisal reports and instead favoured the candidate within his own chain of command who was known intimately to him. (p. 40)

Overall, the findings reported in the data and the secondary sources such as the employment tribunal demonstrate that structurally defined cultural logics can supersede policies and guidance. Thus, structural cultural logics of appropriateness may provide a partial explanation as to why the current distribution of women at senior levels across the Armed Forces remains derisory when compared to males in percentage terms.

Nonetheless, these structural logics should not be considered as a single causal factor of the apparent lack of women at the senior levels above OF5 in the Armed Forces. Other determinates covered in the literature and explored further in this chapter can also contribute, such as context, gender, networks and agency that includes the many social determinates that impact on institutional behaviour (DiMaggio & Powell, 1983, 1991b; Meyer & Rowan, 1977; Zucker, 1987).

Whilst this research on structure contributes to the existing literature on how institutional logics operate within organisations from an individual and gender perspective, it does not provide an explanation of how individuals may seek to change enduring structural logics to their advantage. To more fully comprehend how women engage in institutional logics to bring about structural change it is necessary to widen the discussion to include entrepreneurship.

5.2.4 Structural Change and Entrepreneurship

Institutional change is now frequently encapsulated in the literature as outcomes of entrepreneurial endeavour and brings a new insight to current dominant deterministic explanations on how actors can shape institutions (Leca et al., 2009). The ability of individuals to enact change emerges from the embeddedness of actors within institutional cognitive, social, cultural and political frameworks (DiMaggio & Powell, 1991a). Thus remaining with the CR ontological position elucidated by Archer (1995) that suggests structures are the consequences of past agents' actions and thus morphogenic (Mole & Mole, 2010, p. 231), this section discusses how women are believed to begin the process of entrepreneurial change and potentially set the conditions for others to follow.

Throughout the findings in Chapter 4 and as referenced in section 4.1.7.1, women reported seeking out specific roles for the purpose of enhancing their standing and institutional legitimacy. This allowed individuals access to the referent power associated with powerful male elites and placed women in male congruent roles that enhanced both gender status and visibility as perceived by important others. What is significant in these findings is that this research clearly demonstrates that these women were not waiting to discover opportunities for advancement but purposefully creating opportunities to be advanced.

To access these important roles, individuals did not only acquire the legitimacy arising from formal structures but they also demonstrated that they took a reflexive stance on what appointments and positions were more highly valued by the institution. Three areas of the findings underpin this assertion. Firstly, they were exploiting the close association with an institutional logic of combat through their preference for appointments on operations as the findings in Table 4.5 demonstrate. Secondly, these women sought roles close to powerful "egos" so that they could benefit from high levels of referent power from powerful elites as illustrated in the findings in sections 4.1.6–4.1.7 on positional power and legitimacy building. Thirdly, the drive by a few women to secure appointments previously dominated by males, made these women appear visible to others (section 4.1.7.1). The following quote illustrates this latter point:

Getting a male dominated appointment...implies status, achievement and institutional acceptance...in short you've arrived. (22NF4, line 469-484)

It is suggested therefore, that as women seek these higher order appointments and are successful in obtaining them this subsequently creates fissures in the prevailing institutional structural logics of appropriateness. This altering of structural logics was not achieved by altering the role but by replacing the gender linked to the role, as the following quotes implies:

I am really lucky to be getting this job because it's highly rated as being one of the jewels in a tri service environment (a competitive role between the three services)...the first woman to secure the role replaced the now OF 7(3 ranks higher than respondent) in the Permanent Joint Operating Headquarters and must be close to promotion now...the current one, a female also will have done equally well I also expect...it's hard, demanding and full of testosterone...or so they tell me? (32FR4, line 521-528)

It can therefore be observed in the extract above that the institutional logic of only males in the role began to change some while ago, because previously, other females had successfully secured this role prior to this applicant. Using a CR perspective this constituted a change in institutional logics of appropriateness that was subsequently reinforced through the successive placement of women in this role as the norm (Mutch, 2005, 2007). Thus, over time, the modelling of women in such roles can change deeply held beliefs

about the appropriateness of women in formally congruent male roles. These findings demonstrate that many of these women were acting as institutional entrepreneurs in the sense meant by Battilana (2006). Battilana claimed that those who break with the rules in the form of institutional logics and develop alternative rules and practices can qualify as institutional entrepreneurs without the individual being fully aware of the role they enact (Sundin & Tillmar, 2008).

These findings also suggest that the actions of these women are not based on opportunity discovery but opportunity creation and subsequent exploitation. The literature in the area of entrepreneurial discovery is heavily contested. This contestation is in partly due to poorly defined ontological methodologies and to the focus on macro level experiences that omits the role of the individual and subsequent gender perspectives (Alvarez et al., 2014; Bruin et al., 2007; Shane & Venkataraman, 2000). Thus, these findings make a powerful contribution to the debate on entrepreneurial opportunities within a male institutional It does so by demonstrating firstly that women created environment. opportunities for action rather than discovered opportunities as the main body of entrepreneurship reflects (Kirzner, 1973; Knight, 1921; Schumpeter, 1934; Shane, 2003, Shane & Venkataraman, 2000). Secondly, it examines the creation of these opportunities at the level of the individual and in doing so addresses the shortcomings of current research by bringing the individual back into the debate. As Suddaby (2010, p. 17) suggests:

"if institutions are powerful instruments of cognition, there must be some opportunity in conducting research on how institutional logics are understood and influence at the level of the individual".

Therefore, whilst neoinstitutional perspectives can account for how the institutions affect behaviour on the basis of structure and controls, its critics suggest that it does so in a blanket fashion and does not consider the cognitive and social effects that are widely believed to be the basis of how people act and respond within institutional frameworks (DiMaggio & Powell 1991b; W. R. Scott, 2001, 2004). Thus, to gain greater clarity on how entrepreneurs can access these socially constructed institutional logics to enable change requires the

relationship between structure and agency to be better appreciated (Meyer & Rowan, 1977; Thornton & Ocasio, 2008).

5.2.5 Summary of section

The concept of institutional logics as an objective realisation of the embedded institutional structural gender biases within the UK Armed Forces has tended to favour males over females. To that end this finding has contributed to the gap in theoretical work identified by Sundin and Tillmar (2008) where little is known about how the middle level of an institution interacts to bring about institutional change. This research identified this in three ways.

Firstly, as a response to the identified gender biases it was found that several women responded to such impediments by seeking and acquiring roles and positions that inferred high levels of legitimacy. They consciously adopted a calculating and deliberate (calculus) approach to goal realisation, which demonstrated a reflexive stance on role choice using others to assist individuals in their endeavours. Women in the Navy and Army experienced different cultural structures than those in the RAF and greater comparative degrees of bias as a result. Furthermore, not only were the dominant "elite" entirely male but government policies on female exclusion from certain roles (i.e., combat), only serve to reinforce deeply embedded institutional logics centred on the exclusion of women.

Secondly. the examination of the women's responses through entrepreneurial lens also identified that whilst possibly unknowingly to the individual, their efforts to secure previous male prescribed roles could alter deeply held beliefs or institutional logics on the role of women for others. Thirdly, by using a CR methodology and an incremental approach, it was feasible to establish that changes to institutional logics were possible by these women. This involved the replacement of females in male roles but possibly more significant from a realist perspective was the identification that their replacements were also female. This reinforcing action in terms of Archer's (1995) CR work thus shifted the perceptions of others through reinforcement of past acceptable events. These findings also provide a powerful insight on how the roles of women, at the individual level of analysis, create entrepreneurial opportunities for change involving institutional logics. In doing so, it helps to answer the call by Suddaby (2010) and Mackay et al. (2010) for a greater focus on individual action and institutional change in entrepreneurial research.

The methodological approach adopted to use a CR perspective to separate structure and agency into independent variables also allowed deeper insights on how institutional logics condition human action. Thus, to accommodate the role of agency within this work and to understand how and for what purpose individuals choose to enact change the findings relating to agency are discussed next.

5.3 Agency

5.3.1 Introduction

In the field of neoinstitutional theory the study of entrepreneurship, which involves both opportunity and change, places an increasing emphasis on understanding how the role of agency and the dynamic interaction with structure facilitates or constrains the act of entrepreneurship. Embeddedness remains a central contention and describes the relationship between individual agency and institutional determinism that shapes, constrains and enables action (Giddens, 1984; Seo & Creed, 2002).

As demonstrated in the literature review, agency has a central role in the comprehension of institutional entrepreneurship where entrepreneurship from the perspective of agency is defined as an "individuals" ability to intentionally pursue interests and to have some effect on the social world, altering the rules or the distribution of resource" (Battilana, 2006, p. 8).

The findings in Chapter 4 section 4.2 based on Proposition 2 below provides strong evidence that these women were able to realise their goals for advancement as entrepreneurs by accruing sufficient social capital to alter prevailing institutional logics to their advantage.

Proposition 2. Individual agency enhances the ability of women entrepreneurs to enact change.

The findings identified the following four aspects of agency to be relevant to this research. First, the importance of self-belief of efficacy and goal setting; second, how the constraints of embeddedness were overcome; third, how cognitive social capital necessary to access resources was accrued and maintained; and finally, how social capital could be eroded. These aspects of agency are discussed in the analysis that follows starting with self-belief of efficacy.

5.3.2 Belief of self-efficacy

The findings on self-belief of efficacy are summarised in Table 4.6 and in section 4.2.1 and form the basis of the following discussions. The majority of women in all three services reported very high levels of motivation to succeed in their careers. In entrepreneurial terms this was reflected through an expressed need for achievement or NAch as defined by McClelland (1965). This is believed to be partially a function of their personal ambition but it was also a reflection of their inner beliefs based on their past promotional achievements as illustrated in the extract below:

I wouldn't have joined if I didn't think it would be a challenge...I've worked dammed hard to get this far and to be recognised...and achieve this rank on time (OF5)...I have at least one more rank in me. (45FA5, line 479-484)

Thus, by drawing on their past achievements ("achieving this rank"), these women had the necessary self-belief of efficacy to go beyond their present rank ("one more rank in me"). As such, these elements of self-belief are seen to be critical cognitive and influential transmission processes of the meaning of self through the enactment of goals, a perspective reflected in the work of Bandura (1989).

The ability of individuals to actually realise their goals beyond their current status was identified in the same Table 4.6 as unequal between the services.

Most notably, both women in the Navy and Army reported lower degrees of confidence in the likelihood to successfully enact their goals within their service environment compared to those women in the RAF. A series of comparative quotations from section 4.2.3 help to illustrate this observation:

I'm ambitious to get promoted but I wouldn't go for such appointments...I've been there before...I have my eyes on some other similar appointments...those others are reserved for the really high flyers. (1FA4, Line 298-312)

I wish they would consider opening up more appointments...I believe I have got what it takes...apart from looking like the master race (males). (12FN4, line 375-382)

I'd certainly apply for any role at OF5 that I really wanted and thought was good for my promotion and had a chance of getting...I see no reason why not?(43FR5, line 423-429)

In analysing these quotes the following comments are considered relevant to this research. The first quote appears to pre-empt the inability of this officer to achieve her goals, "I've been here before", although she still has high levels of NAch "ambitious". The reflection on past experiences of failure and the declared belief that a male will be favoured over a female reinforces this point. Goal setting also is evident when she refers to "an eye on some other similar appointments" that appear more likely to provide her with the legitimacy for promotion.

The second quote reflects similar NAch and self-efficacy in the term "believe I have got what it takes" that is considered to be an important determinant for goal realisation (Bandura, 1989). The reference to males as "the master race" reinforces female subordination (AhI, 2006a). In comparison, the last quote from a RAF respondent demonstrates no reflection on potential failure and positively anticipates advancement with an anticipation of goal realisation "OF5 that I really wanted". It is therefore possible to observe that all of these women had high levels of self-efficacy and defined aspirational goals. The literature suggests (Abele & Spurk, 2009) that the combination of these two elements

should lead to higher rates of advancement. However, these findings identify a clear divide of expectations between those women in the Navy and Army who reported lower expectations of actualising their goals relating to advancement, compared to those in the RAF, which did not.

Possible explanations for these differences may be due to the variation in institutional logics that reinforce gender bias and consequently this may be why some women express lower levels of goal achievement. Alternatively, the reinforcing nature of past experiences may also weigh heavily on these women's expectations of success McClelland (1961). Within the field of entrepreneurship an individual's self-efficacy alone is said to be insufficient to realise goals if individuals do not possess sufficient social capital and legitimacy to access the necessary resources to support them in their endeavours (Garud et al., 2007).

Thus, an individual's intentions to realise their goals involving change require the necessary legitimacy and social capital to gain acceptance by dominant institutional power holders, where failure to secure such support leads to rejection (Greenwood, Oliver & Suddaby, 2008; Greenwood et al., 2002). The levels of social capital and legitimacy to enact such change are proportional to how radical the goal appears to others in relation to pre-existing institutional logics and how deeply embedded within the social context they appear to others to be (Seo & Creed, 2002).

Embeddedness is said to be one constraining factor to goal realisation involving change under the mantle of the "paradox of embedded agency" (Garud et al., 2007; Levy & Scully, 2007). Another influential factor is that Institutional Entrepreneurs can rarely change institutions on their own because they require the support of others in the form of additional resources who can legitimise and support their efforts. The ability therefore to alter field level determinates, such as prevailing logics, whilst being so heavily influenced by their constraining forces towards stasis is discussed next.

5.3.3 Embedded Agency

The concept of embedded agency provides a useful insight into how women perceived institutional norms and values as influences on their future choice of action to realise their goals (section 4.2.3). Drawing on examples from the findings on structure for the purposes of brevity and then using the findings on agency, this section explores how women acted as entrepreneurs unrestricted from the so called "paradox of embedded agency" (DiMaggio, 1988b; Giddens, 1991; Granovetter, 1985; Sarason et al., 2006).

An example of embeddedness, illustrated in section 4.1.8, highlighted the importance of the officers' mess to convey values and beliefs of the institution through protocols and rituals where compliance was seen as a more appropriate response than non-compliance within the constraints of institutional norms. This apparent conformity with prevailing logics relates to embeddedness where the actors concerned have adapted their behaviour to seek legitimacy through conformity (Garud et al., 2007; Granovetter, 1985; Uzzi, 1996). Within the field of institutionalism and sociology theory this relationship is described as the "paradox of embedded agency" (Battilana, 2006, p. 4). Such a paradox exists when individuals within the institution wish to bring about change within the very institution that is said to shape their behaviours. The extract from section 4.1.8 shown below can be used to illustrate this viewpoint:

I've served in support of combat arms and at mess functions they still cringingly have all the male officers stand up at dinner evenings and 'toast the ladies'... I was going to stand up also as an officer but somehow... as a minority it felt so wrong and anti-establishment....I don't know why? (12AF4 line 600-621)

Analysis of the extract suggests that whilst individuals may not openly accept institutional logics of appropriateness, as in the case of the Officers' Mess, the very nature of others doing so gives "cognisant legitimacy" to the institutional logic of a man toasting women (DiMaggio & Powell, 1988; Tost, 2011). It is thus possible to observe that in this example legitimacy was established through the individual's response through conformity with institutional norms

that are believed to be powerful influences on behaviour and lead to institutional isomorphism (DiMaggio, 1988b).

The findings in section 4.2.3 identify how women effectively overcame the constraint of embeddedness in several ways. Firstly, by securing roles close to powerful appointments that allowed access to important resources to enhance their social capital and legitimacy for advancement. Secondly, as the findings indicate (section 4.1.7.1), the ability of these women to replace a previous female in a high profile male appointment reinforces the acceptability of women within the cognitive domains of powerful others. The CR perspective on agency views the essentialism of past experiences in shaping current structures and this study confirms this viewpoint (Archer, 2003).

Gender acceptance in this way can be said to alter the prevailing underlying institutional logics, illustrated by these women standing out as initially unique (someone who first acquired a powerful male role) and then subsequently fitting in (replacing someone unique-another female officer). The ability of women to secure male roles and then to reinforce this position by others following on, provides one example to illustrate how women achieved their ends to secure advancement. However, the explanation does not consider the role of individual agency in this process, that is, to escape the strong conditioning effects of structure (DiMaggio, 1988b).

Whilst the concept of the entrepreneur provides a cognitive bridge between independent actions and outcome the literature provides little insight as to how some individuals appear to release themselves from the same constraints that control others (Archer, 2003). Neither do the explanations of entrepreneurs adequately accommodate the actions of others who consequently fail in achieving their desired outcomes (McGrath, 1999). Therefore, using secondary researched literature by Mutch (2007), the findings in section 4.2 are further discussed to elucidate how some women in the services could be considered as "autonomous" reflexives, which provides a broader account of those who brought about change.

