

**THE ROLE OF SOCIAL CAPITAL AND HUMAN  
CAPITAL IN THE GROWTH OF WOMEN-OWNED  
ENTERPRISES IN THE UNITED KINGDOM**

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**The Role of Social Capital and Human Capital in the Growth  
of Women-Owned Enterprises in the United Kingdom**

By

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fulfilment of the requirements for the degree of Doctor of Philosophy

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## **Declaration of Authorship**

I, Muhammad Azam Roomi, the undersigned hereby make a declaration that the contents of this thesis are solely my original work. Except for works cited and for which credit has been duly given or the permission of the author have been granted, this work is entirely my own.

I wish to further declare that no part or whole of this thesis has been presented to any other university for consideration for an award for a PhD degree or any similar degree.

I also confirm that the word length of:

1. the thesis including footnotes is 99,989 words;
2. the list of references is 14,156 words; and
3. the appendices are 3,471 words.

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Professor Ed Clark.....

# **Dedication**

*This thesis is dedicated to*

***Ammi Jaan***

*Who taught me how to respect women and inspired me to devote my life for women's empowerment through entrepreneurship and enterprise development*

***Abbu Jee***

*Who made me realise the importance of honesty, integrity, and dignity*

and

***My Beloved Wife***

## **Abstract**

Research investigating women-owned businesses has developed considerably over the past two decades. There are, however, few British studies that have specifically focussed on growth oriented women-owned businesses. The current study aims to fill this gap. Its purpose is to explore the effect of social capital and human capital on the growth of women-owned enterprises in the UK. The research contributes to the knowledge of women's entrepreneurship as the first to study the moderating role of human capital in building and using social capital in the UK. It develops the theoretical premise that women entrepreneurs with higher human capital gain credibility and centrality in networks, accumulating social capital based on their importance for other network members and their business stakeholders.

This mixed method study involves both collecting and analysing quantitative and qualitative data. Statistical analysis using SPSS was applied to analyse quantitative data collected through 517 on-line completed questionnaires from three different regions. The qualitative data collected through face to face interviews with 42 women entrepreneurs were also analysed and interpreted.

The findings suggest that the social capital possessed by women entrepreneurs plays an important role in the growth of enterprises. Women entrepreneurs use different sources to build and use their social capital at different stages of growth and in different industry sectors such as manufacturing or services. Women entrepreneurs with higher human capital are more likely to identify opportunities, generate ideas and show creative thinking in introducing novel products, services, location, processes or systems, which makes their growth path exponential.

There are implications of this study for women entrepreneurs to build and use their social and human capital for the growth of their enterprises. And there are also implications for politicians and business organisations, who must devise policies to develop opportunities for existing or potential women entrepreneurs for building their human based capital.

## **Acknowledgements**

When I began this journey I did not realise the emotional debts that I would incur and never imagined that my feelings will be so humbling for some wonderful people. I am left overwhelmed and at a loss of words as to how I might extend my gratitude. Customs demand that I make an attempt to acknowledge those who have made my journey possible. So here it goes....

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# List of Publications

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## **List of Abbreviations**

DV	Dependent Variable
EU	European Union
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
ICT	Information and Communications Technology
IDBR	Inter-Departmental Business Register
IV	Independent Variable
LFS	Labour Force Survey
MV	Moderating Variable
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
RBV	Resource Based View
SME	Small and Medium Enterprises
TEA	Total Entrepreneurial Activity
UK	United Kingdom
USA	United States of America
VAT	Value Added Tax
VIF	Variance Inflation Factors Ratio

# Chapter 1 Introduction

## 1.1 Purpose and Context of the Study

In the last three decades, entrepreneurship has received much attention from all spheres of society – academia, business, economy, research, social work, politics and government administration. The post Second World War era has seen developed countries strive for innovation as the main feature of entrepreneurship, whereas developing countries consider entrepreneurship as a self-employment solution. Both these perspectives on entrepreneurship lead to desired socio-economic development for all countries which support entrepreneurship through policies and subsidies. This has contributed to entrepreneurship becoming today more of a buzz word around the globe in the time of liberalisation and globalisation, when sustainable competitiveness is required by businesses.

Entrepreneurship is the first boundary and domain of this research study. According to Stevenson and Amabile (1999), entrepreneurship is the pursuit of opportunity beyond the resources currently controlled by the entrepreneur. An entrepreneur acts as a catalyst for converting the physical resources and market gaps into economic development and more employment. As the process of spotting a market opportunity and converting it into a business does not suit most people, entrepreneurs are a scarce resource in any country.

Another phenomenon experienced in the second half of the twentieth century by businesses within western economies is gender equality and the reduction of the so-called ‘glass ceiling’ for working women in terms of corporate and self-employment. The glass ceiling is basically a combination of interpersonal and organisational factors which prevent women from taking positions with authority, power, status and high discretionary responsibilities. The governments of many

countries have implemented laws and regulations to reduce this pattern of discrimination against women in fields of employment, education and social development and to improve the overall status of women in society. For example, this idea received international recognition when the United Nations General Assembly announced 1976–1985 as a decade for women (United Nations Report, 1980). Since women constitute approximately half a country's population, their higher involvement in the socio-economic activity can have a very positive effect on gross domestic production. However, this depends upon the opportunities, status and support given to women and their entrepreneurial abilities. If women can become active participants in the business process instead of just beneficiaries (Gaur, 1998), then adequate support given to them in terms of easy access to capital, information, training and opportunities can be converted into real development (Kalbagh, 1992). Hence, growth of entrepreneurship, and particularly women entrepreneurship, is crucial for national advantage of any economy. This is the second boundary and domain of this study.

Moreover regarding resource availabilities, during the last three decades the business world has seen a paradigm shift in the creation of competitive advantage for firms in terms of the increased share and importance of human resources as compared to financial and infrastructural assets. Advances in the technology and knowledge based industries have influenced this to a greater extent and firms derive much of their competitive position from intangible assets – human capital as supported by the resource based view (RBV) of the firm (Wernerfelt, 1984). This RBV human capital concept has two implications for the present study. First, women entrepreneurs are an important part of human capital advantage that any country and businesses can have; second, the growth of women entrepreneurship can be affected by the availability of human capital for creativity and innovation in female-managed business start-ups. Thus, human capital, defined by Coleman (2007: 304) as “education, employment or industry experience, and other types of experience”, or by Becker (1962) as an individual's ability to allow for ‘changes in action’ and economic growth through their knowledge and skills, plays a vital role in business and entrepreneurship growth, is the third element in the definition

of the scope of this study (Brush, 2001; Brush et al., 2002; Davidsson and Honig, 2003; Menzies et al., 2004).

The final contextual domain and boundary of this study is the social capital that is accumulated through networking relationships. It is defined as ‘the ability of actors to secure benefits by virtue of membership in social networks or other social structures’ (Portes, 1998: 6), or “the goodwill that is engendered by the fabric of social relations and that can be mobilised to facilitate action” (Adler and Kwoon, 2002: 17). Nahapiet and Ghoshal (1998: 243) has defined it as the “sum of the actual and potential resources embedded within, available through, and derived from, the network of relationships possessed by an individual”. This has its roots in stakeholder theory, alliances and customer relationship management because anyone in the network or decision making unit for entrepreneurial activities can be a stakeholder, as in alliances or the clientele. Entrepreneurship and social capital are closely interwoven since business start-up initiatives are influenced by advice and help from family, friends, neighbours, relatives or colleagues (Begley and Tan, 2001; Carter et al., 2003; Coleman, 2000).

This research study focuses on the intersection between these important management fields of women entrepreneurship, human capital and social capital. The purpose of this research study is to review and analyse the impacts of human and social capital on the growth of women-owned enterprises. The next section discusses why human capital and social capital have become important issues of concern within the area of women entrepreneurship. This discussion then leads closer to the definition of research problem undertaken for this thesis.

## **1.2 Current Trends in Women’s Entrepreneurship**

Entrepreneurial activity has increasingly contributed over the years to economic development and employment generation. Women entrepreneurs and enterprises have increased in all industrial sectors, even in construction and transport which were traditionally dominated by men. The rise of women entrepreneurs is rapid in both developed and developing economies such that more than 25% of enterprises

in developed and advanced nations were owned by women in 1998 (NFWBO, 1998; OECD, 1998). Now a decade later, women entrepreneurship may expect to grow organically with support from advancements in communication, trade and social networking technologies which can help them to scale new peaks in the corporate world. Current data in the USA alone show that an estimated 38% of businesses (that is, the 8.1 million women-owned businesses) contribute \$1.3 trillion to the economy and employ 7.7 million people (Forbes, 2005). This side of the Atlantic is not far behind, with a number of UK success stories becoming household names, such as Anita Roddick, Jacqueline Gold, and Tamara Mellon to mention just three.

These success stories derive their momentum from a variety of factors, such as individual talent, creative spirit, desire and sense of accomplishment, status quo requirements, job security, prolonged unemployment and need of economic security. Researchers have classified these into traditional ‘push’ and ‘pull’ factors, which include the woman’s decision to become an entrepreneur because of ‘dynastic compliance’, ‘no other choice’, entrepreneurship by ‘chance’, as a part of a ‘succession plan’, ‘forced entrepreneurship’, ‘informed’ or ‘pure entrepreneurship’ (Orhan and Scott, 2001). Push factors are more associated with need or necessity, such as job dissatisfaction because of low salary or no promotion, or other family circumstances that result from a ‘have to do’ scenario (Brush, 1990); on the other hand, pull factors concern choice, fun, passion, independence, self-drive and desire to become wealthy, that is, a ‘want to do’ scenario (Still and Timms, 2000). The work-life balance and requirement of a flexible schedule for child care may influence women to think about becoming their own boss (self-employment). This signifies that the social context and factors have more influence on women’s entrepreneurial abilities (Hughes, 2003).

Recognising the growing trend and importance of the economic contribution of female entrepreneurs, numerous forums, foundations, associations, trade bodies have been set up by regulatory, administrative and business groups to develop

support to encourage women entrepreneurship (Hughes, 2003; Langowitz and Minniti, 2007; Minniti and Naude, 2010).

**Table 1-1: Prevalence Rates of Entrepreneurial Activity Across Countries by Gender**

	Early Stage Entrepreneurial Activity (Nascent + New)		Established Business Owners		Overall Business Owners	
	Male	Female	Male	Female	Male	Female
Argentina	17.52%	11.34%	15.78%	4.16%	33.30%	15.50%
Austria	3.06%	1.84%	7.25%	4.78%	10.31%	6.61%
Belgium	4.30%	1.98%	1.86%	0.93%	6.16%	2.91%
Brazil	12.73%	12.71%	12.70%	7.24%	25.43%	19.95%
Chile	16.45%	10.43%	11.89%	5.59%	28.33%	16.02%
China	19.27%	13.43%	9.66%	7.04%	28.93%	20.47%
Colombia	26.91%	18.77%	15.49%	7.84%	42.41%	26.60%
Denmark	6.21%	4.56%	8.54%	3.43%	14.75%	8.00%
Dominican Rep.	18.91%	14.50%	8.96%	6.12%	27.88%	20.62%
Finland	8.96%	4.81%	10.31%	4.80%	19.27%	9.60%
France	4.14%	2.21%	2.52%	0.95%	6.66%	3.16%
Greece	7.96%	3.46%	14.59%	12.04%	22.56%	15.51%
Hong Kong	14.33%	5.82%	7.51%	3.75%	21.84%	9.56%
Hungary	9.29%	4.52%	5.88%	3.81%	15.17%	8.33%
Iceland	17.40%	7.44%	13.43%	3.98%	30.83%	11.42%
India	9.51%	7.49%	8.69%	2.18%	18.21%	9.66%
Ireland	10.57%	5.87%	12.66%	5.38%	23.22%	11.25%
Israel	7.12%	3.75%	3.61%	1.10%	10.72%	4.84%
Italy	6.69%	3.30%	8.87%	2.17%	15.56%	5.48%
Japan	3.47%	5.22%	8.72%	8.57%	12.20%	13.79%
Kazakhstan	11.17%	7.64%	6.80%	4.80%	17.97%	12.44%
Latvia	7.70%	1.41%	4.90%	2.02%	12.60%	3.43%
Netherlands	6.64%	3.70%	8.59%	4.07%	15.24%	7.77%
Norway	8.59%	4.28%	8.20%	3.50%	16.79%	7.78%
Peru	25.74%	26.06%	18.07%	12.40%	43.80%	38.46%
Portugal	11.70%	5.92%	9.79%	4.44%	21.49%	10.36%
Puerto Rico	3.16%	2.97%	4.05%	0.89%	7.21%	3.87%
Romania	4.95%	3.09%	3.34%	1.70%	8.30%	4.79%
Russia	3.79%	1.64%	1.63%	1.73%	5.41%	3.37%
Serbia	12.11%	5.06%	7.74%	2.83%	19.85%	7.88%
Spain	9.75%	5.48%	8.17%	4.57%	17.92%	10.06%
Sweden	5.78%	2.47%	6.87%	2.48%	12.65%	4.95%
Switzerland	7.59%	4.92%	8.56%	4.60%	16.15%	9.52%
Thailand	27.78%	25.95%	23.22%	19.47%	51.00%	45.42%
Turkey	8.65%	2.41%	9.47%	1.32%	18.12%	3.73%
United Kingdom	7.41%	3.60%	7.59%	2.55%	15.00%	6.15%
United States	11.98%	7.25%	6.47%	3.48%	18.45%	10.73%
Uruguay	17.33%	7.19%	8.63%	4.54%	25.96%	11.73%
Venezuela	23.50%	16.81%	5.87%	4.90%	29.37%	21.71%

Source: Allen et al., 2007 (in Global Entrepreneurship monitor report on women and Entrepreneurship)

Women entrepreneurs can be categorised into three major types, based on how they arrive at the business start-up decision: starting a business from unemployment; doing a business for an extra income with a job and later switching to business only; and leaving top management job to start a new venture (Patterson and Mavin, 2009). All three types of women entrepreneur have many common attributes, and creativity and talent leading to the development of new services and products. Governments and businesses across the world know that the key to business sustainability and national economic growth is providing equal opportunity for women in employment and entrepreneurship (Minniti et al., 2005).

According to this trend, the results and statistical data from countries around the world would have shown positive growth and no gender bias in the data of entrepreneurial activities between men and women. However, Table 1-1 shows that by end of 2007, apart from a few exceptions in Latin American and South Asian countries, the overall outlook is nowhere near what might have been expected given all the efforts to develop entrepreneurship, in particular women entrepreneurship (Allen et al., 2008). The statistics in Table 1-1 reveal problems associated with the development of women entrepreneurship, indicating that the barriers faced by women in starting businesses have not been addressed. Other evidence demonstrates the very low success rate of new ventures taken to the market by women. Hence, barriers are at two stages: pre-start up decision making and post-start up decision making. This is discussed in detail in the next section.

### **1.3 Research Problem**

This thesis is more concerned with the factors affecting the growth of the women-owned enterprises, focusing more on post-start-up venture decisions. Despite an increase in the growth trend in the 1990s, the percentage of female entrepreneurs globally remains low in terms of start-up ventures and the success of women owned enterprises (Brush, 1992; Brush et al., 2003).

Governments worldwide know that creative talent and the growth of women's entrepreneurial spirit are the engines of economic and employment growth as the population of women is as significant as that of men. Knowing this fact, the business world and governments have taken a number of measures to boost female entrepreneurship and remove the so-called glass ceiling on corporate promotion. However, research shows that women face huge barriers in starting and sustaining business ventures (Brush et al, 2004). These barriers include gender discrimination in accessing resources, lack of a business network and access to it, lack of appropriate childcare, information and a suitable environment, difficulties creating a work-family life balance and the attitudinal differences in the way women approach business compared to men. Other obstacles faced by women include limited business experience, inadequate education, business launching and employees' management skills, skills related to planning and implementing business strategies to be competitive and surviving in the international business environment.

Apart from these barriers, women face societal, cultural and religious problems in advancing their careers in terms of job or business. This may stem from the national and business culture of the country and political economy stance of the government administration. For example, a democratic political environment supports individual entrepreneurship more than a monarchic or communist political environment (Hill et al., 2006). Such macro level systems affect the women-owned enterprises at the micro level (Brush et al., 2004). Thus, if any country wants to become a competitive and dynamic knowledge-based economy in the world, then it has to develop greater support for women business start-ups and the maintenance of these women-owned businesses.

Even where entrepreneurship is increasing, as in North America and South Asia, research into the sustainability of business start-ups by both men and women is substantially low (Burns, 2007; 2011). The figures are even lower for women-owned enterprises. The problems at national, regional, and societal level as well as in the business world collectively create the current state of low success rate of

women-owned enterprises. The individual efforts of governments, trade associations and women entrepreneurs have not generated the desired performance and growth of new start-ups. According to some researchers (Brush et al., 2004, 2006; Manolova et al., 2007; Prasad et al., 2013; Yetim, 2008), one of the main reasons for this phenomenon may be a lack of resources available to women-entrepreneurs to grow their business. Lichtenstein and Brush (2001) identify financial capital, social and organisational systems/structures, management know-how, technology, physical resources, leadership and culture as ‘salient resources’ required for entrepreneurial ventures. They describe that ‘a series of resource acquisitions and combinations might be necessary’ for firms to grow (Lichtenstein and Brush, 2001: 41). The research also explains how the emphasis on financial, human and social resources changes when the nascent entrepreneurs start, run and develop their businesses (Brush et al., 2004, 2006; Lichtenstein and Brush, 2001).

While a number of studies in the UK have been conducted to explore the impact of financial (capital) resources (Carter and Rosa, 1998; Shaw et al., 2001; Marlow and Patton, 2005; Roper, 2009), there is not much research available investigating the role of human (capital) resources and social (capital) resources on the growth of women-owned enterprises. This also limits the availability of literature on the interplay of human and social capital as possible drivers of enterprise growth. There is no study conducted in the UK to explain that how social capital and human capital play a role in different stages of enterprise growth. This research study fills these considerable gaps in the literature by investigating the impact of human and social capital on enterprise growth and by explaining that how social capital originating from personal networks of women entrepreneurs in the UK interacts with their human capital and impacts on the growth of women-owned enterprises.

#### **1.4 Aim and Objectives**

The investigation to be carried out in this thesis is based on a premise that there are barriers to the growth of women owned enterprises (Carter et al., 1992). The

usual problem of initial venture capital finance is known and well researched (Carter and Rosa, 1998; Roper, 2009). However, there are more pertinent issues which are less tangible but equally critical to the success of entrepreneurial ventures owned by women. In particular, this study focuses on social capital (Yetim, 2008) and human capital (Gimeno, 1997; Menzies et al., 2004). These concepts are not isolated but co-exist, and together may have significant impacts on the growth of women's entrepreneurship.

Governments and the corporate world often regard entrepreneurship as a tool to seek immediate growth. On the contrary, entrepreneurship cannot serve as a magic bullet because the concept itself has its own cycle of evolution according to the awareness and growth of population within the country. Most of the time the demands of the entrepreneurs and the supply of support efforts by the support providers do not match, which decreases the growth and propensity of women's entrepreneurship (Langowitz and Minniti, 2007). The existing literature has addressed strongly issues such as women's entry into the labour force, pay and gender disparities, discrimination and work-life balance (Goldin, 1990). This has left the perceptual issues and the availability of human capital and social capital to women entrepreneurs little understood.

There is a plethora of literature available on the barriers to and the importance of female entrepreneurship. However, the lack of clarity in dimensions, weak understanding of differences between macro and micro factors and over-emphasis on financial capital research have all collectively led to non-comprehensive analyses. Therefore, it is not yet clear how and to what extent human and social capital influence the growth of women owned enterprises; and what needs to be done to improve the growth rate of success of women-owned enterprises. As a result, the main aim of this thesis is to "assess the impact of human based (social and human) capital on the growth of women-owned enterprises in the UK and to explain the ways in which social and human capital influence the growth of women-owned enterprises". Whilst achieving this aim, the research project also has the following objectives:

- To perform a detailed literature review in the domain of women's entrepreneurship and to critically review the factors affecting it.
- To review and evaluate the factors critical to the growth rate of women-owned enterprises within the realm of human based capital.
- To measure the impact of human capital and social capital on the growth rate of women-owned enterprises in terms of employment, sales and profit.
- And to strengthen, extend and develop our understanding of how these relationships (between human based capital and growth of women-owned enterprises) work or unfold.

### **1.5 Overall Approach**

The research methodological stance taken for this study is based on the approach of background theory, focal theory, data theory and novel contribution (Phillips and Pugh, 1994). In presenting background theory, I review and analyse the literature on women's entrepreneurship, while keeping a focus on the main research problem. In developing the focal theory, I assess existing perspectives, frameworks and models related to the factors affecting the growth of women's entrepreneurship. From the theoretical model I formulate a number of hypotheses to guide the empirical work in this thesis and to enable the methodical testing of the model. Research methodology addresses in-depth the selection and justification of the research strategy, research design and research methods.

I apply mixed methods involving both collecting and analysing quantitative and qualitative data. Statistical analysis using SPSS has been applied to analyse quantitative data collected through 517 on-line completed questionnaires from three different regions. The qualitative data collected through face to face interviews with 42 women entrepreneurs have also been analysed and interpreted. The study combines the key strengths of both quantitative and qualitative approaches to facilitate one another. Qualitative research establishes and explains relationships among variables whereas, quantitative research helps to explore how

these relationships are established. This enhances the overall study by providing stronger evidence that could have been missed if only a single approach was used (qualitative or quantitative).

The final element of novel contribution makes explicit the original contribution made by this research study and its alignment with the subject domain, in order to clear the way for further replications of the empirical research and extensions to the theory of the growth of women's entrepreneurship. The study contributes to the literature on women's entrepreneurship by being the first in the UK, exploring the interplay of human and social capital and its impact on the growth of women-owned enterprises. The distinctive contribution of this study is its development of an integrated model based on the perspective of social and human capital that attempts to derive the development process of women-owned enterprises from how they progress in terms of such intangible resources. It is one of the first ones to explore how women entrepreneurs use their social capital at different stages of business growth and how it helps to facilitate their firms' growth. The study also contributes to the literature that how the acquisition and utilisation of social and human capital differs for women entrepreneurs operating in different sectors such as manufacturing, services and trading.

## **1.6 Thesis Organisation**

The thesis is organised in the following way.

### **Chapter 1: Introduction**

This chapter basically introduces why this study is being carried out and its overall definitional landscape. It places the thesis topic in a wider context and shows where it is located between the overlapping domains of entrepreneurship and related topics. It reveals the aim, objectives and overall focus of the study.

### **Chapters 2, 3 and 4: Literature Review**

These chapters examine the existing state of play in regard to the topic of women's entrepreneurship. They look for the ways in which the academic literature has considered the topic and sought solutions to the component research problems in the subject area. In these chapters, I present detailed critical reviews of the existing literature on women's entrepreneurship, the growth of enterprises and the role of social and human capital in enterprise growth; and reveal gaps in the body of knowledge in order to identify my contributions.

### **Chapter 5: Theoretical Model**

Based on the findings of and gaps in the existing literature, Chapter 5 outlines the theoretical framework that provides the deductive basis for the research study. The variables are operationalised and hypotheses formulated. The operationalisation of variables includes the sequential process of analysing constructs, variables, variable dimensions and measurement scales for the quantitative analyses presented in Chapter 7.

### **Chapter 6: Research Methodology**

This chapter provides the logic and justification of the methodological position that I have adopted for this investigation. Thus, it describes the main elements of the research methodology such as research philosophy, approach, strategy and design. The approach to the empirical study of growth and women's entrepreneurship is partly defined by the nature of the research problem and research questions, but also informed by previous studies carried out on the same subject.

### **Chapters 7 and 8: Results of Quantitative and Qualitative Surveys**

These chapters present the results of statistical tests carried out on primary data collected through questionnaires and interpretive analyses of primary data collected through interviews of women entrepreneurs. The chapters form the basis for building a complex understanding of the topic and for developing practical recommendations. This combination of quantitative and qualitative methods of

collecting data and statistical and interpretive analyses of data offers a methodologically robust, reliable and valid way of testing existing theory and building new understandings of how women-owned firms grow.

### **Chapter 9: Discussion**

This chapter investigates the strength and proportionate variation in the relationships between the variables proposed in the framework presented in Chapter 5. The statistical results and analyses of interview data help in theory building, construction, and extension. The chapter offers useful insights into emergent patterns that were not predicted deductively and elaborates theoretical contributions made by the research to the literature. These analyses form the basis for further recommendations.

### **Chapter 10: Conclusion**

This final chapter of the thesis summarises the study, its research limitations, implications for theory and practice, novel contributions and future research possibilities. It presents recommendations to entrepreneurs and policy makers and highlights the theoretical contributions of the thesis to the body of knowledge.

## **1.7 Summary**

This introduction chapter serves as a road map for the research study reported in the thesis. It provides background information that locates this thesis precisely within the contextual domains of the entrepreneurship subject. It introduces the main aim and research objectives which underline the novelty and contribution of the study. The chapter concludes with the clear structure of the thesis. The next chapter explores the academic literature that contextualises the areas of women's entrepreneurship and enterprise growth.

## **Chapter 2 Women's Entrepreneurship**

### **2.1 Preamble**

Entrepreneurs, both men and women, are an important source of wealth creation. The OECD (2011) identified entrepreneurial activity as one of the four core factors, together with human capital, innovation and ICT, responsible for growth in OECD countries. Interestingly, empirical evidence shows a strong link between these four factors. The importance and extent of entrepreneurial growth can be seen in Birch's (1979) study, which found that 81.5% of all new jobs in the United States of America between 1969 and 1976 were created by small businesses. In the United Kingdom, small businesses generate 62% of employment and contribute over 25% to GDP (Burns, 2005). In 2002, the World Bank identified that small businesses contribute around 60% of the GDP of countries like Hungary, Lithuania, the Czech Republic, Poland and Latvia, which have recently embraced market economies. The World Bank credits entrepreneurship as the main vehicle for social changes and for the creation of jobs and wealth in these economies.

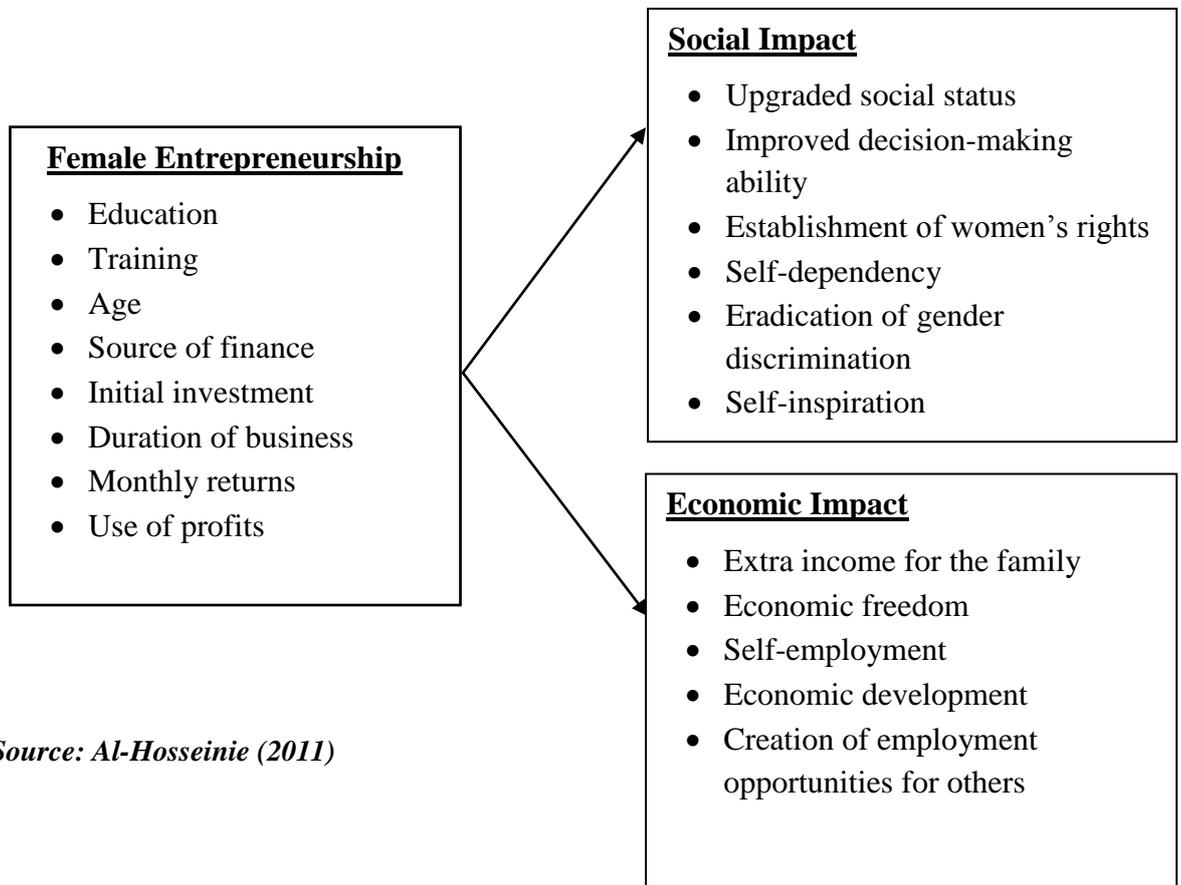
### **2.2 The Importance of Women's Entrepreneurship**

Entrepreneurship was for a long time a male domain (Bird and Brush, 2002; Marlow and Patton, 2005). However, there have been significant changes in the past two decades. In his attempt to distinguish entrepreneurs from the past and present, Richman (1997) has noted that entrepreneurship is no longer about male ownership, and that more and more women are joining the field all over the world. Given a level playing field, women hold great potential to unleash their entrepreneurial capabilities (McClelland et al., 2005). With their advantage as relatively new entrants, women can bring fresh ideas, triggering more innovation in the business world. Innovation is the key to entrepreneurship and is

characteristic of the 'creative destruction' that Schumpeter (1934) attributed to competitive markets, creating more opportunities and greater growth.

The importance of women's entrepreneurship to families and economies is well documented. Women's entrepreneurship is an especially important contributor to economic growth in low and middle income countries (Harding et al., 2007). Figure 2-1 illustrates some of the social and economic benefits of encouraging women's entrepreneurship (Al-Hosseinie, 2011).

**Figure 2-1: The Social and Economic Benefits of Women's Entrepreneurship**



*Source: Al-Hosseinie (2011)*

Women's economic activities, particularly in self-employment, empower them economically and enable them to contribute more to the overall development of their country (Sarri and Trihopoulou, 2004). Recent figures confirm that women's

economic activities play a crucial role in the growth of many of the world's economies (Minniti et al., 2005). Recognising the value and importance of female entrepreneurship, there is hardly a government in the world that is not currently paying at least lip service to creating an environment conducive to the establishment of women-owned enterprises (Knotts et al., 2004). According to one of the studies conducted by the Small Business Service (SBS, 2005), women business owners contribute £50–70 billion in gross value addition to the UK economy each year. This figure does not include the contribution of women business owners in large businesses, women's unpaid and/or hidden contributions (Dhaliwal, 2000), such as caring, or the contributions made in partnerships where the owner is male.

The UK government is increasingly recognising the importance and contribution of women-owned enterprises to the national economy, and a number of initiatives have been taken recently to raise the number of women entering self-employment. The last two decades have seen a steep rise in the number of women becoming self-employed. The number of female entrepreneurs in the UK has risen, but not by as much as the number of women joining self-employment (Minniti et al., 2005). One reason for this may be a higher failure rate of women-owned businesses compared to male-owned businesses (Brush et al., 2006).