The focus for Archer's (2003) discussion on "autonomous" reflexives is based on testing three conditions. First, it needs to be ascertained if the individual's focus is on defined ends and not means, such as the achievement of individual goals. An example of an appropriately framed end rather than means was portrayed in these findings as women sought promotion through association with higher role appointments (section 4.2.2). The second condition is to ascertain if the applicability of the description "autonomous" reflexive is related to an individual experiencing a form of discontinuity in their careers; for the purpose of this paper the concept of discontinuity is synonymous with these women moving within their careers either on appointment or promotion. The final condition is that individuals are secretive about their desired ends and internalised thoughts about how they may choose to enact change based on internally socially constructed models that are context dependant. This cognitive assessment is apparent in the following two quotes from section 4.2.3 for the purpose of discussion that follows:

I tend to think about what I'd like to do next...and then sound out some important seniors...not by stipulating what I want but rather sensing what they think is achievable from their viewpoint. (6AF4, line 418- 423)

Sometimes you need to parallel process in situations where you are trying to develop an image... not only do you think about whom you are talking to but where they sit in the power structures...but also assessing what they think they are perceiving about you whilst you're talking. (21FN5, line 549-562)

The first quote demonstrates internal reflection and secrecy which are conditions for the "autonomous" reflexive entrepreneur by using the words "think...to do next" and "not stipulating". The second quote, (a more repeated sentiment), illustrates how individuals are processing the context of their environment by identifying structural positions of others on which to base their assessments such as, "sit in the power structure...perceiving". Therefore, these particular women quoted appear to be conforming to Archers (2003) description of "autonomous" reflexives.

Mutch (2007) suggests that an individual searching for new opportunities that challenges prevailing institutional logics based on managerial practice is indeed entrepreneurial in nature. This is because individuals can bring about change through purposeful activity that requires constant review as it crosses the boundaries of the prevailing institutional logics in force.

Archer's (2003) work identifies three central types of reflexive namely: communicative, conversationalist and autonomous. However, her work whilst clearly articulating the relevance of each category does not adequately accommodate the possibility of an individual changing how he or she reflects on the likelihood of achieving their defined ends by interlacing the characteristics of more than one reflexive category (i.e., changing from autonomous to "communicative" reflexive). Section 4.2.3 illustrated that whilst some women were indeed secretive about their desired ends there was a point where they declared this interest to others to achieve consensus. A close approximation to this observation in Archer's (1995) work accommodates this type of reflexive stance by individuals as "conversational reflexives", but she does not consider individuals operating in more than one descriptive category. The findings in this research, however, suggest that women both acted as "autonomous" reflexives and "conversational reflexives", using the latter for the purpose of securing support and thus a resource to enact change.

The acquisition of these resources, by accruing sufficient social capital and legitimacy to enact change, is a central concept in institutional and entrepreneurship theory (Dacin et al., 2002; DiMaggio, 1988b). Fligstein (1997) suggests that institutional entrepreneurs are those that can be considered skilled at acquiring the necessary social capital to influence others and by doing so support their efforts to introduce change. This aspect of social capital and how women accrued it within these research findings is discussed next.

5.3.4 Social Capital

Two concepts relating to social capital are relevant to these discussions. Firstly, they involve some notion of social structure (Giddens, 1991) and secondly, individual action can be facilitated within this structure on the basis of

a shared representation of meaning based on trust, reciprocity and endorsement (Coleman, 1988; McClelland, 1961). In this section the focus of the analysis is placed on the cognitive aspects of social capital that refers to the shared representation and interpretation of meaning (De Carolis & Saparito, 2006; Nahapiet, & Ghoshal, 1998).

Women in this study accrued social capital in a number of ways such as securing appointments through the development of relationships with identified sponsors, not only to achieve legitimacy (section 4.2.3) but also social capital by attaining service in close proximity to important others (section 4.2.4). Hierarchical relationships were also considered important for reflection on goal actualisation (4.2.3) whereupon individuals sought preferred appointments not only for positional power, but also to make themselves known to others. The small vignette in section 4.1.8 relating to a woman accessing a male dominated sports board is such an example, where she recollects that despite not being able to play the sport she has made the first steps in being visible through her presence in the board structure. The benefits arising from such visibility appeared to be the accrual of social capital and in doing so the creation of institutional legitimacy developed through connections and relationships represented through tie relationships and networks (Granovetter, 1973; Brass, 1985; Burt 1992, 2000).

Social capital was also reportedly heightened when women reported service with powerful elites. Using the findings in section 4.1.7 as an example the concept of fulfilling a role close to a network "ego" placed actors within the centre of important relationships where they experienced high levels of exposure to powerful others based on trust as a form of social capital. This is consistent with the work of Gabbay and Leenders (2002) and Adler and Kwon (2002). Social capital therefore appears not only to be a product arising from the position and associations with important others but also by working closely with superiors of elite status (males). Narayan and Cassidy (2001), suggest that such social capital acquired through this type of heterogeneous setting by minority representations appears far more potent and influential in bringing

about successful outcomes for individuals wanting to create the conditions for change compared to purely homogenous settings.

Social capital can also be a function of first impressions, social acceptability between agent (boss) and target (individual) that manifests itself as a form of power relationship, as further illustrated in section 4.2.4. The quotes in this section also indicate the interactions that can strongly influence an individual's future success and where self-monitoring by these women of their environment further reinforces the reflexive nature of agents that seek to avoid conflicts with structural logics for the purpose of advancement (Mutch, 2007).

Other sources of social capital were also expressed across the group findings in section 4.2.4 and Table 4.8 in a number of ways. Firstly; a few women used others, including their spouses and partners to access alternative sources of social capital to support their initiatives, and also recruit an extended array of sponsors' support. The literature suggests (Adler & Kwon, 2002; Coleman, 1988; Renzulli et al., 2000) that relationships with kin to be a major source of social capital and these findings are consistent with this viewpoint. However, a key difference in these findings in relation to kin to that expressed in the literature is that these women did not create homogenous kin relationships but heterogeneous relationships with their partner and their partner's networks. Thus, contrary to the literature they were not disadvantaged as suggested through this close association for reasons discussed next.

Secondly, analysis of the findings in section 4.2.4 illustrates how those women with the right partners (i.e., ex military or serving) were able to maintain social capital within the institutional environment that was often lost in times of disagreement. They achieved this by reflecting on difficult issues within the work environment outside of work before introducing work solutions that may be contentious. The following quotes from the findings in section 4.2.4 are repeated here:

He's great for downloading issues into...having been in the military he gets it you see? (13FA4, line 1430-1437)

When I can't seem to move forward at work...he's senior to me but more to the point he's objective and sees it from the other side. (29FR5, line 1257-1262)

As can be observed in the quotes, partners with previous military experience understood the institutional environment in which the female operated, evidenced in the quote "he gets it you see". The ability of these women to obtain an alternative perspective on difficult work issues with their partners "seeing things from the other side" also indicates that a reflexive stance is possible and beneficial. Thus, with such support so closely associated with the institutional context this category of kinship may produce greater benefits for serving partners than wider unconnected family ties alone.

These findings also establish that social capital is intimately linked with social relations and can be accrued in various ways that can be related to hierarchical relationships, power, and compliance with prevailing institutional norms or logics. Other sources of social capital were also evident and those with the appropriate partner appeared to be able to maintain social capital in the work place by accessing alternative networks through kin or close family friends (section 5.4.3). However, there were darker sides to the generation and maintenance of social capital for these women. Not only did women report the need to choose to suppress certain ideas in communications terms (section 4.2.4 and Table 4.9) but also they had to make some difficult life choices to maintain their institutional legitimacy and access to social capital.

The approach adopted by these women to maintain social capital that was not anticipated from the literature review was the use of socio-emotional responses in maintaining social capital that is discussed next.

5.3.5 Maintaining social capital

Several women reported the use of socio-emotional responses to leverage advantage in either maintaining or building social capital. As one candidate said "well if you've got it flaunt it I say" (13FA4, line 1124) in response to maintaining levels of social capital and institutional legitimacy when faced with

difficult work situations (see section 4.2.5). The use of these socio-emotional responses allowed women to straddle a divide between power, stereotypical expectations and to deflect assertive behaviour by softening relationships and to heighten social capital as a form of influence (section 4.2.5.1).

Women also openly referred to the use of soft skills such as smiles and the flashing of their eyes, to manage awkward situations, where either their capability to cope with masculine orientated roles was in question or to manage assertive male behaviour towards them (see 4.2.5.1). The desired outcome through the use of socio-emotional techniques was to be perceived as being competent to do the role without confrontation. The following extract is repeated from Chapter 4 below to elucidate on this and other observations:

Yes I have used my femininity to manage frictional moments... to diffuse certain situations when they initially question your competency. (44FR5 line 1223 - 1227)

Sometimes a smile really a helps people along when things are difficult...and it is surprising how often you can swing things your way by doing so. (13FA4, line 1265 - 1269)

Socio-emotional techniques were used in a number of ways in the above quotes. Firstly, gender reinforcement ("let them know you are female") appears to momentarily place the female as subordinate and reaffirms power and status of the males. This submissive response thus reduces confrontation. The same quote also manages the perception of legitimacy to fulfil the role ("question your competency"). Thus, the judicious use of a feminine response to male stereotyping of a woman's competence to carry out a particular role was considered by some women to be necessary in order to be effective in the workplace. These observations support the current academic viewpoint where gender is promulgated through a series of institutional norms centred on the acceptance of the subordinate relationship between femininity and masculinity (Carli, 2001; Carli & Eagly, 2001; Foschi, 2000; Ragins & Winkel, 2011)

Secondly, the extract in section 4.2.4 that refers to how a female jokingly mentioned to a powerful elite (a previous line manager) who is influential in her

promotion that she may leave the service if not promoted as "heartbroken" is another socio-emotional example. The quote at section 4.2.4 demonstrates not only self-belief of efficacy, but also high levels of perceived cognitive social capital that is utilised to leverage influence in decision-making with powerful others. In this example, the use of persuasive emotional repertoires is evident to confer status that in turn reflects power that can be used to exercise influence with others.

Therefore, the careful use of emotions by several of the women in the research supports the literature that suggests socio-emotional responses are important for handling gender related challenges in the workplace and for personal benefit (Eagly & Karu, 2002; Heilman, 2001; Rafaeli & Sutton, 1991). However, the literature identifies one more component of social capital and agency in relation to entrepreneurship and institutional change that was also observed in this research and this relates to human capital that is discussed next.

5.3.5.1 Human capital

The section on human capital detailed in section 4.2.6 and summarised in Table 4.10, details how women firstly, perceived the utility of human capital in the form of education and training and secondly, the influence that human capital had on their perceived levels of social capital. The findings on human capital demonstrate both positive and negative effects. This analysis will focus on the effects reported under education or other qualifications in Table 4.10 as this is widely defined within the literature as producing positive effects on career outcomes, although these findings were not entirely consistent with the literature (Becker, 1993a; Dakhli & Clerq, 2004; Gonzalez-Alvarez, & Solis-Rodriguez, 2011).

As can be observed in Table 4.10, the highest academic indicator of human capital reported was "ACSC", a selective course with no academic external accreditation for those considered able to achieve the highest ranks above OF5. Other professional qualifications such as a Masters Degree that required superior effort and would have higher status outside of the military had little

indicative enhancement on human capital in regard to advancement as can be seen in the comparative Table 4.10.

The only variation that was observed in terms of reported social capital was within the medical profession where external qualifications were highly valued within the professional field of medicine. However, similar to other academic qualifications at Masters level such specialist qualifications, whilst important for the field of medicine, did not appear to translate into recognised social capital and legitimacy for advancement across the services compared to attainment on "ACSC" as the following extract suggests:

I'm probably the only one qualified across the service in this area...but since I haven't done "ACSC" my chances of reaching the upper medical echelons are quite possibly zero. (22FN4 line 1047 – 1052)

Therefore, whilst the literature suggests that academic attainment as a form of human capital represents the strongest predictor of managerial progression (Tharenou, 2001; Tharenou, Latimer, & Conroy, 1994). These findings illustrate the contrary for the UK Armed Forces, where the investment in education, personal or otherwise, does not directly contribute to the institutional measure of academic human capital necessary for advancement defined as "ACSC".

It is unclear why alternative academic qualifications do not appear to accredit individuals with human capital for advancement other than to reiterate that the objective structural logic of acquiring "ACSC" for advancement appears paramount for acquiring institutional legitimacy. Thus institutional logics have a profound effect on an individual's promotion potential but this research also identified other institutional incongruence's that could erode social capital as a consequence of lifestyle choices. The next section examines how family dependencies impact on social capital and how women chose to respond.

5.3.5.2 Erosion of social capital

An important point of emphasis for those women seeking access to higher positions was their concern over the maintenance of the social capital that they had accrued. Caring for dependants, which required long periods of time within

the home base as a possible consequence of motherhood or caring for others (section 4.2.6 & Table 4.11), appeared to erode social capital. This slowed women's career progression, irrespective of any prior achievement on "ACSC".

Some women responded to the implications of caring on their careers by sustaining their social capital and institutional legitimacy in a numbers of ways. One approach adopted was to delay having a family until the "last safe moment" as can be seen in the age spread of women with young children in Table 4.11. The table illustrates that greater than 40% of the women interviewed were over 35 with children younger than 4 years, and provides an indication of how important the notion of conformity with the male norm of uninterrupted service, influenced their social standing and personal choices. Others in section 4.2.6 openly declared a purposeful decision to forgo family altogether because of the potential to jeopardise their careers. For those that did have family, there were a number of responses that both minimised the time away from service routine for childbirth and subsequent caring. This involved an eclectic mix of care support in the form of nannies, boarding school, retired partners and parents, which were used to separate the link between family and service.

The literature largely places sources of causality to these observed behaviours as the consequential effects of caring because of the dominant role stereotyping that reinforces the dominant congruent perceptions of females by males (Bruin et al., 2007; Brush, Bruin, & Welter, 2009; Davidsson & Honig, 2003; Ragins & Winkel, 2011). Similarly, if these observations are compared to a prevailing institutional logic based on war fighting, the fundamental female determination to have children can clearly contradict the prevailing logics of appropriateness within these institutional settings. Thus, the cognitive association of woman as combatant, whilst also stereotypically seen by males in the same service as mother, appears incongruent to the normative components of the military context that gives rise to isolation (March & Olsen 2004).

Those who alternatively chose to insulate their personal life from the institutional setting demonstrated a closer congruence with institutional norms yet perhaps reinforced their embeddedness through their very compliance. This may help to

explain why some women chose to adopt such an approach by reflecting on the consequences of none compliance, whilst at the same time still trying to accommodate the force of human nature in the form of motherhood.

The imposition of structural determinants for advancement such as the "Golden Escalator" and "ACSC", coupled with the logic of interrupted service can therefore place these women at a disadvantage with their male contemporaries. General solutions are not easy to substantiate, but the UK Armed Forces may wish to consider alternative arrangements for women that can accommodate service discontinuities. Service discontinuity and the subsequent loss of social capital necessary for promotion as a result, is of real concern to these high achieving women although to date, there is no clear answer on how to provide an equitable solution.

5.3.6 Summary

This research has identified that women in the UK Armed Forces demonstrated high levels of self-belief of efficacy and internalised goals focussed on advancement. However, their ability to actualise these goals within their service environment exposed differences between the Navy and Army compared to the RAF. These differences were considered to be either a consequence of prevailing institutional logics that reflected a bias towards women or from an entrepreneurship perspective due to a lack of social capital and legitimacy to enact change alone.

Women were highly reflexive in their approach to enact plans to realise their goals by liberating themselves from the constraints of embeddedness. This involved both "autonomous" and "communicative" reflexive positions that appear as an extension of the ideas by Archer (2003), albeit Archer's work does not appear to address the dual approach of reflexivity identified in this research. This dual approach to reflexivity firstly, enabled women to develop plans for enactment internally before testing their ideas with male elites on their viability for success. Secondly, the communication of their plans allowed for adaptation of their goal realisation plans based on an individual's assessment of the prevailing interpretation of institutional logics. Thus, those that appeared

successful secured previous male roles and by doing so redefined institutional structures and logics in the process. These changes to institutional logics could be further reinforced if these women were subsequently replaced by another woman officer. The CR perspective on agency, that views the essentialism of past experiences in shaping current structures, confirms this viewpoint (Archer, 1995)

Women required the support of others to gain access to important information and to develop trust and reciprocity with influential powerful elites. This involved the use of socio-emotional techniques but human capital offered little advantage in this respect. Sources of social capital included that originating from kin which is consistent with the literature. However, these findings also suggest that women adopted heterogeneous kin linkages rather than homogeneous relationships as suggested in the literature. As a consequence, the anticipated degradation in social capital in the institutional context was not evident because their partners could associate themselves with the institutional environment based on their military background.

The literature on entrepreneurship also demonstrates that the position of these actors, especially women within networks of relationships, is also an important determinant of an individual's ability to realise their goals (Brass, 1985; Timberlake, 2005). Thus, the following section examines how the findings related to networks.

5.4 Networks

5.4.1 Introduction

Agency and social capital are said to be intimately linked through the understanding of networks where social capital is closely associated with patterns of connections, tie strength, legitimacy and access to non-redundant information. Such connections are believed to be essential in the entrepreneurial process of institutional change (Aldrich & Zimmer, 1986; Burt, 1992; Uzzi, 1996). The discussion that follows refers to the findings in Chapter 4, section 4.3, in response to the proposition that is shown below:

Proposition 3: Women use network ties to reduce path lengths and this facilitates their access to non-redundant information for the purpose of opportunity identification.

The analysis of these findings in Chapter 4 identified the following elements of networks relevant to this research perspective: firstly, how the pattern of network connections influence women's access to non-redundant information; secondly, the nature of weak ties and structural holes and their use to provide advantage and finally, how role position can influence how social capital and institutional legitimacy is perceived. These three elements are discussed in the analysis that follows starting with network connections that are built through relationships.

5.4.2 Network connections

The range of networks and the relationship between these networks was reported in Table 4.12. The table identified the networks that individuals were cognitively aware of and this included an appreciation of their purpose, connections and accessibility. The table was separated for clarity into an order of networks with those demonstrating higher structural legitimacy (including expert power) at the top, designated as 1st order networks. Those with lower levels of expert power and legitimacy are described as 2nd order networks. The final group of networks in the table were annotated as 3rd order networks and these held a lower level of positional power and were mainly represented through kin relationships. These networks are now discussed in greater depth in order to understand how women accessed resources form within networks to enact their goals or otherwise.

5.4.2.1 First order networks (1st Order)

Within the context of this study, a highly legitimising 1st order network reported by the women was the promotion and selection board. These boards established both internal and external forms of institutional legitimacy. Internal legitimacy was a function of status and largely centred on legitimate power and expert power based on a membership formed from elite status individuals (See

Table 4.12). The women in this research believed that these 1st order networks held both legitimate and expert power because of the hierarchal position within the institutional structure. Raven (2008) acknowledges that such networks do indeed hold such power and this would concur with the perceptions of these women in the research. Whilst the women in the research did not highlight the concept of external legitimacy as an immediately relevant factor for themselves, it can be observed from secondary data discussed in section 4.3.2 that the actions of the 1st order networks was also to secure such legitimacy through the publication of promotion results in external media sources (London Gazette, 2014; MoD, 2014).

The open publication of the promotion results by the 1st order network results can therefore be considered as an act of legitimacy building that is considered to be an important part of institutional survival (Low, 2010; North, 1990; Suchman, 1995). Such legitimacy in this instance appeared to communicate to the external audience that a meritocracy based system was in place and conferred that the actions of the organisation were both desirable and proper for its very existence. This finding is consistent with the view of several authors (e.g., DiMaggio & Powell, 1991a, 1991b; Suchman, 1995), that consider the role of legitimacy as a vehicle for the substantiation of governance processes that span the relationship between social acceptability and the right of the institutions to exercise influence or power in doing so. This legitimate use of power, substantiated by sources of external legitimacy, has the effect of reinforcing the promotion process as acceptable to both the internal and external environment. Using reinforcement in this manner in turn makes it extremely difficult (from an external perspective) for those women that did not believe in the equity of the selection process to challenge the perceived validity of the process.

Legitimacy from an internal perspective was also called into question on the basis of impartiality in the findings (section 4.3.2). Comments such as:

They are not supposed to know your gender...but it's hard to miss it when the report reflects your gender with phrases ...like pleasant and sensitive. (IFA5, line 421-434)

They are a chosen few that will always get through...irrespective of how good they are. (9FN19, line 719-720)

I wouldn't have a problem with the boards if we thought that they could see us as equals to males or at least hear about us as often as they hear about males. (21FA4, line 599-601)

These comments expose how these 1st order networks can be influenced beyond that of formal process. The first quote emphasises the subliminal biases that women felt were embedded within reports through the terms "pleasant and sensitive" that are believed to be gendered terms. The second quote reinforces the notion of gender bias and reflects the underlying institutional logics previously identified in section 4.1.5.2. The term "chosen few" is a direct reference to the male elites previously referenced in this chapter that are currently all males. The third quote is also relevant for understanding the importance of network relationships as the term, "At least [emphasised in interview notes]...hear about us", suggests that women resided on the periphery of these networks and thus were not heard. These collective responses can therefore be taken to imply a series of hidden institutional logics that imply an underlying sense of disadvantage for women and this is largely supported in the literature (Ahl, 2004; Hallen, 2008; Jennings, Greenwood, Lounsbury, & Suddaby, 2013).

Gender disadvantage within networks is also believed to arise out of women's and men's differences, where the notion of gender inhibits structural access to important networks of influence. This lack of access in turn reinforces their periphery location that emphasises exclusion through gender bias in so called subliminal ways (Brass, 1995; Ibarra, 1993; Kanter, 1988; W. R. Scott, 1994). Such biases are also believed to further disadvantage women and minorities that are not well connected to the most powerful coalitions within institutional frameworks, either through position or relationships, and thus they can

experience greater barriers to advancement (Bevelander & Page, 2011; Timberlake, 2005).

As reported in the findings (section 4.3.2), but more fully illustrated here, is the case of a nurse disadvantaged in promotion and career terms on the basis of gender. Reference to this case helps illustrate how gender bias, subliminal thinking and prevailing institutional logics can influence powerful network decisions. The employment Tribunal (*Williams v Ministry of Defence*, 2013) found in favour of a female military OF5 nurse who had been refused promotion to a long standing male appointment even though she was eminently qualified to do so. The board that considered the promotion concerned in the tribunal was a 1st order network board, which was the most powerful board compared to others in the promotion hierarchy and was an all male. The basis of the judgement, which found in favour of the nurse, was the failure of the Board members to comply with its own rules and policies and based their decision on subjective evidence. Two quotations that help illuminate these points are as follows (italicising added to aid analysis in the following paragraphs):

The tribunal said the MoD's rationale for giving the role to Gp Capt (Group Captain) 'A' [name removed for anonymity] was "entirely subjective and unsustainable" and concluded that Gp Capt 'B' "was not selected because of her sex" [emphasis added]. (BBC, 2013)

We must conclude that the promotion Board included a significant degree of subjectivity and no evidence has been presented to substantiate the subjective decisions made. Discussions were not recorded and we, in the absence of objective evidence, consider that absent appropriate safeguards was subject to conscious or unconscious discrimination [emphasis added]...it is apparent that only doctors reach the rank of OF6. (case number 1318158/2011, p. 32-33)

By referring to the italicised annotations it can be seen that the Boards acted with autonomy and ignored institutional policies and rules. This reflected the position of legitimate, expert and reward power these Boards possessed. Secondly, the conscious or unconscious decisions can be related to institutional

logics that preference male over female. In this respect, it seems highly unlikely due to the seniority of the officers on this Board that they would have been unaware of the governance requirements of the organisation in respect to the Human Resource policies.

This flouting of rules therefore appears to have not just been an act of omission but rather a wilfully taken act. Such an act strongly suggests that this Board was of the opinion that it was not so much answerable to policy as its own sense of what is considered culturally appropriate. This independent action in turn reinforces the power and status of the Board compared to other networks of influence by reinforcing that their decisions are right and proper for the services. However, the Board clearly failed to acknowledge these institutional biases that have favoured males over females. At the very highest level this provides an indication of how deeply embedded these institutional logics are on the appropriateness of men compared to women filling powerful positions.

The findings (section 4.3.2.) and as described in the Tribunal extract above suggest these powerful 1st order boards did not act as entirely independent entities but were themselves influenced through other networks such as the 2nd order networks. The relationship between these 2nd order networks and these women is discussed next.

5.4.2.2 2nd Order networks

The findings (section 4.3.2.) illustrated that 2nd order networks had significant influence over an individual's career and appeared more accessible for women in the RAF compared to those in the Navy and Army. This difference may be due to there being a greater number of female OF6s present within the network structure compared to none in the Navy and Army. The implication of which are encapsulated in the following extracts:

You normally find out what is happening on promotion too late to help [Army]. (5FA5, line 506)

Getting the inside track is dam difficult if you are not well connected...which is difficult with those that carry the weight at these boards [Navy]. (15FN4, line 650-651)

I know of an OF6 female that has attended these boards...she is a good listener and gives you some good inside advice on where to look next for jobs [RAF]. (42FR5, line 534-536)

The first two extracts reinforce the lack of access by these females to important networks of information as referenced in the terms "to late to help" and "getting the inside track" that relate to accessing non-redundant information. In comparison, the third quote that uses the term "good inside advice" infers the flow of important information that is not widely available to others. Thus, the RAF response in comparison to those of the Navy an Army implies greater access to career information that places these women at an advantage over others that do not.

This lack of female representation in both 1st and 2nd order networks of the Navy and Army thus suggests a lack of embeddedness of women that gives rise to exclusion (Ahl, 2008; Hoang & Antoncic, 2003). These observations would thus support Ibarra's 1995 "deficit hypotheses" of networks where the lack of women sends out a message of subordination and exclusion, and in doing so, can produce differential returns for women compared to men. The findings in the RAF case would support the view in the literature that better decision-making from an entrepreneurial perspective is premised in part on an actor's ability to identify niches in institutional logics to create and exploit opportunities for advancement (Brass, 1985; Brass et al., 2004; Cech & Blair-Loy, 2010). However, this is highly dependent upon an individual's connection with like minded others that are close to powerful "egos" either in proximity or status terms within a network. Those that can achieve this type of access considerably reduce the path lengths that would otherwise inhibit their ability to benefit from the non-redundant information that is believed to be necessary to achieve entrepreneurial change (Casson, 2005; Shane, 2003).

The literature also suggests that while a lack of embeddedness within networks leads to exclusion, it can also shape individual's expectations through reinforcement of structural relationships that underpins institutional stability by favouring one group over another (Katzenstein, 1998; Kenny, 2007; Seo & Creed, 2002; B. Smith & Stevens, 2010). Therefore, this lack of embeddedness by the women in the Navy and Army may possibly reinforce the prevailing institutional logics that omit to frame women in senior positions and, as an unforeseen consequence, continue to communicate to women that these senior position are for the dominant elite that are male?

The findings in section 4.3.2 also demonstrated that women in all three services developed alternative network strategies to improve their identities and seek access to important information through alternative means. A prominent strategy that some women utilised to achieve the required level of access to this information was through the use of weak tie relationships that are discussed next.

5.4.3 Weak Tie networks

The findings in section 4.3.3 identified that ties with males were strongest within their immediate cohort in terms of age and locality but they also had several weak ties with powerful elite males in varying proportions outside of their immediate environment. Ties with senior males of elite status were evident in section 4.3.3 across all three services where individuals worked in close proximity or directly for these elites.

Several women reported in the findings that they took a purposeful interest in locating themselves alongside powerful elites in order to benefit from their position and status. In network terms, such positioning also reduces network tie lengths and provides access to the non-redundant information necessary to effect change based on a preference to interact with similar others (McPherson et al., 2001). Thus, these women gained access to important networks for the purpose of enabling change which is consistent with the literature (Bevelander & Page, 2011; Lin, 1999; Moore, 1990).

The findings also illustrate how women accessed males as sponsors either in the form of seniors or indeed through relations or kinship that facilitated access to powerful and highly legitimate network positions. The following extracts can be used for explanation:

He was my boss and head of branch (2nd order network ego)...he knows a lot of influential people and I use him a lot to sound out his opinion on future roles...I'm pretty sure he would discuss this with others. (43FR4, line 348)

My husband is an 'Elite' OF7...I know all of his friends...and they know me. (19FR5, line 426)

The first extract demonstrates how the weak tie relationship with a powerful senior can be seen as a sponsoring role inferred by "discussing this (future appointments) with others". The second quote illustrates how the use of borrowed networks increases the sphere of influence of this woman by accessing her partner's network.

The utility of using sponsors can be seen as providing differential access to important information through linkages with network "egos". In doing so these women could leverage non-redundant information for entrepreneurial benefit (Burt 1992, 1997; De Carolis & Saparito, 2006). The use of kin and extended family can also further benefit actors as they are able to adopt the implied status of these networks ties during conversations and consequently benefit from the network access this allows irrespective of gender as discussed in Lin (1999).

These findings coincide with the literature on entrepreneurship where the use of borrowed networks or the use of personal ties with powerful others are believed to invoke high levels of institutional social capital and legitimacy. This is especially relevant where the ties acquired are considered to be closely associated with institutional expectations as reflected in these findings (Aldrich, 1989; De Clercq & Voronov, 2009; Dubini & Aldrich, 1991).

The data reported in section 4.3.3 also identified how women used weak tie connections with those that bridged network structural holes to their advantage.

The bridging position relates to the role of the "gatekeeper" (see 4.1.7.2) that straddled the relationship (hole) between the 1st and 2nd order networks (nodes). These weak tie relationships allowed access to highly relevant information on future opportunities and facilitated direct dialogue over career possibilities. Such a connection with the "gatekeeper" also appeared to enhance the salience of candidates in the eyes of the "gatekeeper" more than those that did not engage with this tie on a regular basis. This allowed those women with a "gatekeeper" tie to benefit from early non redundant information regarding highly valued roles which they could apply to fill. The following quote from Chapter 4 provides an example of this tie relationship:

I never thought I could secure an appointment within MoD...this one was out of the blue and I heard about it through my desk officer (gatekeeper)...whom I know well...he put me forward and won the day...its hard work but you are right at the heart of the movers and shakers. (24FN4, line 729-736)

In this quote, it can be observed that the "out of the blue" reference situates that the information received was new and highly relevant to advancement and can be classed as non-redundant information. Secondly, the information source was not through an extended network path length but straight from the gatekeeper who bridged a structural hole.

Burt (1992) describes in detail the role of the bridging position in networks and highlights the benefits of such a position in terms of the individual holding the bridging position alone. In contrast to Burt's findings this research has identified that the so called "gatekeeper" that held such a bridging position between individuals and higher order networks could also benefit those with weak tie relationships with the bridging position.

From a gender perspective therefore, those women who use the gatekeeper for such purposes have the advantage of increasing the likelihood of access to diverse information on which to better formulate strategic action. This enhanced access to information is due to two factors. First, shortened path lengths, which is unsurprising as it is entirely consistent with the literature. The

second factor, which involved using the bridging tie held by the gatekeeper who has access to 1st and 2nd order networks that these women did not, was not anticipated. The role of the "gatekeeper" therefore appears to have far more potential than is presently understood.

On potential issues to explore, with regards to the gatekeeper role, is how and if such weak tie relationships exist with males, the type of information that is communicated and its relevance to promotion, and how this role with better training can identify those with less network social capital to obtain unfettered access to the information relevant for career enhancement.

Within the wider working environment network ties with other female colleagues was possible but these women did not consider that these weak ties were important sources of information (section 4.3.3). The findings therefore suggest that women across all three services created weak tie relationships through heterogeneous connections rather than homogeneous relationships, which is contrary to the general expectations within the literature (Aldrich & Martinez, 2001; Blau, 1977; Kanter, 1988; Marsden, 1987; McPherson et al., 2001).

This difference with regards to heterogeneous rather than homogenous ties may be due to the gender imbalance across the services where there are fewer women compared to males (approx 46 out of 1,080 at OF5), as detailed in the secondary statistical data (DASA, 2014). The lack of females therefore leaves no alternative but for women to create such ties with males and thus indirectly enhanced network inclusiveness (Ibarra & Tsai, 2005).

The connections created through weak ties are therefore considered in most instances to provide important sources for gathering information to enable decision-making which is consistent with the literature (Aaltio et al., 2008; Carli, 2001; Ferri et al., 2009). However, the literature also identifies that these ties are less likely to be useful for women who are lacking in network social capital, than for men (Burt, 1992; Granovetter, 1983). Within the context of networks, social capital refers to the position of an actor in the network that gives rise to such social capital. The findings discussed next demonstrate how women thus acquired and potentially lost such structural social capital through role positions.

5.4.4 Network social capital

This section examines the findings in Chapter 4, section 4.3.4 and uses Figure 4.3.1 repeated below as Figure 5.4.1 as a basis for discussion. This figure illustrates the comparison of reported network social capital against different categories of congruent roles. Female congruent roles can be illustrated as those where there is a stereotypical match between gender and role such as a nurse or administrative assistant. The corollary of congruent roles is described as incongruent with a third category described as highly incongruent. In general, incongruent roles refer to women filling male typical roles such as a Commanding Officer of an operational unit in charge of many male soldiers. Highly incongruent roles refer to women in appointments related to highly masculine roles such as Special Forces appointments. Special Forces roles only apply to Army candidates in this research. These interpretations of role congruence and incongruence are used to analyse the findings in section 4.3.4 that follow.