### **2.3 Defining Women's Enterprise**

The Strategic Framework for Women's Enterprise initiative in the UK uses the term 'entrepreneurship' as synonymous with 'business' and 'enterprise' (Prowess, 2005). Carter and Shaw (2006) use women's enterprise as a broad term to describe female self-employment and business ownership. Women-owned businesses are those that are wholly or majority owned and managed by women (Carter and Shaw, 2006). In the USA, the Federal Acquisition Regulation, paragraph 2.101 gives the following definition: 'Women-owned small business concern means a small business concern (1) That is at least 51% owned by one or more women; or, in the case of any publicly owned business, at least 51% of the stock of which is owned by one or more women; and (2) Whose management and

daily business operations are controlled by one or more women.' The US National Women's Business Council and the Centre for Women's Business Research in the USA includes businesses equally owned by men and women in its definition of women-owned businesses. In the UK, studies of women enterprise also include data on female self-employment. Such differences of measurement used by various governments and agencies make it very difficult to define and measure women's enterprise clearly (Carter and Shaw, 2006).

Finally, to complicate matters even further, the very definition of entrepreneurship – that entrepreneurs bring to the market products or services that are new or not already offered in the market (Deakins and Freel, 1998) and that the owner risks uncertainty for the sake of making a profit – makes defining female entrepreneurship more difficult. Since most of the businesses started by women are in traditional sectors like retail, hospitality and other low-end services (Marlow and Carter, 2004), they do not fall into the category of entrepreneurship.

Following the norm of Prowess's research papers (Prowess, 2005), and to avoid any confusion of definition, the word 'entrepreneurship' will be used in this thesis interchangeably for 'enterprise', 'business' and 'self-employment'. Similarly, 'female entrepreneurship' will be used as a synonym for 'women-owned enterprise', 'women-owned business' and 'women-owned profit-making venture'.

#### **2.4 Why Study Women's Entrepreneurship?**

The Global Entrepreneurship Monitor (GEM) 2010 global business report states that: 'Entrepreneurship in a society should contain a variety of business phases and types, led by different types of entrepreneurs, including women and underrepresented age groups' (Kelley et al., 2010: 5). The study of women in business is important for several reasons. Firstly, although women's entrepreneurship has increased in the last two decades, it is still a significant source of unexploited economic potential. The current degree of women's entrepreneurship is only the tip of the iceberg in terms of what women are actually capable of (Sathiabama, 2010). Secondly, female entrepreneurship differs from its

male counterpart in several vital ways and is, therefore, worthy of further study. Henry et al. (2005) have affirmed that women's entrepreneurship is an under-researched area with huge economic potential, requiring special attention. These are some of the special issues that make women's entrepreneurship an interesting and important area in its own right:

1. Women's entrepreneurship is a recent phenomenon. Women have traditionally been excluded from entrepreneurship and their function has mainly been in the home (Roomi and Harrison, 2008). This is still the case in many countries around the world and for the purposes of this study women in business can be treated as a minority group. The level of women's entrepreneurship varies from country to country but is always lower than that of men (Kelley et al., 2010).
2. The traits seen in entrepreneurs tend to fit masculine gender-role stereotypes rather than feminine gender-role stereotypes (Gupta et al., 2009). Women have to break free of these stereotypes to become successful entrepreneurs. In fact, women who score highly on entrepreneurial intentions also score highly on male gender identification and display traits generally considered to be masculine (Gupta et al., 2009). Hence women entrepreneurs are a special case among entrepreneurs in general.
3. Women-owned businesses may differ from male-owned businesses in several important respects. These include the importance placed on social relationships, the types of businesses they own and the sectors in which they are active (Sathiabama, 2010).
4. Women-owned enterprises generally underperform compared to male-owned enterprises. Low returns on capital have been noted, for example (deMel et al., 2008). In transition economies female-owned businesses do not perform as well as male-owned businesses. In fact, many female-owned businesses may not be profitable at all. In Lithuania, for example, as many

as 75% of women-owned enterprises were not profitable (Aidis et al., 2007). In Turkey, female-owned businesses are fewer in number and smaller than male-owned businesses (Kutanis and Bayraktaroglu, 2003). Even in industrialised countries such as the UK, where there may be fewer barriers to entrepreneurship, the failure rate for businesses is higher for women than it is for men (Brush et al., 2003).

5. Organisational theories are rarely gender neutral. Many theories relating to organisations and entrepreneurship were developed by men, using exclusively male samples. They, therefore, may not reflect women's entrepreneurial behaviour. In particular, the characteristics of women entrepreneurs are measured using male instruments and constructs (Moore, 1990).
6. The subject of women's entrepreneurship is under-studied. There are gaps in our knowledge of the subject, and focus is often one dimensional (Carter et al., 2003). In particular there is a lack of theory and models for women's entrepreneurship (Winn, 2004), and a dearth of research into its historical, cultural and structural aspects (Nutek, 1996; Knorr, 2011). There is also very little analysis from explicitly feminist perspectives (Ahl, 2006; Mirchandani, 1999).

## **2.5 Women's Entrepreneurship in the UK: The Data**

Lack of clarity and the differences in measurement used by various governments and agencies make it very difficult to define and measure women's enterprise clearly (Carter and Shaw, 2006). Statistical data from the Inter-Departmental Business Register (IDBR) and Value Added Tax (VAT) register provide valuable information on the small and medium enterprise (SME) sector. Unfortunately, these do not include a gender classification. Although based on a sample survey, the Labour Force Survey (LFS) is one of the most reliable sources for indicative gender segregated data on self-employment and other levels of employment.

**Table 2-1: UK Labour Force Overview**

	Total	Employees	Self-employed	Unpaid family workers	Government supported training and employment programmes
	1	2	3	4	5
<b>PEOPLE</b>	<b>MGSA</b>	<b>MGRO</b>	<b>MGRR</b>	<b>MGRU</b>	<b>MGRW</b>
Aug–Oct 2005	28,830	24,973	3,663	92	102
Aug–Oct 2006	29,065	25,060	3,810	97	99
Nov–Jan 2007	29,090	25,051	3,836	100	103
Feb–Apr 2007	29,087	25,038	3,843	104	101
May–Jul 2007	29,178	25,114	3,836	107	120
Aug–Oct 2007	29,291	25,224	3,856	100	111
<i>Change on quarter</i>	114	110	20	-7	-9
<i>Change%</i>	0.4	0.4	0.5	-6.6	-7.8
<i>Change on year</i>	225	165	46	3	12
<i>Change%</i>	0.8	0.7	1.2	3	11.7
<b>MEN</b>	<b>MGSA</b>	<b>MGRO</b>	<b>MGRR</b>	<b>MGRU</b>	<b>MGRW</b>
Aug–Oct 2005	15,550	12,770	2,687	33	59
Aug–Oct 2006	15,697	12,836	2,761	43	58
Nov–Jan 2007	15,716	12,826	2,789	39	62
Feb–Apr 2007	15,736	12,854	2,793	40	58
May–Jul 2007	15,783	12,880	2,794	40	69
Aug–Oct 2007	15,832	12,940	2,796	40	57
<i>Change on quarter</i>	40	60	2	-1	-12
<i>Change%</i>	0.3	0.5	0.1	-1	-17.6
<i>Change on year</i>	135	104	35	-3	-1
<i>Change%</i>	0.9	0.8	1.3	-6.4	-1.9
<b>WOMEN</b>	<b>MGSB</b>	<b>MGRP</b>	<b>MGRS</b>	<b>MGRV</b>	<b>MGRY</b>
Aug–Oct 2005	13,280	12,203	975	58	43
Aug–Oct 2006	13,368	12,223	1,049	55	41
Nov–Jan 2007	13,374	12,225	1,047	61	41
Feb–Apr 2007	13,350	12,193	1,050	64	44
May–Jul 2007	13,394	12,234	1,042	67	51
Aug–Oct 2007	13,459	12,284	1,060	60	54
<i>Change on quarter</i>	65	50	18	-6	3
<i>Change%</i>	0.5	0.4	1.7	-9.6	5.3
<i>Change on year</i>	90	61	11	6	13
<i>Change%</i>	0.7	0.5	1.1	10.3	30.7

Source: Labour Force Survey (2007)

Data from the Labour Force Survey (2007, see Table 2-1) show the 2007 self-employment figures for the UK. There were approximately 1,060,000 self-employed women in the UK in August to October 2007, the most recent quarter for which data are available. This is 8% of the total UK women in employment. For the same period the number of self-employed men stands at 2,796,000, or 18% of the total UK men in employment. The total self-employed population is 3,856,000. Of this, self-employed men and women account for 73% and 27% respectively.

Data from the Labour Force Survey also reveal that the female share of self-employment has remained broadly the same over the past 20 years, although there has been a substantial growth in overall self-employment (Lindsay and Macaulay, 2004). However, a slightly better picture of female entrepreneurship is revealed in a comparison of self-employment in 1997 and 2007, using the historical data provided by the Labour Force Survey (LFS) as shown in tables 2-2 and 2-3.

**Table 2-2: Employees and Self-employed by Industry Sector**

(Not seasonally adjusted)

		<b>All Self-employed</b>					
		<b>Total: All Persons (000)</b>	<b>Change (%)</b>	<b>Men (000)</b>	<b>Change (%)</b>	<b>Women (000)</b>	<b>Change (%)</b>
1997	Q2	3,456		2,525		931	
	Q4	3,437	-0.55%	2,507	-0.71%	930	-0.11%
2007	Q2	3,796	8.96%	2,768	8.78%	1,029	10.53%
	Q3	3,850	10.23%	2,775	9.01%	1,075	15.47%

*Source: Labour Force Survey (LFS) Historical Quarterly Supplement Table 23 – Employees and self-employed by industry sector*

The data demonstrate that while there is a 10.23% overall growth in self-employment, the female share has risen by just one percentage point from 26.94% to 27.92% (Table 2-3). However, for the same period female self-employment has increased over 15%, while male self-employment has increased by only 9%. While it is true that the female share of self-employment over the past 20 years has remained stable (Carter and Shaw, 2006; Lindsay and Macaulay, 2004), if the

individual gender growth is considered, women have done better than men, growing 15.47% in the past 10 years compared to 9.01%, as shown in Table 2-2.

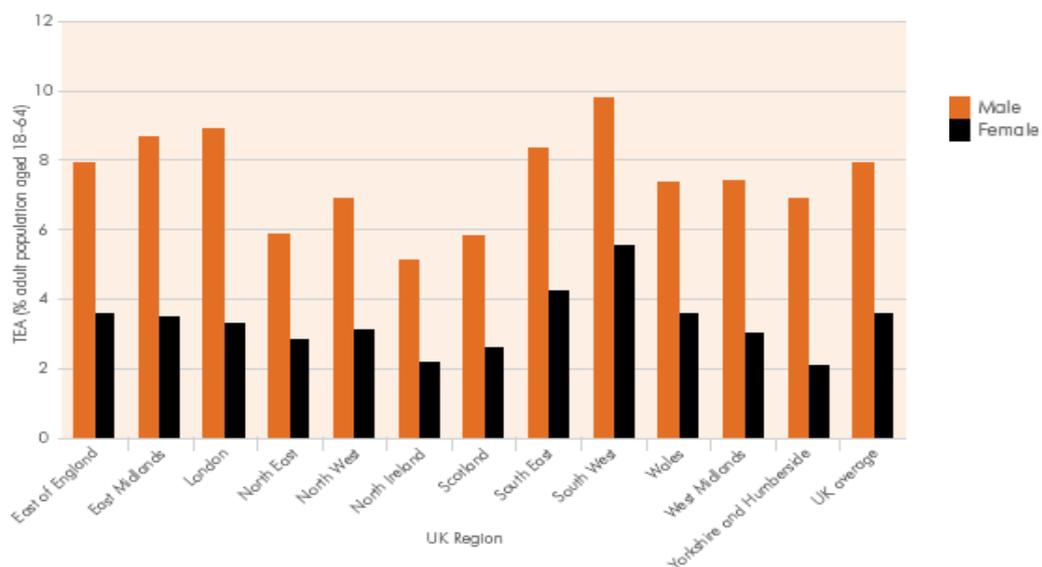
**Table 2-3: Employees and Self-employed by Industry Sector**

		Total: All Persons (000)	Men (000)	(%)	Women (000)	(%)
1997	Q2	3,456	2,525	73.06%	931	26.94%
	Q4	3,437	2,507	72.94%	930	27.06%
2007	Q2	3,796	2,768	72.92%	1,029	27.11%
	Q3	<b>3,850</b>	<b>2,775</b>	72.08%	<b>1,075</b>	27.92%

Source: Labour Force Survey (LFS) Historical Quarterly Supplement Table 23 – Employees and self-employed by industry sector

Regional differences in self-employment using GEM UK APS 2006 data are shown in Figure 2-2. Female entrepreneurial activity varies from 2% to nearly 6%. The highest entrepreneurial activity rate is in the Southwest, with 5.5%, and the lowest is Yorkshire and Humberside with only 2.1%. Incidentally, Yorkshire and Humberside also have the widest gap between male and female entrepreneurship: men in the region are 70% more likely to be entrepreneurially active than women. On average across all the regions men are 50% more likely to be self-employed than women.

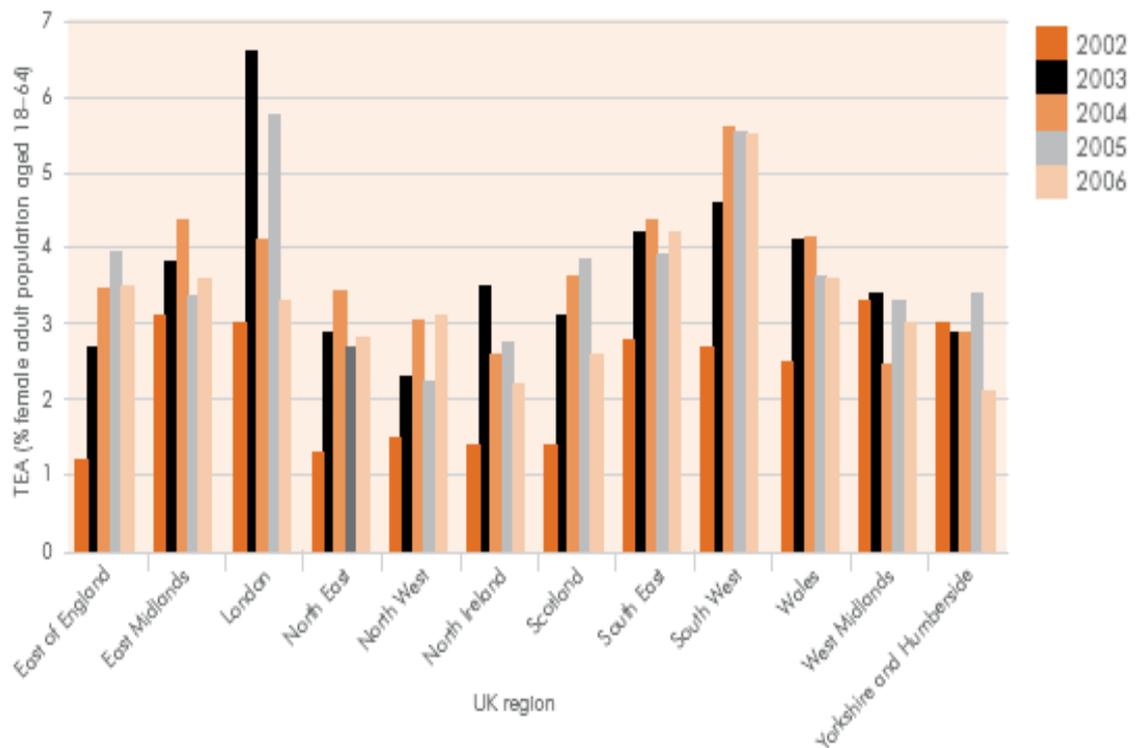
**Figure 2-2: Total Entrepreneurial Activity in the UK by Regions**



Source: GEM UK APS (2002–2006)

Figure 2-3 represents trends in female total entrepreneurial activity (TEA) in the regions over a five-year period from 2002 to 2006. In most of the regions, women's entrepreneurial activity has grown since 2002. Again, only Yorkshire and Humberside has performed badly, seeing a substantial reduction in women's entrepreneurship. Women in the East of England significantly increased their entrepreneurial activity in the period from a mere 1.2% to 3.5%.

**Figure 2-3: Women's Total Entrepreneurial Activity in the UK**



Source: GEM UK APS (2002–2006)

The gender divisions of the labour market are largely attributed to different levels of male and female self-employment. The major occupations taken by the employed and self-employed in the UK are shown in Table 2-4, drawn from the Labour Force Survey (2006). The data show that self-employed women lead in sectors like Associate Professional and Technical (21.1%), Managers and Senior Officials (19.6%), Personal Services (17.2%) and Professional Occupations (14.3%). On the other hand, self-employed men dominate in Skilled Trades (37.1%).

**Table 2-4: Self-employed Men and Women by Standard Occupational Classification**

<b>Standard Occupational Classification</b>	<b>All Employees</b>	<b>Men</b>	<b>Women</b>	<b>All Self-employed</b>	<b>Men</b>	<b>Women</b>
All in thousands	24,900	12,702	12,199	3,731	2,733	998
Managers and Senior Officials	14.7	18.7	10.5	17.7	17.0	19.6
Professional Occupations	12.7	13.8	11.6	13.8	13.6	14.3
Associate Prof. and Technical	14.2	13.4	15.1	15.6	13.6	21.1
Admin and Secretarial	13.5	5.7	21.5	3.1	0.7	9.4
Skilled Trades	8.4	15.2	1.5	28.8	37.1	6.3
Personal Services	8.3	2.5	14.2	5.4	1.0	17.2
Sales and Customer Service	8.6	5.1	12.2	2.1	1.6	3.7
Plant and Machine Operatives	7.4	12.6	2.1	8.3	10.5	2.1
Elementary Occupations	12.1	12.9	11.4	5.3	4.9	6.3

*Source: ONS Labour Force Survey Winter 2005/06, Table 17*

The above statistics may change gradually over the years. With more and more women entering sectors which were once dominated by men, the gender gap in areas of self-employment might narrow. As Marlow and Carter (2004) reckon, the recent increase in the number of women entering professional occupations such as accounting, law, medicine and veterinary science may lead to more women in self-employment.

## **2.6 Invisible Entrepreneurship**

Most studies and reports find that women are less active than men in starting and growing their businesses and that their businesses underperform compared to men's businesses. However, this may not be the whole picture. Several studies on women's entrepreneurship reveal that women's business activities are not always formally recognised and therefore may not be accurately reflected in statistics and reports on the state of women's entrepreneurship. For example, the phenomenon

of 'bosses' wives' in Taiwan relates to women who work (often unpaid, but not always) and have a stake in their husband's businesses (often as much as 50%). These bosses' wives are numerous in the small and medium enterprise in Taiwan and are often active in managing the business, and yet they are not reflected in any business statistics from the country (Saikou and Wen-Chi, 2008). Similarly in Ghana, female palm kernel processors are an invisible economic group, with no official record of their contribution (Awusabo-Asare and Tanle, 2008). In Turkey, invisible entrepreneurship is also prevalent, with women managing businesses established by their husbands or brothers. Some of these women may own a 50% share of their husband's business (Kutunis and Bayraktaroglu, 2003).

A ground-breaking study in the UK (Dhaliwal, 2000) found that among the South Asian population there are many more women participating in businesses owned by their male relatives than there are male entrepreneurs in their own right. The contribution of these women is hidden, and this phenomenon of 'invisible entrepreneurship' is likely to be much larger than is currently recognised. The disadvantage to women of invisible entrepreneurship is likely to be a lack of opportunities to take up government initiatives or secure capital. In some cases, although women may manage a business, it may be owned by others in the family, giving them a lack of control over their own destiny and little freedom to grow the business or take advantage of new opportunities.

## **2.7 Women's Motivations for Starting in Business**

Women become self-employed for an assortment of reasons, including independence, satisfaction and status, the need for income, flexibility, and personal growth (Goffee and Scase, 1985; Scott and Bruce, 1987; Winn, 2004). Motivations for entering entrepreneurship may vary between industrialised, transition and non-industrialised countries. In industrialised countries, such as the UK and USA in particular, a woman's career development is restricted by the existence of the so-called 'glass ceiling' (Wirth, 2002: 4). This term was first used to describe the barriers that impede women's progress to the top levels of organisations in corporate America. Other impediments to a woman's career

advancement include discrimination; lack of opportunities, particularly at high levels; stereotyping; penalties for women who act outside their traditional gender role; and exclusion from networking groups. In the information technology sector in particular, the culture of organisations may block women from progressing to the ranks of upper management (Lemons and Parzinger, 2001). Women may have less access to appropriate training and are less likely than men to be trained in relevant areas.

Time and time again, there are reports in the literature of frustration with the glass ceiling and the denial of top management level posts to women (Weiler and Bernasek, 2001), as well as dissatisfaction with stressful and highly inflexible work environments. Patterson and Mavin (2009) point out that women in paid employment struggle to compete in corporations where patriarchy is deeply embedded in the organisational culture, masculinity is rewarded and men are able to access privileged and powerful positions from which women are blocked. Exclusive social networks such as the 'old boy network' and male bonding at the golf club perpetuate the problem. Women have sought to overcome this problem by becoming 'masculinised', that is, by adopting male traits and behaviours in order to find social acceptance and promotion to more senior positions. When this strategy no longer works, women leave corporations in order to be truer to their own nature (Patterson and Mavin, 2009).

Frustrations with the rigid, stressful and discriminatory nature of corporations seem to be pushing women in industrialised nations towards entrepreneurship. In the UK, 54% of women start a business so as to obtain flexible working hours, compared to only 35% of men (Carter et al., 2003). However, in contrast McAtavey (2002) reported that women entrepreneurs entered business to be in charge, advance themselves, fulfil long-held ambitions, and recapture excitement. The GEM 2006 report (Harding et al., 2006) defines two types of entrepreneurs: those who start a business to take advantage of a gap in the market or other business opportunity, and those who are forced into it because other work is not available. These are termed opportunity entrepreneurs and necessity

entrepreneurs, respectively. As may be expected, there are more necessity entrepreneurs in low to middle income countries, and, in these countries, the level of female necessity entrepreneurs, compared to opportunity entrepreneurs, is higher. For example, in Bulgaria 59% of women said that they had started a business due to a lack of other viable work options, whereas most men had done so to achieve economic independence (Manolova et al., 2007). Almost 56% of women in a study in Pakistan cited maintenance or improvement of economic status as a reason for entrepreneurship (Roomi and Parrott, 2008). Women were pushed into business by conditions such as the death of a spouse, the lack of available jobs and sub-standard working conditions, including long hours and low pay (Roomi and Parrott, 2008).

Sometimes, a combination of factors influences women into entrepreneurship. For example, in Taiwan the stated reasons for starting a business included the flexibility to fit work around child care commitments, the need to increase income and frustration at the lack of opportunities for progress that is the glass ceiling (Saikou and Wen-Chi, 2008). Lerner et al. (1997) also reported a mixture of motives for Israeli women entrepreneurs: achievement, independence and economic necessity.

Yetim (2008) distinguishes motivation by social class, proposing that most working class immigrant women are necessity entrepreneurs, whereas middle and upper class women primarily seek autonomy. Entrepreneurial motivations may also be categorised in terms of push factors and pull factors. Push factors include economic necessity or poor working conditions, and pull factors include the desire for autonomy (Hughes, 2003; Yetim, 2008). Although this dichotomy has been criticised for being too simplistic, it can in some cases be a useful framework. For example, Turkish women enter business primarily to provide extra income for their families, often seeking to do this via paid employment rather than entrepreneurship. But this option may not be available to them because of their low human capital. They often have little training or skills to interest an employer

(Yetim, 2008). Yetim (2008) considers that push factors are more important than pull factors for most female entrepreneurs in Turkey.

The above examples show that there is usually no single reason for a woman to start a business; rather there is a multitude of interlinked factors. Often, both push and pull factors may operate simultaneously. Patterson and Mavin (2009) point out that women's motivations for entering self-employment are often complex and multifaceted. According to these authors, attributing women's motives to push/pull factors is simplistic: women usually cite a mixture of motives for becoming entrepreneurs, among which are usually both push and pull factors.

## **2.8 Socio-Economic Factors and Women's Entrepreneurship**

Recent studies have shown that business ownership experience varies for each gender, and women are less likely to choose entrepreneurship (Bird and Brush, 2002; Brush and Hisrich, 2002). Women have traditionally chosen very different types of businesses from their male counterparts. Most women-owned businesses tend to be in the areas such as retailing, low-tech services, and so on, and are mostly undertaken in a part-time capacity (Marlow and Carter, 2004; SBS, 2003). Marlow (2002) observes the same trend in the labour market activities of women. Many researchers have noted differences in the profile of male-owned and female-owned businesses. There is a general agreement among researchers from various disciplines in entrepreneurship that age, work status, education, income and perceptions are all significant socio-economic factors in a person's decision to start a business (GEM, 2006). Carter and Shaw (2006) specifically identify gender pay gap, occupational segregation and work-life balance issues as the three main socio-economic factors that affects women's enterprise.

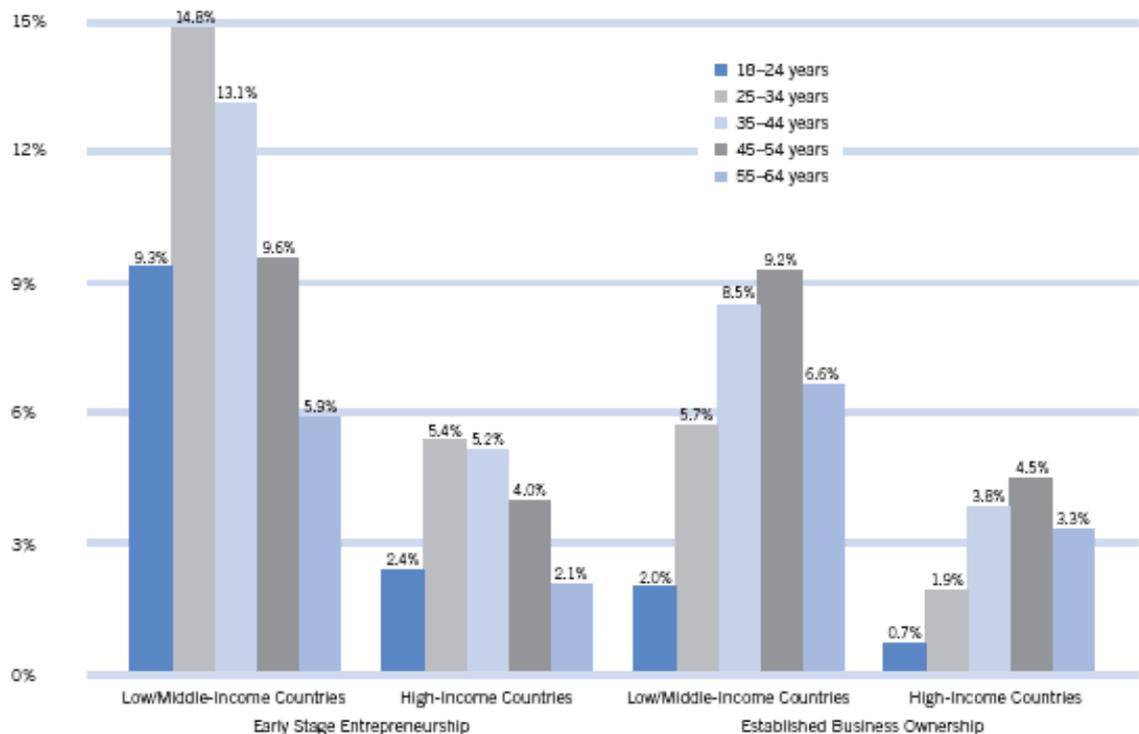
Various other factors such as employment status, education and social networks also affect women's entrepreneurship (Harding et al., 2006). In addition, there may also be more subtle factors, such as prior social conditioning. Several of these factors – age, employment status, education, the gender pay gap, household

income and the work–life balance – will be discussed in turn in the following subsections.

### 2.8.1 Age

Despite age being highly related to human capital components such as education (Dakhli and De Clercq, 2004; Ram et al., 2007) and experience (Roberts, 1991), the data obtained by others (GEM, 2006; Krasniqui et al., 2007; Madsen et al., 2003) show that there is little gender difference in entrepreneurship in terms of age and the stage of entrepreneurship. The most likely age for women to become entrepreneurs in low to middle income country groups is 25–44.

**Figure 2-4: Age Distribution of Women Entrepreneurs by Country Groups and Business Stage**



Source: GEM (2007)

The figures are slightly different for high income countries (Figure 2-4), where new business owners were most likely to be between 25 and 44 and owners of mature businesses between 35 and 54. In general the age distribution patterns for women entrepreneurs follow an inverted ‘U’ shape, with peaks of

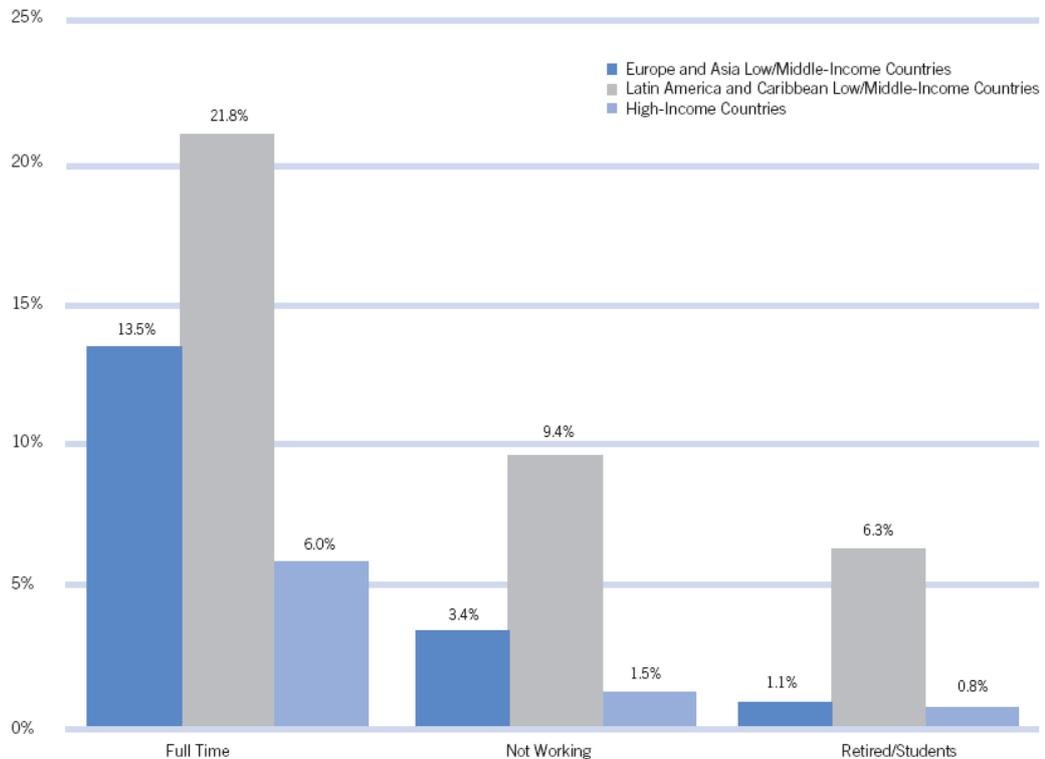
entrepreneurship between 25 and 44. This is similar to the pattern seen in males. There are evidently localised exceptions to this general situation. In Taiwan, for example, women between the ages of 35 and 45 are most likely to create a start-up. This differs not only from the general global figures but also from male entrepreneurs in Taiwan, who show a much wider range of ages (Saikou and Wen-Chi, 2008). There is a trend for women to start a business once their children are grown, and this affects the age at which they enter business. In Israel, most entrepreneurs only began once their children had grown up (Lerner et al., 1997), the reasons for this are partly cultural (there is a strong emphasis on family in Israel) and partly institutional – the existing institutional structure supports working women as long as their family is the first priority (Lerner et al., 1997). A study on Danish women by Neergaard et al. (2006) found that women who start business at an early age are more likely to enter traditional sectors like hairdressing and other low end services than older Danish women, whose businesses are more dependent on technology.