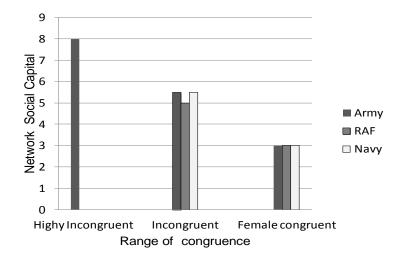


Figure 5.4.1. Role congruence versus network social capital

5.4.4.1 Role incongruence

Analysis of Figure 5.4.1 and the findings in section 4.3.4 illustrate that those appointments that were highly female incongruent, especially those associated with elite forces, produced the highest reported level of network social capital but had the lowest level of representation. Only the Army had representatives

in the research sample interviewed. Examination of the findings indicates that these specialist roles were reported by women as being highly regarded by males. One candidate reported that males "took a step back in disbelief; shocked by a woman doing this kind of role" (15FA4, line 489-497). This statement is taken to imply that such roles were 'highly incongruent' perceptions of women's capability by men to fill such appointments. This response further reinforces the underlying institutional logics of appropriateness about what women can and can't do. However, those few women who succeed in these roles have inferred upon them very high levels of network social capital which is consistent with the literature (De Carolis & Saparito, 2006; Fligstein, 1997; Nahapiet & Ghoshal, 1998).

In comparison, "incongruent" roles such as Command appointments (male typical) roles also offered women comparatively high levels of network social capital compared to congruent roles. This is believed to be as a result of their association with powerful elites and their structural position. Women who obtained such roles also reported that these male typical roles gave access to referent power and status by situating them close to network "egos". Figure 5.4.1 therefore illustrates that institutionally such positions (incongruent) conferred on these women a higher level of social capital compared to "female congruent" roles.

In analysing the responses regarding incongruent "male typical" roles, the literature identifies that the concepts of role congruence and network homophily play an important part in the assessments of individuals for either inclusion or exclusion in important networks (McPherson & Smith-Lovin, 1987; McPherson et al., 2001). A key assumption in the study of gender and social relationships is that social inequality is generated on the basis of social selection amongst groups where similarity between actors is said to be preferential over dissimilarities (Brass et al., 2004; McPherson & Smith Lovin, 1987). Thus, as a general point of discussion, the enhanced levels of network social capital could be attributed to these women in "male typical" roles appearing homophilious to the male gender norm for these roles as perceived by others.

Adopting an entrepreneurial viewpoint to these two categories of findings sees the juxtaposition of females into male dominated and institutional acclaimed roles as also reflecting shifts in institutional perceptions. Such a viewpoint is supported in the literature that suggests endorsement of new conditions of acceptance within institutions alters the very frames and logics that actors know and interpret as a given (W. R. Scott, 1987, 1994). However, these explanations do not account for the reduced network social capital reported in the findings for those in congruent roles in comparison to that observed in the "male typical" roles. The aspect of network congruent roles is discussed next.

5.4.4.1 Congruent network roles

The findings in Table 4.14 demonstrate that "female congruent" roles were the most highly represented group for women in the research and comprised of female stereotypical appointments such as administration support roles. Stereotypical roles have received a large amount of attention with regard to the negative effects that these can have on women's abilities and the possibilities for advancement (Acker, 1990; Chappell, 2006; Connell, 1987, 2002). As illustrated in Figure 5.4.1, women did not receive equitable levels of network social capital in these roles compared to appointments in either highly incongruent or incongruent roles (mainly a masculine domain). Without equitable access to such social capital these women were therefore constrained in the amount of social capital they could accrue as entrepreneurs who wished to enact change. The reason for this is due to the lack of network social capital available to these women to enable them to access important networks for support as confirmed in the literature (Davidsson & Honig, 2003; Ferri et al., 2009).

While NPM aspired to diffuse such demarcations, the evidence in this study suggested that without the active calculation of self-interest by these women that the "Glass Ceilings" remained firmly in place. Key elements about gender reform under NPM, equal access to appointments which combined with the Governments Equality Act (2010), should have resulted in a statistically even chance to reach to the top but possibly, only if they had a statistically even

chance to fill those roles that attracted comparatively higher levels of network social capital than congruent roles alone. These findings did not reflect that this was currently possible and reinforces the work by Chappell (2006) that suggest that such roles filled by stereotypical perceptions merely reinforce the gender logic of appropriateness found in male dominated institutions.

Organisational gender arrangements are also said to be active, not passive, where the position of women at any one time provides the necessary cultural coding of appointments and the design of the institutional structure itself. Thus women's appointments to stereotypical roles are therefore considered to reinforce these gender social roles and the continuing division of labour, including the cultural and institutional definitions of femininity (Eagly & Karu, 2002).

Whilst network congruent and incongruent roles conferred different levels of network social capital on individuals, other considerations such as family were also identified in the findings that impacted on an individual's level of network social capital in varying degrees. These are briefly reviewed in the following sections under the erosion of structural social capital that follows.

5.4.5 Erosion of network social capital

The findings in section 4.3.5 revealed the most widely reported negative influence on network social capital was with regard to caring responsibilities that relate to the implications of childcare in particular. These findings were represented in Figure 4.3.2 which is repeated below as Figure 5.4.2 for ease of reference. The perceived loss of social capital due to family commitments was proportionately smaller for women who filled "highly incongruent" or "female congruent" roles compared to those that held "incongruent" (male typical) roles across all three services.

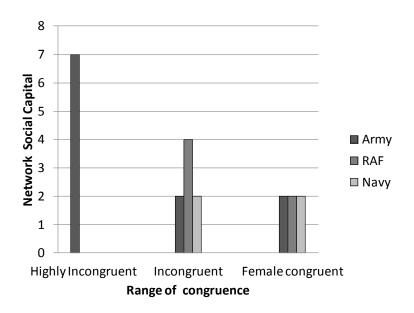


Figure 5.4.2. Network social capital the impact of caring

For those women in the Navy and Army that held "incongruent" roles it can be observed that they reported the largest drop in network social capital compared to those in the RAF. Prior established network ties with heterogeneous groupings were lost and an increase in homogeneous connections was thus reported as replacing them (4.3.5). Women also reported in several responses that the weak tie relationship with the gatekeeper was lost thus isolating these women from important sources of non-redundant information.

The above observations closely reflect the literature on women's status within the work environment where the concept of family is also said to reinforce male gender perceptions of females through the division of labour (Weber, 1997), the reinforcement of social roles (Kark & Eagly, 2010) and aspects of benevolent sexism (Glick & Fiske, 1996). As an outcome, women suffer the continued imposition of "mother" that disadvantages career progression (Watkins et al., 2006). Diekman and Goodfriend (2006) note that when women are perceived as aligning with their social roles such as nurturance and carer then the consequence is that they will be more valued in these roles but devalued in others.

The erosion of network social capital reported in the incongruent "male typical" roles is likely to be a consequence of reinforcing gender perceptions on role

incongruence where the notion of children reinforces male perceptions of female stereotypes and inadequacy (Heilman, 2012). As a result, these women were perceived by the institution to be illegitimate holders of male roles and subsequently lost the tie connections that previously gave them access to non-redundant information for decision-making (Ibarra, 1995; Ibarra & Tsai, 2005). Those that returned quickly to their role benefited from the reinforcement of not only institutional logics, but also through their compliance with the structural determinants. Therefore, whilst not immune from the loss of social capital entirely, the impact was less likely to be enduring compared to others that did not return so quickly. These observations are largely substantiated in the literature (Borgatti et al., 2009; Hardy & Maguire, 2008; B. Smith & Stevens, 2010),

In comparison, the relatively small decline in network social capital for those in "female congruent" roles reflected a reinforcement of role legitimacy that already has implanted within it the notion of female stereotypical role congruence. Thus, such an occurrence as childcare in such a role had little or no effect on these individuals when measured against pre-existing institutional logics (Ridgeway & Smith-Lovin, 1999)

An explanation for the marginal loss in network social capital for highly incongruent roles is largely unexplained in the literature. However, a possible explanation for such a relatively small loss in social capital is that such highly masculine roles produce latency of effects. The work of Kilduff and Krackhardt (2008), as a source of secondary information, suggests that the process of entrepreneurial identity change based on challenging the assumptions and biases associated with gender may be a plausible explanation. Heroic leadership is a possible other explanation that also presents a paradox between gender leadership and power (Fletcher, 2004). Whilst there is much work still needed in this area of interest, this research suggests that those women that achieve positions in highly incongruent appointments have successfully altered the cognitive network identity of those that fill such roles to match the dominant elite. This new status achieved by these women is a clear indication that, for

these particular few, they have managed to achieve recognition as institutionally acceptable people irrespective of gender.

Overall, the particular issue of female disadvantage due to exclusion from roles and positions reported not only here in this section, but also in sections 5.1 and 5.2, is now becoming increasingly of interest to external stakeholders such as government that seek to influence outcomes through the context of policy.

5.4.6 Summary

The findings illustrated how women are faced with a structurally determined set of powerful networks that have established both internal and external legitimacy for their actions. These networks were found to be inaccessible by women directly and reinforced a male gender bias despite outward signs to the contrary. Furthermore, the absence of women in structural positions reinforced this perception as women continue to appear in this research less embedded than males. This resulted in women experiencing extended path lengths to access the non-redundant information necessary for entrepreneurial endeavours because they continued to reside on the periphery of networks.

The use of weak ties in the form of heterogeneity, borrowed networks ties, the use of senior male elites as sponsors, and by accessing bridging ties such as the "gatekeeper", were identified as methods for shortening path lengths. As a result, this increased an individual's ability to access networks and the non-redundant information necessary for entrepreneurial decision-making. However, it is not clear if this would be equally applicable for men seeking similar career advancement or if such access could be more uniformly shared through training and awareness across the UK Armed Forces.

Network social capital was also identified as playing an important role for these women in allowing access to networks dependent upon the level of homophily with institutional role gender expectations they conveyed. The analysis demonstrated how different levels of role congruence influenced reported levels of network social capital, whilst also identifying how other commitments such as child care, could severely erode the network social capital accrued.

Whilst both social capital and networks are clearly linked within the literature from an internalised perspective (Johns, 2006; Sewell, 1992), the ability to relate how external context can influence this relationship is not well detailed in the literature and this provides the basis for discussing context next.

5.5 Context

The findings in section 4.4 examined how context could be understood from the perspective of the individual and how the macro influences on an institution can affect these interpretations. The proposition used in the research is shown below:

Proposition 4. Context can influence the likelihood of women realising their goals for advancement.

The findings identified that context in the form of change imposed from the external environment, and this includes the effects of NPM, as being influential on the likelihood of women realising their goals for advancement.

5.5.1 Change as context

During this research the UK Armed Forces were undertaking a substantial amount of internal change triggered by a government review focussed on cost reduction (Dunn, Egginton, Pye, Taylor, & Watters, 2011). The findings in section 4.4.1 provided some evidence that for the women in this study these changes would not substantially move the current perceptions of women's ability to gain advancement due to the embeddedness of the masculine logics that would remain in place. The findings in section 4.4.1 illustrate a "fait accompli" response by many of the women with regards to the idea that restructuring and change would improve the potential to see women as equals with men in terms of opportunities. The responses were overwhelmingly cynical in nature as the following extract from section 4.4.1.2 illuminates:

My worry about restructuring is that promotion for all will become really, really competitive...which is fine...but what will happen is that the bar for

promotion will be raised for all...but the men will still be getting a leg up by their chums. (9FA5, lines 270-277)

This perception was further reinforced in sections 4.4.1.2 and 4.4.1.3 where women commented that the organisational culture was being left unscathed by such change and that "the system", which comprised of rules, ethos and conformity, which they believed worked against them, would continue to remain in place. Two quotes help illustrate this point:

I can see change going on...we're changing shape...but actually very little has changed at this level. (6FA4, line 398-340)

The titles are changing...but in reality...when it comes to gender...women are still 'camp followers' in the minds of our superiors. (3FA4, line 290-296)

These quotes not only reinforces the individuals' continued perception of gender bias but also exposes the inherent difficulty that women currently experience in seeking promotion that is only becoming harder rather than potentially fairer. The concept of higher expectations than men reflects the literature in this area which suggests that women are inherently assessed in terms of performance to start from a lower baseline than their male contemporaries (Acker, 1990; Ahl, 2008; Fletcher, 1999). Thus, change for the UK Armed Forces in its current guise of becoming smaller, does not appear to constitute changes to the institutional logics which guide individuals understanding of the unwritten rules and logics of acceptability that continue to disadvantage women.

These findings are also consistent with a CR perspective which argues that changing the formal structure observable at the empirical level is not the same as the unwritten level of the real (Archer,1995). The real is to be found in the social systems and cultural beliefs presently occupied by the male elite. The majority of subjects in this study clearly made this distinction and it is for this reason they expressed the view that these changes in the organisation did not constitute any fundamental change to the context in a way that would help them. Thus, the MoD as an institution, compared with the civil service that has high levels of female representation across equivalent senior appointments

(>35% compared to 1.3% in the UK Armed Forces; EHRC (2011), look impervious to any external influence to disrupt its internal logics that continue to favour males over females.

Within the past year however, there has been an increased attention by government on the employment of women in the UK Armed Forces that could challenge the gendered structures observed in the findings that inhibit advancement (section 4.4.1.3). In part, this increased interest by government could also be a direct response to the recent press coverage of the female nurse covered in section 4.3.1 (*Williams v Ministry of Defence*, 2013) but also the increased recognition that, especially within the Army and Navy, internal defence rules on exclusion from combat roles appears unsustainable in the face of political calls for greater gender equity (MoD, 2010). Macro political attention is therefore paying more attention to the apparent gender disparities in the Armed Forces as the following recent extracts show:

"The military is one of the last closed institutions in this country that hasn't adapted to modern social values... there is a climate of fear with women too scared to complain", says Labour MP Madeleine Moon, who this week called for an Armed Forces ombudsman to adjudicate on internal complaints. (Telegraph, 2014)

"Let women fight on the front line": Defence Secretary tells Army to end macho image.

- Tory Cabinet Minister reveals plan for women to be given combat roles
- Review was due in 2018 but will be brought forward to this year
- Chief of the General Staff will report to Hammond by end of year
- Hammond says current ban sends bad signal Army not 'open to women'
- Says "macho image" of the Army is wrong. Claims reality "very different". (Daily Mail Online, 2014)

The first quote identifies defence as a closed institution and this could be substantiated also on the basis that it is possibly the only institution with its own form of judiciary other than the Police service when presiding over serious criminal offences (Manual of Service Law, 2013). This institutional framework that is resistant to exogenous influences is thus said to continue to reinforce the "old fashioned idea that what happens inside should stay inside" (Magnanti, 2014). This reinforces the concept of male dominated logics that are impervious to external regulation, or in this case aspects of the law, that provide very little indication of change.

These press and media statements above also raise a number of issues. Firstly, the literature suggests that exogenous shocks are said to reshape institutions based on their need for external legitimacy to support their continuance (DiMaggio & Powell, 1991a; Meyer & Rowan, 1977). However, the findings discussed above suggest that the recent change to the UK Armed Forces is unlikely to change itself internally given the embeddedness of the male dominant institutional logics and, consistent with the literature, it will require an external exogenous shock that questions the organisations legitimacy that supports its very existence for any change to occur (Meyer, Rowan, Powell, & DiMaggio, 1991; Streeck & Thelen, 2005). The current changes for financial reasons do not constitute such a shock because they do not question the very legitimacy that the institution needs for its survival (DiMaggio & Powell, 1991a; Meyer et al., 1991.

Secondly, the two press quotations above that emanate from government and opposition politicians are fundamentally questioning the UK Armed Forces legitimacy in the area of equality for women. Specifically, government is challenging the ability of the UK Armed Forces to break out of the closed and gender-biased system which it has maintained for years. Incidents such as the earlier referenced nurse tribunal case, female soldiers committing suicide as a result of bullying and claims of rape (Guardian, March, 2014) all combine to generate a perception that the institution of the MoD is becoming illegitimate in the eyes of government and wider public opinion. Whilst it is too early to

understand what changes are being made, the previous discussions in this chapter provide evidence of inequalities in power relationships, role appointments, access to networks, and the ability to accrue and sustain social capital due to, as an example the consequences of childcare. Whilst this list may not be exhaustive it is offered as a focus for thinking about where such changes are required.

Thus change to the basis of institutional legitimacy is an important factor for individuals as it will eventually become part of a response that alters internal logics, values and norms. Statements of attention to equity in employment, which are merely attempts at ameliorating external attention, do not constitute a viable response by the UK Armed Forces on its own unless the underlying practices where gender difference still exists are altered also (Diekman & Goodfriend, 2006). Thus changes in symbols and process without corresponding changes in consciousness about the context of gender are unlikely to deliver enduring institutional change (Diekman & Goodfriend, 2006; Stivers, 2002).