### **2.8.2 Employment Status**

Studies have found evidence that the employment status of women influences their entrepreneurial activity to a great extent. Women who are employed (either full time or part time) are more likely to become entrepreneurial than those who are not working or retired, or who are studying. This is the case in both high and low income GEM countries (see Figure 2-5). Working women from low income groups are 74% more likely to get involved in early stage entrepreneurial activity than non-working women. This evidence strongly suggests that work experience provides a greater launching pad for involving women in entrepreneurial activity than other socio-economic factors.

Figure 2-5 shows that employment status clearly has a very strong effect on women's entrepreneurship. This observation suggests that a working environment provides women with an access to capital (both financial and non-financial) and other resources, such as information and knowledge, which may be required in starting an enterprise.

**Figure 2-5: Female Early Stage Entrepreneurial Activity by Work Status and Country Groups**



*Source: GEM (2007)*

### 2.8.3 Education

Research shows that education is likely to influence positively the probability of starting a new venture (Goedhuys and Sleuwaegen, 2000; Honig, 1998; Levinthal, 1997) and the success, growth and performance of entrepreneurial ventures (Bruderl et al., 1992; Honig, 1998; Parker and Van Praag, 2006). It is also likely to improve a person's entrepreneurial capability (Madsen et al., 2003) and increase an entrepreneur's human capital (Dakhli and De Clercq, 2004; Ram et al., 2007; Schultz, 1993).

Female entrepreneurship is also influenced by education. The chances of women entering the regular labour market and of starting a new venture are high among educated women (Harding et al., 2007). In the 1980s and 1990s, researchers such as Bowen and Hisrich (1986), Hisrich and Brush (1981) and Brush (1992)

observed that female entrepreneurs were most likely to be college graduates. However, some researchers, like Greer et al. (2003) questioned this notion. In one study, Cliff (1998a) pointed out that lack of business education and business experiences was more of a disadvantage to women starting new ventures than it was for men.

In recent years, gaining a college education seems to have become less of an advantage when it comes to entrepreneurship. If the work status of the women is set aside, attaining higher education in any income groups (GEM countries) does not result in more early stage entrepreneurial activity among women (Harding et al., 2006). However, in both high and low income GEM countries it is observed that the education levels among established businesswomen are higher than among women who are early stage entrepreneurs. This shows that education may play a vital role in positively influencing business survival and growth rates (Harding et al., 2006).

#### **2.8.4 Gender Pay Gap**

Women have not yet achieved equality with men in wage employment (Borden, 1999; Minniti et al., 2005; Minniti and Bygrave, 2003). Since the majority of businesses are started with the entrepreneur's personal savings (Bhide, 1992), the continued disparity in wage earning potential between men and women disfavours the ability of female entrepreneurs to accumulate financial resources for investment in the creation and growth of enterprises (Carter and Shaw, 2006).

Men earn £250,000 more than women over the course of their lifetimes in the UK (Rake et al., 2000). This is around 37% more than equally skilled women without children (Carter and Shaw, 2006). Borden (1999) states that gender inequality in wage employment encourage women to opt out of wage employment and to get self-employment. Although this can be considered a positive effect, it is inappropriate to advocate self-employment as a solution to the wage discrimination that exists in our labour markets (Borden, 1999).

### **2.8.5 Household Income**

The economic status of a country and the family's financial status have also been found to influence women's entrepreneurial activity (Brush et al., 2004). The position and roles of women in the labour market and society have a considerable influence on the extent and nature of their enterprise (Carter and Shaw, 2006). Allen et al. (2008) found that there is a positive correlation between greater household income and involvement in managing and owning a business. The only exception to this is in the low and middle income groups, where early stage entrepreneurial activity is higher. Allen et al. (2008) also found that the same trend is seen in countries with both low and high GDP. Among the 40 countries surveyed, the incidence of female early stage activity is higher in low and middle income countries, whereas countries with high GDPs showed much lower rates of female early stage entrepreneurial activity.

The availability and access to various resources such as; finance, social, human and cultural capital those are needed for any enterprises are greatly determined by the entrepreneurs' socio-economic and cultural environment. Hence, a woman's status as a business owner is determined by her position in society (Carter and Shaw, 2006).

### **2.8.6 The Work-life Balance**

Self-employment and business ownership are workable solutions to gaining managerial experience and breaking the glass ceiling. This arrangement also allows women to manage their own time, which may not be possible in paid employment (Greer and Greene, 2003; Marlow and Carter, 2004). Carter et al. (2001) suggest that considerably higher numbers of women are in part-time self-employment than in part-time paid employment because it is advantageous to women in their 'work-life balance'.

Many women believe that entrepreneurship will accommodate their personal situation more effectively than a corporate job (Moore and Buttner, 1997). As women normally have responsibility for childcare, and adequate and affordable

childcare outside the home is often lacking, they may find it difficult to undertake full-time paid employment. Part-time or full-time self-employment may be a way of enabling women to obtain an income while managing their own time, and being able to fit work around family obligations. Male entrepreneurs do not generally have to deal with these issues.

## **2.9 The Effect of Gender on Women's Entrepreneurship**

Heilbrunn (2004) highlighted two main theoretical perspectives for identifying the differences between female and male entrepreneurs. Firstly, the theory of *Social Feminism*, whereby male and female entrepreneurs adopt different business approaches which may in turn lead to differences in effectiveness. Secondly, the theory of *Liberal Feminism*, according to which men and women are viewed as equal but the general opinion is that female entrepreneurs will be less successful than male entrepreneurs due to factors such as open discrimination in the financial market. Feminist approaches to business ownership have helped in developing theoretically strong analyses of the role of gender in entrepreneurship (Bird and Brush, 2002; Greer and Greene, 2003; Marlow, 2002; Mirchandani, 1999; Neergaard et al., 2005). In recent years, a shift in research focus from *whether* gender affects business ownership to *how* it does so has been observed by Marlow (2002), Carter and Shaw (2006) and Brush et al. (2006).

In feminist approaches, gender is viewed as a social structure that is generally accepted without question (Mirchandani, 1999). Men and women have been ascribed with certain characteristics and their differences are 'taken for granted'. These differences appear natural or normal, but they construct a pecking order that benefits men and demerits women (Mottier, 2002). In business in particular, entrepreneurship is innately a white male domain and any other forms of entrepreneurs, be they women or ethnic minorities, are seen as inferior (Ahl, 2002; Ogbor, 2000). When the broader environment is considered, we find that the conflict may arise from the social and cultural construction of gender (Carter and Shaw, 2006). Roomi and Harrison (2008) argue that in some societies and cultures, women's full economic potential is not being tapped due to the deeply-

rooted discriminatory socio-cultural values and traditions that are embedded in institutional support mechanisms. Women do not, therefore, enjoy the same opportunities as men. This may be due to systemic subordination determined by the forces of patriarchy, greatly influencing their spatial mobility and occupational role or due to low levels of education and skill (Al-Riyami et al., 2002). Greer and Greene (2003) also mention countries in which historical prejudice legally prohibits women from owning land and businesses. The same prejudices contribute to the growth of institutional and social practices that still restrain female entrepreneurial behaviour today. These institutional barriers create an environment based on gender differences in education, work and networks, and access to both financial and non-financial capital.

However, despite the barriers and shortcomings which women face – as well as cultural norms that expect women to be subservient, supportive and submissive to men – women are joining the entrepreneurial arena more and more all over the world (Al-Riyami et al., 2002; Roomi and Harrison, 2008). Favourable government policies and easy access to resources, especially capital is playing a crucial role in the establishment and development of women-owned enterprises. Firkin (2003) lists various types of 'capital' that help in starting and running a business: Financial Capital, Human Capital, Social Capital, Physical Capital, Organisational Capital and Technological Capital. Carter and Shaw (2006) agree that a mixture of 'capitals' greatly enhances the experience of business ownership and the performance of the enterprise. Cliff (1998) found that female entrepreneurs had fewer of these resources than their male counterparts. Women are disadvantaged both inside and outside the business circle. Loscocco et al. (1991) argue that because of this structural disadvantage even successful women may miss opportunities to exploit business openings.

### **2.9.1 Financial Capital**

Financial capital is one of the key ingredients in enabling a small business to innovate, grow and create jobs (Brush, 2001). There is an increasing awareness among researchers that women-owned enterprises tend to be undercapitalised

(Carter and Shaw, 2006). Not surprisingly, a considerable amount of the literature on women's entrepreneurship has focussed on finance and related issues. Women's ability to raise start-up finance, their inability to show collateral/guarantees, lack of penetration into the formal/informal networks that can help them access finance, and bankers' discrimination have been researched time and again in different geographical settings (Carter et al., 2001).

The smaller size of businesses operated by women may also be attributed to the smaller resources availability to women during start-up and during the growth process. The amount of resources, including financial capital, used by women to start or acquire a business is relatively less than that used by men (Brush, 1992; Carter and Rosa, 1998; Verheul and Thurik, 2001). This is credited to various reasons, including: businesses being started with personal savings (Bhide, 1992), less accumulated financial capital because of the gender pay gap (Minniti and Bygrave, 2003), women's preference for internal sources of finance (Chaganti et al., 1995; Haynes and Haynes, 1999), women shunning banks as a source of funds (Cole and Wolken, 1995) and so on. Although a study by Carter and Shaw (2006) found that 43% of women used external borrowing for start-up capital, compared to 14% of male entrepreneurs, the average amount of borrowings for males was twice as high as for females, and men's mean start-up capital was greater.

In another study, Abor and Biekpe (2006) mention a number of studies that reveal that female business owners encounter more difficulties accessing capital than men. Various authors (Brush et al., 2005; Rees and Miazhevich, 2005) have attributed this development to different factors, including sexual stereotyping and discrimination, women's lack of personal assets and credit track records, and the inability of women to penetrate the same informal financial networks as men. They also point out that women face difficulties in raising finance because of bank officials' perception that they lack essential entrepreneurial qualities in comparison to men.

Another major problem faced by women in securing finance is that on average they seek smaller amounts than men, and these small financing sizes are uneconomic business propositions for financiers. Carter and Shaw (2006) find in their investigation that bank loan officers are more likely to question the understanding of the business function, the implication of the business ownership and the kind of research undertaken if the applicant is a woman. However, such gender stereotyping has been mitigated to an extent with the advent of technology and more female employees in the banking sector. Technology has made the decision-making process in banks more depersonalised (Carter et al., 2006), and increasing female participation in the banking sector (Dench et al., 2002), and their increasing numbers at executive levels (EOC, 2005) are providing a level playing field for women entrepreneurs.

### **2.9.2 Human Capital**

The concept of human capital relates to an individual's ability to allow for 'changes in action' and economic growth through their knowledge and skills (Becker, 1962). The positive link between education and experience of an entrepreneur, and the success of an enterprise is cited by various scholars, including Chandler and Hanks (1998), Reid and Smith (2000), and Macpherson and Holt (2007).

The importance of human capital for entrepreneurial success is a prominent theme of the entrepreneurship literature. Brush (1992) reveals that women and men have different backgrounds of human capital and some of these differences may affect the success of their ventures. Brush and Hisrich (2002) and Singh and Vinnicombe (2003) emphasise the impact of entrepreneurial education on the managerial performance of women entrepreneurs. They also point out that gender also affects the nature of entrepreneurial education that might be imparted, subsequently affecting the managerial style of entrepreneurs.

In their study of factors that inhibit the economic growth of female-owned small businesses in North West England, Fielden et al. (2003) discover that not all

women entrepreneurs possess characteristics such as high self-confidence, high education and motivation to achieve. They state that a number of women do not possess previous direct experience or managerial experience relating to their businesses. The work of Sexton and Bowman (1990) also found that gender-related managerial differences existed in female and male owned enterprises and such differences were used as a basis for gender stereotyping. They explained that female entrepreneurs were subject to gender discrimination even if they belonged to the same socio-economic background and possessed the same motivation and skills as their male counterparts. However, Lin et al. (2000) argue that it is the financial capital more than the experience accumulated in paid employment that helps entrepreneurs in their start-up activity. Finally, Brush et al. (2004; 2005) emphasise a women entrepreneur's networking capabilities and her social capital as more influential for enterprise development and survival.

### **2.9.3 Social Capital**

Social capital is "the goodwill that is engendered by the fabric of social relations and that can be mobilised to facilitate action" (Adler and Kwoon, 2002; 17). It is one of those intangible assets that count most in the everyday lives of people. These may include the goodwill, sympathy, fellowship and social intercourse that occur among the families and individuals of a social unit (Woolcock and Narayan, 2000). Research has highlighted the importance of networking and the development of relationships beyond networking, and has explained how these are critical for business success (Bennet and Richardson, 2005; Lin et al., 2000). Research has also highlighted the importance of a strong network of individuals based on trust and values (social capital), which can be used to share ideas and access information on the running of businesses. Networks are especially important as a vital source of information for identifying opportunities and providing assistance that might guide the entrepreneurial career path (Campbell, 2000; Campbell, 1988; Daniel et al., 1994).

To be successful, entrepreneurs have to be more resourceful than others. Resource mobilisation requires 'entrepreneurial contacts, knowledge and confidence'

(Stevenson and Amabile, 1999). Social capital, that is, the use of networks and interpersonal relationships by business owners to generate informal assistance, is not only one's position in the network(s), it is one's ability to draw upon their position in the network. People who are entrenched in their own lives and are not well connected to society often let profitable venture ideas pass by unnoticed (Stevenson and Amabile, 1999). Globally there has been an increased recognition of women as successful entrepreneurs, combined with a rising number of female-owned businesses. However, female entrepreneurship is characterised by a number of constraints, including family responsibility and a lack of social capital (Heilbrunn, 2004). Schmidt and Parker (2003) state that female entrepreneurs often enter self-employment under-resourced in human and social capital as compared to men. Smith-Hunter and Boyd (2004) also confirm that women business owners are more disadvantaged than their male counterparts in terms of resources because of their limited access to the 'right' social circles that can help them access those resources.

Marlow and Carter (2004) strongly link the underperformance of female-owned firms to their initial undercapitalisation. They state that this initial undercapitalisation is not restricted to access to finance, but also includes human and social capital, which comprises previous managerial and sectoral experience as well as access to appropriate professional and personal networks. Women's social structure and the way they socialise have a major influence on the social capital that they use to start up their businesses, with women being less welcome than men in social networks (Neergaard et al., 2006).

## **2.10 Summary**

This chapter has provided an understanding of women's entrepreneurship in the light of recent academic literature. First of all, it defines the term 'women-owned enterprises' and discusses the problems of clearly defining and measuring women's enterprise due to the different measuring frameworks used by various governments and agencies. It further provides some data on women's Total

Entrepreneurial Activity (TEA) in the UK and highlights the trends of the labour market in the ten year period from 1997 to 2007.

Taking into consideration the GEM (2006, 2007, and 2008) findings, the next section explained the significance of such socio-economic factors as age, work status, education, income, gender pay gap, occupational segregation and work-life balance that contribute to a woman's decision to become self-employed rather than work for someone else in the labour market. The primary factors that appear to affect the likelihood of entrepreneurship for women include age, level of education, employment status, household income, the gender pay gap and family commitments. This chapter also illustrates that women's contribution to business and to economic growth is almost certainly underestimated as many women work in the informal sector and their business activity does not show up on national statistics. In many countries, women manage a business that belongs to a male relative, of which they may or may not own a share.

Significant research has been conducted in the area of women's entrepreneurship since the publication of the first article on the subject in the *Journal of Contemporary Business* in 1976 by Eleanor Schwartz, 'Entrepreneurship: A new Female Frontier' (Greene et al., 2003). This chapter looks into the key literature published on women's entrepreneurship and finds that women are globally under-represented in business, making women's entrepreneurship an important unexploited economic potential. They have the potential to contribute significantly to the growth of economies and GDP. Their motivations for starting a business differ from those of men, with the most commonest reasons being economic necessity, lack of other options, frustration with 'glass ceilings' and corporate inflexibility, and the need to balance work and family commitments. Significant differences in women's entrepreneurial motivations exist between countries, with a greater number of necessity entrepreneurs found in low to middle income countries. In general, women's enterprises differ from those of men, being generally smaller and slower growing and generally restricted to certain low value sectors such as retail and service industries.

The chapter further reviewed important issues relating to gender differences discussed in the literature on women's entrepreneurship. There may be gender differences in management style; women are widely considered to be more risk averse than men. On the positive side they are seen to operate more flexible businesses, with a 'human element'. However, this is not widely supported by empirical studies and may be a stereotype. Women face numerous gender specific barriers when starting their own companies. These include reduced access to financial capital, lack of support from family, lack of good high level networks, social conditioning, pressure to conform to female gender role stereotypes, religious and cultural barriers, lack of confidence and fear of failure, lack of credibility, reduced access to human capital, and occupational segregation.

In their comprehensive work, researchers such as Carter et al. (2001), Greene et al. (2003), Brush et al. (2004; 2006) and Carter and Shaw (2006) have emphasised the important roles of acquisition, mobilisation and generation of resources in the phases of start-up and growth. This chapter briefly discusses the different forms of capital (financial, human and social) required to run and manage women-owned businesses. It reviews the knowledge about women's entrepreneurship and the use of different forms of capital and sets a base for a more detailed review in the next chapters. The upcoming chapters provide details about gaps in the literature and how these gaps have led to the framework of said study.

The next chapter reviews the literature on the growth of enterprises, explaining different models and strategies for growth. It then examines the impact of human-based (human and social) capital on the growth of women-owned enterprises, especially under the Diana Project (Brush et al., 2004, 2005, 2006), and identifies those gaps that are the basis for this thesis.

## Chapter 3 Growth of Women-Owned Enterprises

### 3.1 Introduction

Business ‘growth’ is considered one of the most popular and widely known measures of any company’s success (Brush and Vanderwerf, 1992; Storey, 1997). It also indicates financial and business achievement and increases the chances of a firm’s survival (De Geus, 1997; Storey, 1994; Taylor and Cosenza, 1997). Mintzberg (1994) has provided four categories of growth:

- Financial growth (increase in turnover, costs, investments for achieving profits, assets, value);
- Strategic growth (formulating a strategy for developing capabilities to exploit a presence in the marketplace);
- Structural growth (changes in a company’s personnel, planning and systems); and
- Organisational growth (changes in a company’s processes, culture and attitudes as it grows and develops. Changes in entrepreneurs’ roles and leadership style).

Growth challenges business owners to generate, acquire and mobilise resources (Storey, 1994; Brush et al., 2004). The interventions that entrepreneurs make to overcome these challenges have attracted many researchers in recent decades (Burns, 2007). Some of this work has been industry specific and therefore of limited relevance in other sectors such as Altinay and Altinay, 2006 (Turkish minority businesses), Basu and Goswamy, 1999 (South Asian business) and Davidsson et al., 2002 (Swedish businesses). Some has been more broadly based, providing insight into critical issues through the development of various growth models (Burns, 2007; Dobbs and Hamilton, 2007; Macpherson, 2005).

The purpose of this chapter is to examine and review the main findings relating to ‘enterprise growth’, with a special emphasis on women-owned enterprises. It discusses the development and presentation of different models of enterprise growth and the critique of renowned scholars of various models. Another aim of this review is to provide an insight into recent work on the particular factors that influence the growth of women-owned enterprises. It further explains the significance and meaning of growth for women-owned businesses and assesses what hurdles women-led businesses need to clear in order to grow.

### **3.2 Enterprise Growth Models (Approaches)**

There is a general consensus that enterprise growth is a complex process that is neither linearly continuous nor dependent upon only a limited number of factors (Deakins, 1996). A number of conceptual frameworks have attempted to capture different aspects of business growth. These can be divided into six broad categories: stochastic, descriptive, evolutionary, resource-based, learning and deterministic (Dobbs and Hamilton, 2007).

The ‘*Stochastic Approach*’ proposes that enterprise growth is independent of the present and past status of the firm and depends on a number of factors (McMahon, 1998). Gibrat’s (1931) seminal work proposing the ‘Law of Proportionate Effect’ confirmed the dependence of growth on a range of factors, such as management, customers’ needs and macro-economic policies (Dobbs and Hamilton, 2007). Burns and Dewhurst (1989) suggest that a firm’s growth levels off after the early years of its existence. However, Smallbone et al. (1995) found that mature firms were as likely to grow as new ones, pointing out a number of causal factors that might trigger growth in different stages of a firm’s lifetime.

A number of growth models have been developed using the analogy of a life cycle to describe challenges faced by entrepreneurs in different stages/phases and how/what changes are needed to manage the enterprise in an effective and efficient manner (Burns, 2007, 2011; Churchill and Lewis, 1983; Greiner, 1972; Scott and Bruce, 1987; Sharlit and McConnell, 1989). This life cycle approach is

termed the '*Descriptive Approach*' by Dobbs and Hamilton (2007: 298). Despite criticism from some authors (Garnsey, 1998; Storey, 1997) this approach has been used in a number of empirical studies explaining enterprise growth (Kazanjian, 1988; Miller and Friesen, 1984).

Criticisms of the staged-growth model (the descriptive approach) have led to the development of evolutionary and resource-based models. The proponents of the '*Evolutionary Approach*' or model reject the presence of any standard model or sequence of stages (Aldrich, 1999; Vinnell and Hamilton, 1999) and believe that 'the nature and timing of a firm's growth will be a result of its unique circumstances' (Dobbs and Hamilton, 2007: 298). Other opponents have considered that a firm's growth is dependent on the managerial resources available to planning and managing growth, in addition to running the current operations (Orser et al., 2000; Penrose, 1995), and on the strategic ability of the entrepreneur to identify growth opportunities (Edelman et al., 2005; Storey, 1997). This '*Resource-based Approach*' has been used in numerous recent studies to explore the determining factors in the growth of women-owned enterprises (Brush et al., 2006; Carter et al., 2007; Greene et al., 2003; Lam et al., 2007).

According to Macpherson (2005: 1138), 'organizational growth is ultimately dependent on satisfactory resolution of the crisis of "knowing"'. The basis is the same for the '*Learning Approach*' to growth. This emphasises an entrepreneur's absorptive capacity to learn, how he/she learns, and when he/she can learn most effectively to grow his/her enterprise (Bessant et al., 2005; Dobbs and Hamilton, 2007).

Most of the recent studies studying enterprise growth have applied multivariate techniques to large cross-sectional data to determine a set of explanatory variables affecting growth (Smallbone et al., 1995; Deakins and Freel, 1998; Basu and Goswamy, 1999; Davidsson et al., 2002; Barringer and Jones, 2004; Altinay and Altinay, 2006; Krasniqi et al., 2007). A dominant approach in recent years for

determining what causes growth differs from stochastic approaches, and has been labelled the '*Deterministic Approach*' by Dobbs and Hamilton (2007).

Before describing growth in women-owned enterprises, the next few sections explain the most frequently cited growth models (descriptive approach) in entrepreneurship research, the critique of these models (resource-based and evolutionary approaches), the factors influencing growth (deterministic approach) and the measurement of growth (to highlight important variables).

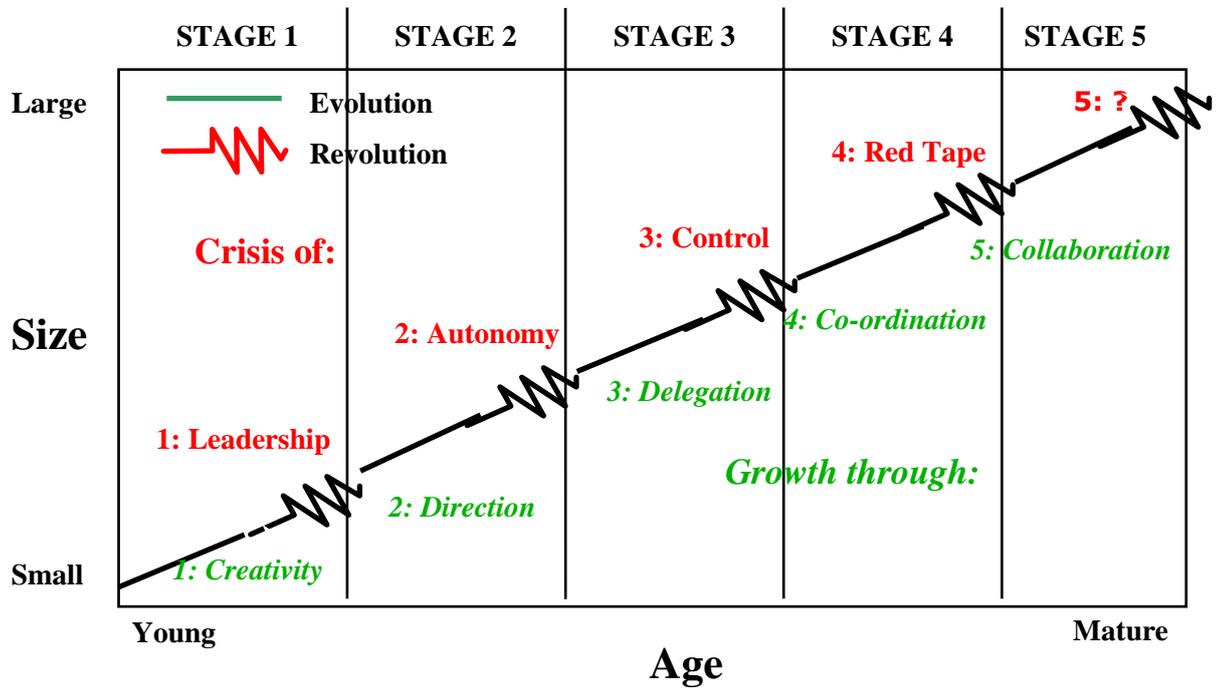
### **3.3 Staged Growth Models**

#### **3.3.1 Greiner's Growth Model**

One of the most widely cited models for the growth of small and medium enterprises (SME) is that developed by Greiner (1972). This shows five stages in developing an SME and the managerial changes that founders have to face during each phase. Growth periods vary in length according to whether the industry is in a slow or fast growth period.

Each phase of the evolution (growth) requires a particular management style and is followed by a revolution (crisis) that presents a management problem. The founder of the company has to make a change in her/his management style, if she/he wants to develop or grow it. If the owner of the company is unable to overcome the crisis the company may not grow, or may even fail. As shown in Figure 3-1, the first four phases – creativity, direction, delegation and coordination – may all be readily recognised in the development of many small businesses. At the fifth and final phase – collaboration – the business is no longer small.

Figure 3-1: Greiner's Five Stage Growth Model



Source: Greiner (1972)

### 3.3.2 Churchill and Lewis Growth Model

Churchill and Lewis (1983) postulated that any small firm that experiences growth goes through a life cycle of growth stages (Figure 3-2). This approach is analogous to life cycle approaches to products, implying birth, an early growth stage, then maturity, and eventually decline and death. Each stage has particular challenges that can be approached in different ways. One implication of such an approach is that growth is linked to age.

The model has been refined over the course of many years and deemed helpful by hundreds of business owners in understanding problems, assessing skills and resources needed, and anticipating further challenges (Burns, 2007). Each stage is characterised by an index of increasing size, complexity and/or dispersion, and

described by five management factors: managerial style, organisational structure, extent of formal systems, major strategic goals and the owner’s involvement in the business (Churchill, 2000).

**Figure 3-2: Churchill and Lewis Growth Model**

	Stage I	Stage II	Stage III	Stage IV	Stage V	Stage VI
	<i>Existence</i>	<i>Survival</i>	<i>Disengage- -ment</i>	<i>Growth</i>	<i>Take-off</i>	<i>Maturity</i>
<b>Management Style</b>	Direct supervision	Supervised supervision	Functional	Functional	Divisional	Line and staff
<b>Organisation</b>	Simple	Growing	Growing	Growing	Growing	Sophisticated
<b>Extent of Formal Systems</b>	Minimal to non-existent	Minimal	Basic	Developing	Maturing	Extensive
<b>Major Strategic Imperative</b>	Existence	Survival	Maintaining profitable status quo	Obtain resources for growth	Growth	Return on investment

*Source: Burns (2007: 216)*

According to this model, in the very first stage a company’s strategy is to stay alive. Planning is minimal, with only a close time horizon. Organisation is simple and the owner performs, or is involved in, all tasks related to the business by supervising subordinates (if any), supplying energy, direction and capital. Systems and formal planning are minimal or non-existent, and the strategy is to keep costs low in order to stay afloat. In the second stage, the primary goal is to establish a customer base and product portfolio. Once there are enough satisfied customers the focus of attention shifts from existence to the relationship between revenue

and expenditure to ensure returns on investment. Organisation is still simple, with the owner controlling almost everything, and the planning horizon is still short – maintaining cash flow is the crucial element.

In the third stage, a management team is in place, as are systems that effectively cover marketing, finance and general operations. In this stage the founder begins to delegate some responsibility to the management team. The company can continue in this way indefinitely or it can move back or forward a stage, with many companies continuing in this stage for long time periods. However, if conditions change the company may be forced to go back a stage or cease trading.

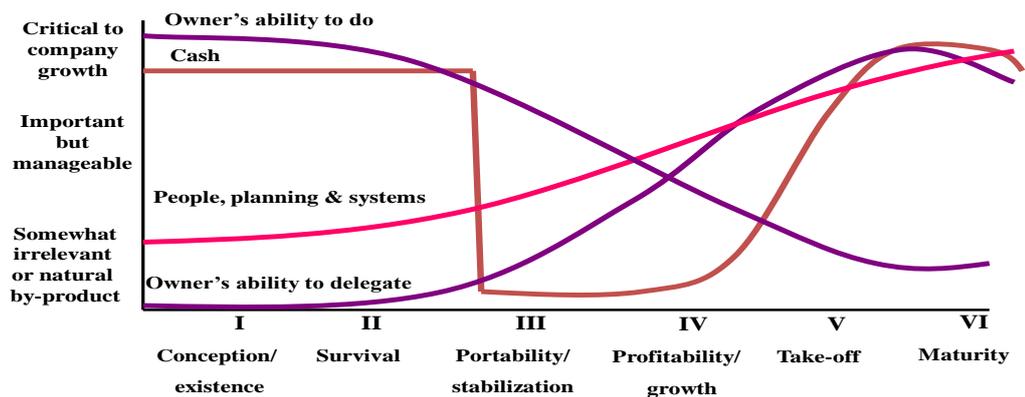
To enter the growth stage a clear future vision and strategy are needed. This will probably involve hiring new managers with the skills for operational and strategic planning. The founder now needs to channel some resources into company growth (Churchill, 2000). If a company wishes to move to the fifth and final stage, financial resources, strategic planning and a good management team are required, and the company may consider itself a large and successful one.

Churchill and Lewis (1983) further discuss key factors that can affect a company's success or failure during different life stages. They categorise these first by the owner's attributes, including their goals and abilities, and second by resources, including financial, personnel, systems and business. When the company is starting out the goals and attributes of the founder(s) are crucial, including the ability to manage operations and finance. Management skills are less important at this stage as there are few staff members or departments to manage.

Once, in the growth phase the founder's strategic and delegation capabilities become increasingly important (Burns, 2007; Churchill, 2000). Then the inability of many founders to stop doing everything themselves and begin managing and delegating explains the demise of many businesses in stage four (Churchill and Lewis, 1983). Careful management of cash flow is paramount in the early stages, but as the company's sales become established the pressure on cash flow eases

off. Figure 3-3 also shows the changes in people, planning and systems across the various stages, which are highly correlated to the owner's ability to delegate and manage.

**Figure 3-3: Management Factors and Stages of a Company's Success**



*Source: Churchill (2000: 256)*

Cash is extremely important in the start-up, survival and growth stages of a business for accessing resources, balancing cash flow and acquiring human and physical resources. As the business enters stages five and six, cash becomes manageable again, as in stage three, because of repetitive sales. As the company progresses into different stages, issues of people, planning and systems gradually acquire everyday importance. The early development of these saves time when the company is ready to grow.

The Churchill and Lewis Growth Model is useful for explaining and predicting the growth of enterprise, and is pervasive in the academic literature (Churchill and Lewis, 1983; Garnsey, 1998; Kazanjian, 1988; Miller and Friesen, 1984; Scott and Bruce, 1987; Storey and Westhead, 1994). From the perspective of women's entrepreneurship, this study has used the Churchill and Lewis Growth Model to look at the way in which women entrepreneurs use social capital and its effect on the growth of their enterprises (Roomi, 2009).

### **3.3.3 Burns' Growth Model**

Burns' (1996) four-stage model of growth places the orientation of the company, its management, accounting, marketing and finance as the main business imperatives. This model shows that if the company wants to develop beyond the survival stage, it must develop strategic orientation and formal structures. However, after studying 57 SMEs, Hill (2001) found that sales in the early stages of business existence, not marketing, determine the true trajectory of company growth and development.

### **3.3.4 Sharlit and McConnell's Growth Model**

Sharlit and McConnell (1989) also proposed a staged model of business growth, focused on human resource management (Mazzarol, 2003). They identify only two stages: creativity and direction. In the creativity phase, communication, job roles and procedures are informal and flexible. As the company grows, the founders realise that they are not able to manage human resources effectively, and they build a management team, which in turn results in making company structure, communication and procedures more formal.

## **3.4 The Critique of Staged-Growth Models**

A number of writers have criticised staged-growth models or life cycle approaches as too simplistic, and postulated that growth is far from cyclical but may be interspersed with relative periods of stability (O' Farrell and Hitchins, 1988). One of the reasons researchers such as Storey (1997), Garnsey (1998), and Garnsey et al. (2006) have rejected the idea of any 'recurring temporal sequence' (Bhide, 2000: 247) in the development of the firm is the 'excessive claims for invariance in stage of growth theories' (Garnsey et al., 2006: 3). O'Gorman (2001) considers the models inadequate for many reasons, most significantly because they assume that a company must pass through all the stages of development, and they do not allow for alternative growth paths, such as skipping stages or progressing through them in a different order. Some critics also state that the models fail to consider changes in industry, technology and other variables (McClelland et al., 2005).

A further assumption made by Churchill and other proponents of staged-growth models is that growth can be understood in 'gender-neutral terms'; yet evidence suggests that women entrepreneurs may perceive the need for growth differently to their male counterparts (Mitra, 2002; Still and Timms, 2000). Burns and Dewhurst (1996) agree that the main problem with such models is that many businesses do not experience growth at all, especially women-owned businesses (McClelland et al., 2005).

According to Burns (2007), the motivation and aspiration of a business owner may also affect the growth path of their business. There are different reasons for business owners to set-up their businesses, and these determine their types. Goffee and Scase (1985) categorised four different types of female entrepreneurs: conventional entrepreneurs, innovative entrepreneurs, domestic entrepreneurs and radicals. Each group has a different outlook on the level of growth required for their business. If the business owned by a woman is a 'lifestyle' business (Burns, 2007: 16), then she is classified as a 'domestic entrepreneur' and her growth objective will be lower than that of a 'gazelle' (radical entrepreneur) with a high-growth orientated business.

Two major critiques, by Garnsey (1998) and Storey (1994), have presented resource-based models that emphasise the importance of resources. Garnsey's (1998) growth model is based on the earlier work of Penrose (1959) and combines a staged approach (Greiner, 1972; Churchill and Lewis, 1983) with her own research on firms in the UK and USA. It is resource-based and modelled on an input-output model, using assets as a measure of growth. According to this model, inputs include employees, finance, network connections and strengths, and the capabilities and attitudes of the owner-manager(s). These resources attempt to solve problems at each stage of growth, which results in the development of competence and organisational routines; the solutions strengthen the organisation and allow it to change and challenge another set of (growth) problems.

Garnsey (1998) emphasises that the ‘members of a firm have to access, mobilise, generate and accumulate resources if the firm is to achieve sustained expansion’ (1998: 523). As growth centres on solving problems at different stages, these resources (financial, human and/or social) help entrepreneurs or owner-managers to accumulate competence and distinctive capabilities. Storey (1997) also points out the importance of access to resources for a firm’s growth, especially in complex situations where early stages may be short-lived or compressed.

As mentioned earlier, the critiques of staged growth model are of the view that not all the enterprises follow the stage growth model (Burns and Dewhurst, 1996; Storey, 1997; Garnsey, 1998). They observe that there are a number of factors that influence the enterprise growth (and its path). The next section describes these factors that influence growth of enterprises in detail.

### **3.5 Factors that Influence Growth**

Various studies recognise the importance of financial, human and business resources, technical and management skills that can adapt to and cope with a changing environment, the potential to develop staff, and creativity and opportunity recognition as the key factors to determine the growth of enterprises; however, there is not yet a comprehensive theory that explains which small firms will grow, or how they grow (Bridge et al., 1998). As cited earlier, a number of multivariate studies have been conducted using multivariate techniques to determine a set of explanatory variables that affect growth (Altinay and Altinay, 2006; Barringer and Jones, 2004; Basu and Goswamy, 1999; Davidsson and Delmar, 1997; Deakins and Freel, 1998; Krasniqui et al., 2007; Smallbone et al., 1995). The literature on growth mainly describes factors thought to influence small business growth in four categories (Dobbs and Hamilton, 2007; North and Smallbone, 2000). These are discussed separately below.

#### **3.5.1 Entrepreneurs’ Characteristics**

Entrepreneurial characteristics include behaviour, personality and attitude (Storey, 1994); capability, including education and training, which creates higher

expectations in some industry sectors (Henry et al., 2005); and social capital, which influences their access to resources (Brush et al., 2004). Other factors identified by Storey (1994) are previous management experience, family history and functional skills, and relevant business sector knowledge. While a number of studies have shown a relationship between entrepreneurs' characteristics and a firm's performance (Barkham et al., 1996; Barkham, 1994; Barringer et al., 2005; Lin, 1998; Montserrat, 2002), none of these factors has been conclusively shown as universally necessary for success.

Empirical evidence also suggests that although growth orientation does not automatically lead to actual business growth, a distinguishing characteristic of high growth businesses is their owners' commitment to expansion. Gibb and Davies (1990) identified a 'personality-dominated approach', in which the entrepreneur is regarded as key to business development. A business set up to exploit an identified market opportunity would therefore be expected to have stronger growth orientation than one set up as a result of 'push' factors such as a lack of alternative opportunities. The owner's attitude to risk also affects the willingness to use external finance (Brindley, 2005). Additionally, there is the desire for managerial competency in relation to strategic management skills and personal autonomy, which affects the extent to which consultants and partners may become involved. And last but not least, an entrepreneur's human capital in the form of education and experience may influence a firm's growth (North and Smallbone, 2000). Education is likely to improve "a person's search skills, foresight, imagination, as well as computational and communication skills" (Dobbs and Hamilton, 2007: 308), resulting in higher rates of growth (Bates, 1990). Prior experience, on the other hand, limits how much entrepreneurs make mistakes (Smallbone and North, 1995), improves the chances of the business success (Aidis and Mickiewicz, 2004), and is positively correlated with the financial performance of the business (Dahl and Reichstein, 2007; Dodd et al., 2004).

### **3.5.2 Management Strategies**

Strategies may be planned, intentional and formalised, or unintentional and emergent – nevertheless becoming a pattern of operating. Management strategies affect company growth (Storey, 1994; McMahon, 1998), in particular the growth objectives of the entrepreneur (Heinonen et al., 2004) and employee recruitment and development (Barringer and Jones, 2004). The growth objective of an entrepreneur who is looking for a work-life balance will be different from one who is motivated by having ‘more’ power, control and financial benefits.

The development of employees’ skills and effective HRM practices needs financial commitment on an entrepreneur’s part, but they are likely to give a return on the investment as there is empirical evidence that they positively influence a firm’s performance and growth (Lin, 1998; Storey et al., 1987). Furthermore, management strategies such as product market development (Barringer and Jones, 2004; Barringer et al., 2005; O’ Gorman, 2001; Yasuda, 2005), access to financial resources (Carter and Van Auken, 2005; Harrison et al., 2004; Sexton et al., 1997), internationalisation and business collaboration (Heinonen et al., 2004; O’ Gorman, 2001; Robson and Bennett, 2000; Storey and Westhead, 1994; Zahra et al., 2000) and flexibility (Eirich, 2004; O’ Gorman, 2001; Smallbone et al., 1995) have all been mentioned as contributing to the growth of enterprises.

### **3.5.3 Environmental and Industry-specific Factors**

Factors pertaining to the industrial or environmental milieu of a company can affect its growth. Bridge et al. (1998) have pointed out that ‘the triggers for enterprise growth are found along a continuum from inborn attributes of individuals to complex interrelationships amongst often changing cultural, political and economic conditions at national, regional and local levels’. Smallbone et al. (1995) also point out that sectoral variations in small firm growth are common because of differences in market trends and competitive activities. Location is another factor. Variation in size, scope and buoyancy of demand in

local markets is likely to affect growth opportunities. On the supply side, variation in the cost and availability of labour, premises and services is also influential.

Whatever the size of business or stage of development, the environment of any organisation is enormous, consisting of all the influences that may affect its decisions and performance, (Grant, 1998). It can be seen to comprise several layers. On the outside is the macro environment as a whole, next there is the industry sector, the market and competitor organisations and finally the organisation itself (Johnson et al., 2006). Arguably, all of these elements together and their unpredictable nature exert the greatest force on the direction and pace of the growth of a business, often due to a lack of entrepreneurs' understanding, expertise and time.

#### **3.5.4 Characteristics of the Firm**

The age and size of a firm are said to influence its growth. Storey (1994), for example, reports that most UK research indicates that younger firms grow faster than older ones. This confirms Jovanovic's (1982) model of growth, which is also based on the concept that small firms grow faster than larger firms as they have an increasing rate of learning from experience. This is contrary to Gibrat's (1931) law, which states that the rate of growth of a firm is independent of its size. It further appears to reflect Burns' (1990) assertion that firms grow in their first few years and then stabilise. There are exceptions, however, with examples of mature businesses growing strongly and the discontinuity of small firm growth.

Under these four main headings – entrepreneur's characteristics, management strategies, environmental and industry specific factors, and characteristics of the firm – there is a long list of variables that influence enterprise growth. However, the literature does not identify a single variable that “universally or by itself has a strong determining influence and explanatory models based on additive effects of comprehensive lists of presumed causes provide far from full explanations of the variance in firms' growth” (Dobbs and Hamilton, 2007: 311). Our understanding of small business growth is limited (Davidsson and Klofsten, 2003; North and

Smallbone, 2000). One main reason for this is the disagreement of researchers on when and how to measure a firm's growth. The following section details a range of measures for evaluating business growth.

### **3.6 Measures of Enterprise Growth**

Rosa et al. (1996) outlined following four measures of evaluating performance and growth of a business:

- Entrepreneurial performance measures (desire for growth and the ownership of multiple businesses);
- Primary performance measures (number of employees, sales turnover, profit, value of capital assets);
- Proxy performance measures (geographical range of markets, VAT registration); and
- Subjective measures (ability of business to meet business and domestic needs).

Among studies conducted in the past two decades, the most common and widely used measurements are primary performance measures or objective measures. These include:

- **Number of Employees**

(Altinay and Altinay, 2006; Barringer and Jones, 2004; Davidsson and Delmar, 1997; Davidsson and Henkerson, 2002; Davidsson et al., 2002; Delmar et al., 2003; Dhaliwal and Scott, 2010; Freel and Robson, 2004; Glancey, 1998; Hamilton and Lawrence, 2001; Havnes and Senneseth, 2001; Hoogstra and Van Dijk, 2004; Johnsen and McMahon, 2005; Kangasharju, 2000; Locke, 2004; O' Gorman, 2001; Reichstein and Dahl, 2004; Smallbone and North, 1995; Wang and Altinay, 2012; Yasuda, 2005).

- **Sales/Revenue**

(Barringer et al., 2005; Basu and Goswamy, 1999; Chandler and Baucus, 1996; Del Monte and Papagni, 2003; Delmar et al., 2003; Havnes and Senneseth, 2001; Hubbard and Bromiley, 1995; Johnsen and McMahon, 2005; Kelley and Nakosteen, 2005; LeBrasseur et al., 2003; Littunen and Tohmo, 2003; McMahon, 2001; O' Gorman, 2001; Olson and Bokor, 1995; Orser et al., 2000; Pena, 2002; Reichstein and Dahl, 2004; Rosa et al., 1996; Rue and Ibrahim, 1998; Sadler-Smith et al., 2001; Smallbone et al., 1995; Wang, 2008; Wang and Altinay, 2012; Wiklund and Shepherd, 2003).

- **Profit**

(Becchetti and Trovato, 2002; Birley and Westhead, 1990; Edelman et al., 2005; Pena, 2002).

- **Number of Customers**

(Baldwin et al., 1994)

- **Value of Assets**

(Carpenter and Peterson, 2002)

Of all these measurement tools, that of the number of employees is the most frequently used for defining the growth of enterprises. One of the main reasons for this is the easy availability of data thanks to entrepreneurs' willingness to share this information with researchers (Altinay and Altinay, 2006; Dobbs and Hamilton, 2007). However, although a greater number of employees is considered an appropriate criterion for public policy because it reduces unemployment, for entrepreneurs growth is more likely to be measured in terms of revenue generation, profit making and asset creation (North and Smallbone, 2000). A few studies have shown a correlation between employment growth and revenue growth over a longer period of time (Storey et al., 1987) however, a greater number of employees is less likely to be related to profit growth (Smallbone and

Wyer, 2000). Measuring growth only on the basis of employment figures is therefore controversial and is not sufficient.

It is difficult for researchers to extract financial data (on revenue and profitability) from companies, especially SMEs, as most are not willing to share this information with others and they are not legally bound to provide annual financial reports (Altinay and Altinay, 2006). In view of these problems, some studies have been conducted to determine growth by analysing proxy performance measures such as the geographical range of markets and VAT registration (Scott and Bruce, 1987; Delmar, 1998; Davidsson and Wiklund, 2000). In addition, some authors have even used entrepreneurial performance measures such as the desire for growth, the ownership of multiple businesses and formal strategic orientation (Chell et al., 1991; Davidsson and Honig, 2003).

Chaganti et al. (2002) show that using different measures for growth can produce different results. Researchers such as Delmar (1998), who used both sales and employment as measuring tools, have not always been able to find the same results for both dependent variables. One reason may be that some firms grow simultaneously in employment and sales while others do not (Dobbs and Hamilton, 2007). Similarly, an increase in employment sometimes reduces a firm's overall profit. To gain a complete picture of a firm's growth and test the validity of any theoretical model, it has been proposed that multiple growth measures should therefore be used (Dobbs and Hamilton, 2007; Havnes and Senneseth, 2001; Johnsen and McMahan, 2005; Locke, 2004; O' Gorman, 2001). Delmar (2003) reviewed the growth indicators used in the academic literature and found that the most common were sales turnover and employment.

### **3.7 Women-Owned Enterprises and Growth**

Business growth is an extremely important issue in the study of entrepreneurship. However, in spite of its significance, the growth of women-owned enterprises was not much studied until the launch in 1999 of the Diana project (Greene et al., 2003). "Notably absent was an understanding of factors affecting growth" and a

lack of cumulative knowledge from which adequately to conceptualise and build explanatory theories of the growth process of women-owned enterprises (Brush et al., 2006: 4). Most of the work conducted concerned women's motivations for starting a business and the subsequent effect of these on growth (Buttner and Moore, 1997; Lerner et al., 1997); the effect of location (urban or rural) on business performance (Merrett and Gruidl, 2000); and the effect of size and sector on business development (Cliff, 1998b; Du Reitz and Henrekson, 2000). A number of scholars conducted research comparing gender in terms of entrepreneurship (Birley, 1989; Boden and Nucci, 2000; Chell and Baines, 1988; Cliff, 1998b; Merrett and Gruidl, 2000; Rosa et al., 1996; Sexton and Bowman-Upton, 1990; Sexton et al., 1997).

In order to explain the growth patterns of women-led businesses, it is important to understand on an international scale why the growth phase varies from that of men-led businesses. Rosa et al. (1996) conducted one of the first large-scale studies for measuring the comparative performance of businesses by gender (Carter et al., 2001). They found that women-owned businesses had lower sales turnover, fewer employees and served mostly local markets. Women entrepreneurs were also less concerned with growing their businesses and less optimistic than men about their future success. Reasons for the lower performance of female-owned companies are thought to include, but are not limited to, unequal rights, unequal access to markets (Nichter and Goldmark, 2009), undercapitalisation at multiple levels, female gender role expectations, conflicts between family commitments and business, and a lack of support from family (Jamali, 2009). Moreover, women's businesses are more likely to be located in the home, further limiting their growth potential (McCormick, 2001). However, the reasons for the low growth of female-owned enterprises are complex, multi-factorial and operate at various levels (micro, meso and macro), and there is a great deal of entanglement between levels and factors (Jamali, 2009).

Controversy exists over whether there is any difference between the survival and growth of female and male businesses, since, once the effects of industry and size

are removed, there are no significant differences in survival and growth between male- and female-owned businesses, and differences may depend on external influences rather than the gender of the business owner (Anna et al., 2000; Cowling and Taylor, 2001; deBruin et al., 2007; Kalleberg and Leicht, 1991; Mirchandani, 1999; Thornton, 1999). DeBruin et al. (2007) suggest that the level of embeddedness of the business in the family, and the level of support from family (including labour support) may be more important than gender per se. However, a recent large study of one-person businesses conducted over a six-year period found that gender was one of the most important predictors of low growth (Korunka et al., 2010), with female-owned businesses showing considerably less growth. The following sections summarise some of the major factors that have been used recently to explain the growth of women-owned enterprises:

### **3.7.1 Upbringing and Education**

The early stages of life have a powerful impact on individuals in terms of their future development and career paths. It has been shown that upbringing contributes to some of the overall problems faced by female entrepreneurs and more specifically to growth matters. For example, from a very young age, parents traditionally infer that boys are better at dealing with money, taking risks and negotiating, and girls are less comfortable or capable in these latter areas and better qualified at dealing with domestic tasks, nurturing, and so on. These latter facts have a psychological impact and influence on how women and men perceive their careers and the possibility of growing a venture (Bandura and Walters, 1963).

Women are more likely to get degrees in liberal arts subjects than in maths or science-related subjects (Hauser and Zaslow, 2002). They face considerable challenges in the growth phase and they are not academically well-prepared to overcome them. However, some authors (Cowling and Taylor, 2001; Greene et al., 2003) believe that more and more women are joining self-employment with higher levels of education.

Singh and Vinnicombe (2003) and Brush and Hisrich (2002) emphasise the impact of entrepreneurial education on the managerial performance of women entrepreneurs. Furthermore, Singh and Vinnicombe (2003) point out that in addition to its impact on the stage of individual development, gender affects the nature of entrepreneurial education that might be imparted, which subsequently affects managerial style.

### **3.7.2 Previous Work Experience**

As cited above, an entrepreneur's work experience helps them avoid mistakes and more successfully manage their enterprise (Dahl and Reichstein, 2007; Dodd et al., 2004). Women tend either not to possess enough work experience or to possess it only in traditional roles and sectors and not managerial or technical positions (Shaw et al., 2001). Most women entrepreneurs gain their first managerial experience when starting their own business. Their lack of basic commercial networks, linked with a lack of prior managerial experience, contributes to their inability to grow their businesses (McClelland et al., 2005).

### **3.7.3 Personal Characteristics and Attributes**

The main female characteristic that can be seen as a barrier to effective growth is a typically low level of self-confidence. According to Brush et al. (2004), this relates to their upbringing and to rooted social stereotypes. Fielden et al. (2003) studied the factors that inhibit the economic growth of female-owned small business in North West England. They concluded that not all women entrepreneurs possess high self-confidence, high education and motivation for achievement. According to Fielden et al. (2003), a number of women do not possess managerial and business start-up experience and have no previous direct or managerial experience relating to their businesses.

Another reason proposed for the slow growth rate of women-owned businesses is that women consider growth as a financial or social risk that may come from exogenous or endogenous sources. Because they tend to be more risk averse, careful and conservative, they purposely strive for a controlled and manageable

rate of growth (Brindley, 2005; Brindley and Ritchie, 1999; Cliff, 1998b). Women deliberately choose a slower pace and avoid expanding their businesses too quickly. However, there is further evidence that in management decisions women are not more risk averse than men. Another perspective, according to Chung (1998), is that the gender difference in attitudes to growth may be more closely connected to women not wishing to risk their home–work balance rather than an antagonism to growing the business. This seems a more likely explanation for the lower growth of women-owned businesses than applying the generalisation that women are risk averse or uninterested in growth.

#### **3.7.4 Resistance from Family**

Resistance from family members is another hurdle to cross for women who wish to excel in business (Babaeva and Chirikova, 1997). In some parts of the world this may derive from socio-cultural, political and tribal reasons (Roomi and Harisson, 2008; Roomi and Parrott, 2008). In others, ‘traditional’ family commitments may impede growth (Brush et al., 2004). At the same time, family responsibility is one of the main reasons for women to start their own businesses, as self-employment offers greater flexibility for looking after the family (Carter et al., 2001).

#### **3.7.5 Motivation and Choice of Business**

Most women choose self-employment because of desires for self-fulfilment, personal goal attainment or flexibility of working hours (Buttner and Moore, 1997; McClelland et al., 2005). Family commitments have already been mentioned and will certainly affect the growth of a female-owned enterprise. Women often start enterprises to improve their work-life balance, gaining the flexibility to manage their responsibilities to both family and work (Carter et al., 2001). These women will therefore be restricted in how much time and energy they can devote to the business; attempts to manage both may lead to reduced growth (Longstreth et al., 1987).

To achieve a suitable work–life balance, women may choose businesses that are compatible with traditionally defined female identities, which provide a way of making money that is attuned to their other domestic obligations (Lerner et al., 1997). There is limited growth potential in these kinds of life-style business (Burns, 2007). However, some conflicting evidence comes from Bulgaria. Here, younger age and having children at home are associated with growth expectations for women but not men, and conflicts with family responsibility lead to lower growth expectations for men but not women (Manolova et al., 2007). It is possible that family responsibility may fuel growth, particularly for necessity entrepreneurs in developing and transition countries.

Finally, women tend not to do business in high growth sectors. Their range is limited in scope and location (Brush and Hisrich, 1999; Carter et al., 2001; Nichter and Goldmark, 2009). Technology and innovation-based businesses have higher potential for growth and less competition, but very few women venture into these areas (McClelland et al., 2005; Nichter and Goldmark, 2009). The different ways in which women use business proceeds may also affect growth. Nichter and Goldmark (2009), for example, found that female SME owners used business funds to set up their children in business, to expand laterally by creating new businesses, or to buy essential items needed in the home.

### **3.7.6 Management Characteristics**

Sandberg (2003) proposes that one primary difference between female and male managers is that women tend to place more emphasis on an open and flexible atmosphere and general ethos. This behaviour is highly evident in women's management style, which includes more open communication channels, increased system flexibility and greater emphasis on establishing interpersonal relationships. Men, on the other hand, tend to perceive power over subordinates as a major element of success. Furthermore, male and female management values differ markedly. Women measure success in terms of personal satisfaction, customer responses and additional employment. Men, however, measure success in terms of market position, turnover and profitability.

On the other hand, Brush et al. (2004) have observed that women entrepreneurs in the USA tend to be independent decision makers. They may discuss issues with others but do not feel confident in sharing ownership and control with partners and/or employees. This affects the growth of their firms as according to the staged-growth models, delegation is crucial for a firm's growth as no entrepreneur can do things on her own in the take-off and growth phases of her business (Churchill, 2000; Burns, 2007).

### **3.7.7 Financial Issues**

Carter and Allen (1997) claim that access to financial resources and other financial aspects of a business exert a stronger influence on a business than choice or intention. Chell and Baines (1988) and Boden and Nucci (2000) argue that women's lack of financial capital affects their businesses more than their intentions to start a business. Shaw et al. (2001) suggest the following financial problems faced by female entrepreneurs in the UK:

- Women use only one third of the starting capital that men do, irrespective of sector;
- On-going growth finance may be less available for female-owned businesses than male-owned businesses, largely because of the problems women have in penetrating informal financial networks;
- The guarantees required for external finance may be beyond the scope of most women's personal assets and credit track record; and
- Female entrepreneurs' relationships with bankers may suffer because of sexual stereotyping and discrimination.

Therefore, women-led businesses are more likely to use informal sources of finance to start and sustain their businesses. More women-led businesses use family-savings, household income, inheritances, grants and friends as sources of finance (Carter, 2000; Carter et al., 2001). Gundry and Welsch (2001) determined that the availability of finance when needed, the selection of strategies focused on market expansion and new technologies, and a willingness to incur greater

opportunity costs on behalf of the superior performance of their firms were the key factors in women-owned businesses with high growth businesses. They also noted adequate capitalisation, access to a wider range of financial resources, structural organisation, quality control and earlier planning as factors for improved performance and growth of women-owned enterprises. Therefore, under-capitalisation, inability to enter informal financial networks, lack of adequate collateral, and the sexual stereotyping and discrimination of formal financing institutions restrict women entrepreneurs' growth potential.

### **3.7.8 Social Capital**

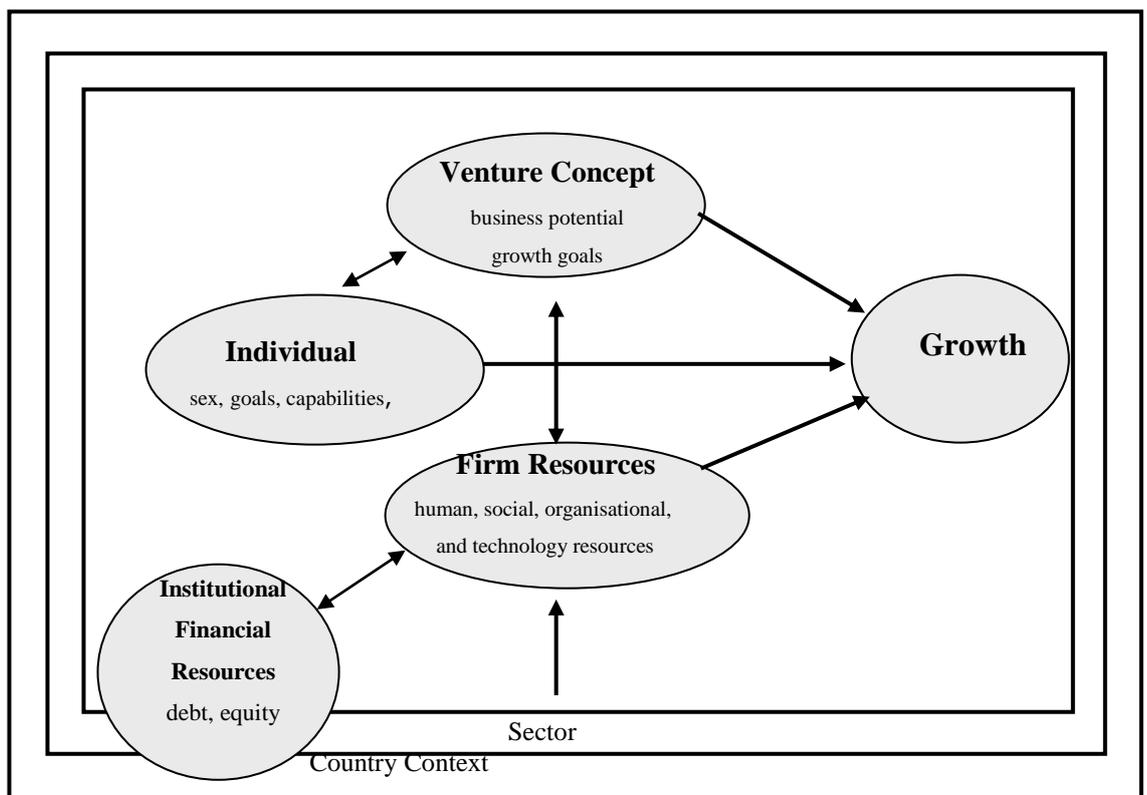
Under the Diana project, Brush et al. (2004, 2005, 2006) investigated the apparent disconnection between opportunities and resources in equity funding for high growth businesses owned by women in the USA. These studies highlighted significant differences according to gender, especially with regard to growth, and tried to investigate why, despite a rise in the number of ventures created by women in the last two decades, women-owned businesses remained smaller (measured in terms of revenue generated or employees hired) than those of their male counterparts (Brush et al., 2006). Their initial findings confirmed that "...women often lacked the economic power and the social and family support structure to grow their ventures", and the lack and/or higher cost of adequate childcare may have led them to keep their businesses smaller and more manageable (Brush et al., 2004: 8).

They also discovered that one of the most important reasons for the slower growth of women-owned businesses was that the social structures of work, family and social life that women encounter influence the development of human and social capital differently from their male counterparts. This lack of 'appropriate' social capital by which to make meaningful exchanges within business networks limits women's opportunities to raise growth capital and other crucial resources (Brush et al., 2005).

### 3.8 Synthesis

The above discussion concerning the literature on growth and women-owned enterprises has described both staged-growth models and their critique. It has further explained those factors that influence growth and the issues surrounding the measurement of growth. The last section pinpoints major issues regarding the growth of women-owned enterprises.

**Figure 3-4: Research Framework for Women and the Growth of Businesses**



Source: Brush et al. (2006: 8)

The research framework presented by the Diana Project (Brush et al., 2004, 2005, 2006) shows the relationship between the entrepreneur, strategic choices (venture concept and industry), resources and growth. It establishes the positive effect of a woman-owned firm's resources (human, organisational, social and technological) on its survival and growth within a sector and country context. According to Brush et al. (2004), human capital is an intangible asset that reflects the degree of development of managerial know-how and capability, while Manolova (2006:

235–236) asserts that “social capital, or business owners’ degree of development of social contacts, determine the strength of institutional endorsement and support for the entrepreneurial initiative and improve social prospects”.