Such a model of change imposed through external pressures can be found in the form of NPM and where NPM is seen a clear manifestation of such external pressures that drives public institutional change on the basis of normative and coercive pressures (Fligstein, 1997). The relevance of NPM in relation to institutional change and the possible outcomes for women are discussed next.

5.5.2 New Public Management

In recent years the attention paid to the apparent lack of context in academic studies and in particular entrepreneurship has come into sharp focus (Johns 2006; Welter, 2008, 2011; Zahra, 2007). This criticism is with respect to the dominance of current theoretical ideas of entrepreneurship that favour the safe rather than the innovative and consequently the majority of such research fails to address context at all (Welter, 2008, 2011). The notion of context has been heavily influenced by the concept of rationality and bureaucracy that not only encodes information in terms of symbols and artefacts but sets normative rules

for their interpretation, including how context constrains behaviour responses and routines (Mischel, 1968; Rafaeli & Sutton 1989). Entrepreneurship is not only socially bound, but also happens in spatial, or geographical, contexts (Ramirez-Pasillas, 2008).

The impact of NPM in the form of privatisation of services, outsourcing and open competition was identified by several women in section 4.4.1.3 as an area where constraints to their career advancement aspirations could arise. These women made reference to CONDO, that largely occupy the logistic support services, and the home base as examples where the replacement of military by civilians could reduce opportunities for advancement. The following quote indicates how this can be interpreted:

The main support to the helicopters is now fully contractorised...they are also out in Afghanistan... I can see these contractors backfilling us after the 3rd rotation. (18FR5, line 575-579)

The above quote indicates that the increasing use of contractors in support roles is having a positive effect on the Armed Forces by reducing the number of military trained personnel ("backfilling us") to support a long term operation. However, these reductions in numbers are in those areas of support that are more likely to be occupied by females compared to close combat roles that still remain dominated by males. This situation is likely to prevail based on the current policies in force (MoD, 2010).

Figure 5.5.1 below illustrates how CONDO can encroach on the positions that are predominantly female as shown in Table 4.14. The two axes refer to the comments in 4.4.1.3 that characterised a perception by these women that CONDO would not encroach on areas where there was high threat combined with high levels of manoeuvre and threat (e.g., Combat, which is female incongruent). The demarcations are notional on the figure but the implication for women if only partly correct, is that there will be fewer roles that can be used by women to enhance their social capital for several reasons. First, the implementation direction for CONDO is to replace low manoeuvre and low threat military provided services and these services are where currently the

predominance of females reside. Secondly, the ability of females to move into the highly legitimated roles depicted in the findings in sections 4.4.2 and 4.4.3 that sees "in situ" (war fighting) roles as the most desirable will be limited if current deployment policies prevail. Furthermore, the removal or limitation of the "in situ" (home based) context will also have consequential effects for women in the Navy and Army if these women are unable to serve directly in combatant roles.

Finally, for those women that remain in locations in the home base (out of situ) they will continue to suffer from lower levels of legitimacy that may degrade as CONDO becomes more prevalent. This final point has a propensity to heighten the disadvantage of child care that many women face because without locations to employ females there will possibly be no careers available either.

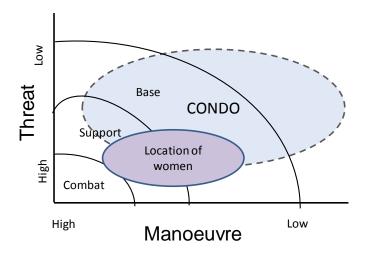


Figure 5.5.1. Impact of CONDO on women's roles

The views expressed in the findings in section 4.4.1.3 also support the observation that the intentions of NPM based on opening up Government to liberal market forces are impacting the Armed Forces. The last three decades since the Thatcher Government in the 1970s has seen an increasing move to privatisation of the Armed forces in the form of NPM. Whilst NPM has many tenets based on openness and efficiency it also has a principal of equity and fairness. However, these women could not see how this could be so, given the present structural constraints based on policy and embedded gendered institutional logics.

Furthermore, this research suggests that women still occupy the lower levels of the organisation resulting in control and power being held within the upper male echelons. Literature on NPM within the public sector suggests that NPM has its roots in efficiency driven organisational restructuring as one of the means of achieving economic ends. The ability for it to do so equitably and replace powerful controlling entities to establish such enduring principals is heavily contested (AhI, 2004, 2006b; Hedegaard, & AhI, 2013). Controlling entities are said to reinforce controlling gender substructures through the continued exclusion of women that reinforces the perpetuation of homosocial policies (Kanter, 1977). Examples of this can be seen in the experiences of the National Health Services where privatisation resulted in heterogeneous connections being lost in favour of male homogenous male cohorts of decision-makers and unforeseen consequence for women (Carter, 2000).

The consequential effect of NPM is that such changes, given the current power bias towards males, will reinforce homosocial reproduction and subjugate women further in the ever diminishing size of the UK Armed Forces (Kanter, 1977). The focus on combat as the last safe haven for men based upon the current exclusion of women will thus leave very little room for females to rise to the top on an equitable basis unless there are fundamental shifts in policies to level the battlefield.

5.5.3 Summary

This section identified that despite a large organisational restructuring imposed exogenously on the services the perceived ability of women to advance quicker as a consequence was not altered. This was because such change did not question the services institutional legitimacy that was underpinned by gender biased logics. More recently, the legitimacy of the UK Armed Forces with regard to female treatment and employment has been called into question by external powerful government and opposition representatives. This heightened interest may result in change but unless it can create a large enough shock to fundamentally question the legitimacy of the UK Armed Forces, and the embedded institutional logics that favour males, it is unlikely to succeed.

NPM as part of UK government's reform strategy sees the free market as a central tenet to reducing costs and improving overall government effectiveness and efficiency. An unforeseen consequence of this drive to outsource Defence is the likely consequence of reducing the opportunities for women that can enhance their social capital and subsequent access to higher echelons through promotion. The most likely consequential effect is that such changes will reinforce homosocial reproduction and subjugate women further in the ever diminishing size of the armed forces. This will leave very little room for females to rise to the top on an equitable basis unless there are fundamental shifts in polices.

All of these reforms therefore raise even deeper areas for research in terms of understanding what the purpose of the Armed Forces is, what do we want it to do and whether women in combat are a driver for institutional legitimacy? This is a situation that warrants a more inclusive and balanced view. The next section therefore draws the four elements—structure, agency, networks and context—together into a revised relational framework to illustrate how they interact as an open social system of influence when considering institutional change as a form of entrepreneurship by women.

5.6 Reframing the initial research model

5.6.1 Introduction

The findings in Chapter 4 strongly suggested that outcomes for women were influenced by structure, agency, networks and context, whose interpretation at the level of the 'real' in CR terms by individuals were reported as deeply embedded structures of meaning in the form of institutional logics. These prevailing logics appeared to constrain women's expectations to secure those appointments that brought the highest social capital for the purposes of advancement that were believed to be retained for males. In response the majority of women adopted a "calculus" or strategic calculating approach to role selection built upon individual goals that were translated into goal realisation strategies. These goals were based on the individual's aspirations for

achievement within their relative service context balanced by the perceived likelihood for achieving a successful outcome.

In reviewing the findings, several common strategies underscored the "calculus" approach adopted by these women such as: seeking roles close to senior powerful male elites, securing previously male dominated roles, shortening network path lengths through a bridging tie described as the "gatekeeper", and holding highly incongruent roles or combinations thereof. However, due to the varying strengths of institutional logics encountered across the services that could constrain the likely success of individual goal realisation strategies, these women were highly reflexive in their goal enactment approach in two distinct modes. Firstly, by acting as "autonomous" reflexives, to develop their individual plans based on internal sense making of how they could navigate the prevailing institutional logics (structure) to secure change. Secondly, they acted as "communicative" reflexives by discussing their goal realisation strategies with powerful males in order to test the viability of enactment or to make adjustments where necessary.

To achieve goal realisation, these women also needed to acquire the necessary institutional social capital by building their level of legitimacy through social relations with powerful elites and their networks. This relationship through ties allowed individuals to subsequently access resources to leverage advantage such as the development of wider networks and to gain access to non-redundant information for the purpose of timely decision-making. In doing so, this allowed some women to effectively dis-embed themselves from the institutional constraints (logics) and thus enabled these women to access both opportunities and resource to enact their individual goals. However, women in the Navy and Army experienced greater difficulty in goal realisation than those in the RAF due to the apparent strength of variation between these logics that placed a higher reliance on service "in situ" rather than "out of situ" experiences, which were subsequently translated into a proxy measure of social capital.

Whilst social capital was identified as an important resource necessary to access non-redundant information, the same social capital was also vulnerable

to rapid erosion in particular circumstances. For example, the implications of caring responsibilities across all three services appeared to significantly erode an individual's social capital. In response to these types of situations, such as new family commitments or caring for elderly parents, several women chose to either: delay having a baby to a later age, forego family altogether or to make arrangements for their family that allowed these particular women to continue with their career. In this respect, women in the Navy and Army appeared more disadvantaged when declaring family commitments than those in the RAF due to the difference in service attitudes (logics).

The ability to change these deeply embedded institutional logics from an exogenous perspective appeared limited due to the highly resilient nature of the organisation. Whilst NPM was perceived as one reform strategy that held equity as one of its principles it appears to have had no direct influence over these prevailing logics that continue to disadvantage women. Further to this the effects of NPM could also further disadvantage women's advancement by merely reinforcing male homosocial heterogeneity in decision-making through the absence of women at higher ranks. Unless the legitimacy of the institution with respect to gender equity becomes a matter of government attention it is unlikely that the necessary policies to enable equitable change will be forthcoming.

Finally, in taking these collective findings in Chapter 4 and by overlaying them on the initial research relationship model (refer Figure 2.8.1 that is repeated as Figure 5.6.1 for ease of reference) a number of limitations of the initial relationship model were found and are discussed next.

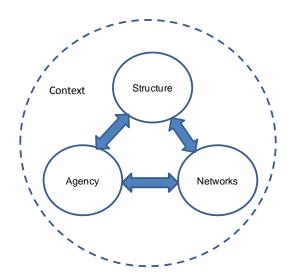


Figure 5.6.1. The initial relationship model for research

5.6.2 Revising the initial relationship model

The literature review in Chapter 2 demonstrated that the study of entrepreneurship had several systematic biases in terms of foundational assumptions, topics areas and research methods. Furthermore, several authors (Ahl, 2002, Hughes et al., 2012) also argued that in order to generate new insights it would be necessary to conduct research outside of these traditional approaches. The model shown as Figure 5.6.1 was developed from the literature review that identified that there was an unexplored causal relationship between the four variables shown and institutional change as a result of entrepreneurial activity focussed on gender and the level of the individual.

In reviewing the findings in Chapter 4 and the discussions in Chapter 5, the following summarised points are provided that suggest that the model would benefit from further refinement:

Structure. The structural determinants in the form of prevailing institutional logics were not uniform across the services or the individuals concerned. As a consequence, the ability of these women to enact their goals required them as individuals to establish their goal realisation strategies in such a way as to appear as acceptable to institutional norms in which they perceived change possibilities. To achieve their goals, a

reflexive stance by the women concerned was adopted. This involved two patterns of reflexivity, "autonomous" and "communicative", where the former is highly individualistic and is based on the perceptions of the strength of the variables depicted in the model. The model in its original form did not convey this understanding because it was defined at a macro level and premised on an assumption that these variables would be uniformly applicable to all three services. This research has demonstrated that this assumption is no longer valid (e.g., differences between the RAF and Navy and Army). Figure 5.6.1 also does not clearly demonstrate that as individuals these women constructed meaning differently by assimilating different perspectives of structure and therefore structure was not consistently interpreted across all individuals.

The individual's cognitive based process of entrepreneurial Agency. identified action in this research (e.g., "autonomous" "communicative" reflexives, social capital accrual, and the perceived importance of role positions) suggests that rather than a closed system, as illustrated in Figure 5.6.1, individuals were dealing with social based systems with emergent properties. Thus the analysis has shown that this figure is over generalised and does not adequately reflect that individuals reside in different cognitively defined spatial and temporal positions within each dimension, based on their understanding of the real. The identification of individuals acting as "autonomous" reflexives, then subsequently "communicative" reflexives, also suggests that as individuals the strategies they chose to enact change were both spatially and cognitively specific to the individual and the four variables. Thus, the current two-dimensional model shown in Figure 5.6.1 is limited in the expression of these potential dimensional relationships. This notion of spatial relevance could therefore be made clearer by separating the constructs as being dimensionally relevant to each other in different axial positions.

Networks. Individuals did not experience or have access to the same networks because they created an array of different linkages across their service environment based on their individual perspectives. Thus some women in the RAF could associate themselves with both more powerful females in their networks because senior females were present in their hierarchies. In comparison, women in the Navy and Army could not access senior women because none existed in their respective hierarchies. Further to this, some women appeared to gain access to both non-redundant information through bridging ties (gatekeeper) and higher levels of social capital by association with powerful elites. In comparison others did not have these declared linkages. Overall, networks were not uniform and provided different levels of access to the resources needed to enable the enactment of their goal realisation plans.

Context. External contextual factors were identified in the findings as creating endogenous effects that could impact on the ability of women to acquire suitable roles for promotion based on the current limitations of women being excluded from combat positions. If NPM continues to outsource non-combat positions, then eventually these women will be further excluded from the Forces almost in their entirety unless the policy on women changes. It is therefore considered that this relationship between external context and the individual institutions (RAF, Navy and Army) could be illustrated more clearly than that presently shown. This is achieved by adding a directional arrow that penetrates the semi-porous boundary and in some way changes the relationship between these women and the institutional variables defined. The arrow serves the purpose of clarifying the influence of context discussed in this research and does not include all possible contexts that are feasible.

Accounting for institutional change. The findings also identified that individuals experienced dissimilar environments in which to enact their chosen goal realisation strategies. This was portrayed in the differences between the Navy, Army and RAF and the variation in the role of social

capital, for example. However, the findings also indicated that not only did women conform in part to the prevailing institutional logics but also these logics could also change as a result of individual action. A shift in the institutional logics was apparent when women successively replaced males in former male dominated roles. Therefore, whilst Figure 5.6.1 demonstrated interaction it did so at a macro level rather than at that of the individual. This form of representation is inadequate as it could be misread as implying that the institution is an unresponsive entity to human agency and therefore entirely resistant to change. Thus a model that identifies the institutional position relative to the variables defined as structure, agency, networks and context could more accurately reflect the dynamic nature of the associated interactions.

Therefore, by drawing these aforementioned points together, which explained the need to modify the original model; it is possible to amend Figure 5.6.1 to more clearly illustrate the potentially different relationships between the variables shown and the individual. The revised figure, Figure 5.6.2 repositions the variables of structure, agency and networks by placing them on three different dimensional axes with context as an overall macro based influence that can impact on these three internal dimensions. Having explained why the model required modification, an explanation of how the newly modified model is to be interpreted now follows.

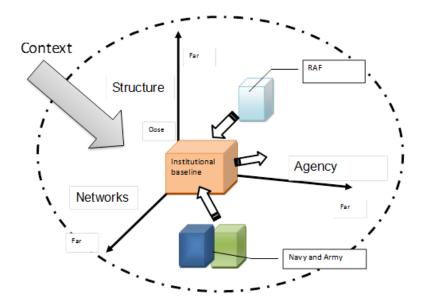


Figure 5.6.2. Relational model at the level of the individual

5.6.3 Explanation of a revised relational model

This section provides a more detailed explanation of how the revised model (graphically illustrated in Figure 5.6.2) can be interpreted:

- Institutional baseline position. This is shown as a cube that sits at the origin of all three axes and is considered as a baseline origin point for all current institutional logics relevant to the institution in question. To assist in understanding and for the remainder of this explanation this is described as the baseline position. In its simplest form, male elites would be an example from this research that would sit in positional terms coincident on this point thus inferring conformity with institutional expectations or logics. The reality is that all males per se will not sit at this annotated position, but it is offered that the most senior and powerful males could.
- Individual positions. In diagrammatic terms this is conveyed as an appropriate service cube. The relational position is with respect to all three axes shown. The position of the individual is initially shown as a snapshot based on how individuals may cognitively perceive themselves in relation to the variables shown. The term snapshot is used to illustrate that an individual's position is transient and not static. Thus, by taking

this snapshot, it is possible to describe that an individual may sit closer to the baseline in the network dimension by having senior connections through partner's networks than they do structurally, where they may not have completed "ACSC", for example. Similarly, their ability to use agency to create the social capital necessary for institutional change may be low compared to others that are higher.