The mainstream literature reports lower human capital as well as social capital in women-owned enterprises than men-owned businesses (Boden and Nucci, 2000; El-Hamidi, 2011; Kalleberg and Leicht, 1991; Watkins and Watkins, 1984). Few studies find similar level of education (and sometimes more) for women entrepreneurs and men entrepreneurs (Birley, 1989; Cowling and Taylor, 2001). However, the general understanding is that because of cultural expectations of women's household role as compared to career oriented role of men, specific human capital and social capital may be significantly lower for women-owned businesses than men-owned businesses (El-Hamidi, 2011). According to Watkins and Watkins (1984) female entrepreneurs are much less likely to have human and social capital because they have less relevant prior training and experience.

Empirical evidence has documented a consistent and healthy relationship between human capital, social capital and the performance of the business (El-Hamidi, 2011; Jack, 2010). Higher levels of general human capital pave the way for a successful and a growing business; they raise the expectations of the businessperson and lower the likelihood of failure, enable the entrepreneur to identify and exploit opportunities, and empower him/her with tools necessary to succeed in securing social capital (Bates, 1990; El-Hamidi, 2011; Kangasharju and Pekkala, 2002; Pena, 2002; Ucbasaran et al., 2008; Unger et al., 2006; Wiklund and Shepherd, 2003).

Testing the impact of human and social capital on business performance along gender lines is early and sporadic. A study by Manolova et al. (2007) in Bulgaria, finds that human capital increases growth expectations for women-owned businesses but not for men-owned businesses. Since women in general are at a disadvantage when it comes to capital accumulation and access to financial resources, it is no surprise that human capital is likely to be a more important

resource to women-owned businesses than to men-owned businesses. Some researchers went further to establish that human and financial capitals are substitutes (Chandler and Hanks, 1998). They showed how high (low) levels of financial or low (high) levels of human capital may lead to similar performances. It is important in this context to point to the fact that financial institutions take the level of human capital of the owner in account when providing financial capital. In other words, it is considered a signalling tool to lenders and lowers financial constraint (Jack, 2010; Parker and Van Praag, 2006).

Together with an entrepreneur's personal goals, human and social capital can help access and mobilise the resources (including financial capital) crucial for the growth of enterprises (Brush et al., 2006; Lam et al., 2007). Brush et al. (2004) further recognise women's lack of human and social capital as a major limitation to their access to and utilisation of these resources. The same concept provides the need for this doctoral study based on the hypotheses established in Chapter 5.

Overall, the literature attests to the importance of general and specific human capital as well as social capital, in the start-up of women-owned businesses. In the UK, two studies, based on data from 30 female and male entrepreneurs (Lam et al., 2007; Shaw et al., 2005), have analysed the role of social capital and entrepreneurial capital on financial resource generation in Scotland. Another study (Sapleton, 2009) considers the relationship between women's entrepreneurship and social capital by extracting data from the European Social Survey (ESS). However, no primary, hands-on empirical study has been conducted so far in the UK that analyses the effect of social and human capital on the growth of women-owned enterprises; how these forms of capital facilitate women-owned firms' growth; and how women entrepreneurs acquire and utilise their social and human capital at different growth stages.

Furthermore, in the women's entrepreneurship literature, no study has been conducted so far, to determine the interplay of human capital and social capital as drivers of enterprise growth. This study aims to fill all these gaps, and intends to

explore further the effect of social capital and human capital on the growth and performance of women-owned enterprises in the UK through mixed method (both quantitative and qualitative) approach. It also explores whether human capital plays any role in building, maintaining and using social capital to foster the growth of women-owned enterprises in the UK.

The following chapter provides a thorough understanding of the concepts of social capital and human capital in the field of entrepreneurship, describes their particular importance for women-owned businesses, and provides the background for establishing the theoretical model.

## **Chapter 4 Social Capital, Human Capital and Entrepreneurship: A Review**

### **4.1 Introduction**

The previous chapter provides a review of the main findings relating to enterprise growth, with a special emphasis on women-owned enterprises. It discusses different models of enterprise growth and the critiques about these models. It explains the significance and meaning of growth for women-owned businesses. Furthermore, it highlights the main hurdles that must be cleared by the women-owned enterprises in order to grow. This chapter examines in detail the notions of social capital and human capital, reviewing their sources, types, their impact on the growth of enterprises including benefits and negative effects, if any; and their influence on gender. These notions have guided the construction of the theoretical framework of the said study as discussed in upcoming chapter.

The chapter begins by defining social capital then, in its subsequent sections it explains human capital and also explains the role of social and human capital in the growth of women-owned enterprises.

### **4.2 Social Capital**

#### **4.2.1 What is Social Capital?**

In the past 20 years, the concept of social capital has been used to explain a diverse range of social phenomena, including organisational dynamics, socio-economic performance, democracy, entrepreneurial performance, and competitive advantages (Adler and Kwon, 2002; O'Neill and Gidengil, 2006; Ostrom and Ahn, 2003). The concept of social capital proposes the existence of a certain form

of capital different from economic and human capital. This notion draws on a long tradition dating to Alexis de Tocqueville's noting of the American propensity for civic association in the 1830s (Putnam, 1995). Some classic sociologists studied how society was held together by certain forms of solidarity, rules or norms (Durkheim, 1893), and in 1916, while explaining the importance of community participation in enhancing school performance, Hanifan (1916, cited in Woolcock and Narayan, 2000), first defined social capital, giving it a similar meaning to that adopted today:

*“Those intangible assets [that] count most in the daily lives of people: namely good will fellowship, sympathy and social intercourse among the individuals and families who make up a social unit... If [an individual comes] into contact with his neighbour, and they with other neighbours, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community (Hanifan, 1916: 228–9)”*.

In *Housing and Social Capital* (Dube et al., 1957), published by the Royal Commission on Canada's Economic Prospects, social capital was defined in relation to the physical infrastructure of a nation, including its schools, universities, churches, hospitals, roads and streets, airports and departments of government (Baron et al., 2000). But it was not until the late 1980s that the term gained in popularity, thanks to the work of Pierre Bourdieu (1986), James Coleman (1988, 1990, 1993) and Robert Putnam (1993, 1995, 2000). Between them, Bourdieu, Coleman and Putnam established the contemporary concept of social capital.

The French sociologist Pierre Bourdieu was one of the first authors to discuss social capital from a symbolic perspective. He argued that there are two other forms of capital in addition to the traditional notion of economic capital. He named the first cultural capital, meaning academic qualifications, particular modes of presentation, use of language, etiquette and art expressions. The second form,

social capital, he defined as ‘the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition’ (Bourdieu, 1986: 249).

Bourdieu described social capital as an individual asset which becomes capital only by virtue of social exchanges (Bourdieu, 1986). It is quite clear that he used the concept as a heuristic tool, accepting that it was not easily operationalised (Ahl, 2008). Bourdieu (1986) further emphasised the instrumental character of social capital and acknowledged its dependence on economic capital. For him, the possession of any form of capital is determined by a person’s position in the economic structure. Social networks and connections are thus not just resources that people can access freely, but are determined by their correspondent economic capital. He added that the difference between economic capital and social capital lies in the way in which each of these forms can be accessed. While economic capital can be physical (e.g. a bank account, land or assets), social capital is less tangible, and is characterised by unspecified obligations, uncertain time horizons and the possible violation of expectations of reciprocity (Portes and Landolt, 2000).

Although Bourdieu introduced the concept of social capital into the field of contemporary sociology, it is through the work of two American scholars that it gained popularity in economics and political science. James Coleman used social capital to find an economic and sociological explanation for human capital creations, such as educational achievement. According to him, social capital can be understood as a resource that facilitates or helps produce certain actions. Coleman noted ‘closure of social networks’ and ‘appropriate social organisations’ as two important elements of social capital that could aid the creation of human capital in a community (Coleman, 2000). He defined social capital by its function: ‘It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and

they facilitate certain actions of individuals who are within the structure' (Coleman, 2000: 39).

The political scientist Robert Putnam became the main promoter of the concept of social capital. In *Making Democracy Work: Civic Traditions in Modern Italy* (Putnam et al., 1993), Putnam and his co-authors explore the differences between regional administration in north and south Italy. They argue that the existence of social capital may explain the performance advantages of the north in comparison with the south. In their view, social capital is defined as 'features of social organisations, such as networks, norms and trust, that facilitate action and cooperation for mutual benefit' (Putnam et al., 1993: 21).

Based on his study of the Italian case, Putnam aimed to explain the decline of communitarian activities and political engagement in the USA during the 1980s and 1990s. He measured social capital by studying the participation of people in different communitarian activities, such as newspaper reading, membership in voluntary associations and expressions of trust in political authorities. It was he who made the concept of social capital a collective rather than individual phenomenon (Ahl, 2008). In *Bowling Alone: America's Declining Social Capital*, he defined social capital as 'features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated action' (Putnam, 1995: 66). He went further than this, suggesting that democracy in the USA may be jeopardised by the decline of social capital. Following his work, the concept of social capital was picked up by scholars in many disciplines, including economics, politics, sociology, and anthropology.

Recent definitions of social capital demonstrate the term's flexibility. Portes (1998: 6), for example, describes social capital as 'the ability of actors to secure benefits by virtue of membership in social networks or other social structures', while Adler and Kwon (2002: 19) define it as 'the goodwill available to individuals or groups'. Its source lies in the structure and content of the actor's relations. Its effects flow from the information, influence and solidarity it makes

available to the actor'. Ostrom and Ahn (2003) argue that social capital incorporates factors of trust and norms of reciprocity, networks, forms of civic engagement and both formal and informal institutions, that have been omitted in the classical approach of economic studies. Social capital is interpreted by the authors from different disciplines to use the concept to explore different things within the domain of their discipline. For example;

- The political sciences literature emphasises on the role of institutions, political and social norms in shaping human behaviour (Field, 2003: 8).
- The sociological literature focuses on features of social organisation such as trust, reciprocity and networks of civic engagement from the analysis of social determinants of human motivation. Coleman argues that sociologists see 'actors as socialized and action as governed by social norms, rules and obligations' (1988: 95);
- The anthropological literature develops the notion that humans have natural instincts for association that provide a biological basis for social order; and
- The economics literature explores the design and effects of formal and informal institutions on economic development. It also focuses on individuals' self-interest and their incentives to interact with others and to invest in social capital resources – the principle being to maximise utility.

In the past two decades, the concept of social capital has been used to understand different phenomena, including development processes (Portes and Landolt, 2000; Uphoff and Wijayaratna, 2000; Woolcock, 1998), economic performance (Narayan, 2002; Zucker, 1986), managerial and organisational behaviour (Metz and Thareneu, 2001; Ostgaard and Birley, 1994; Timberlake, 2005) and entrepreneurial dynamics (Kim and Aldrich, 2005; Marlow and Patton, 2005). The following section summarises some of these different perspectives.

### 4.2.2 Perspectives on Social Capital

Woolcock and Narayan (2000) have identified four distinct approaches to social capital research: the communitarian perspective, the network perspective, the institutional perspective and the synergic perspective.

The *communitarian perspective* associates social capital with the existence of local organisations such as clubs, associations and civic groups. Putnam's measure of social capital is related to the number and density of these types of groups in a given community (Putnam et al., 1993). There is an implicit assumption that the social capital represented in these groups is good and positive. However, their existence per se does not imply their direct involvement in decision making processes at the political level (Foley and Edwards, 1999). This perspective has been criticised by Rubio (1997), Portes (1998), Morrow (1999), and Claridge (2004).

The *network perspective* stresses the importance of vertical and horizontal associations between people and of relations within and among such organisational entities as community groups and firms (Woolcock and Narayan, 2000). In fact, the study of social networks can be considered a precursor to the development of social capital theories. Mark Granovetter (1973) produced one of the pioneering studies in the understanding of networks. He analysed how professionals and managers used interpersonal channels to obtain better jobs. Granovetter proposed a network theory for information flow, suggesting that weaker ties tend to form bridges that link individuals to other social circles for information not necessarily available in their own circles. Following this idea, Ronald Burt (1992) developed a theory of 'structural holes', by which an individual may benefit through bridging or linking different groups. The network view attempts to include the positive and negative aspects of these activities for groups and communities. Woolcock and Narayan (2000), for instance, argue that networks can provide a range of valuable services for community members, but group members might be restricted by a sense of obligation that forbids them from finding resources in other groups. These authors further acknowledge the

advantages of this approach, yet they caution against emphasising groups and communities at the micro level, which may mean important aspects such as institutions, norms and regulations, are overlooked (Woolcock and Narayan, 2000).

An *institutional perspective* can respond to these concerns. It proposes that the vitality of community, networks and civil society is largely the product of the political, legal and institutional environment. Where the communitarian and network perspectives largely treat social capital as an independent variable giving rise to various outcomes, the institutional perspective considers social capital as a dependent variable. Hence, the very capacity of social groups to act in their collective interest depends on the quality of the formal institutions under which they reside (North, 1990). This approach is particularly useful when addressing macro-economic policy, but it may be less useful for analysing micro-economic aspects. In response, Woolcock and Narayan (2000) have proposed a synergic perspective on social capital.

Supported by the World Bank, the *synergic perspective* aims to integrate network and institutional perspectives. It identifies three central tasks for theorists, researchers and policy makers: (1) to identify the nature and extent of a community's social relationships and formal institutions, and the interaction between them; (2) to develop institutional strategies based on these social relations, particularly the extent of bonding and bridging social capital; and (3) to determine how the positive manifestations of social capital – cooperation, trust and institutional efficiency – can offset sectarianism, isolationism and corruption. The synergic view includes both macro and micro levels of analysis (Woolcock and Narayan, 2000).

This study will take into account *communitarian perspective* (Putnam, 1993) for measuring social capital with the number and density of groups/associations as well as the *network perspective* stressing the importance of vertical and horizontal associations between people and organisations (Woolcock and Narayan, 2000).

### 4.2.3 Types and Characteristics of Social Capital

Three types of social capital have been distinguished: bonding, bridging and linking.

- Bonding social capital can be considered a horizontal relationship by which members of the same group or community strengthen their ties (Putnam, 2002).
- Bridging social capital refers to members of a particular group establishing 'bridges' with others groups or organisations, for example business associates or people from different groups (Narayan, 2002).
- Linking social capital is characterised by connections between those with different levels of power or social status (Aldridge et al., 2002).

Another important conceptualisation of social capital is that developed by Nahapiet and Ghoshal (1998). They define three dimensions of social capital:

- Structural: including network ties, network configuration and appropriate organisation;
- Cognitive: including shared codes, language and narratives; and
- Relational: including trust, norms, obligations and identifications.

Claridge (2004) mentions that structural social capital facilitates mutually beneficial collective action through established roles, and social networks supplemented by rules, procedures and precedents. On the other hand, cognitive social capital, which includes shared norms, values, attitudes and beliefs, predisposes people to mutually beneficial collective action (Krishna and Uphoff, 2002). Cognitive and structural forms of social capital are commonly connected and mutually reinforcing, and may have affect productivity (Uphoff and Wijayaratra, 2000). Finally, relational dimensions provide a context in which trust, rules and norms can be applied.

#### **4.2.4 Sources of Social Capital**

The conceptualisation of social capital involves many dimensions, each a possible field for exploration. However, it is possible to identify three distinct sources of social capital:

- Networks
- Trust
- Norms and rules

##### ***4.2.4.1 Networks***

Nahapiet and Ghoshal (1998) define social capital as the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network.

Much valuable work has been produced on how people relate with each other, establish alliances and links, and work in communities known as social networks (Lin, 1999). Granovetter (1973) highlighted the importance of weaker ties in accessing information. Nevertheless, he did not distinguish whether weaker ties were better than stronger ties. In response, Lin et al. (1978) studied the relationship between tie strength and attained status in three metropolitan areas in New York. They found that successful associations involved high status intermediaries and nodes connected to extended social networks (Lin, 1982). Lin (1999) studied the relationship between social networks and resources further, eventually presenting a theory of social resources. According to this, the convergence of social resources and social capital theories complements and strengthens the development of a social theory that focuses on the instrumental utility of accessed and mobilised resources in social networks.

Lin's (1999) social resources approach clarifies how social capital can be used to further business opportunities for entrepreneurs or mobilise job opportunities for

managers. This consideration is crucial for the present thesis, since it relates social capital to the entrepreneurial practices of accessing resources, establishing alliances and developing ventures.

Following this line of investigation, some researchers have suggested investing in social capital in order to achieve entrepreneurial success. The latest work by Kim and Aldrich in particular (2005) provides some clues to the importance of social capital and social networks to entrepreneurship. They define social capital broadly as ‘the resources available to people through their social connections’ (Kim and Aldrich, 2005: 3). However, they acknowledge the existence of socio-cultural constraints in the availability of these resources. They focus on the characteristics of social networks in order to understand the different access that groups or individuals have to certain resources. Three categories must be considered in this analysis: diversity (i.e. composition of the group: heterogeneous or homogeneous), social boundaries (i.e. gender, race or a person’s location in the social structure) and bounded rationality (i.e. ignorance and uncertainty leave people with limited opportunities to interact). In addition to these three categories, Kim and Aldrich (2005) include trust, or the lack of it, which is required whenever people go beyond relationships already known to them.

Kim and Aldrich (2005) subsequently argue that social networks tend towards homogeneity, not diversity. In addition, they state that not all relationships are the same: some may be stronger or more rewarding than others. They dispute the typical division of tie strength into strong and weak categories. Instead, they propose analysing social ties across four dimensions: time spent in the relationship, emotional intensity, the extent of mutual confidence, and the degree of reciprocity between individuals. Finally, they suggest that certain kinds of people are consulted more often within social networks. These ‘main actors’ have many advantages over less central actors: they can connect people and, eventually, mobilise social action quickly and efficiently (Kim and Aldrich, 2005: 29).

Networks may be categorised as sparse or cohesive (Alguezaui and Filieri, 2010), and both types are supported in the literature (Alguezaui and Filieri, 2010; Bratkovic et al., 2009; Uzzi, 1997). Social capital may also be distinguished between that belonging to the founding entrepreneur or business owner and that belonging to the organisation (Aldrich et al., 1997; Bratkovic et al., 2009). However, for small and micro-enterprises (which includes the majority of businesses owned by women) the two are indistinguishable as the entrepreneur will bring her/his own network of personal contacts (Bratkovic et al., 2009). Later in the company's life cycle, the network will become formalised and become part of the organisation's social capital. Strategic exchange of information and other resources can then occur between organisations (Bratkovic et al., 2009).

Although entrepreneurs are to be closely tied through their social relationships to a broader network of actors, understanding what really goes on within a network remains limited to relatively broad and descriptive accounts (Gordon and Jack, 2010). Moreover, despite the pervasion of the network concept and its increasing popularity, many questions remain unanswered about the actual content of interactions and the relationship between networks and women entrepreneurship (Gordon and Jack, 2010; Jack, 2010). Literature is also silent on how networks can assist women to develop their social capital which will further leads towards the growth of their firms.

#### **4.2.4.2 Trust**

Among the many academic studies of trust, the following definitions have proved popular: Gambetta (2000) defines trust as a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action; Misztal (1996) defines trust as the belief that the results of somebody's intended action will be appropriate from a subjective point of view.

The role of trust in the development, progress and adaptability of societies has been emphasised by several authors. Putnam (1993) has argued that social capital

is related to the level of trust in the community or group. Fukuyama (1995) goes further to suggest that a high level of trust in certain societies can explain economic performance. Luhmann (1979), however, has demonstrated that trust can increase the potential of a system for coping with complexity, and thus diversity. Giddens (1984) describes trust as a mechanism for maintaining or re-creating social coherence.

As argued by Höhmann and Malieva (2005), these different definitions of trust and its role agree on three essential elements. The first element is reciprocity: trust refers to human action and not to natural events. It refers to a behavioural attitude which may facilitate the building of trust with others. Secondly, trust is a state of expectation towards possible, normally desirable, future reactions of the object of trust. Thirdly, trust enables people to acquire knowledge without the strict confirmation of its veracity, according to their confidence in the person or institution being trusted.

The notion of trust is also linked to the conceptualisation of social capital. Indeed, it is possible to say that some authors equate the two (Fukuyama, 1995), others see trust as a source of social capital (Putnam et al., 1993) and still others see it as a collective asset resulting from social capital construed as a relational asset, placed in the individual (Lin, 1999). In all these definitions of trust, it is possible to note a great value, but also a degree of uncertainty in relating it to social capital. Hence, it is difficult to determine whether trust is an element, a cause, or an outcome of social capital.

#### ***4.2.4.3 Norms and Rules***

Norms and rules have long interested important sociologists (Durkheim, 1938; Weber, 1962). Norms are standards or patterns of social behaviour that are accepted in or expected of a group; they may also be levels established by governments or other authorities to be complied with or attained. On the other hand, rules can be understood as a formal or informal expression of these norms. Thus, not only legislation but also cultural codes have rule-like qualities.

Alongside the concepts of norms and rules, it is common to find the notion of values. Values are part of the moral codes or cultural or civic agreements that are transmitted by families, education or authorities (Lesse, 1987). It is argued that values, norms and rules can help in understanding attitudes towards community involvement (Christenson et al., 1988).

Institutions can be equated to rules for keeping order and increasing the predictability of social actions. Ostrom and Ahn (2003) define institutions as prescriptions for what actions are required, prohibited or permitted, and the sanctions authorised if rules are not followed. Grootaert (1998), for example, includes governments, the rule of law, the court system, and civil and political liberties as indicators of social capital. Some theories of trust include a macro view of institutions. Indeed, Ostrom and Ahn (Ostrom and Ahn, 2003) state that patterns of trust and reciprocity depend to a large extent on the rules that are crafted in any polity and expressed by institutions. It is possible to conclude that the presence of rules, norms and institutions in certain groups are related to the existence of social capital in a particular society/community.

#### **4.2.5 Benefits of Social Capital to Entrepreneurship**

Studies have suggested many benefits to social capital. Lin (1999: 31) has summarised these as follows:

- Social capital facilitates the flow of information available in certain groups and, therefore, it may reduce transaction costs for the organisation in acquiring information.
- Social ties may exert influence on the agents who play critical roles in decisions.
- Acknowledged relationships may serve as social credentials for the individual; and
- Being assured and recognised as a member of a group can provide self-reassurance, support and reinforcement.

Social capital lies at the heart of democracy in many countries. Levels of association, participation and community involvement may determine how strong democratic institutions are in a given region or in a country. Fukuyama (1998) links social capital to modern economies and stable liberal democracy. This can result in greater well-being through optimism, personal satisfaction and positive perceptions of government institutions, all of which is important to individuals' self-confidence (Narayan and Cassidy, 2001).

It has been argued that social capital improves community development, enhances solidarity and in general induces economic development (Krishna and Uphoff, 2002). The World Bank, for example, regards elements of social capital such as reciprocity and solidarity as crucial to the sustainability of investments in developing economies (Woolcock and Narayan, 2000).

Social capital is also important to educational attainment, public health (Coulthard et al., 2001; Subramanian et al., 2003), community governance and the solving of economic problems (Bowles and Gintis, 2002), and an important element in economic and industrial productivity (Dasgupta, 2000).

Extensive and effective social and community relations transform into returns in human capital. Gambetta (1988) and Fukuyama (1995) noted that economic exchanges are influenced by the level of trust between economic agents; many other studies have shown that social capital not only helps facilitate individual action and business operation (Baker, 1996; Burt, 1992; Coleman, 1990), but also creates value (Svendsen, 2003; Tsai and Gosha, 1998).

The acquisition of intangible or virtual resources such as knowledge and information is particularly important in the start-up, survival and growth of an entrepreneurs' businesses (Gabbay and Leenders, 1999). While entrepreneurs hold some of these resources themselves, they often complement them by accessing their contacts, or social capital (Aldrich et al., 1991; Aldrich and Zimmer, 1986; Cooper et al., 1995).

These resources are generated and/or facilitated by people the entrepreneur knows, or who are known by others that the entrepreneur knows. These social contacts bear a level of trust (Gambetta, 1988) and often lead to successful outcomes (Burt, 1992). Their significance derives from the mobilisation of knowledge and the process of learning and innovation they are said to promote: social capital is an important factor in accessing information and, therefore, reducing transaction costs (Metz and Thareneu, 2001). Social capital is thus a major driver of the 'knowledge economy' that most governments are struggling to cultivate. Without it, an individual's abilities can be hindered (Nahapiet and Ghoshal, 1998).

The importance of social capital (i.e. use of networks and interpersonal relationships) in developing and growing businesses is now recognised (Bennet and Richardson, 2005; Pirolo and Presutti, 2010). Social capital has been described as 'critical' for the growth of an enterprise (Manolova et al., 2007). One study in China found that, rather than viewing their enterprise as a stand-alone financial entity, entrepreneurs viewed their business within a web of supportive relationships indistinguishable from their daily life. Relationships with employees, customers, friends, family and business partners were seen as extremely important. Social capital can mean the difference between SMEs being national or international in scope (Ruzzier et al., 2006) and can influence strategy and management (Harris and Wheeler, 2005). Senior managers' personal networks were important for large firms' performance. Organisational learning can be improved through the strategic use of social capital, which in turn increases growth (Bratkovic et al., 2009; Skerlavaj and Dimovski, 2006; Skerlavaj et al., 2007).

Social capital is also of value at an organisational level. Some firms, for example, prefer to employ people through recommendations (contacts, networks) and thus reduce the costs of both recruitment and the approval of applications. Social capital can also increase the opportunities for employees to move within an

organisation, improve team work and develop strategies for organisational growth (Williamson, 1981) .

A high level of social capital has also been shown to benefit innovation (Nahapiet and Ghoshal, 1998) intellectual capital; career success, executive rewarding systems and recruitment procedures (Belliveau et al., 1996; Burt, 1992); corporate entrepreneurship (Chung and Gibbons, 1997); job searching, new business formation (Coulthard et al., 2001); supply chain relations (Uzzi, 1997); regional production networks (Romo and Schwartz, 1995); inter-firm learning and, finally, enterprise growth (Alguezaui and Filieri, 2010).

#### **4.2.6 Risks and Downsides to Social Capital**

Although several authors and researchers have described social capital as the ‘magic bullet’ to a number of problems (Putnam, 1995), others have referred to its possible problems and downsides (Baron et al., 2000; Campbell, 2000).

The sociologist Alejandro Portes (1998) has criticised the positive approach to social capital in the work of Putnam and Coleman. He argues that they focused on the positive, beneficial sides of social interaction, while neglecting its downside in terms of social control or exclusion. Instead, he builds upon Bourdieu’s relation of social capital to economic capital, which is consequently determined by structural conditions. Portes’ (1998) point of view is that as Bourdieu (1986) considers social capital as a form of economic capital, similar barriers to access can be found when trying to build or access social capital or networks. In fact, certain groups protect themselves against the intrusion of outsiders by using social capital elements such as trust or shared values as a form of exclusion. In Bourdieu’s words:

*“Social capitalism as much as economic capitalism is an ideology of inclusion and exclusion: a means by which the powerful may protect and further their interest against the less powerful” (Bourdieu, 1986: 245).*

Portes and Landolt (2000) note many possible socio-economic downsides to social capital. Rubio (1997), for example, has documented what he calls 'perverse' social capital among gangs in Colombia, and there is a particularly high risk of negative social capital in situations of urban poverty situations.

Adler and Kwon (2002) note three risks arising from social capital: firstly, close relationships may impede innovation and new ideas; secondly, cliques may form and, thirdly, the amount of investment in close ties may become a liability. Claridge (2004) provides the following list of negative effects: fostering behaviour that worsens rather than improves economic performance, acting as a barrier to social inclusion and social mobility, dividing rather than uniting communities or societies, facilitating rather than reducing crime, educational underachievement and behaviour damaging to health.

Some feminist scholars have criticised the positive view of the social capital of fraternalism, since the same bonds that link certain men can also exclude both women and racially differentiated men (Arneil, 2006).

*“Social capital, when you are in a position of power, is largely a positive thing aimed at solidifying trust and cooperation amongst the members of the already powerful group and community at large. If on the other hand, you lack power, then social capital will be used for very different purposes” (Arneil, 2006: 19).*

This sort of 'bonding social capital' has been termed 'negative social capital' by Portes (1998), since in accumulating and maintaining this type of social capital a group risks isolation from its surroundings. Not only does it generate biases against individuals belonging to other groups, but it also promotes nepotism and partiality for the members of its own group. Using examples from Puerto Rican drug dealers in New York, Portes (1998) has shown how bonding or negative social capital may also limit an individual's freedom of action and take away their privacy.

Regarding entrepreneurship specifically, several studies have shown that while social capital may be beneficial at the start-up stage, it can become a liability in mature companies, such as in the biotech industry (Maurer and Ebers, 2006). Leenders and Gabby (1999) and Bratkovic et al. (2009) have found that social capital is important for new businesses: the network of colleagues, friends and family helps in acquiring human and financial capital but later in the growth phase the strong ties may inhibit growth and the take-up of new opportunities.

Bratkovic et al. (2009) looked at the influence of social capital on enterprise growth and found that close friendship ties, although necessary at the start up stage, hindered the growth of the organisation by affecting decision making, including an increase of risk aversion. In addition, a network of close friendship ties remained tight and local, meaning that resource diversity was restricted (Bratkovic et al., 2009). Kern (1998), in a study of German industry, found that excessive trust between firms inhibited innovation, as firms remained loyal to established suppliers rather than seeking new and better solutions. A further example comes from Japan, where banks' prioritisation of networks over good practice led to the financial crisis of the 1990s (Locke, 1999). Another problem occurs when a network demands a share of the profits, which might otherwise have been reinvested in the company (Nichter and Goldmark, 2009).

The researcher using the concept of social capital has to be aware of its difficulties. A concentration on its 'positive' side needs to be considered in relation to cultural, economic and historical contexts. It is important to examine which structural conditions or inequalities can shape either 'positive' or 'negative' aspects of social capital. With regard to the current thesis, social capital's relationship to gender issues and entrepreneurship also needs to be addressed.

## 4.2.7 Social Capital and Women's Entrepreneurship

### 4.2.7.1 Social Capital and Gender

Most of the literature on social capital does not consider gender (Fox and Gershman, 2000; Kilby, 2002; Molinas, 1998; Norton, 2001). Yet gender is an important factor in social capital, as there is evidence that women are excluded from high ranking, powerful, male-oriented networks (Silvey and Elmhirst, 2003). Despite not following an explicitly gender-based approach, Putnam has highlighted women as main actors in the construction of social capital:

*“With fewer educated dynamic women with enough free time to organise civic activity, plan dinner parties, and the like, the rest of us, too have gradually disengaged. At the same time, the evidence also suggests that neither time pressures nor financial distress nor the movement of women into the paid labour force is the primary cause of civic disengagement over the last two decades ... civic engagement and social connectedness have diminished almost equally for both women and men, working or not, married or single, financially stressed or financially comfortable” (Putnam, 2000: 25).*

In contrast, the British researcher Peter Hall (1999) emphasised the role of women in maintaining social capital in the UK. However important these two works are, the fact that the gender perspective seems to have been ‘just added’ produced a series of reactions from feminist scholars and academics. In particular, Lowndes (2000: 334), commenting on Hall's (1999) article, pointed out the structural difficulties in focusing on analysing social capital through certain male organisations, while neglecting female activities:

*“Like other commentators on social capital, Hall effectively disregards an entire sphere of relevant activity – that is, the social networks that involve parents (almost universally mothers) in their roles as child-carer. Such networks are produced and reproduced through a range of familiar activities, some characterised by mutuality, others by*

*reciprocity ... Trust and mutuality may be associated with pub attendance (along with fighting and petty crime), but there is surely a far weaker link to social capital formation than the regular shared and reciprocal responsibilities that characterize child-care networks” (Lowndes, 2000).*

In regard to the relationship between social capital and gender, Bourdieu (1986) considers that the social world is comprised of objective structures, for example resources and different types of capital, and subjective structures created by the mental (subconscious) systems of classification that individuals use as symbolic templates for engaging in and interpreting practical activities (Bourdieu and Wacquant, 1992). He argues that the structures created by human interactions reflect tacit, taken-for-granted assumptions that underpin society’s ‘natural’ attitude towards gender difference. These assumptions create attitudes that connote women with negative qualities (e.g. weakness) and men with positive ones (e.g. strength). As a consequence, emerging social structures are hierarchical and benefit men while disadvantaging women.