• Effects of entrepreneurial action. Entrepreneurial action through the enactment of individual goal realisation strategies is perceived to move individuals relative to the axial positioned variables. As individuals enact and secure change they either move closer to or further away from the institutional baseline position in relative terms. However, successful goal enactment could also move the institutional baseline as it itself changed to accommodate women as an appropriate institutional logic. This is indicated by the two arrows in Figure 5.6.2, indicating a move towards the baseline to illustrate individuals in different spatial aspects to one another, demonstrating a movement of the baseline position towards the individual.

Therefore as an example those RAF females that secured previously male dominated roles on a recurring basis could reflect such an individual moving towards the institutional baseline and the baseline itself moving its initial position to represents a new institutional logic (e.g., by consistently accepting women in new roles). For others, such as those women in the Navy and Army, there was a greater challenge to overcome these dominant logics that held the baseline in its static position.

• Context. Context is shown as a dotted line around the institutional relationships that reflect not only internal context but also how exogenous context can influence these dimensions through policies and intervention, as examples. Thus, external macro influences can alter all relevant positions as it effectively changes an individual's perceptions of what is possible based on the opportunities for realisable goals. External

- policies on women are one example that would potentially create the impetus for the baseline to move away from its current defined position.
- Dynamics of change. The model accounts for interaction between the individual and the institution through entrepreneurial change endeavours. It achieves this by firstly, suggesting that individuals sit in different spatial positions relevant to each variable. Using CR terminology this can be understood as the individual's perspective based on what they perceive as 'real'. Secondly, the actions undertaken by the individual to realise their goals can move individuals closer or further away to these variables. In enacting change, individuals themselves alter their understanding of reality so they have moved their relational position. Thirdly, the potential for such successful action to be reinforced by a change in the institutional baseline position to reflect a new logic is now possible to envisage. Like movement of the individual, new logics reflect a new position of the institution that is no longer at the baseline position. Finally, context can influence the dimensional aspects of the model and change the institutional logics that individuals use to interpret how they will enact their goals. This effectively alters both the position of the institution and the individual that will be subject to the characteristics of this influencing pressure.

5.6.4 Implications

There are several implications that can be drawn from this model. Firstly, as individuals move closer to the datum there is a subjective possibility that if the datum does not respond and move towards these individuals then these women may become totally embedded and accept the institutional logics as reality. This would account for the "paradox of embedded agency" where women consider that the policies and rules are so restrictive that they limited their ability for action. Women who reported that career planning did not require their intervention in comparison to those that believed in intervention potentially illustrates this embedded paradox point. Secondly, context reinforced the underlying institutional logics (e.g., exclusion of women in combat roles and

marketisation of the home based role), thereby removing future opportunities for women to access positions to accrue social capital. As a result of outsourcing non-combat roles, (notably, those where the majority of women were found), the opportunity to enact goals that attract the highest levels of legitimacy and social capital necessary for advancement will become even more constrained. Finally, context can also deliver beneficial effects for these women through enforceable policies on the broader employment of women in key roles. As shown with the RAF's recent OF7 promotion, such policies have helped move the institutional baseline closer to these individuals. This movement has in turn delivered a far more, but as yet not fully equitable balance, between women and men with respect to promotion across the services.

As the model developed in this chapter and illustrated in Figure 5.6.2 demonstrates, the factors disadvantaging women are multi-causal and dynamic. Therefore, unsurprisingly the possibility of producing a fairer outcome for women would require working with all of these variables. However, the evidence found in this study would suggest that exogenously imposed reforms offer the most promising starting point by which to alter the present institutional logics. The reason for making this suggestion is that the MoD has shown itself to be remarkably able to resist change in respect to matters of gender. As demonstrated earlier, the power of the male dominant logics is so embedded that it seems unlikely to be able to understand its own prejudices and underlying assumptions, let alone alter them.

Nonetheless, both the MoD and the wider UK government have a stated aim of wanting to deliver greater entrepreneurial outcomes. Both have publicly proclaimed to achieve this outcome that requires promotion the best people irrespective of race, religion or gender. Achieving this aspiration will require greater understanding of why these inequities persist and what to do to in order to overcome them. This study has gone some way to answer the first question. However, given its limitations (a single case study) there is insufficient evidence to make a strong recommendation around specific policy reforms. The study did however provide sufficient evidence to suggest where to direct future

research and of the four variables involved, context may be the most important. Context in this case being defined as limited to the exogenous forces (e.g., policy) that can be applied to the MoD to bring about internal reforms.

5.6.5 Summary

In comparing the findings in Chapter 4 with the original relational model it was considered that the utility of the model in illustrating the spatial and dynamic relationships between the variables (e.g., structure, agency, networks and context) could be enhanced. The model originally developed, while basically sound, lacked the sophistication needed to explain some of the more subtle issues involved. As a result it was modified to reflect these findings. Chapter 6 now summarises the entire range of steps involved from conception through to completion of the research.

CHAPTER 6 CONCLUSIONS

6.1 Introduction

This research set out to explore female entrepreneurship within a male dominated institution in the public sector. The literature review suggested that female entrepreneurship involved complex relationships between structure, agency, networks and context. To examine these relationships from a female gender perspective, an exploratory case study was conducted within a government, male dominated institutional environment, namely the UK Armed Forces. Independent evidence demonstrated that compared to all other arms of government (averaging 25% plus), it had the lowest representation of women in senior positions (1.3%; EHRC, 2011). It was precisely because the MoD had such a strong occupational gender imbalance that it was assumed it would provide an excellent case study to examine this research topic. Specifically, it was believed that whatever the barriers were they would be easier to detect in an organisation which had narrower gender equity trends exhibited in comparison to all other private and public sector organisations in the UK.

The literature review also demonstrated that the research to date in entrepreneurship has been heavily biased in terms of causal assumptions (trait, male, private sector and economic measures of success) and the research paradigm (overwhelmingly positivist) employed. Researching this topic from a female perspective and within a public sector organisation dedicated to a public rather than private good moved the research beyond traditional topics of enquiry. As the research paradigm selected to explore the assumed relationships was CR it also broke away from the dominant research pattern. This break was also extended by the use of a research methodology using a qualitative case study based on Miles's and Huberman's (1994) approach. The study was therefore novel in that it shifted away from the dominant approaches to date in terms of the content areas examined, the potential causal factors explored and research paradigm used. This shift was justified on the grounds that much of the literature demonstrated that these changes were necessary in

order to generate fresh insights into this topic of institutional entrepreneurship in the UK Armed Forces.

The overall aim of the study was to explore if women acted in entrepreneurial ways to seek advancement into a particular stratified layer within a male dominated institution. The institution chosen was the UK Armed Forces and the stratified layer was the boundary between OF5 and OF6 where women were clearly under-represented in comparison with other government institutions (EHRC, 2011)

The literature review suggested that a promising way to explore this issue was to examine the dynamic relationships between the four key causal variables (structure, agency, networks and context).

To explore the relationships between these variables the following overall proposition and four sub-propositions were developed and examined in greater depth:

Research Question: How do female entrepreneurs interpret and respond to the dynamic relationships between structure, agency, networks and context to successfully change those institutional logics that hinder their career advancement?

Sub-proposition 1. Women who can understand and respond to the prevailing institutional logics are more likely to be able to create the necessary structural legitimacy to succeed.

Sub-proposition 2. Individual agency enhances the ability of women entrepreneurs to enact change.

Sub-proposition 3. Women use network ties to reduce path lengths and this facilitates their access to non-redundant information for the purpose of opportunity identification.

Sub-proposition 4. Context can influence the likelihood of women to realise their goals for advancement.

The key findings against each the four sub-propositions and the overall proposition are as follows:

Sub-proposition 1 – The findings demonstrated that structure was important with two notable descriptions defined as "ACSC" and the "Golden Escalator" that existed as a reality in the minds of the female officers. This cognitive understanding in turn influenced their approach to achieving advancement and evidence demonstrated that they adopted a "calculus" approach to future role selection. Key considerations in their approach to these future roles was to create sufficient legitimacy through acquiring key appointments with powerful elites to access the necessary social capital to leverage support from powerful others in order to support change. However, there was high degree of variation between the Navy and the Army compared to the RAF due to differences in the prevailing institutional logics between the service environments. Overall, the findings demonstrated that the structures in the UK Armed Forces are gender biased but individuals could, by successively reinforcing the appointment of females in previously defined male roles, change the prevailing institutional logics towards acceptance rather than rejection.

Sub proposition 2 – This was supported in a general sense. The findings illustrated that agency was conveyed through a high degree of self-belief and goal setting that manifested itself into goal realisation strategies. These strategies were not uniform across individuals and were dependent upon an individual's access to important resources that could enable these women to overcome the effects of embeddedness. To assist themselves in their goal actualisation the women initially acted as "autonomous" reflexive to devise their strategies for goal realisation and then a "communicative" reflexive to validate their plans before enactment. Social capital building and goal realisation was an important consideration in goal enactment but it was not without its consequences if these women appeared, from an institutional perspective, to be in opposition to the prevailing institutional logics. Evidence of external commitments through child care provided just one example where women

appeared to lose the relevant social capital to advance their goal realisation strategies.

Sub proposition 3 – This was strongly supported by the evidence. The findings under this sub-proposition were firstly, that the pattern of network connections influenced women's ability to access powerful networks so that they could then gain career advancement advantage. Secondly, that the weak tie relationship with people in bridging positions could be used for individual advantage by accessing non-redundant information. Thirdly, the notion of role position and "in situ" and "out of situ" service could directly influence the reported levels of network social capital which could either enhance or degrade the reported levels of social capital considered necessary by these women for promotion.

Sub-proposition 4 - Again the findings confirmed that this proposition was largely correct. Context in the form of external influences derived from the government's agenda for outsourcing is likely to severely impact women's prospects for advancement in the future based on the current findings. However, external context in the form of gender positive policies may assist in the amelioration of these effects by shaping the prevailing gendered institutional logics into a more equitable arrangement where the impervious relationship between combat roles and males is decoupled to accommodate females.

Research question. Based on the findings the overall research question can be explained by using the relational model discussed next to illustrate the full extent of this justification.

6.2 Relational Model

The initial research model developed post the literature review was based on a macro perspective of the dynamic relationship between the depicted variable (structure, agency, networks and context) without detailed attention to the effects and responses at the level of the individual (see Figure 6.2.1). However as reported in the findings and discussions in Chapter 5, individuals and their corresponding service environment offered different patterns and interpretations of these four variables that could not be adequately portrayed in the original

model. For example, women created and enacted individual not collective goal realisation strategies based on their independent interpretation of the array of prevailing service institutional logics. As individuals they acted as an "autonomous" reflexive before becoming a "communicative" reflexive in the development and subsequent choice of their goal realisation strategies. Similarly, as the prevailing institutional logics changed through the suggested entrepreneurial action of some women, and when women were placed successively in previously dominant male roles, it became possible to perceive that the institutional logics themselves also changed in relative terms from a previous position to a new one.

As a result of these observations the model was revisited to illustrate how the dynamic relationship between institutional logics, the four variables and the individual could be more clearly illustrated. This resulted in Figure 6.2.1 below that illustrates how these women could be perceived as holding different dimensional positions to each other and relative to the variables shown. The model also provides a basis for suggesting that as women enacted their goal realisation strategies they did so by moving their axial relationship to these variables and an institutional reference position denoted as the baseline. The institutional baseline is indicative of the current prevailing logics as translated against these variables. This model can therefore provide an illustrative interpretation of both individual change and institutional change brought about either by the actions of individuals or the external contextual influences discussed.

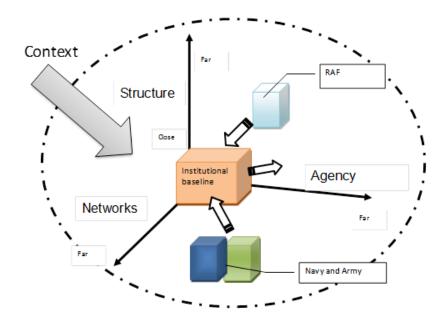


Figure 6.2.1. Relational model at the level of the individual

6.3 Implications

The findings in this research challenges the work by Giddens (1984) who advocates that structure and agency can only exist as a duality whilst this research reinforces the position of Archer (1995, 2003) that suggests that these two variables are independent of each other, or a dualism. This is substantiated in this research which demonstrated that for these women at the CR level of the real, structure did exist as an understanding of institutional logics of appropriateness separate from agency. This was typified in the notion of the "Golden Escalator" that in turn gave rise to shared perceptions about cognitive realities that subsequently shaped future choices of actions by individuals.

The research paradigm used in this research defined as CR is also supportive of the call for further work on a "non fusionist approach" to understanding institutional entrepreneurship and change by resisting the temptation to inflate structure over agency (Leca & Naccache, 2006). The adoption of a CR paradigm also extends the field of entrepreneurial enquiry in new directions by taking gender as a starting point and examining how the study of gender and entrepreneurship can be examined from new epistemological position before it reaches a so called "dead end" (Ahl & Marlow, 2012).

These findings demonstrated that at the level of the real, women achieved entrepreneurial change by firstly, identifying opportunities for entrepreneurial action, a much contested topic within current literature, that suggests that opportunities do not exist at the empirical or the actual but are constructed at the level of the real. Secondly, it provides an example of how gendered institutional orders are interpreted and responded to by women entrepreneurs and how plans to enact change are constructed and deconstructed for the purpose of realising their individual goals (the "autonomous" and "communicative" reflexive). It also provides an individualistic account, possibly for the first time, of how entrepreneurs address the conundrum over the "paradox of embedded agency" where the constraints imposed by institutional logics prevent entrepreneurial action. As such it advances the call by Ahl (2006b) for new directions and understanding of women and entrepreneurship.

The effects of external context on women's advancement also identified that macro institutional influences in the form of NPM have potentially unforeseen consequences for individuals in terms of career advancement. Whilst the work of Osborne and Gaebler (1992) and Sundin (2011) demonstrate the effects of NPM on individuals in terms of managerialism, this research identifies the effects of NPM in reinforcing gender discriminatory logics of appropriateness. Similarly, the potential of external context in the form of gender equitable policies could reshape the future promotional potential for these women if they were appropriately applied. These findings therefore contribute to the work of Hood (1991), Gabbay and Zuckerman (1998) and Thomas and Davies (2002a, b) in their call to provide an informed understanding of how certain elements of context can impact on the daily enactment of entrepreneurship.

The final implication of this research is the production of a relational model between these four variables and the individual that is not apparent within the literature, at least this is not apparent using the current prevalent research perspectives. Whilst the model is merely illustrative it does, possibly for the first time, convey the notion of an individual's relationship between these four particular variables and also frames the position of the institution relative to

these variables. It has a major strength in that this research reintroduces agency into the study of entrepreneurship but possibly more enlightening, it introduces individual agency from a female perspective that has not been widely interpreted within extant literature relating to institutional entrepreneurship and change.

It has also explored institutional entrepreneurship using a gender perspective in an area of government—UK Defence—that has not received such analysis before, especially how women as individuals responded to embeddedness using an entrepreneurial perspective. The research has concluded with a qualitative framework model on which further research can be built upon, a model that has until now evaded articulation within the literature in any form.

6.4 Recommendations for future research

As a single case study it was not possible to substantiate if the model developed has more universal applicability. However, it is assumed that the model does have wider utility for not only how these variables defined affect women but also other marginalised or otherwise disadvantaged groups working in a wide variety of institutional settings. Therefore to determine if the model has wider applicability the following recommendations are offered:

- Widen the research to include a similar stratified layer of males within the UK Armed Forces to identify if those males that seek advancement adopt comparative standpoints and strategies as observed in this research.
- Assess the applicability of this model at lower female ranks of the UK Armed Forces. This would help identify if the variables identified in the model are applicable to all levels in the organisation.
- Broaden the research into areas such as the National Health Service or the Police Force to determine if variation exists across different institutional settings.
- Expand the research to include ethnicity as a research focus to understand if minority groups within majority Caucasian institutions experience similar influences and effects.

 Adopt a feminist institutional perspective to understand if the application of a different philosophical research perspective produces similar or vastly different conclusions as to the causal nature of the manifest phenomena.

6.5 Limitations of the research

There were several limitations to this research that the suggested recommendations for future research would address and may have facilitated a more comparative approach to the analysis phase. The limitations identified are:

- The omission of comparative (e.g., male, ethics, other institutional settings).
- A stratified sample which, with one exception, consisted of female, middle class, well-educated women who would generally be regarded to have come from privileged backgrounds.
- The adoption of a single sociological institutional perspective. The absence of a female researcher, that is, as the primary researcher was an ex-military male officer and the supervisor was also male they may have constrained, misinterpreted or entirely missed the more gendered nuanced responses.