Other researchers (Pateman, 1998) have criticised the lack of awareness of the fundamental activities performed by women, which actually build and maintain links and bonds between families, relatives and neighbours. In fact, as Russell (1999) argues, the very building blocks of social networks are gendered, because women’s continued responsibility for caring and domestic work tends to extend towards other supportive social networks in the community. On the other hand, women’s private domestic responsibilities may hamper a more public participation beyond the household.

In the context of a patriarchal society, it is not surprising that analysts and researchers tend to replicate certain stereotypes when analysing women’s social capital. In such a society, what counts are the visible activities of the man-soldier, or man-hunter; female activities are simply invisible, or confined to the household.

The dismissal of women's presence in the public sphere can also be explained by economic inequalities (Holmstrom, 2002; Rubin, 1975). Although Western countries' governments, and in particular the UK, have introduced equal opportunities to the political agenda, there is still a long path to thread. The report of the Women and Work Commission (2006) found that women in the UK who work full time earn 13% less than men, based on median hourly earnings. Although increasing numbers of women have attended university, occupational segregation or the predominance of 'women's jobs' (i.e., as carers, in services, etc.) still remain.

A stream of studies has analysed the way in which female and male professionals seek job promotions (Brass, 1985; Metz and Thareneu, 2001; Timberlake, 2005). In general, these studies demonstrate that women can be disadvantaged because access to certain influential groups in the organisations is male dominated. This just reflects a broader social order, in which inequalities continue to be experienced by women at different levels and in different environments.

In contrast, other researchers highlight some of the strategies utilised by women to 'break the glass ceiling', such as using strategic networking, mentorship or professional advisers to pursue their goals (Weiler and Bernasek, 2001). The increasing number of women-only networks has been regarded as a potential factor in women's professional development (McCarthy, 2004). On the other hand, homophilous women-only networks may hamper more diverse type of links (such as bridging social capital).

In summary, it is widely accepted that, from a gender perspective, social capital must be understood in relationship to structural conditions that define the role of women in certain societies. In consequence, the positive view of social capital as defined by some American scholars must be considered with special care.

#### ***4.2.7.2 Social Capital and Women's Entrepreneurship***

A number of studies have contributed to a better understanding of the difficulties and opportunities faced especially by women entrepreneurs (Butler, 2003; Fielden and Davidson, 2005). Carter and Hisrich (1999) have pointed out that certain groups of women – such as those from ethnic minorities – can experience additional difficulties in gaining access to certain resources. In terms of networks and social capital, it is acknowledged that although a growing number of women's networks seem to be challenging the predominance of the 'old boys' network' (McCarthy, 2004), many stereotypes linked to female self-employment or women's entrepreneurship still need to be challenged. Similarly, authors analysing the distribution of venture resources between male and female entrepreneurs have found that the shortage of equity capital for women is determined by both institutional or network barriers and a lack of human capital (Brush et al., 2002). Women entrepreneurs tend to be perceived as 'not serious' by resource providers such as bank managers and business advisers, and they do not, therefore, benefit from the potential resources and loans of the financial market (Prowess Ltd, 2004). Jennings and Cash (2006) have also postulated differences in the social network structures of male and female entrepreneurs as an explanation for the performance differentials of gender-segregated enterprises.

#### ***4.2.7.3 The Role of Networks***

More recent studies (Lam et al., 2007) regarding men and women's different use of networking have included the role of social capital in accessing these types of resources.

Different scholars (Cromie and Birley, 1992; Katz and Williams, 1997) hypothesise that 'something about women's networking behaviour' explains why they are not as successful as men in the start-up and growth of their businesses. In order to understand the origin and impact of these differences, Ibarra (1993) provides a framework by which to understand the personal networks of women and minorities. First of all, she proposes seeing network differences as reflections of purposeful strategic action within a context of structural constraint (Ibarra,

1993: 57). This distinction emphasises the character of networks not only as ‘general relationships’ but also as ‘purposeful strategic actions’:

*“Real networking is not just meeting someone at a cocktail party or a professional trade show and exchanging business cards. It is the management of all the activities associated with developing and maintaining ongoing relationships. It includes repeated interactions and mutual exchange of valuable information and resources” (Ibarra, 1993: 57).*

Other authors have complemented this view by refining the concept of social capital in relation to certain realms. Adeler and Kwon (2002), for example, emphasise the existence of a *purpose* in all the activities related to the building of social capital by linking both social capital with purposeful networking. Their approach to social capital is thus related to Ibarra’s notion of purpose. In this way, it is possible to clarify the relationship between social networks and social capital. Adler and Kwon (2000) suggest that in analysing social networks as part of social capital, the researcher should consider three elements:

- *Opportunity*: The transactions that can emerge from social ties;
- *Motivation*: Including trust; and
- *Ability*: The actual capacity of a contact or relationship to deliver the desired effect or outcome.

In addition, they include the role of hierarchical and market relationships in how certain groups access and use social capital. Firstly, hierarchy, as an important dimension of social structure, can influence social capital by shaping the structure of social relationships. Indeed, many have criticised Putnam for an excessively ‘bottom-up’ view of social capital and have stressed the ‘top-down’ role of certain formal institutions such as government structure and legal rules in facilitating or impeding the emergence and maintenance of social capital and trust in civil society (Ostrom, 1994; Woolcock, 1998). Secondly, it can be argued that market

relationships can sometimes undermine the traditional bonds of community and extended family.

On the other hand, the fact of belonging to certain group (of ethnicity, gender, etc.) does not guarantee the creation of bonds. For example, being a woman, or working with other women, does not necessarily build social capital among women (Wolf, 2006: 1). Welter (2006) notes that the networks of women entrepreneurs show less outreach and greater homogeneity, and that they focus on emotional support rather than 'strategic networking'. These networking tactics offer limited possibilities for access to business-related resources and negatively influence not only a woman's decision to start her own business but also the survival and success of the business (Welter, 2006: 140).

#### ***4.2.7.4 The Role of Social Structures***

Social and cultural settings can determine the nature of women's networks and their use of social capital. Women and men usually have networks of similar size; however, there are significant differences in terms of composition (Moore, 1990). Women tend to have fewer ties to non-kin and more ties to kin, while men include more co-workers and professional advisers in their networks. This suggests that women are less able to use networks as instrumental resources in finding jobs and advancing their careers (Moore, 1990). These differences can be explained in two ways. Firstly, it might be said that the different dispositions of men and women towards interpersonal relationships determines access. This is an explanation based on the mother/soldier model, referred to by Pateman (1998). Secondly, however, these disparities may also be explained by the different locations of women and men in the social structure. Research by Renzulli et al. (2000) confirms Burt's (1997) theory of 'structural holes' and Granovetter's (1973) 'strength of weak ties', but discounts gender as an explanatory variable (Ahl, 2008: 178). It postulates that although network heterogeneity and proportion of kin in the network do matter, gender and gender composition of the network do not.

It has also been acknowledged that women experience more problems when accessing certain groups or networks (McCarthy, 2004). Indeed, due to their position in social structure and access to power, women may experience inequalities in both social capital and in the returns expected from their 'investment'.

Howard Aldrich (1989) has remarked that women's networking activities as embedded in a social context may be constrained or inhibited by women's position in social networks. He suggested that divisions and barriers within the spheres of work, marriage and family, and organised social life, significantly limit the reach and diversity of women's networks. Based on his work, other researchers have studied the 'differences' between male and female ways of building networks in organisations, enterprises, or community life (Burt, 1997; Ibarra, 1993; Timberlake, 2005). Burt (1998: 7) observes that:

*“Social capital predicts that returns to intelligence, education and seniority depend in some part on a person's location in the social structure of a market or hierarchy.”*

#### **4.2.7.5 Factors Affecting Women's Level of Social Capital**

Women's networks are generally thought to differ from those of men, being composed of family and friends as well as business contacts (Yetim, 2008). Although there are many examples of women's use of social capital, they are often descriptive and anecdotal rather than empirical quantitative studies, and they are not always clear on exactly how social capital affects growth. Quantitative empirical studies with statistical validation are severely lacking.

Yetim (2008) looked at the factors affecting social capital among Turkish women. The following factors were identified: 'entrepreneurial personality characteristics' (characteristics pertaining to middle and upper class women), social status (whether or not the woman was a migrant), professional experience, age, professional training, and personality and pull factors. Being part of a minority

group (migrants) predicted a high level of social capital. Interestingly, professional experience, a component of human capital (for details please refer to section 4.3.1), was a predictor of social capital. It is thought this is due to networks expanding as professional experience develops, which in turn leads to a further increase in knowledge and skills. This increase allows the female business owner to make more profitable contacts and increase her self-assurance. Greater knowledge can allow her to make more effective and strategic use of her networks. Yetim (2008) also found that age predicts high social capital, as more contacts are formed over time.

‘Entrepreneurial personality characteristics’ and pull factors were associated with low levels of social capital (Yetim, 2008). Yetim speculates that upper- and middle-class women had a high level of human capital in the form of education and background. Their social networks were more limited and were not as essential as those of lower-class immigrant women, and they were thus more motivated by pull factors (desire for autonomy etc.).

Formal business networking groups have been found to vary in size, type and quality from country to country. In Taiwan, for example, there are few formal women’s networking organisations; however, informal networking is seen as essential for business success (Saikou and Wen-Chi, 2008). In Ukraine, social capital is extremely important for women entrepreneurs, who deal with business problems by liaising with other entrepreneurs. However, women-only social networks in Ukraine were not found to be helpful to overall growth because they were smaller and of a lower level than those of their male counterparts (Aidis et al., 2007). Having a husband who is in business may be an important factor predisposing women to entrepreneurship (Caputo and Dolinsky, 1998; Coleman, 2000). An entrepreneurial husband may be considered both human capital (family background) and social capital (business contact).

#### ***4.2.7.6 Social Capital as a Replacement for other Forms of Capital for Women Entrepreneurs***

Women entrepreneurs in developing and transition countries face numerous barriers and often rely heavily on social capital. Migrant and working class women in particular have strong networks in their own communities and use this as social capital, whereas native-born middle- and upper-class women may have weaker networks. Yetim (2008) suggests that for lower-class migrant women, whose human and financial capital is low, social capital can partially replace other forms of capital. In Ghana, self-employed women in the palm oil processing industry use their traditional skills (a component of human capital) along with their social capital (personal networks) to make a living. Some of these women have no financial capital whatsoever, and in these cases their social capital is vital to them starting and continuing their businesses. However, there is little growth potential in these businesses and most of them operate at subsistence level (Awusabo-Asare and Tanle, 2008).

In a similar vein, Ali (2011) reports that in Sudan, divorced women often become street vendors. However, institutionalised patriarchy prevents these women from growing their businesses above the micro-enterprise subsistence level. Women use their traditional social networks to join forces to pool money in order to set up informal micro-credit schemes (Ali, 2011). Social capital can be used as a replacement for financial capital in many contexts. Immigrant entrepreneurs in New Zealand, for example, rely on social networks to keep the running costs of their business low (Pio, 2007).

#### ***4.2.7.7 Social Capital and the Growth of Women-Owned Enterprises: A Summary***

The concept of social capital recognises the importance of interpersonal relationships, the community and groups (Bourdieu, 1986; Putnam, 1995). In the field of entrepreneurship, social capital has received special attention as a category through which to understand certain dynamics related to networking in the pursuit of business opportunities. Consequently, social capital can be defined

as the extent and effectiveness of social and community relations bearing a level of trust (Gambetta, 1988) that can facilitate the accumulation and utilisation of resources (Burt, 1992). It is argued that entrepreneurs need to acquire knowledge, information and resources such as capital, skills, and labour when establishing and developing an entrepreneurial venture (Gabbay and Leenders, 1999). While entrepreneurs hold some of these resources themselves, they often complement them by accessing their contacts, joining networks or meeting people who can eventually help them grow their businesses (Aldrich et al., 1991; Aldrich and Zimmer, 1986; Cooper et al., 1995; Hansen, 1995). These contacts or people constitute an entrepreneur's social capital. Brush et al. (2002) identify social capital as a catalyst of value creation as well as the facilitator of resource exchanges, particularly knowledge, within and between firms.

Social capital may help solve two problems of institutional economics, by compensating for asymmetrical information about access, timing and referral advantages (Burt, 1992), and by reducing transaction costs as a result of social and economic interaction (Nahapiet and Ghoshal, 1998; Svendsen, 2003). Its significance derives from the mobilisation of knowledge and the process of learning and innovation it is said to promote (Powell et al., 1996).

Women-owned businesses are considered to have limited resources as compared to male-owned businesses because of their limited access to the 'right' social circles (Bennet and Richardson, 2005). Brush and Hisrich (1999) have pointed out that certain groups of women – i.e., those from ethnic minorities – can experience additional difficulties in gaining access to certain resources, which hamper their growth and performance. For women entrepreneurs, strong tie relationships with family members and friends are more helpful for generating initial capital and emotional support (Uzzi, 1997), whereas a diverse network of weak tie relationships with customers, suppliers and resource providers is helpful in accessing financial, human and physical resources (Bennet and Richardson, 2005; Roomi and Parrott, 2008) and may increase legitimacy, (Higgins and Gulati, 2003; Uzzi, 1997).

## **4.3 Human Capital**

### **4.3.1 What is Human Capital?**

The concept of human capital relates to an individual's ability to allow for 'changes in action' and economic growth through their knowledge and skills (Becker, 1962). It represents in particular, the extraction of an individual employee's knowledge to get the best solutions for a firm (Bontis et al., 1999).

Edvinsson and Malone define human capital as 'the collection of the employee's skills, experience, competence and implicit knowledge' (1997: 34–35); Dakhli and De Clercq (2004) identify it as one of the core constituents of intellectual capital. Dess and Shaw (2001) define 'future human capital' as business people who are talented, smart and sophisticated; technologically savvy; internationally intelligent; operationally quick and well-coordinated. Human capital may also be defined from the social perspective as the intrinsic abilities, knowledge and skills accumulated in an individual's lifetime (Laroche and Merette, 1997).

From the perspective of economic returns, human capital pertains to investments in education and acquisition of job experience and skills that can generate returns in the labour market (Nee and Sanders, 2001: 392). Neergaard et al. (2006) define human capital as the sum of education and experience (both general and specific) possessed by an individual. Authors such as Boden and Nucci (2000), Davidsson and Honig (2003), Camacho and Rodriguez (2005), and Lam et al. (2007) include age as a proxy measure of human capital.

Brush et al. (2004) identify human capital as an important initial 'endowment' for entrepreneurs as it provides a platform to secure other forms of resources like organisational physical and financial capital. In today's rapidly changing scientific environment, technology and knowledge have become the key factors of production. Romer (1986) indicates that 'knowledge', in addition to labour and capital, has now become the third factor of production in leading economies. Such economies thrive on scientific discovery and innovation, for which knowledge and

technology are the key factors of production and these factors, gives them competitive advantage. Ucbasaran et al. (2008) observe that entrepreneurs with higher levels of human capital are able to identify considerably more opportunities. They also found evidence that specific human capital is more rewarding than general human capital.

Schultz (1961) considers entrepreneurial ability a form of human capital that can be sharpened through education, healthcare, experience, training, etc. Nevertheless, empirical studies show that the level of education does not necessarily increase the likelihood of an individual becoming an entrepreneur (Burns, 2007). However, researchers such as Watkins and Watkins (1984), Cooper et al. (1988), Boden and Nucci (2000), Davidsson and Honig (2003) have found a positive relationship between the age and experience and the establishment of firms.

#### **4.3.2 Perspectives on Human Capital**

*“The concept and perspective of human capital stems from the fact that there is no substitute for knowledge and learning, creativity and innovation, competencies and capabilities; and that they need to be relentlessly pursued and focused on the firm’s environmental context and competitive logic” (Rastogi, 2000: 196).*

The underpinning hypothesis of human capital theory is that there is a general positive correlation between education and earnings: increased education leads to an increase in worker productivity, which in turn leads to higher income for the worker. Although modern human capital theory was originally advanced by Schultz (1961), Becker (1964) is widely credited as its principal early promoter.

Becker suggested that two of the major constituents of an individual’s income are education and work experience. The scale to which the acquisition of knowledge and skills is compensated by higher wages is highly dependent on the specificity of the capabilities to the job held. The greater the relevant skills and knowledge of

a worker, the greater the share of costs associated with acquiring these skills is assumed by the firm (Becker, 1962). Becker also proposed that an employee will have little or no interest in acquiring skills at their own expense if such skills are of no use upon leaving the firm. Firms tend to offer a wage premium to employees so as to be able to reap the benefits of their investment in human capital.

Grogan (1997) states that an individual will only be induced to undertake additional education if they are certain of higher lifetime earnings. Human capital theory argues that an individual's decision to invest in their development is based on the wage differentials that such investments can bring (Mitchell et al., 2007). According to this theory, the major factors taken into account when an individual enters the labour market are their level of education and training. Eventually these are expected to manifest as higher productivity. Human capital theory further explains wage differentials in terms of worker heterogeneity rather than differences between jobs. Low productivity workers tend to be in jobs that are low paying and are either unable or unwilling to make the investments in human capital that would enable them to obtain better jobs (Thomson, 2002). Although human capital theory states that knowledge attained through the education system is the major determinant of wages and employability, some writers have pointed out that the knowledge and skills that are important to practising a job are not in fact gained in the education system (Thurow, 1975). They argue that employers incur costs in imparting these skills and knowledge. Firms therefore employ workers whose training costs are relatively cheaper to the firm.

Among other perspectives, McCarthy and Leavy (1998/1999) include personality in their definition of human capital. They argue that entrepreneurs are born with specific traits or personalities that make them stand out from others and hence strengthen their growth as entrepreneurs. However, this assumption leaves no room for learning or the teaching of entrepreneurial skills (Madsen et al., 2003). Moreover, there is little evidence that specific human traits predict start-up success (Shaver and Scott, 1991).

Other authors have included age, gender and race as human capital variables (Cooper et al., 1994; Cressy, 1999). Roberts (1991) maintained that entrepreneurs, in addition to the natural skills they are born with, acquire some competence through education and experience. Skills are developed over a period of time. Experience and the underpinning knowledge play a vital role in the accumulation of skills and hence age and education.

The importance of education and experience to entrepreneurship in general is cited in most of the literature on human capital. Honig (1998) states that education and experience may positively influence the probability of entrepreneurship and the success of entrepreneurial ventures. Along the same lines Krasniqi et al. (2007) argue that experience is likely to have a positive effect on the growth of a firm. They further note that experience, even if it is not specific to the business, is advantageous to growth.

A firm's human capital stock (the collective capabilities of its employees) is a major input to its production of goods and services. Technology, financial capital, economies of scale, natural resources and other neo-classical factors of production are easy to replicate and no longer give firms a competitive advantage in today's highly competitive environment. Snell (1996: 65) argues that 'If the types and levels of skills are not equally distributed, such that some firms can acquire the talent they need and others cannot, then (ceteris paribus) that form of human capital can be a source of sustained competitive advantage'. People's knowledge and expertise, as well as skills and education, can make a difference to the sustainability of an entrepreneurial venture. Itami (1987) thus proposes human capital as an 'invisible asset'.

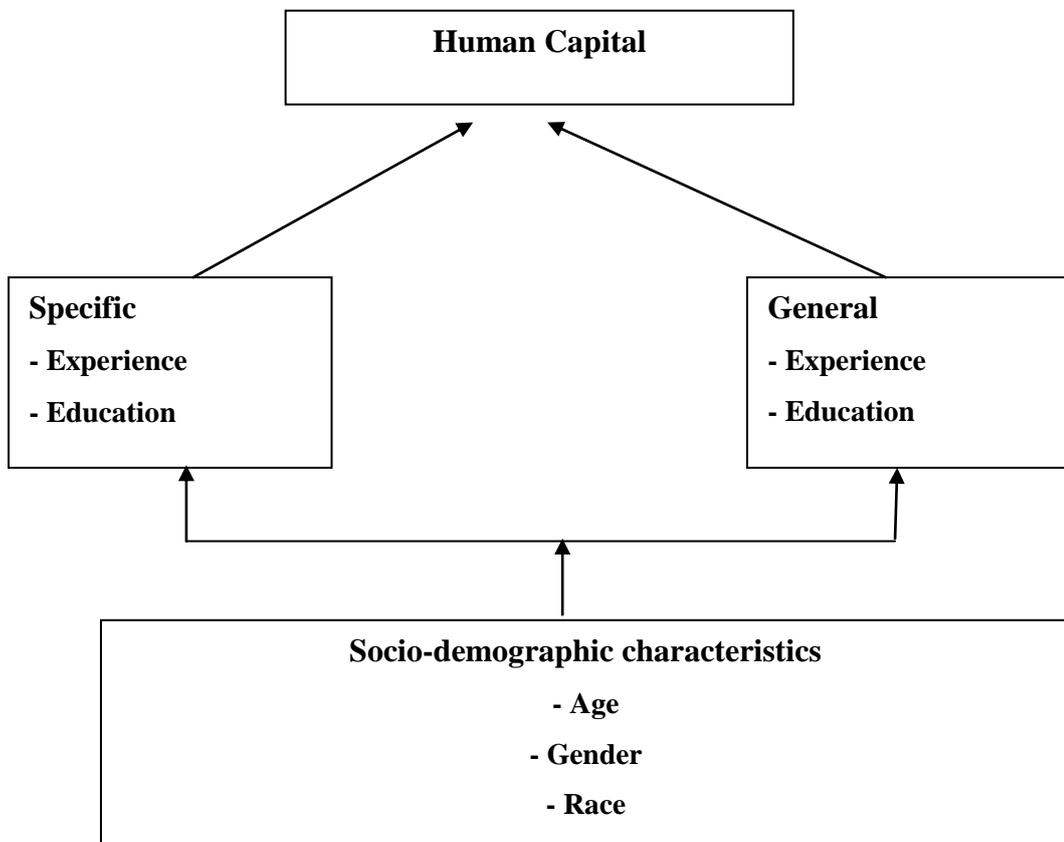
### **4.3.3 Sources of Human Capital**

Expenses in education, healthcare and training are investments in human capital, with educational and training expenditure the most important of these (Becker, 1964). Various authors agree that human capital can be built through training and/or education (Bontis, 2002; Dakhli and De Clercq, 2004; Ram et al., 2007).

Neergaard (2006) describe the nature, level and the total number of years in education and the extent of experience of an entrepreneur as part of an individual's human capital.

Education is one of the most cited indications of general human capital (Bruderl et al., 1992; Parker and Van Praag, 2006). In fact many researchers use education, skills and human capital as interchangeable concepts (Harris and Helfat, 1997; Teixeira, 2002), and some have used education as a substitute for human capital and skills (Bates, 1990; Teixeira, 1998). However, there are a considerable number of authors who argue that education is just one way to develop skills, and others still who argue that education is simply a way to measure a worker's ability to learn on the job (Thurow, 1975) or to identify favourable social personalities (Bowles and Gintis, 1976; Bowles and Gintis, 2002).

**Figure 4-1: Sources of Human Capital**



*Source: Madsen et al. (2003)*

Empirical evidence shows that education and training complement each other (Goedhuys and Sleuwaegen, 2000; Honig, 1998; Levinthal, 1997). Education is also considered to help accelerate the processes of idea generation and innovation (Becker, 1964; Hayton, 2005) – two important factors that positively influence the start-up and performance of enterprises (Burns, 2007). Skills can be developed through formal training and workplace experience (Teixeira, 2002), and by performing job-related activities over a period of time (Rosen, 1986).

The significance of relevant experience to human capital is found in the study conducted by Lam et al. (2007). On-the-job training, discussed by Bosworth et al. (1996), is another major form of investment considered under human capital theory. Formal education helps people quickly learn the skills taught through on-the-job training (Foster, 1987; McMahan, 1998). The level of formal education thus correlates positively with the degree of skills acquired and, therefore, the amount of human capital (general and specific).

However not all sources of human capital involve cost. Ben-Porath (1967) identifies human capital itself as the main raw material for producing of new human capital. Korman and Kraut (1999) maintain that there are areas of human capital, such as innate capabilities, that are acquired free of cost to the individual and hence society.

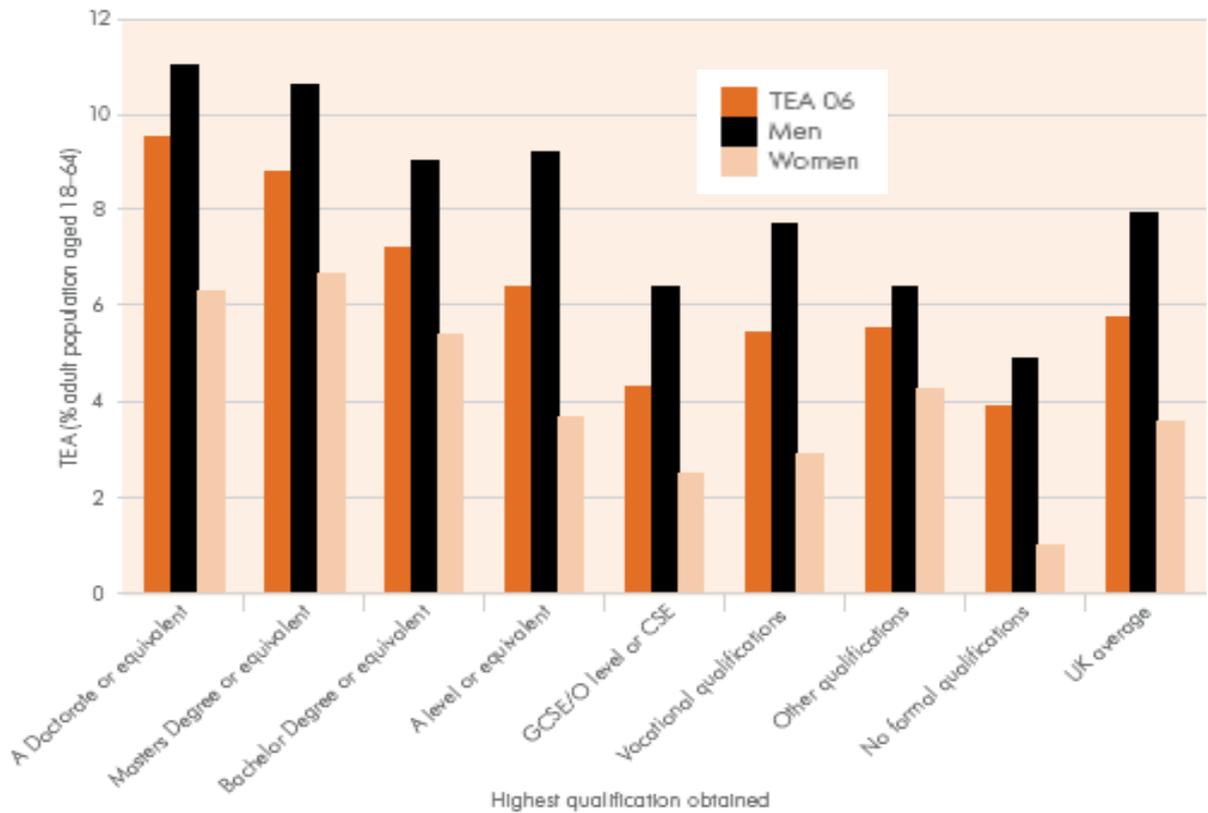
#### **4.3.4 Human Capital and Women's Entrepreneurship**

In her ground-breaking article on female entrepreneurship, Schwartz (1976) found that there were very few differences in the personal qualities of male and female entrepreneurs. Later research by Hisrich and O'Brien (1981, 1982) confirmed this finding.

Notwithstanding this similarity, it was found that female entrepreneurs find it difficult to overcome society's negative beliefs about women. There is a generally held perception that women do not have the right human capital to lead high-growth start-ups. Brush et al. (2004) argue that this perception is based on two

primary assumptions: women lack the right education and sufficient or appropriate professional experience.

**Figure 4-2: Level of Education and Total Entrepreneurial Activity (TEA) in the UK**



*Source: GEM UK APS (2006)*

Greene et al. (2003) add that women lack suitable human capital, including leadership skills, background, and strategic skills in choosing areas for growth, product and markets. Women mostly start businesses in traditionally female industries like retail, hospitality and services. These areas may be associated with the human capital that they have acquired through education, which tends to be in the liberal arts rather than business or technical areas (Hisrich and O'Brien, 1981, 1982). The different human capital backgrounds of men and women affect their entrepreneurial processes, as well as the performance and growth of their ventures (Brush, 1992). Women are also disadvantaged in specific human capital, such as managerial, technical and self-employment experiences (Boden and Nucci, 2000;

Kalleberg and Leicht, 1991). Women, however offset this drawback with same or higher levels of education (Cowling and Taylor, 2001).

Figure 4-2 (from GEM, 2006) reveals that higher levels of education among women result in increased entrepreneurial activity. Women with Doctorate or Masters Qualifications, or their equivalents, have the highest levels of entrepreneurial activity (6.3% and 6.7%, respectively).

Entrepreneurial activity is also relatively high among women with a bachelor's degree or equivalent qualifications (vocational post-16 years, level 4 NVQ) compared to women with just A-level or GCSE education. The GEM findings show that, compared to men, women with no formal education find it hard in the entrepreneurial arena.

Many scholars have established strong positive links between education and other forms of entrepreneurial capital. Earlier studies have found strong empirical support for the relationship between education and economic growth, (Psacharopoulos, 1973), growth in earnings (Schultz, 1961; Becker, 1964), productivity (Denison, 1967), and a firm's performance (Oahey, 1995). Some recent studies have not found any influence of the entrepreneur's education on the size of the firm (Fischer et al., 1993) or the growth trajectory of the firm (Begley and Boyd, 1986; Barkham et al., 1997; Storey, 1997). However, Begley and Boyd (1986) did establish a positive relationship between profitability and education. In another study, the National Foundation of Women Business Owners found that high-growth women business owners in the USA had higher education levels than their slow-growing counterparts (NFWBO, 2001).

#### ***4.3.4.1 Human Capital and the Growth of Enterprises***

It is generally agreed that human capital is related to the success of enterprises (Bosma et al., 2004; Bruderl et al., 1992; Fischer et al., 1993; Unger et al., 2006). Management-related training is seen as particularly helpful in growing a business. Bruhn et al. (2010) have even proposed the concept of 'managerial capital' which

refers to a capability for management. Human capital also benefits entrepreneurs by allowing them to adapt to changing circumstances. Higher or further education makes a company less likely to fail (Bates, 1990), and also makes it easier to source capital from banks (Coleman, 2000; Greene et al., 2003).

Chandler and Hanks (1998) go so far as to describe human and financial capital as substitutable. Financial institutions, for example, consider human capital an important asset when deciding to provide finance (Zacharakis and Meyer, 2000). As raising financial capital at start-up and/or during the growth process is one of the biggest constraints for women entrepreneurs (Brush et al., 2004), human capital (both general and specific) can play a crucial role in compensating that deficiency.

A study of small companies in Finland by Kangasharju and Pekkala (2002) found that educated entrepreneurs were less likely to give up in difficult economic conditions, and that education was positively related to company growth in all economic conditions. In Spain, growth enterprises were found to be more often managed by owners with a university education (Pena, 2002). Previous industry experience is also an important component of human capital. In a study of 1000 Dutch companies, for example, previous industry experience was found to greatly improve both profitability and growth (Bosma et al., 2004).

Although human capital is generally agreed to contribute to a company's success, until recently there was no research on the magnitude of this relationship and there was some dissent about its importance in entrepreneurship. Some authors consider human capital central to business success, while others feel that its importance has been overstated (Bauman and Silverman, 2004). There has also been a wide variation in the strength of influence reported in different studies. This is probably due to differences in defining human capital, and differences in measuring success, as well as the presence of moderator variables and the given context (Unger et al., 2011).

In order to investigate the effect of human capital on success further, Unger et al. (2011) carried out a meta-analysis of around 70 studies. It was found that, although high human capital does not necessarily predispose individuals to entrepreneurship, it is generally advantageous if they do start a business (Unger et al., 2011).

#### ***4.3.4.2 Human Capital and the Growth of Women-Owned Enterprises***

Women generally possess lower levels of human capital than men, including lower levels of education and reduced skill sets (Yetim, 2008). In addition, the type of human capital possessed is not gender neutral: men generally have higher levels of previous industrial or business related experience, including management of employees (Carter and Brush, 2005; Carter and Williams, 2003; Boden and Nucci, 2002; Jamali, 2009). This lack of human capital may affect women's ability to spot and exploit opportunities (Jamali, 2009), ultimately leading to reduced growth (Coleman, 2000).

However, the precise effects of human capital on the growth of women-owned enterprises are not totally clear cut. University-level education is not always a predictor of entrepreneurial activity and growth of women enterprises. In Taiwan, for example, highly educated women tend to join the professions, while less educated women start enterprises (Sanyang and Huang, 2008), with most entrepreneurial women being educated to an intermediate-level. However, Taiwanese women considered that business-specific skills such as internet and IT, management, sales, marketing, bookkeeping and accountancy were crucial for business success, and they made taking courses in these subjects a priority (Sanyang and Huang, 2008).

Coleman (2007) analysed data from the US Federal Reserve's 1998 Survey of Small Business Finances. The survey includes information on 3,561 small US firms (defined as firms having 500 or fewer employees). It was found that unwillingness to apply for loans (which is more common in women entrepreneurs) negatively affected profitability, indicating that a lack of

confidence, which is a particular problem for women, can negatively affect growth. Prior business experience was a better indicator of profitability for women than for men, indicating that this form of human capital is particularly important in the growth of women-owned enterprises (Coleman, 2007). Surprisingly, previous business experience actually had a negative effect on growth for both male and female business owners. Coleman (2007) suggests that this may be because experienced owners are more aware of the risks of high growth and choose to grow their business more slowly, focusing on other performance measures. Coleman (2007) also found gender differences in the effects of human capital on growth. For women, none of the following human capital variables were significantly related to growth: level of education, age, prior experience, whether the business was family-owned, sole proprietorship, and whether the business was inherited. Financial capital variables such as the ability to secure loans were also not related to growth of women-owned enterprises. Coleman (2007) suggests the growth of female-owned businesses is related to other unmeasured factors, unconnected to human or financial capital.

Industry-specific experience is important for the growth of small businesses (Loscocco et al., 1991). This puts women at a disadvantage as they generally have fewer years of industry experience (Coleman, 2007), which makes it harder to seek out and take advantage of resources. Bruhn et al. (2010) investigated how managerial capital affects business growth for Peruvian women. In this randomised controlled study female micro-entrepreneurs were given lessons in business and recordkeeping skills. No improvement in revenue, profit or employment levels was shown in comparison to the control group.

On the other hand, a study carried out by Roomi and Harrison (2009) in Pakistan shows that business management and enterprise development training significantly improved the confidence of women entrepreneurs as well as their annual revenue and employment growth. Manolova et al. (2007) found that the level of education was unrelated to growth among female entrepreneurs in Bulgaria, although there was a slight correlation between growth and certain

aspects of domain-specific human capital. In general even specific human capital was not found to predict growth (Manolova et al., 2007). However, the level of perceived benefit from prior experience was related to growth.

Similarly, in Kenya, businesses owned by women underperform in growth terms (McCormick, 2001). This is thought to be due to a lack of human capital: women in Kenya are less educated than men and their level of illiteracy is more than double that of men. The lack of educational opportunities for women is mainly due to marriage institutions, which assign women the major share of domestic work (McCormick, 2001).

These three examples suggest that, at least in a transition economy such as Bulgaria, in an under-developed economy such as Kenya and an Islamic country such as Pakistan, human capital may be more important for women than men in growing enterprises.

Stevenson and St-Onge (2005) divided Kenyan women entrepreneurs into three groups depending on their business's growth potential: First, micro-entrepreneurs who work from home or a shed as part of the informal economy. They are constrained by low human capital and not permitted by their husbands to undertake courses or training. They also shoulder a huge burden of domestic responsibility. These businesses have very little potential for growth, but are the most common female-owned business in Kenya (Stevenson and St-Onge, 2005).

The second group is composed of women who have higher human capital (secondary education or business experience) and social capital (their husbands are supportive and may also be involved in the business). Their businesses may employ a small number of staff and operate from registered business premises. For these women the main constraint is finance, as their businesses are still too small to be of interest to commercial lenders, and they may have no assets to use as collateral. These firms have growth potential and some trade on the global market (Stevenson and St-Onge, 2005). However, they are still constrained by a

lack of working capital and may not be able to cope with increased demand, which hinders growth.

Finally there are women with very high human capital; they are university educated and may have experience in management, or come from an entrepreneurial family. They have access to information, networks and resources. Their businesses are medium to large and they are highly internationalised, primarily as exporters and have high growth potential (Stevenson and St-Onge, 2005).

The above examples suggest that more human and social capital possessed by women entrepreneurs lead to increased performance of enterprises. However, it is difficult to separate the effects of human capital from those of social capital. Hence empirical quantitative studies are needed which consider both variables and how they affect growth.

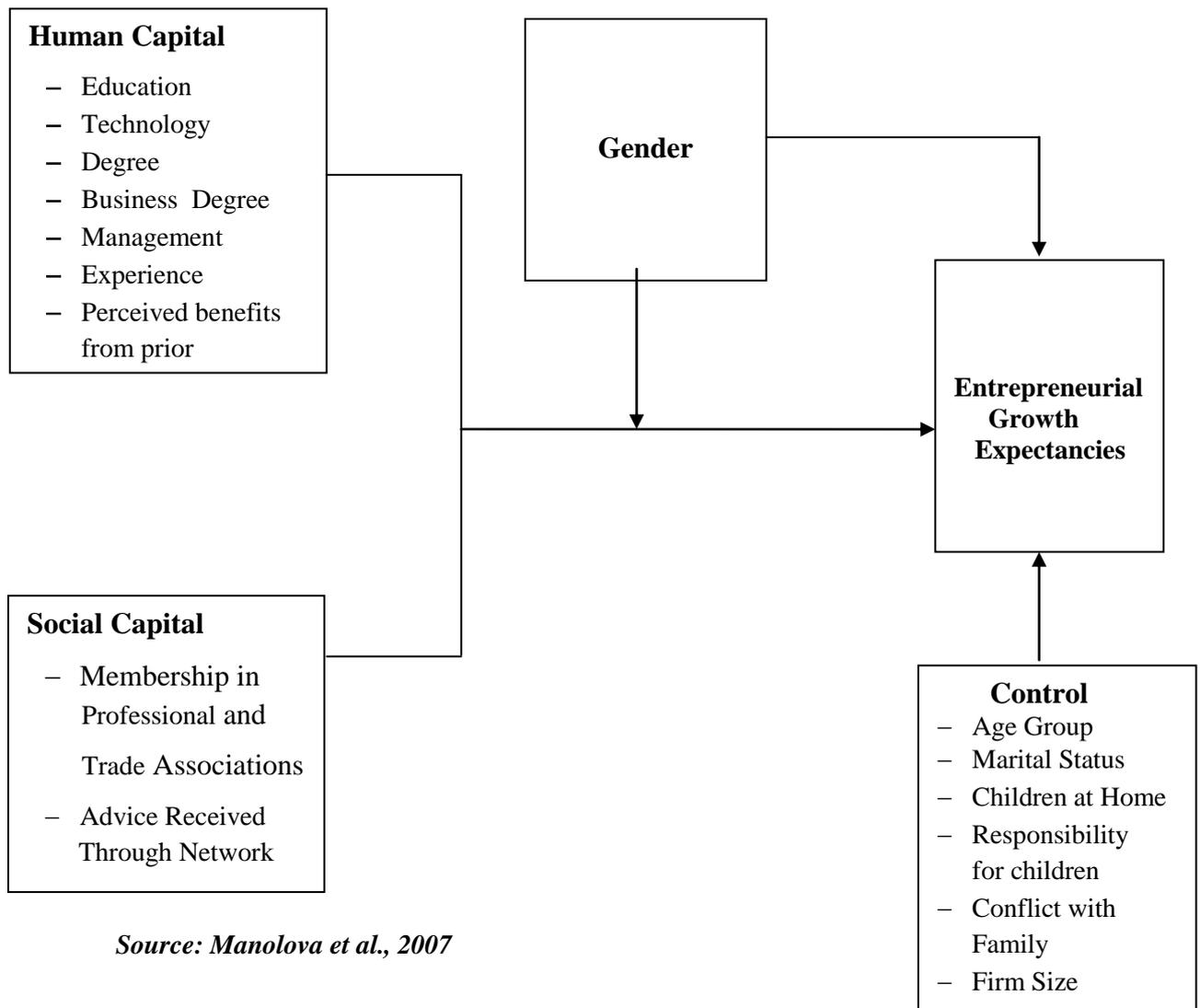
#### **4.3.5 Relationship between Human Capital, Social Capital and Growth**

Entrepreneurs need to use their firms' human capital stock effectively so that the skills and expertise are shared and not under-utilised either intentionally or unintentionally. Stiles and Kulvisaechana (2003) point out that both owners and workers must be committed to the organisation to utilise their human capital effectively, and that there must therefore be both social and organisational capital so as to use human capital appropriately to generate favourable results.

The relationship between human capital and social capital can be established from Leenders and Gabbay's (1999) work, which recognised that the knowledge and information owned by individuals was positively related to their positions in social networks. Social capital thus increases because of their influence on other members (Lin and Huang, 2005). The argument validates French and Raven's (1959) view that individuals with higher human capital are more likely to be respected for their knowledge and expertise. People in the same industry or sector will go to these people for advice or help, providing them with an opportunity to

increase their own social capital through giving advice, etc. (Friedman and Krackhardt, 1997).

**Figure 4-3 Human Capital, Social Capital, Gender, and Entrepreneurial Growth Expectancies: A Conceptual Model**



*Source: Manolova et al., 2007*

One of the most cited benefits of extended social capital for entrepreneurs is the privileged access to information (Nahapiet and Ghoshal, 1998; Brush et al., 2004). However, this information can only be transformed into opportunities and revenue generation if entrepreneurs have sufficient knowledge, skills and experience to absorb that information and convert it into ideas. Therefore, entrepreneurs with higher human capital are able to assimilate information from the environment

more effectively and efficiently and translate it into innovative products, services, systems and/or procedures (Kugler et al., 2007).

Empirical research acknowledges that effective relationships with customers, suppliers, employees and other resource providers positively affect a firm's performance (Bennet and Richardson, 2005). One can argue that higher human capital increases the chances of this (Lam et al., 2007). Financial institutions such as banks and venture capitalists, for example, will be more interested in supporting an entrepreneur who possesses the relevant skills, experience and knowledge than someone who does not.

Similarly, if customers and suppliers are aware of an entrepreneur's ability to successfully operate their business on the basis of appropriate experience, skills and knowledge, they will be more willing to have a stronger long-term business relationship on favourable terms for the entrepreneur. This argument suggests that the link between social capital and growth is stronger for entrepreneurs with a higher level of human capital (Florin et al., 2003; Kugler et al., 2007).

There is only one study by Manolova et al. (2007) where they have considered both human and social capital in relation to gender. It "looks at the differential effects of men and women entrepreneurs' human capital and networking on their growth expectancies in the context of a transitional economy" (Manolova et al., 2007: 407). They have used a proxy measure of growth (growth expectancy) and investigated the role of human and social capital on growth expectancy of women and men owned enterprises. The findings were used to produce a conceptual model of how various factors impact on growth expectations in Bulgaria. In this model, gender has a moderating influence on the effects of human and social capital on growth expectancies, as well as directly affecting growth expectancies. Other gender-related factors, such as 'kids at home' and 'conflict with family' as well as age and size of firm act as controls (Manolova et al., 2007).

There is no study available investigating the moderating role of human capital on women-owned enterprises especially in the developed economies such as the UK. By investigating the moderating effect of human capital on social capital and growth of women-owned enterprises, this study fills a gap in the literature. Before conducting the research, it is important to summarise the key definitions of different concepts (especially social and human capital) this study adopts. These definitions have been given in Box 4-1.

**Box 4-1: Key Definitions**

***Human Capital***

The concept of human capital relates to an individual's ability to allow for 'changes in action' and economic growth through their knowledge and skills (Becker, 1962).

"Human capital refers to education, employment or industry experience, and other types of experience" (Coleman, 2007: 304).

***Social Capital***

"The ability of actors to secure benefits by virtue of membership in social networks or other social structures" (Portes, 1998: 6)

"Sum of the actual and potential resources embedded within, available through, and derived from, the network of relationships possessed by an individual" (Nahapiet and Ghoshal, 1998: 243)

"The goodwill that is engendered by the fabric of social relations and that can be mobilised to facilitate action" (Adler and Kwoon, 2002: 17).

**4.4 Summary - Key Findings**

This chapter critically reviews the literature on social and human capital and their role in women's entrepreneurship development. It finds out that most of the women entrepreneurs choose not to grow their businesses, preferring to maintain their work-life balance; others are growth oriented. Women entrepreneurs are usually under-capitalised in other areas and may rely more heavily on their social

capital. In some cases social capital can replace human and financial capital. The chapter discovers a positive impact of social capital in the start-up phase of businesses (Leenders, 1999; Bratkovic et al., 2009) but mentions a negative role of building and using social capital in the growth phase (Maurer and Ebers, 2006; Portes, 1998). It also learns that there is a difference in the influence of human capital between developing, transition and developed countries; in some developing countries human capital may mean the difference between illiteracy and having a secondary-level education.

The chapter has examined the relevant gaps in the literature on the role of human capital and social capital in the growth of women-owned enterprises from different methodological standards. It exposes that though some of the studies (Brush et al., 2004; Renzulli et al, 2000) suggest that the growth of women-owned businesses can “at least partly be attributed to improvements in women’s stock of social capital” (Sapleton, 2009: 193), however, so far no empirical research has been conducted in the UK to determine the impact of women entrepreneurs’ social capital on the growth of their enterprises. The chapter further reveals that there are no studies available investigating the use and sources of women entrepreneurs’ social capital in different stages of growth of their enterprises. And there is a lack of research studying the use of social capital for the growth of women-owned enterprises in different sectors and different stages of enterprise growth.

Human capital may be more important for women entering entrepreneurship than in the growth of their enterprises (Boden and Nucci, 2002; Cater and Brush, 2005; McCormick, 2001), however, the chapter reveals that the precise effects of human capital on the growth of women-owned enterprises are not totally clear cut (Coleman, 2007; Sanyang and Huang, 2008). While some of the authors (Brush and Hisrich, 2002; Brush et al., 2004; Macpherson and Halt, 2007) have found a positive relationship between human capital variables (education and experience) of women entrepreneurs with the growth and performance of their firms. Others (Coleman, 2007; Manolova et al., 2007; Sanyang and Huang, 2008) have found either negative or no relationship between women entrepreneurs’ human capital

variables (education, experience, and age, etc.) and the growth of their enterprises. The chapter also reveals that though there are some studies conducted in other countries such as USA, Bulgaria, Kenya, and Pakistan, there is a dearth of empirical studies in the UK, looking at the impact of women entrepreneurs' own human capital on their firms' growth.

This chapter also uncovers that not many studies are available on the growth of women-owned enterprises which look at human and social capital together, and that there is a need for further empirical research in this area. Even in the gender-neutral mainstream literature on enterprise growth and performance, authors have usually studied either the effect of human capital (Bates, 1985, 1990; Ganotakis, 2012; Lafuente and Rabetine, 2011; Romer, 1989) or social capital (Aldrich and Zimmer, 1986; Pennings et al., 1998; Tsai and Gosha, 1998) alone. This limits the availability of literature on the interplay of human and social capital and determines a need to study the moderating role of human capital on social capital and the growth of women-owned enterprises.

The next chapter synthesizes the findings to develop a new framework. The proposed framework links the main applicable items of human capital and social capital with growth of women-owned enterprises. The next chapter illustrates the theoretical model for this study based on these findings and the gaps established in the literature review.

## **Chapter 5 Theoretical Framework**

### **5.1 Introduction**

Based on the findings and gaps established in the literature review, this chapter develops the theoretical model that has guided the empirical aspects of the research study. Based on the predicted relationships among the key concepts in the theoretical model, a set of propositions are developed. The propositions are operationalised by identifying variables related to each concept and by formulating sets of hypotheses that allow the tentative relationships among those variables to be probed empirically. The variables are measured and hypotheses are tested using data collected through structured questionnaires and one-on-one interviews with the owner-managers of women-owned UK businesses.

This chapter is structured as follows. It starts with reporting critical observations from the literature and then moves on to an integrative framework of the study. The chapter presents research propositions and hypotheses next, followed by a section on the hypothesised theoretical model of the study. The next section describes how variables are measured in the study and then the chapter concludes.

### **5.2 Critical Observations from the Literature**

In this section, I rehearse the argument for examining the role of social and human capital in explaining the growth of female-owned enterprises.

The management literature has shifted from its traditional view of the business models, from those based on opportunism and market transactions (Williamson, 1981) to more socially-based models in which knowledge, skills and human resources are the key elements in the performance of an organisation. Women entrepreneurs have been cited (Brush et al., 2004, 2006; Manolova et al., 2007;

Prasad et al., 2013) to have lower chances to grow their businesses because of limited access to human-based resources. Resource dependency theory (Pfeffer and Salancik, 1978) supports this view, stating that the performance of organisations depends upon how entrepreneurs can derive and utilise resources from the business environment or society (Storey, 2004). These resources in turn are to be used in the firms by expert employees, whose knowledge and skills can be conceptualised as human capital. This is a resource-based view of the firm (Barney, 1991; Penrose, 1995).

The concept of human capital was first proposed by Schultz (1961) and Becker (1962), with an emphasis on investments in human productivity leading to economic growth. Earlier research on human capital took place at the macro-economic level for regions and countries, whereas a shift to business-level analysis for human capital happened in the 1990s, when companies started competing for the future competitive advantage in terms of intangible resources (Barney, 1991; Becker, 1993). Thus, human capital became an important construct in management thinking about the growth of organisations or the analysis of performance, while becoming a repository of intellectual capital from employees and other stakeholders in the organisation (Edvinsson and Malone, 1997).

The major studies that have analysed human capital at an organisational level for the growth, success or performance of the organisation include Storey (1995), Pennings (1998), Harris and Wheeler (2005), Lin and Haung (2005), and Coleman (2007). These researchers have applied the dimensions of human capital, i.e. education, training, experience and abilities (Bontis, 2002; Lepak and Snell, 1999; Snell et al., 1996; Youndt et al., 2004) that were presented in Chapter 4 and I have selected the same dimensions in analysing human capital in this study.

Social capital is also a key resource and notion in this approach to the theory of the firm (Alguezaui and Filieri, 2010). It is related to numerous phenomena, for example, careers and recruitment, innovation (Landry et al., 2002), intellectual

capital (Hargadon and Sutton, 1997), corporate entrepreneurship (Chung and Gibbons, 1997) and business start-ups (Coulthard et al., 2001). The research also confirms that “potential and nascent entrepreneurs draw heavily upon their social networks at the early stage of their firm establishment (Sapleton, 2009; 197). The resources embedded in social networks such as seed funding, innovative ideas for products and services, and availability of expert human resources can be of high value for nascent entrepreneurs.

Social capital is considered a valuable resource or an intangible asset for organisations since it can provide unique networks of relationships. Each individual to whom an entrepreneur is connected may have access to numerous resources (Sapleton, 2009). These resources can be useful for entrepreneurs to a myriad of economic and wealth creating transactions. However, the question remains that why those individuals in possession of resources will share their resources with entrepreneurs. The answer is – only if entrepreneurs have build their social capital with their contacts, which is the ability of entrepreneurs “to extract benefits from their social structures, networks and memberships” (Davidsson and Honig, 2003: 307). Hence, social capital and human capital offer not contradictory but complementary approaches to how firms can excel.

Theories of women entrepreneurship have suggested that social access and the availability of human capital are two crucial factors in the success of women-owned ventures. Researchers such as Bourdieu (1983), Coleman (1988, 1990) and Loury (1987) have theorised that social networks provided by extended family, friends, community-based groups, and organisational relationships supplement the effects of human capital items such as education and experience as well as financial capital (Davidsson and Honig, 2003). Thus, I propose to develop and examine a theoretical model that inter-relates these constructs, i.e. human capital, social capital, and growth of enterprises. Tables 5-1 and 5-2 present the findings from the literature review of the factors (human capital and social capital respectively) that affect the growth (Table 5-3) of women-owned enterprises.

**Table 5-1: Human Capital and Growth of Enterprises – Main Findings from the Literature**

Empirical Study	Findings
Begley and Boyd, 1986	Positive relationship between the profitability of the venture and the education level of the entrepreneur.
Watkins and Watkins, 1984 Cooper et al., 1988 Boden and Nucci, 2000 Davidsson and Honig, 2003	Age and experience of an entrepreneur has a positive relationship with the establishment and development of enterprises.
Brush and Hisrich, 2002	Positive relationship between education and managerial performance of women entrepreneurs.
Singh and Winnecombe, 2003	Stage of individual development and gender has impact upon entrepreneurial education and management style of entrepreneurs.
Madsen et al., 2003	Human capital can be sourced from experience; education and social demographic characteristics such as age, gender and race can affect it.
Brush et al., 2004	Education and experience are vital for performance of enterprises.  Human capital an important initial endowment for entrepreneurs as it provides a platform from which to secure other forms of resources like organisational, physical and financial capital.
GEM, 2006	Higher levels of education among women results in increased entrepreneurial activity.
Macpherson and Halt, 2007	Education and experience of entrepreneurship have a positive link with the performance of enterprises.
Coleman, 2007	Education and experience of women entrepreneurship have a positive impact on the profitability of their firms.
Ucbasaran et al., 2008	Entrepreneurs with higher levels of human capital including education, work experience, business experience, and managerial and entrepreneurial capabilities are able to identify considerably more opportunities.

**Table 5-2: Social Capital and Growth of Enterprises - Main Findings from Literature**

Empirical Study	Findings
Howard, 1989	Contacts, knowledge and confidence are required for resource mobilisation by entrepreneurs.
Denison et al., 1994	Networks are important for scanning business opportunities, career path and information.
Woolcock and Narayan, 2000	Social capital an intangible asset; can be derived from good-will, sympathy and fellowship amongst social unit.
Schmidt and Parker, 2003	Female entrepreneurs often enter self-employment under conditions of human and social capital.
Brush et al., 2004; 2005	Female entrepreneurs' networking capabilities and social capital are more influential for enterprise survival development and growth.
Smith-Hunter and Boyd, 2004	Female business owners are at a disadvantage compared to male entrepreneurs in terms of limited access to social capital.
Marlow and Carter, 2004	Underperformance of female-owned enterprises can be attributed to initial undercapitalisation in terms of social, human and financial capital.
Bennet and Richardson, 2005	Importance of networking and developing relationships beyond networking are critical for business success.
Neergaard et al., 2005	Women are less welcome compared to men in social networks that influence their business start-ups.
Carter and Shaw, 2006	Strong emphasis on acquisition, mobilisation and generation of resources for start-up and growth phases of women-owned businesses.

**Table 5-3: Growth of Enterprises - Main Findings from the Literature**

Empirical Study	Findings
Brush and Vanderwerf, 1992	Growth of an enterprise, especially an SME, can be perceived as the most significant performance indicator of an organisation.
Mintzberg, 1994	Growth can be categorised as financial, strategic, structural and organisational growth.
Storey, 1994	Entrepreneurial success can be dependent on motivation, education, experience, age, gender and social mobility.
Rosa et al., 1996	Business performance and growth can be measured in terms of entrepreneurial success, employment growth, sales growth, geographical range and subjective measures of meeting business and domestic needs.
Storey, 1997	Business growth can be a measure of the company's overall success.
Garnsey, 1998	The growth path process involves conversion of assets into resources, allocation and mobilisation, which can bring stability and growth to the organisation.
Greene et al., 2003	A resource-based approach can be utilised to determine factors affecting growth of women-owned enterprises.
Brush et al., 2004	Women often lack economic power and social and family support structure to grow their ventures.
Altinay and Altinay, 2006	Employment growth can be a measure of organisational growth.
Burns, 2007	Individual capabilities and firm resources are vital to venture growth.
Dobbs and Hamilton, 2007	Business growth can be divided into six broad categories, namely stochastic, descriptive, evolutionary, resource-based, learning and deterministic.

### **5.3 Integrative Framework of the Study**

The critical review of the published academic literature yields key findings beyond the existing theoretical perspectives confirmed in the earlier literature review chapters. The findings in the previous section support the theoretical propositions introduced in the next section (5.4); the current section details with the gaps found in the literature related to the theories of growth of women-owned enterprises, concepts of human and social capital, and their measurements. These gaps have led the researcher to propose the following framework relating to these variables of growth, human capital and social capital:

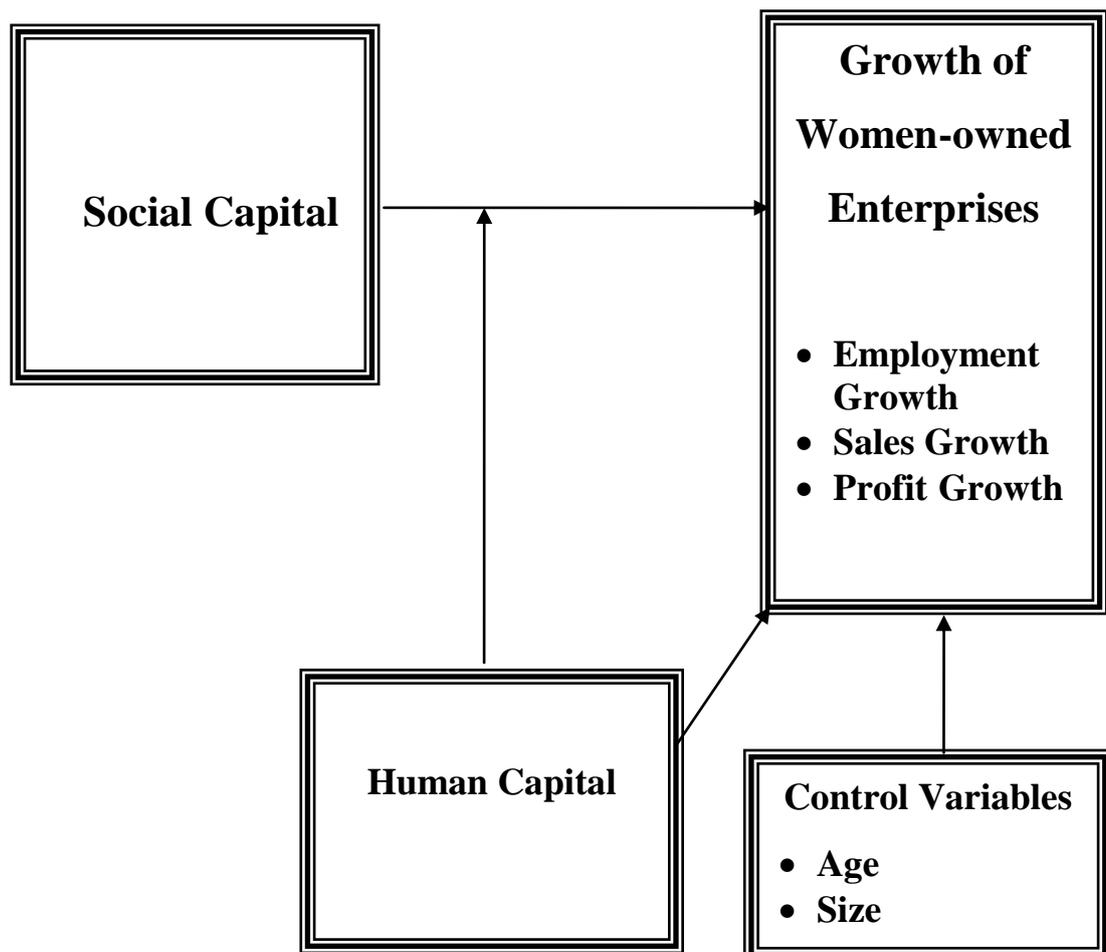
1. Women-owned enterprises have substantial policy and organisational support; however, their success is limited.
2. Measures applied by governments and agencies for women's enterprise development are many and they do not collate with each other to bring the right factors to identify the problems faced by women entrepreneurs.
3. Although numerous studies have examined the role of various factors affecting entrepreneurial growth, limited research has been conducted on the factors affecting the growth of women-owned enterprises, especially in the UK. Hence, it is still not clear what influences the growth of women-owned enterprises. The present study aims to investigate the impacts of human and social capital on the enterprise growth of those ventures owned by women in the UK.
4. Previous research has been based on theoretical reflections about women's entrepreneurial issues and expectations, but measurements of actual growth are rarely based on such constructs as human and social capital. The existing literature focuses more on issues of gender difference; however, the challenge is to carry out an in-depth regional study of active enterprises and discover human and social capital issues as well as the growth aspects of women-owned enterprises. Thus, the findings of this study can help potential and current women entrepreneurs and government agencies support the growth of women-owned enterprises.

5. Brush et al. (2004, 2005, 2006) found disconnect between the opportunities and resources available for high growth women-owned enterprises in the USA and discovered that social structures have a significant influence on the success of women-owned enterprises. The current study extends this research a step further by analysing the effects of social and human capital on the growth of women-owned enterprises in the UK.
6. After three decades of research about women's entrepreneurship it is still unclear what women entrepreneurs need to succeed and which capital and resources women require for their self-employment ventures to become successful (Manolova et al., 2008; Manolova et al., 2010).
7. Some studies have found support for education as a major indicator of the potential for a woman's entrepreneurial success, whereas recent studies have revealed that an entrepreneur's education has no influence over the size and growth of the firm (Barkham et al., 1996; Begley and Boyd, 1986). It is a general belief that women entrepreneurs have difficulties in overcoming human and social capital shortages for their ventures, in addition to society's more general negative beliefs about women (Brush et al., 2004). Hence, this research study attempts to clarify such contradictory findings in the literature and come up with evidence-based recommendations about the impacts of social and human capital on the growth of women-owned enterprises.