6.6 Closing Remark

To date the institutional inertia of the MoD has in terms of recruitment, training, promotion and retention been bound by linear-thinking process-focussed maintainers of the status quo, which had the result of holding back women. While this arrangement may have been appropriate in a Cold War context the challenges confronting the modern MoD operating within a neoliberal framework have created a very different set of problems which will require very different and highly creative problem solvers. As shown, entrepreneurship is not an exclusive male domain and these women have not only demonstrated their individual ability to overcome powerful institutional barriers that are resistant to change, but in doing so, they have revealed their innate creativity and tenacity to

succeed. It therefore follows that the MoD would do well to more actively tap into the obvious talent of its female officers.

The scope of this research has therefore been to extend the body of knowledge in institutional entrepreneurship involving women and change by using a multi-dimensional and wide ranging approach that has taken the challenge to provide new insights into an under-researched aspect of entrepreneurship in government institutions. It is suggested that the explanatory power of the relational model developed as a result of this research has real potential to generate fresh insights into old and frequently recurring issues. However, this potential will not be realised without additional and ongoing research. To that end it is hoped that other scholars interested in this topic will seek to advance the knowledge generated as a result of this study.

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APPENDICES

Appendix A Initial Letter of Introduction



Vincent Centre

Cranfield University Defence Academy of the United Kingdom Shrivenham Swindon SN6 8LA, UK

8th May 2013

Tel Direct Line + 44 (0) 1793 785052

Sarah Guerra

Head of Equality and Diversity, Ministry of Defence
DCDS PERS_SEC_DIVERSITY AHd
6.D.11 MOD Main Building
Whitehall London
SW1A 2HB

Dear Ms Guerra

A PHD RESEARCH STUDY- POTENTIAL INSTITUIONAL FACTORS WTHIN THE MOD THAT MAY RESTRCT FEMALE PROMOTION TO OF6 (Brigadier) AND BEYOND

Reference A. JSP 536: Ethical Conduct and Scrutiny in MOD research involving human participants.

The centre for Defence Acquisition in Cranfield University is currently sponsoring a PhD student to conduct a study on the topic of Public Entrepreneurship. The focus for the research is on female promotion, primarily in the region of OF5 (Colonel/ equivalent) toOF6 (Brigadier/ equivalent) within the UK Ministry of Defence (MoD). The purpose of this correspondence is to seek your support and approval for the proposed PhD research study. As you will be aware both the press and the government have shown an increasing interest in this topic. In particular, there has been growing speculation that

women are constrained from accessing the higher echelons of defence when compared to their male contemporaries. However, despite the strength of these widely held beliefs that women face institutionalised limitations for senior promotion there has been little if any substantiated theoretical research around this topic that would support or refute such a view point.

The increasing strategic importance of female promotion to the MoD can be demonstrated from several angles. First, the evidence from the Equality and Human Right Commission's report (2012) demonstrated that the MoD stood in stark contrast to other government departments when considering promotion for senior ranking female officers. Whilst the figures still require further validation, The Armed Forces collectively have less than 1.3% of appointments above OF5 filled by women compared to the Police at 16.6% and the civil service at 34.7%. Second, successive governments have sought to implement female friendly policies both within government and across the wider community. Because the MoD's figures suggest it has been the least successful of all government departments in achieving the desired policy outcomes, it is likely to come under increased scrutiny from stakeholders to explain its performance. Third, the issue of female promotion within the military would appear to be one issue of increasing global concern. For instance, in 2012 the United States Department of Defense generated a series of recommendations with respect to policy reforms

The rationale for these reforms is that:

"The department of Defense is committed to removing all barriers that would prevent Service members from rising to the highest levels of responsibility that their talents and capabilities warrant."

As you will be aware, similar initiatives are underway in countries such as Australia and Canada. All indications are that for the foreseeable future the issues of female promotion within the military will remain an important strategic issue. The proposed study would therefore appear to be both timely and to offer the following benefits to the MoD. First, it will help determine if there is any substance to the widely held perceptions by stakeholders such as the press and government, on the treatment of women in the military. Second, if such barriers to female promotion are found to exist, then the research could offer recommendations to the MoD on steps to remove the barriers or lower their impact. Thirdly, it will assist the MoD to demonstrate to key stakeholders that it is proactively taking steps to manage these strategic issues.

Appendix 1 provides some additional detail on the research approach. Should further information be required, this can be provided in writing, by telephone or face-to-face. The research study will be carried out under the standard security arrangements that exist between the MoD and Cranfield University. These arrangements ensure that no aspects of the research or its findings are released to the public domain without prior written permission from the MoD.

Your assistance is therefore sought to support and facilitate approval for the PhD student, Colonel (Retd) Derek McAvoy OBE, to access a limited number of female staff (in the range of OF5 to OF6 on a voluntary basis) drawn from across the three services, and any relevant data associated with promotion held by the respective Military Secretariats and the Defence Analytical Services Agency (DASA).

Your assistance in this matter would be very much appreciated

Yours sincerely

Dr David M Moore

Director, Centre for Defence Acquisition

Appendix

OUTLINE STAFFING PROCESS FOR PHD RESERACH - CRANFIELD UNIVERSITY

Appendix 1 to letter dated 8th May

OUTLINE STAFFING PROCESS FOR PHD RESEARCH -CRANFIELD UNIVERSITY

Purpose of Research

To explore issues related to promotion of females into senior appointments within UK defence. The research proposition being examined is; women's inability to leverage the required resources within institutional networks and as a consequence this inhibits their promotion opportunities.

Staffing Process

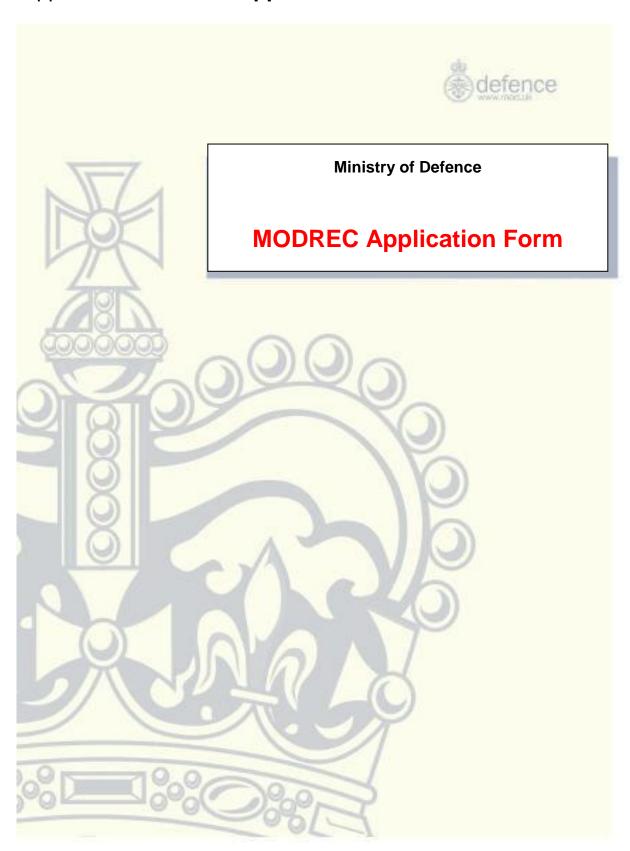
An application to the MoD Ethics Committee that seeks approval of the research methodology using semi-structured interviews will be made by Cranfield University. When approved, all parts of the research will adhere to the MoD's ethical requirements. In accordance with the requests in this letter, DCDS Personnel and Training Diversity will indicate suitable points of contact (POC's) within the three services (Navy, Army, Air Force). These POC's will act as single service leads to provide access to personnel or any relevant data that is permissible under service guidelines.

Communication between the PhD research student and the respective POC's will be established to define the available data and potential candidates for interview in accordance with the MoD's Ethics Committee's direction. Individuals will be approached and interviews will be held subject to the guidance set out by the Ethics Committee, and the department.

An estimated 20-30 personnel in total across the three services will be individually invited to a semi structured interview lasting approximately 1-1.5 hours. Selection of interviewees will be based on a stratified sample across all three services, and interviews will take place at the interviewee's normal place of work where practicable. Participation will be voluntary. All information collected will be on the assurance of complete anonymity throughout. Additional follow up interviews for a small percentage may be sought to aid clarification, however it is not anticipated at this stage.

Access to aggregated data and intuitional promotional rules will also be required in order to establish and baseline the research elements such as the total population size, qualifications for promotion, numbers qualified but not selected. The data will be synthesised using approved research instruments in Social Network Analysis and the relevant findings written up within an overall PhD thesis framework. Clearance for external publication will be sought under the authority and guidance of Reference A unless informed to the contrary. Should it be required, the identified POC's can be briefed on the executive abstract.

Appendix B MODREC Application Form



Documer	Document Description:					
Application	on form for MODR	REC	approval of hun	nan research		
Version	Date	De	escription			
1.0	19 Jun 2006	Fir	rst issue			
1.1	15 Oct 2007	Mi	nor format & co	ntent changes		
1.2	22 Oct 2009	Mi	nor format & co	ntent changes		
1.3	25 Jun 2010	Minor format & content changes				
1.4	21 Jan 2011 Minor format & content changes					
This docu	ıment will be subj	ect t	o version contro	ol by:		
Marie Jo	Marie Jones Telephone: 01980 658849					
Corporat	Corporate Secretariat Fax: 01980 613004					
Bldg 005, G01-614 E-mail: ethics.sec@dstl.gov.uk						
Dstl Porton Down						
Salisbury						
Wiltshire						
SP4 0JQ						

MODREC Protocol No:



Ministry of Defence Research Ethics Committee (MODREC)

MODREC APPLICATION FORM

Please read the notes in the MoDREC Application Form Guide before completing this form. Enter text in the grey boxes, which will expand automatically to encompass your text. Please e-mail the completed form and any supporting documents to ethics.sec@dstl.gov.uk

1. TITLE OF STUDY

Examining how females achieve entrepreneurial outcomes in the Armed Forces

2. DATE/VERSION

Date 20 June 2013 **Version** 1.03

1. NATURE OF PROJECT

PhD Research

2. INVESTIGATORS

2. INVESTIGATORS
2a. Chief Investigator
Name and Title: McAvoy D A Col (Retd)
Grade/Rank: Student
Post Title: N/A
Department: Department of Management and Security
Establishment: Defence Academy of the UK
Address: Shrivenham, Swindon, SN6 8LA
Address. Sinvernam, Swindon, SNO 6LA
Telephone : 07825 061024
E-mail: d.mcavoy@Cranfield.ac.uk
2b. Other investigators / collaborators / external consultants
Dr Kevin Burgess
2c. Name of the Independent Medical Officer (if applicable)
N/A

3. PREFERRED TIMETABLE

3a. Preferred start date: Aug/Sep 2013

3b. Expected date of project's completion: Dec 2013

4. SPONSOR / OTHER ORGANISATIONS INVOLVED AND FUNDING

4a. Department/Organisation requesting research:

Cranfield University

4b. If you are receiving funding for the study please provide details here:

Nil

4c. Please declare any competing interests: Nil

5. OTHER RESEARCH ETHICS COMMITTEE (REC) APPROVAL

Has the proposed study been submitted to any other REC? If so, please provide details:

Cranfield University Research Ethics Committee. No anticipated problems.

6. PURPOSE OF THE STUDY

The purpose of the study is to examine the factors related to social capital and network resources pertinent to women.

The research question is:- What is the role played by social networks in assisting women to act as entrepreneurs within the military.

Objectives are:- to determine what factors exist within social networks that either enable or inhibit women behaving as entrepreneurs.

As this is exploratory research rather than a hypo deductive study, specific hypothesises testing is not considered appropriate at this time.

7. STUDY DESIGN, METHODOLOGY AND DATA ANALYSIS

As an exploratory research study use will be made of semi structured interviews with a population of between 20-30 female officers and 3 serving male officers drawn from a stratified sample across the rank range Lieutenant Colonel to Colonel. The sample will be apportioned across the three services subject to numbers in the cohort described.

Design. The research design will be based on a case study conducted within the setting of the MoD. The study is qualitative in nature and will use semi structured interviews to explore the objectives already outlined. The unit of analysis will be the foregoing stratified sample.

Methodology. An estimated 20-30 female personnel and 3 serving males in total across the three services will be individually invited to a semi-structured interview lasting approximately 1-1 ½ hours. Selection of interviewees will be based on a stratified sample across all three services, and interviews will take place at the interviewee's normal place of work where practicable. Participation will be voluntary and they may withdraw at any time without explanation. All information collected will be on the assurance of complete anonymity throughout. Use will be made of coding and code books that will be held securely. Additional follow up interviews for a small percentage may be sought to aid clarification, however it is not anticipated at this stage.

Access to aggregated data and institutional promotional rules will also be required in order to establish and baseline the research elements such as total population size, qualifications for promotion, numbers qualified but not selected. The data will be synthesised using approved research instruments in Social Network Analysis and the relevant findings written up within an overall PhD thesis framework. Clearance for external publication will be sought under the authority and guidance of Cranfield Ethics Committee and existing publication

protocols between Cranfield Security and Defence and the MoD.

10. SAFETY

10a. Has a Project Safety Committee been appointed? If so, please give the name and contact details of the chairman.

No. Not considered appropriate based on a risk assessment of likelihood versus consequences.

10b. How will the safety of the proposed research be managed?

Project safety will be managed within existing safety procedures and legislation within both the MoD and or University establishments. As the research is question based there are no known additional risks other than those in a normal office environment.

10c. Is your application supported by a certificate of verification stating that the safety of the proposed research has been properly assessed and managed? (The certificate of verification should be attached to the application. If there is no certificate of verification this needs to be explained.)

N/A

10d. Who is the named person taking responsibility for the safety of the equipment to be used in the research?

N/A No equipment is used.

10e. Who is the named person taking responsibility for the overall safety of the proposed research and who will be responsible for day-to-day safety?

Cranfield University via the delegated officer Dr Kevin Burgess who is responsible for overall and daily safety of the research specified herein.

- 10f. How will those conducting the research be made aware of:-
- a) Their responsibilities for reporting any new issues as to safety which arise after the start of the project and
- b) Their responsibilities for reporting adverse events in the conduct of the project?

10f (a and b). Cranfield University H&S management system will be used. Feedback to MoD is part of this process. Adverse events will be reported through

the Cranfield University H&S management system. The research would be halted until safe clearance is given.

10g. What other measures have been taken to ensure the safety of this research and minimize any risk to the participants?

Written permission to take part highlighting the right to withdrawal.

Assured anonymity for all participants

11. ETHICAL CONSIDERATIONS

All ethical considerations are being addressed through the Cranfield University Research Ethics Committee which operates in accord with UK and International Research Standards for conducting research with human subjects.

12. PARTICIPANTS TO BE STUDIED

Number of participants: 20 -30

Lower age limit: 30

Upper age limit: 50

Gender: Female

Please provide justification for the sample size:

Stratified sample due to the relatively low population size at Lt Col and Col level when compared to the male cohort.

13. SELECTION CRITERIA

By rank, gender, uniformed services in the UK Armed forces.

A balanced number of both male and female officers by service is a

requirement.

Using information from the single services manpower planning cells.

14. RECRUITMENT

14a. Describe how potential participants will be identified:

On the basis of the above and using the lead E&D desk officers within the appropriate Command structure to assist in the communications with potential candidates.

14b. Describe how potential participants will be approached:

By letter that outlines the purpose of the study and their options to participate

14c. Describe how potential participants will be recruited:

Voluntary basis with no remuneration.

15. CONSENT

15a. Please describe the process you will use when seeking and obtaining consent:

Study is question based. Modified consent letter attached.

15b. Will the participants be from any of the following groups?

Under 18: Yes/No Subordinates: Yes/No

Prisoners: Yes/No Pregnant or nursing mothers: Yes/No

Mental Illness: Yes/No Learning disabilities: Yes/No

How will you ensure that participants in the groups listed above are competent to consent to take part in this study? N/A
15c. Are there any special pressures that might make it difficult for people to refuse to take part in the study? How will you address such issues?
No. They will be clearly informed in writing and on the actual interview day that their participation is entirely on a voluntary basis and they have the right to withdraw from the study at anytime without explanation
16. PARTICIPANT INVOLVEMENT: RISKS, REQUIREMENTS AND BENEFITS
16a. What are the potential hazards, risks or adverse effects associated with the study?
All have been identified and suitable treatments are in place e.g. from fear of attribution relating to comments or involvement. Anonymity procedures in place. It is believed that the risks are relatively low.
16b. Does your study involve invasive procedures such as blood taking, muscle biopsy or the administration of a medicinal product? Yes/No
If so, please provide details:
N/A
16c. Please indicate the experience of the investigators in the use of these procedures:
N/A

16d. If medical devices are to be used on any participant, do they comply with the requirements of the Medical Devices Directives?

N/A

16e. Please name the locations or sites where the work will be done:

Cranfield University Shrivenham or MoD establishment.

16f. Will group or individual interviews / questionnaires discuss any topics or issues that might be sensitive, embarrassing or upsetting? If so, please list these topics and explain how you will prevent, or respond to, volunteer discomfort:

No. However in the unlikely event of such an outcome the individual can withdraw and any information offered will be destroyed immediately.

16g. Is it possible that criminal or other disclosures requiring action (e.g. evidence of professional misconduct) could take place during the study? If yes, give details of what procedures will be put in place to deal with these issues:

Considered extremely unlikely. If revealed we would make the individual aware of their rights and responsibilities. Exposure of incidents involving a criminal nature would be referred to the Cranfield University Research Ethics Committee for guidance.

16h. Please describe any expected benefits to the research participant:

No immediate or direct benefits but in the long term it may help individuals identify the issues which could help or hinder them in being effective entrepreneurs

16i. Under what circumstances might a participant not continue with the study, or the study be terminated in part or as a whole?

It is assumed that this will be a one off in the case of the subjects and therefore apart from a one hour interview not much else will be required. There may be a case to follow up some participants for clarification purposes should the data presented not be entirely clear. However, this is expected to be minimal. Subjects are able to withdraw at any time from the study and also request that any information gathered in relation to the said individual be withdrawn. On withdrawal it will be destroyed.

It is not anticipated that the study will be terminated in part or the whole.

17. FINANCIAL INCENTIVES, EXPENSES AND COMPENSATION

17a. Will travelling expenses be given?

All costs associated with travel will be covered by Cranfield University. As the intent is to visit the subjects in their place of work it is not anticipated that participants will incur any travel costs.

17b. Is any financial or other reward, apart from travelling expenses, to be given to participants? If yes, please give details and justification:

No- It is purely a voluntary study.

17c. If this is a study in collaboration with a pharmaceutical company or an equipment or medical device manufacturer, please give the name of the company:

No

18. CONFIDENTIALITY, ANONYMITY AND DATA STORAGE

18a. What steps will be taken to ensure confidentiality (including the confidentiality and physical security of the research data)? Give details of the anonymisation procedures to be used, and at what stage they will be introduced:

Anonymisation procedures will be implemented from that point immediately after an interview of a participant has been conducted. The interview will be

transcribed and then held in a secure location within Cranfield University and with strict access provisions. These records will not contain names or other sensitive details about the participants. Each subject will be assigned a unique identifier code and a code book will be held in separate, yet secure location to where the primary data is held. The University will destroy the primary data after a seven year period.

18b. Who will have access to the records and resulting data?

Access to the data will be afforded to the PhD student, Derek McAvoy, his supervisor, Dr Kevin Burgess, and if required the Cranfield ethics committee. Please note that it is considered highly unlikely that the ethics committee would request access to this data unless there was some compelling reason around a possible breach of an agreed procedural issue or complaint.

18c. Where, and for how long, do you intend to store the consent forms and other records?

The consent forms will be scanned and held by both the student and his supervisor on Cranfield University servers that are both encrypted and password protected. The code book will be held separately to the raw data in a secure location. Hard copies of the forms will be held by Cranfield University in a secure location that is both separate from the code book and raw data.

19. INFORMATION FOR PARTICIPANTS AND CONSENT FORM

The Information for Participants and Consent Form should be composed according to the guidelines and submitted with this form.

The following, where applicable, are attached to this form (please indicate):

- [x] Information for Participants
- [x] Consent Form
- [NA] Appendix relating to medicines and/or healthcare products
- [NA] Letter to general practitioners
- [NA] Letter to parents/guardians

- [x] Letter of other research ethics committee approval or other approvals
- [x] Copy of e-mail recruitment circular/poster/press advertisement
- [x] Questionnaire/topic guide/interview questions
- [x see email] Evidence of permission from organisation (e.g. hospital) where research is to take place
- [NA] List of acronyms
- [X] CVs of named investigators
- [X] CV of supervisor
- [NA] CV of Independent Medical Officer

Please list any other supporting documents:

Initial letter to the head of MoD E&D at Main Building

Extract of this MODREC form as a separate document the information to participants

Letter to candidates

Information for Participants

Study title

Examining how females achieve entrepreneurial outcomes in the Armed Forces

Invitation to take part

As an Officer in the Armed Forces you are being approached to determine if you are willing to take part in a short semi-structured interview. The interview forms the primary research phase of a PhD sponsored Cranfield University student who is researching female entrepreneurship in a defence context. If you are willing to take part then your involvement will require approximately 1 hour of your time to be interviewed. The interview can be arranged for a time and a venue suitable to your availability. Participation is entirely your choice and complete anonymity of your involvement and responses will be assured. The purpose of the research, contribution to defence and other frequently asked questions are detailed below.

Should you wish to register your interest to take part or to seek further clarification then please email either; Derek McAvoy on d.mcavoy@Cranfield.ac.uk or Kevin Burgess on k.Burgess@Cranfield.ac.uk

What is the purpose of the research?

The purpose of the study is to examine the factors related to social capital and network resources pertinent to women.

The research question is:- What is the role played by social networks in assisting women to act as entrepreneurs within the military.

Objectives are:- to determine what factors exist within social networks that either enable or inhibit women behaving as entrepreneurs accessing the social capital relevant to gaining promotion.

Who is doing this research?

Derek McAvoy a research student and Dr Kevin Burgess both from Cranfield University Shrivenham

Why have I been invited to take part?

You have been invited to take part on the basis of gender and rank. The stratified sample will invite all women in the rank range Col/Captain/ Gp Captain and for some services Lt Col/Cdr/Wg Cdr levels due to possible low population sizes. A smaller comparative size of male officers will also be interviewed as a comparator.

Do I have to take part?

Participation is entirely voluntary. Should you offer to take part then at anytime wish to withdraw you may do so without recourse or question.

What will I be asked to do?

During the interview you will be asked 10-12 questions. Your responses will be recorded and afforded complete anonymity. There is no need to prepare for the interview. There are no right or wrong answers.

What are the benefits of taking part?

There are no immediate benefits arising to individuals taking part although their contribution to the research may be viewed as important inputs to debate on gender employment in the Armed Forces? First, it will help determine if there is any substance to the widely held perceptions by stakeholders such as the press and government, on the treatment of women within the military. Second, if such barriers to female promotion are found to exist, then the research could offer recommendations to the MoD on steps to remove the barriers or lower their impact. Thirdly, it will assist the MoD to demonstrate to key stakeholders that it is proactively taking steps to manage this strategic issue.

What are the possible disadvantages and risks of taking part?

None known

Can I withdraw from the research and what will happen if I don't want to carry on?

Yes. You can withdraw at anytime throughout the process of interview.

Are there any expenses and payments which I will get?

No

Will my taking part or not taking part affect my Service career?

No. Complete anonymity of the responses will be assured. The final thesis will use aggregated data only built upon a range of responses that are not related to an individual.

Whom do I contact if I have any questions or a complaint?

Questions can be addressed to the researcher Derek McAvoy at d.mcavoy@Cranfield .ac.uk or his supervisor Dr Kevin Burgess should you have a compliant.

Will my records be kept confidential?

Yes, all records will be kept confidential. You will have a codified reference that is designed to ensure anonymity

Who is organising and funding the research?

Cranfield University have sponsored this research. The individual services Navy, Army and RAF have appointed their respective equality and Diversity/Inclusion departments to nominate a lead desk officer. The initial communication t candidates will be sponsored via this point of contact. Thereafter Cranfield University will manage the process. Cranfield University are funding the research.

Who has reviewed the study?

The Cranfield University ethics, and the PhD research committees

Further information and contact details.

The postal address for correspondence is:

Department: Department of Management and Security

Establishment: Defence Academy of the UK

Address: Shrivenham, Swindon, SN6 8LA

ARRANGEMENTS FOR THE PAYMENT OF NO-FAULT COMPENSATION TO RESEARCH PARTICIPANTS

1. This Annex sets out the arrangements for the payment of no-fault compensation to a person who suffers illness and/or personal injury as a direct result of participating in research conducted on behalf of the Ministry of

Defence. The no-fault compensation arrangements only apply to research participants (Military, Civilian, or non-Ministry of Defence) who take part in a Trial that has been approved by the MOD Research Ethics Committee.

- 2. A research participant wishing to seek no-fault compensation under these arrangements should contact the DBR Common Law Claims & Policy (CLCP), Ministry of Defence, Level 1, Spine 3, Zone J, Whitehall, London, SW1A 2HB who may need to ask the Claimant to be seen by a MOD medical adviser.
- 3. CLCP will consider reasonable requests for reimbursement of legal or other expenses incurred by research participants in relation to pursuing their claim (e.g. private medical advice, clinical tests, legal advice on the level of compensation offered) provided that they have been notified of the Claimant's intention to make such a Claim.
- 4. If an injury is sufficiently serious to warrant an internal MOD inquiry, any settlement may be delayed at the request of the research participant until the outcome is known and made available to the participant in order to inform his or her decision about whether to accept no-fault compensation or proceed with a common law claim. An interim payment pending any inquiry outcome may be made in cases of special need. It is the Claimant's responsibility to do all that he or she can to mitigate his or her loss.
- 5. In order to claim compensation under these no-fault arrangements, a research participant must have sustained an illness and/or personal injury as a direct result of participation in a Trial. A claim must be submitted within three years of when the incident giving rise to the claim occurred, or, if symptoms develop at a later stage, within three years of such symptoms being medically documented.
- 6. The fact that a research participant has been formally warned of possible injurious effects of the trial upon which a claim is subsequently based does not remove MOD's responsibility for payment of no-fault compensation. The level of compensation offered shall be determined by taking account of the level of compensation that a court would have awarded for the same injury, illness or death had it resulted from the Department's negligence.
- 7. In assessing the level of compensation, CLCP, in line with common law principles, will take into account the degree to which the Claimant may have been responsible for his or her injury or illness and a deduction may be made for contributory negligence accordingly.
- 8. In the event of CLCP and the injured party being unable to reach a mutually acceptable decision about compensation, the claim will be presented

for arbitration to a nominated Queen's Counsel. CLCP will undertake to accept the outcome of any such arbitration. This does not affect in any way the rights of the injured party to withdraw from the negotiation and pursue his or her case as a common law claim through the Courts.

Appendix C Interview question set

	Primary Question
1.	Can you briefly tell us about your military career and your present career aspirations?
2.	Can you describe the promotion process pertinent to your career advancement?
3.	Who do you believe to be important influencers (formally/ informally) in helping you progress/ determine your career?
4.	How do you believe that your role and rank are perceived by others within the military?
5.	Do you believe that you will be promoted under the existing career policies? If not, why not?
6.	Who, in your opinion does the career advancement process favour and for what reasons?
7.	What do you believe are the key attributes and experiences that the MoD values in the career advancement system?
8.	How do you think the key attributes and experiences of female officers align to those valued by the MoD?
9.	What do you consider that the MoD could do to improve the promotional rate for female officers?
10.	How do you enhance your promotional prospects?
11.	Is there anything else not yet mentioned that you consider important for understanding the challenges faced by women who seek promotion within the military?

Appendix D Candidate Letter



Centre for Defence Acquisition

Cranfield University

Defence Academy of the United Kingdom

Shrivenham

Swindon SN6 8LA

PhD Research: Examining how females achieve entrepreneurial outcomes in the Armed Forces

The purpose of this letter is to invite you to participate in a study on female entrepreneurship in defence. As you will be aware both the press and the government have an increasing interest in the accessibility by women to executive appointments including those in the Armed forces. In particular there has been growing speculation that women may be unduly disadvantaged when seeking promotion to senior appointments such as those at 1 Star and above when compared to their male contemporaries. However there is presently little comparative evidence available to substantiate or refute such a view. The MoD is thus continuing to take an active interest in this important issue and have permitted Cranfield University to undertake some research in this area.

The process will involve a recorded interview based on the 11 questions attached to this letter. The interview will last approximately one hour and can be arranged at your place of work or at some other location if more convenient to you? Participation will be on a voluntary basis. The transcript of the interview, recording and your participation will have complete anonymity and held securely at Cranfield University. After a period of seven years all data will be destroyed. If at any time during the interview you choose to withdraw then you may do so. Any data collected from you will then be immediately destroyed and omitted from the research.

The outcome of the collective research will be threefold. Firstly, the interviews will provide the research component for a PhD submission. Secondly, the MoD will be provided with an academic perspective on any identified impediments to career progression for women transitioning between OF5 (Captain RN, Colonel, Group Captain) to OF6 (Commodore, Brigadier, Air Commodore). Finally, this research may be used to support other academic papers for submission to leading research journals.

If you require further clarification then queries can be addressed by e mail to Derek McAvoy, d.mcavoy@Cranfield.ac.uk (phone 07825 061024) or Dr Kevin Burgess K.Burgess@Cranfield.ac.uk . Should you wish to partake then please advise me by e mail or phone of your contact details?

Original signed

Research Student

Appendix E Candidate consent form

CONSENT FORM FOR PARTICIPANTS IN RESEARCH STUDIES

Title of Study: Examining how females achieve entrepreneurial outcomes in the Armed Forces

Ministry of Defence Research Ethics Committee Reference: TBA

- The nature, aims and risks of the research have been explained to me. I have read and understood the Information for Participants and understand what is expected of me. All my questions have been answered fully to my satisfaction.
- I understand that if I decide at any time during the research that I no longer wish to participate in this project, I can notify the researchers involved and be withdrawn from it immediately without having to give a reason. I also understand that I may be withdrawn from it at any time, and that in neither case will this be held against me in subsequent dealings with the Ministry of Defence.
- I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- I agree to volunteer as a participant for the study described in the information sheet and give full consent.
- This consent is specific to the particular study described in the Information for Participants attached and shall not be taken to imply my consent to participate in any subsequent study or deviation from that detailed here.

my dependar compensatio	t of participating as a volunteer in Ministry of Defence research, I or nts may enter a claim with the Ministry of Defence for n under the provisions of the no-fault compensation scheme, ich are attached.
Participant's	Statement:
Ι	
satisfaction a written above	e research project named above has been explained to me to my and I agree to take part in the study. I have read both the notes and the Information for Participants about the project, and what the research study involves.
Signed	Date
Witness	Name
	Signature
Investigator's	s Statement:
Ι	
	have carefully explained the nature, demands and any risks (where applicable) of the proposed research to the
Signed	Date
AUTHORISII	NG SIGNATURES

I understand that in the event of my sustaining injury, illness or death as

The information supplied above is to the best of my knowledge and belief accurate. I clearly understand my obligations and the rights of research participants, particularly concerning recruitment of participants and obtaining valid consent.

Signature of Chief Investigator	
	Date
Name and contact details of Chief Investigator	:

Appendix F Interview checklist

Why bother?

Chack List

Argyris and Schon (1974) suggest that the theory that governs a person (therefore by inference a researcher's also) actions is their 'theory in use' which may or may not be compatible with their 'espoused theory'. They further suggest that alignment of both theories in an individual is rare and hence the need for researchers to invest time and effort into understanding their own dissonance between both theories in order to reduce the risks of biasing their research findings. It is therefore important for researchers to uncover the theory implicit in order to be able to refine it and make it more in line with their desired theory (Folk, 1996). Given the importance of reflexivity to the ongoing development of any social science researcher the following check list was developed. It was used immediately after ever interview as it was assumed that the sort of learning required would be optimal when it was directed toward to surfacing and dealing with the feelings and insights as they were experienced as near as possible to the interview situation.

For the reasons already mentioned reflexivity is important in its own right. However the following check list was also used as an aide-memoir to ensure the application of sound interviewing skills. This list was developed from reviewing the following sources (Egan, 1976; Parrott, 2008; and Trevithick, 2005)

Officer List	•		
Interviewe	e's Code Name	:	
Interview:			
Process O	bserver		
Date			

Topic	Action	Response	Comment
Administration	Letter received before hand		
	Signed consent form		
	Taped		
	Follow up by subject e.g.		
	Supporting documents the subject may have agreed to send.		
	Follow up researcher e.g. to send additional material on the subject		
	Setting type e.g. work place, home, etc. supported(nonintrusive) or disrupted the interview		
Interview	Creating rapport		
	Surfacing any concerns before proceeding		
	Degree of empathy and sympathy (e.g. underdone or excessive)		
	Listening		
	Clarifying		
	Summarising		
	Prompting		
	Probing		
	Allowing and using silence		
	Self-disclosure		
	Using Humour		

	Providing Information	
	Providing Advice	
	Reframing	
	Providing reassurance	
	Using persuasion	
	Being directive	
	Ending Interview	
	Duration	
Emotional Response	Satisfaction	
	Affirmed	
	Truthful	
	Courageous	
	Flattered	
	Manipulated	
	Fear	
	Anger	
	Irritable	
	Confused	
	Ashamed	
	Depressed	
Reflection meta process	Gained insight – is so into what	
	Self-acceptance - down - up	
	Anxiety – down - up	

	Guilt	
Actions	Skills identified that were either adequate as is or needed to be improved	