Based on the above discussed gaps found in the literature, the conceptual framework is developed into theoretical propositions for this research study as shown in Figure 5-1. In the proposed theoretical model, human capital and social capital are the independent variables, having separate effects from each other on the growth of women-owned enterprises. In addition, human capital is considered to have a moderating effect on the relationship between social capital and the growth of women-owned enterprises because "human and social capital are seen as complements in the sociological literature" (Santarelli and Tran, 2013; 435). However, the literature on the interplay of social and human capital as drivers of

firm growth is limited (Santarelli and Tran, 2013). In the field of women's entrepreneurship, studies have been conducted to determine the effect of human capital on enterprise growth (Gundry and Welsh, 2001; Coleman, 2007; Manolova et al., 2007) with contradictory results. Similarly, some studies have been conducted to study the impact of social capital on the performance of women-owned firms (Sappleton, 2009; Shaw et al., 2009). However, so far no study has been conducted to study the moderating role of human capital between the relationship of social capital and enterprise growth. To fill this gap, based on the theoretical model (Figure 5-1), a set of propositions are developed and operationalised as a set of hypotheses.

**Figure 5-1: Theoretical Model of the Study**



## **5.4 Research Propositions and Hypotheses**

In this section, taking the predicted causal relationships among the concepts presented in the theoretical model into consideration, research propositions are developed and hypotheses concerning how the growth of enterprises can be affected by social and human capital are formulated and presented. Positive relationships affecting the growth of women-owned enterprises are proposed between social capital and growth, human capital and growth, and the moderation of social capital effects by human capital. The detailed hypotheses are presented as follows.

### **5.4.1 Social Capital and Growth of Women-Owned Enterprises**

Businesses owned by women are considered to have limited resources as compared to those owned by men because of their limited access to the ‘right’ social circles. Women are regularly excluded from traditional business networks and they further lack access to information about them (Bennet and Richardson, 2005). Brush and Hisrich (1999) have pointed out that certain groups of women – such as those from ethnic minorities – can experience additional difficulties in gaining access to certain resources, which hamper the growth and performance of their businesses. For women entrepreneurs, strong tie relationships with family members and friends are more helpful (as compared to men) for generating initial capital and emotional support (Uzzi, 1997), whereas a diverse network of weak tie relationships with customers, suppliers and resource providers is helpful in accessing financial, human and physical resources (Bennet and Richardson, 2005), and may result in an increase in legitimacy (Uzzi, 1997; Higgins and Gulati, 2003). In general, social capital affects the performance of enterprises in four different aspects (Santarelli and Tran, 2013). First, social networks provide access to scarce resources such as finance and expertise (Brush et al., 2004, 2005, 2006). Second, social networks are helpful for entrepreneurs in accessing intangible resources such as credibility and competence (Bosma et al., 2004). Third, social networks have signalling and reputational effects (Santarelli and Tran, 2013). Fourth, an entrepreneur’s frequent external contacts such as distributors, suppliers, contractors, and even competitors play a role in accessing

information and advice, which contribute to the ability of an entrepreneur to make effective decisions to grow her business. Based on the literature, which has established a positive relationship between a firm's growth and an entrepreneur's level of social capital (Liao and Welsh, 2001; Batjargal, 2005), it is proposed that;

Proposition 1: The possession of a higher level of social capital by women entrepreneurs leads to a higher level of firm growth.

The proposition was operationalised in three hypotheses as researchers have operationalised growth of enterprises in terms of employment (Altinay and Altinay, 2006; Barringer and Jones, 2004; Davidsson and Delmar, 1997; Davidsson and Henkerson, 2002; Davidsson et al., 2002; Delmar et al., 2003; Dhaliwal and Scott, 2010; Freel and Robson, 2004; Glancey, 1998; Hamilton and Lawrence, 2001; Havnes and Senneseth, 2001; Hoogstra and Van Dijk, 2004; Johnsen and McMahon, 2005; Kangasharju, 2000; Locke, 2004; O' Gorman, 2001; Reichstein and Dahl, 2004; Smallbone and North, 1995; Wang and Altinay, 2012; Yasuda, 2005), sales ((Barringer et al., 2005; Basu and Goswamy, 1999; Chandler and Baueus, 1996; Del Monte and Papagni, 2003; Delmar et al., 2003; Havnes and Senneseth, 2001; Hubbard and Bromiley, 1995; Johnsen and McMahon, 2005; Kelley and Nakosteen, 2005; LeBrasseur et al., 2003; Littunen and Tohmo, 2003; McMahon, 2001; O' Gorman, 2001; Olson and Bokor, 1995; Orser et al., 2000; Pena, 2002; Reichstein and Dahl, 2004; Rosa et al., 1996; Rue and Ibrahim, 1998; Sadler-Smith et al., 2001; Smallbone et al., 1995; Wang, 2008; Wang and Altinay, 2012; Wiklund and Shepherd, 2003), and profit (Becchetti and Trovato, 2002; Birley and Westhead, 1990; Edelman et al., 2005; Pena, 2002):

*H<sub>1</sub>: Firms owned by women entrepreneurs having a higher level of social capital show higher employment growth.*

*H<sub>2</sub>: Firms owned by women entrepreneurs having a higher level of social capital show higher revenue growth.*

*H<sub>3</sub>: Firms owned by women entrepreneurs having a higher level of social capital show higher profit growth.*

### 5.4.2 Human Capital and Growth of Women-Owned Enterprises

Human capital is considered to be useful for increasing the productivity of entrepreneurs, resulting in higher profits (Bates, 1985). It is also useful for raising the level of opportunity recognition, since knowledge and information accelerate the processes of idea generation and innovation (Becker, 1964; Hayton, 2005). Both idea generation and innovation help in the establishment and development of new and/or improved products and services. This again results in an accelerated performance of the enterprises (Burns, 2007). Furthermore, human capital plays a crucial role in the successful exploitation of these opportunities and in managing the complex task of running a business, including interacting with customers, suppliers and workers, as well as acquiring resources (Chandler and Hanks, 1998; Unger et al., 2006; Kugler et al., 2007).

As an indication of general human capital, education is one of the most cited variables in the growth and performance of firms (Bruderl et al., 1992; Parker and Van Praag, 2006). Specific human capital, consisting of industry experience, training and skills, enhances market and product knowledge and helps understanding of industry structure and dynamics. In addition, managerial experience and tacit knowledge of the same industry also influence a firm's growth indicators. Raising financial capital at start-up and/or during the growth process is one of the biggest constraints for women entrepreneurs (Brush et al., 2004), but human capital (both general and specific) can play a crucial role in compensating that deficiency. Therefore it is proposed that;

Proposition 2: The possession of a higher level of human capital by women entrepreneurs leads to a higher level of firm growth.

The above proposition generates the following hypotheses:

*H<sub>4</sub>: Firms owned by women entrepreneurs having a higher level of human capital show higher employment growth.*

*H<sub>5</sub>: Firms owned by women entrepreneurs having a higher level of human capital show higher revenue growth.*

*H<sub>6</sub>: Firms owned by women entrepreneurs having a higher level of human capital show higher profit growth.*

### **5.4.3 Human Capital as the Moderator of Social Capital with the Growth of Women-owned Enterprises**

Entrepreneurs need to use their firms' human capital stock effectively so that skills and expertise are shared and not under-utilised. Stiles and Kulvisaechana (2003) point out that both owners and workers must be committed to the organisation in order to utilise their human capital effectively. To generate favourable results through the appropriate use of human capital, therefore, social capital must also be in place.

The causal relationship of human capital and social capital can be established from Leenders and Gabbay's (1999) work, which recognized that the knowledge and information owned by individuals was positively related to their positions in social networks, hence increasing their social capital because of their influence on other members (Lin and Huang, 2005). This validates French and Raven's (1959) view that individuals with higher human capital are more likely to be respected for their knowledge and expertise. People in the same industry or sector will go to them for advice or help, providing them with an opportunity to impact advice/help seekers positively, hence increasing their own social capital (Friedman and Krackhardt, 1997).

One of the most cited benefits of extended social capital for entrepreneurs is the privileged access to information (Nahapiet and Ghoshal, 1998; Brush et al., 2004). However, this information can be transformed into opportunities and consequently to revenue generation and profit maximisation only if entrepreneurs have sufficient knowledge, skills and experience to absorb that information and convert it into ideas. Therefore, entrepreneurs with higher human capital (both general and specific) on the basis of their knowledge, skills and experience have an advantage

in effectively and efficiently assimilating information from the environment and translating it into innovative products, services, systems and/or procedures (Kugler et al., 2007).

Empirical research acknowledges that effective relationships with customers, suppliers, employees and other resource providers positively affect a firm's performance (Bennet and Richardson, 2005). One can argue that the chance of realising these benefits increases if entrepreneurs have higher human capital (Lam et al., 2007). For example, financial institutions such as banks and venture capitalists will be more interested in supporting entrepreneurs who possess the relevant skills, experience and knowledge than those who do not. Bankers can offer better lending conditions to entrepreneurs with higher specific human capital (especially work or managerial experience in the same sector/industry), because it will make them more confident in the success of the business.

Similarly, if customers and suppliers are aware of an entrepreneur's ability to operate his/her business successfully on the basis of experience, skills and knowledge, they will be willing to have a stronger long-term business relationship on favourable terms for the entrepreneur. This argument generates the premise that the linkage between social capital and the growth of a firm is higher in businesses owned by entrepreneurs with a higher level of human capital as compared to those owned by entrepreneurs with a lower level (Florin et al., 2003; Kugler et al., 2007). This argument and the relevant theoretical perspectives lead to the next proposition of the study.

**Proposition 3: Women entrepreneurs with a higher level of human capital are better able to leverage their social capital to realise higher enterprise growth.**

Based on the above proposition, following hypotheses regarding the role of human capital as a moderator in the relationship between social capital and the growth of women-owned enterprises are formulated:

*H<sub>7</sub>: Firms owned by women entrepreneurs with higher social capital will show higher employment growth, if they have a higher level of human capital.*

*H<sub>8</sub>: Firms owned by women entrepreneurs with higher social capital will show higher sales growth, if they have a higher level of human capital.*

*H<sub>9</sub>: Firms owned by women entrepreneurs with higher social capital will show higher profit growth, if they have a higher level of human capital.*

## 5.5 Hypothesised Theoretical Model

The hypothesised model for this research study is presented below, according to the sequence of the hypotheses. The phases of the hypothesised model are also presented below. To aid understanding, the proposed framework is divided into three components based on the causal relationship arrows, which depict the relationships between these constructs. Primary data collected from structured questionnaires will be analysed to test these hypothesised relationships.

Figure 5-2 hypothesises an association between social capital and the growth of women-owned enterprises. Research hypotheses H<sub>1</sub> to H<sub>3</sub> suggest that social capital may be measured through such dimensions as help from official and personal sources, willingness to get along with others and professional business advice received from one's own network. This social capital can have a significant impact on the employment, sales and profit growth of women-owned enterprises. This set of hypotheses (H<sub>1</sub>–H<sub>3</sub>) assumes that there is a positive relationship between an increase in social capital and the growth of a women-owned enterprise

**Figure 5-2: Social Capital and the Growth of Women-Owned Enterprises**

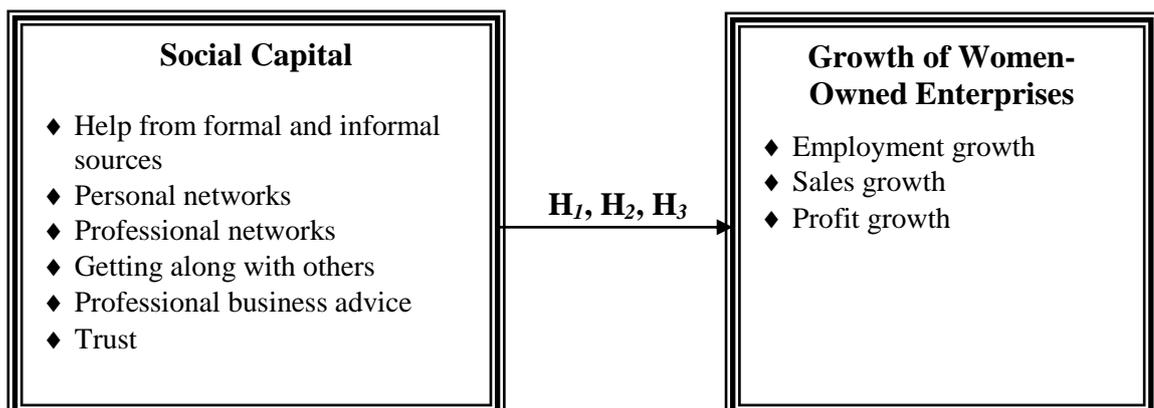


Figure 5-3 hypothesises an association between human capital and the growth of enterprises owned by women. Research hypotheses  $H_4$ – $H_6$  suggest that dimensions such as employees' and owners' education levels, work experience, industry experience, professional training or business expertise can comprise the overall human capital. In turn, this human capital can have a substantial effect on the overall organisational growth of female-owned enterprises. This set of hypotheses ( $H_4$  to  $H_6$ ) assumes that there is a positive relationship between an increase in human capital and the growth of women-owned enterprises.

**Figure 5-3: Human Capital and the Growth of Women-owned Enterprises**

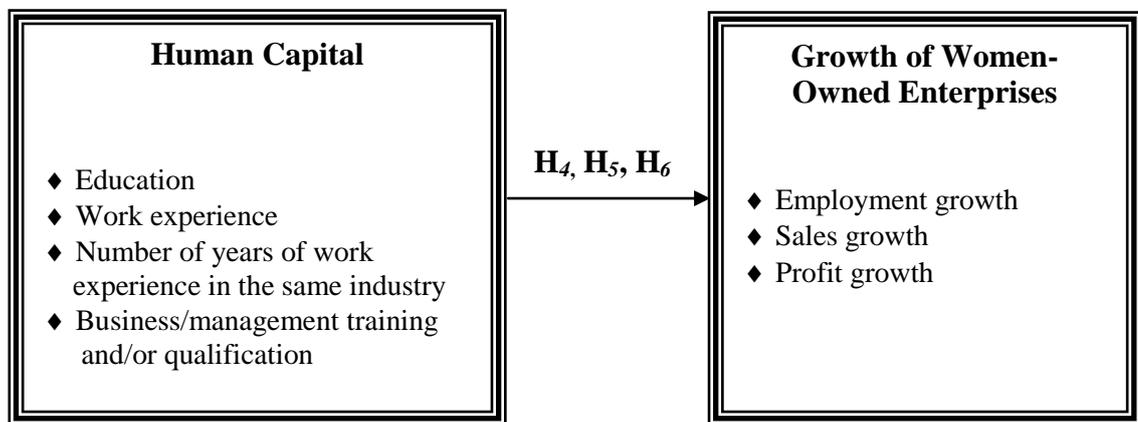
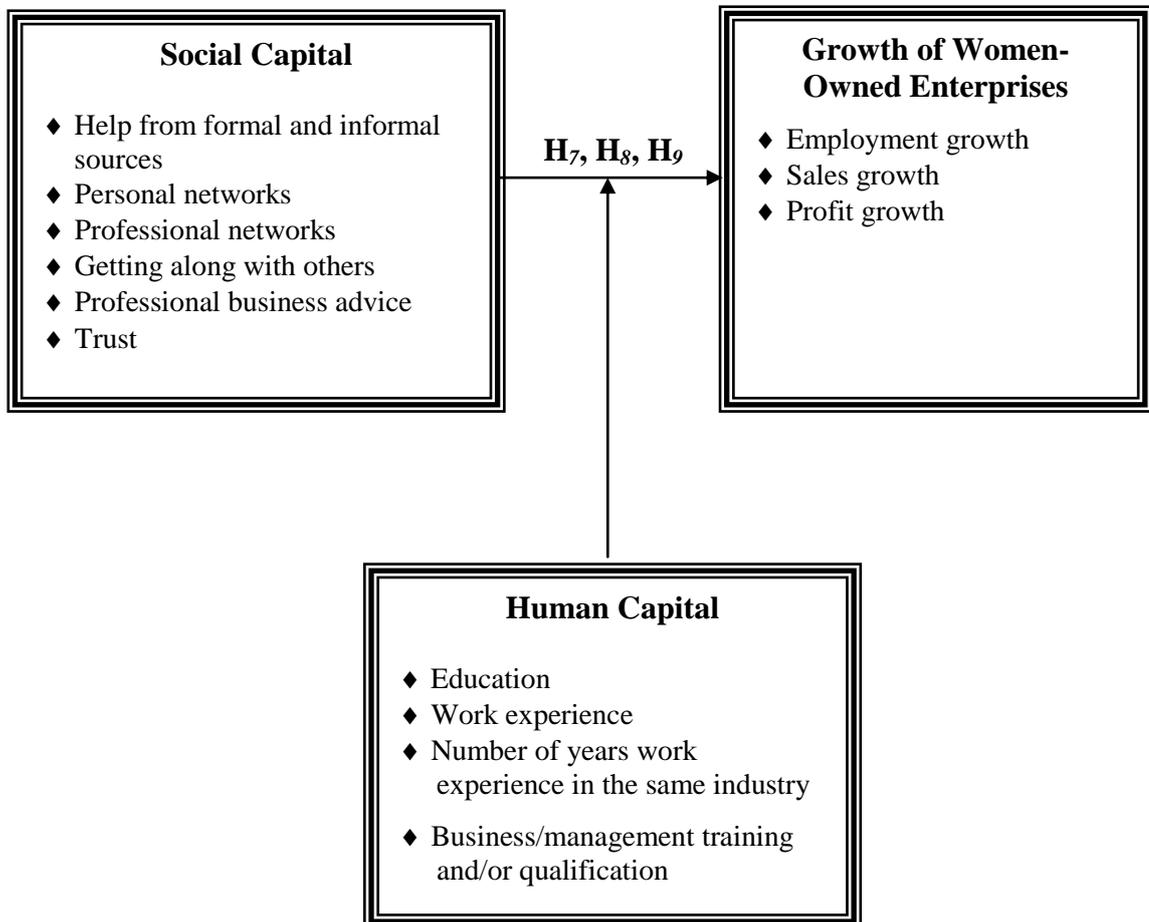


Figure 5-4 supports the earlier hypotheses  $H_1$  to  $H_3$  about social capital and the growth of women-owned enterprises; it also adds that human capital is a mediating variable for this relationship. The more human capital women-managers have, the more it helps them build social capital and in turn increase its effects on the growth of their enterprises.

**Figure 5-4: Social Capital and the Growth of Women-owned Enterprises**

## 5.6 Measurement of Variables

As seen from the theoretical propositions above, two independent variables in the framework are social capital and human capital, whereas the dependent variable is the growth of women-owned enterprises. These variables are measured across various dimensions. Each variable and its measurements form the process of operationalisation as detailed below.

### 5.6.1 Measurement of Growth

Enterprise growth can be categorised into four main types: financial, strategic, structural and organisational (Mintzberg, 1994). Since it is a very complex

process, it is difficult to link it to certain factors (Deakins, 1996). Rosa et al. (1996) outline four measures of enterprise growth, namely: entrepreneurial performance, primary performance, proxy performance and subjective measures. Because of their widespread use, primary performance measures are utilised for this study. In this case these include the number of employees (Hamilton and Lawrence, 2001; Havnes and Senneseth, 2001; Kangasharju, 2000) sales/revenue (Orser et al., 2000; Havnes and Senneseth, 2001; McMahon, 2001; O’Gorman, 2001; Sadler-Smith et al., 2001; Pena, 2002; Delmar et al., 2003; Del Monte and Papagni, 2003); and profit (Birley and Westhead, 1990; Becchetti and Trovato, 2002; Pena, 2002; Edelman et al., 2005). It may be noted that the number of employees is frequently used as a measure because entrepreneurs are willing to share such data (Altinay and Altinay, 2006; Dobbs and Hamilton, 2007). Researchers such as Delmar (1998) have used both employment and sales as measuring tools for growth and were able to find the same results because, according to Dobbs and Hamilton (2007), enterprises may grow simultaneously in sales and employment.

In this study, three dependent variables were examined: compound employment growth rate, compound sales growth rate and compound profit growth rate. These were measured using the employment, sales and profit of enterprises respectively. The findings were then interpreted on the basis of previous research and the theoretical framework outlined above. Various financial measures have been employed in previous research to evaluate enterprise sales growth (Rosa et al., 1996), profit level (Edelman et al., 2005) and the number of employees (Birley, 1985; Birley and Westhead, 1990). Compared to profit figures, information on annual sales turnover is considered to be more easily obtained through a structured questionnaire (Edelman et al., 2005; Rosa et al., 1996).

The compound employment growth rate was computed using the model

$$E_i = E_j (1 + r/100)^n$$

where  $E_i$  is the current level of employment in the enterprise,  $E_j$  employment at the time of start-up,  $n$  is the number of years from start-up and  $r$  is the compound average growth of number of employees from start-up.

The compound sales growth rate was computed by measuring the annual change in revenue from the last working year of the enterprise, using the following model

$$S_i = S_j (1 + r/100)^n$$

where  $S_i$  denotes revenue from annual sales in the most recent year,  $S_j$  denotes the annual revenue generated at the close of the first year of business,  $n$  denotes the number of years from start-up and  $r$  denotes the average growth of revenue from start-up.

And finally, the compound profit growth rate was computed using the model

$$P_i = P_j (1 + r/100)^n$$

Where  $P_i$  denotes the annual profit in the most recent year,  $P_j$  measures profit at the time of start-up,  $n$  denotes the number of years from start-up and  $r$  denotes the compound average growth of profit from start-up.

### **5.6.2 Measurement of Human Capital**

Human capital is an intangible asset. Since intangible assets cannot be observed directly, economists generally measure human capital using proxy measures based on levels of educational attainment such as the length of time adults have spent in education or the percentage of adults with tertiary-level qualifications. The common approaches to human resource accounting documented in literature (Bontis et al., 1999) are based on cost, income and education.

The *cost-based approach* considers child rearing costs (tangible cost) and costs for enhancing quality or productivity of labour (intangible). Engel (1883) cited in

Kiker (1966) considered child rearing costs up to the age of 25, while Kendrick (1976) and Eisner (1985) considered child rearing costs up to the age of 14. Intangible costs include those expenses involved in education and training, health care, mobility, replacement or the opportunity cost of human assets.

The *income-based approach* calculates discounted estimates of future income. Petty's (1960) estimation of the human capital stock in the UK is considered the pioneering work based on this approach. However it is Farr (1853) who is credited with first estimating the value of human capital using a scientific model (Kiker, 1966). Farr (1853) calculated an individual's potential lifetime earnings adjusted against his personal living expenses. The underlying principle of this model is to 'find the value of the human capital embodied in individuals as the total income that could be generated in the labour market over their life' (Lee et al., 2005: 27).

The *education-based approach* combines models of financial value with non-financial behaviours (Baron and Markman, 2000). The basic idea is that education is the key component in forming human capital, and that all investments into its accumulation are key indicators of the value of human capital. This approach measures human capital by educational indicators such as literacy rates, (Azariadis and Drazen, 1990; Romer, 1989), school enrolment rates (Barro, 1991; Gemmell, 1996; Levine and Renelt, 1992), dropout rates and repetition rates (Barro and Lee, 1996; Lee and Barro, 2001), average years of schooling in the population (Psacharopoulos and Arriagada, 1986; Wachtel, 1997), and test scores (Barro and Lee, 2001).

Scholars have observed limitations to all three of these approaches. Tao and Stinson (1997) and Dagum and Slottje (2000) combined various methods in their studies, with the idea of exploiting the strengths of each method while neutralising their weaknesses (Lee et al., 2005).

**Table 5-4: Human Capital Measurement**

<b>Variables (Items)</b>	<b>Abbreviation</b>	<b>Type of Variable and Transformation</b>	<b>Concept Derived From</b>
Education	DGRAD	Dummy variable, If degree = 1 otherwise = 0	Astebro and Bernhardt 2005; Boden and Nucci, 2000; Coleman, 2007; Dakhli and De Clercq 2004; Davidsson and Honig, 2003; Ganotakis, 2010; Jansen et al., 2013; Lam et al., 2007; Prasad et al., 2013; Santarelli and Tran, 2013; Shaw et al., 2009
Work experience in the same sector	DWEXP	Dummy variable, Yes = 1 otherwise = 0	Astebro and Bernhardt 2005; Boden and Nucci, 2000; Coleman, 2007; Dakhli and De Clercq 2004; Davidsson and Honig, 2003; Ganotakis, 2010; Jansen et al., 2013; Lam et al., 2007; Prasad et al., 2013; Santarelli and Tran, 2013; Shaw et al., 2009
Number of years' work experience in the same sector	DNYEXP	Dummy variable, If > 1 year = 1 otherwise = 0	Astebro and Bernhardt 2005; Boden and Nucci, 2000; Coleman, 2007; Dakhli and De Clercq (2004); Davidsson and Honig, 2003; Ganotakis, 2010; Lam et al., 2007; Jansen et al., 2013; Prasad et al., 2013; Santarelli and Tran, 2013; Shaw et al., 2009
Business management education or training	DBMET	Dummy variable, Yes =1 otherwise = 0	Astebro and Bernhardt, 2005; Boden and Nucci, 2000; Coleman, 2007; Dakhli and De Clercq 2004; Ganotakis, 2010; Lam et al., 2007; Santarelli and Tran, 2013; Shaw et al., 2009

In spite of the various refinements in technique over the years there is still scepticism about the accuracy of human capital measurement. Bontis et al. (1999: 395) argue that ‘... all of the models suffer from subjectivity and uncertainty and lack reliability in that the measures cannot be audited with any assurance’. Despite such criticism, understanding the value of human capital is of great importance. Countries and firms spend a considerable amount of their wealth on education and training. The huge cost involved demands some kind of justification, and research should be directed to find measures that can give consistent results.

For this study, in designing the questionnaire, the independent variables were organised into two main groups: human capital and social capital. Education, experience and age have been extensively identified and used as measures of human capital (Boden and Nucci, 2000; Camacho and Rodriguez, 2005; Cooper et al., 1988; Davidsson and Honig, 2003). Education and formal training were seen as important ways to increase human capital potential (Dakhli and De Clercq, 2004). Various authors agree that human capital can be enhanced via training (Bontis, 2002), while Ram et al. (2007) have identified occupational training and education as major indicators of human capital. Indeed level of education is acknowledged as a key measurement of human capital in relation to the growth of enterprises (Bruderl et al., 1992; Parker and Van Praag, 2006) and one of the crucial components of human capital (Schultz, 1993).

In the literature, human capital has been divided into general and specific human capital. These two categories of human capital have been differently defined by various authors. Specific human capital entails the entrepreneur’s education and professional experiences (Cressy, 1999), on-the-job training (Becker, 1962; Rosen, 1986) and tenure at managerial rank (Pennings et al., 1998). On the other hand, general human capital refers to factors such as age, gender, previous personal experience and marital status (Cressy, 1999), as well as off-the-job training (Becker, 1962).

For this study, human capital was measured using the indicators of education, work experience in the same sector, number of years of work experience in the same sector, and business management education or training. The use of these variables is in line with the 'Human Capital Theory', which proposes that by attaining higher level of education, an individual increases his/her degree of productivity (Oscarsson, 2001).

The reason for choosing education and experience is because they are cited extensively in the literature (Becker, 1964a; Bruderl et al., 1992; Boden and Nucci, 2000; Parker and Van Praag, 2006; Kugler et al., 2007). Krasniqi et al. (2007) argue that experience can play a positive role on a firm's growth.

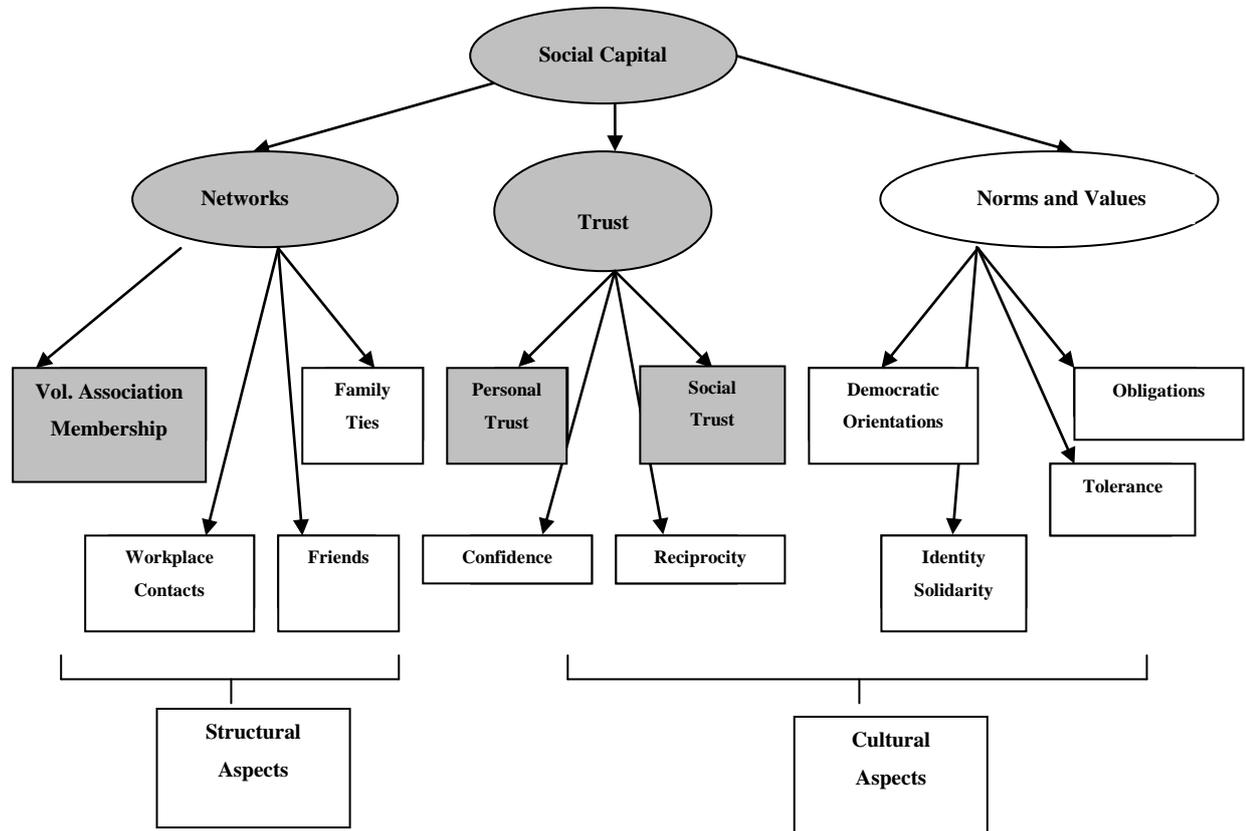
The participants were asked in this study about the highest level of education they had accomplished. For the purposes of facilitating comparisons, four categories were constructed: no education, primary, lower secondary, higher secondary and tertiary. The survey also incorporates a direct measure of work experience not only in the United Kingdom, but also from other parts of the world. It includes a question asking the participants to state their number of years of work experience. The study assigns dummy variables to various elements of human capital. Table 5-4 shows the nature of human capital variables together with their transformations.

### **5.6.3 Measurement of Social Capital**

During the last decade, a number of methods have been developed for measuring social capital. Jan Van Deth (2003) has summarised some of the main aspects to consider. He indicates two aspects to social capital: structural (connections or networks) and cultural (obligations or social norms and values, and particularly trust). These aspects need to be addressed differently. The model shows networks and trust as dominant approaches to measuring social capital, emphasising that most indicators and most attempts to operationalise concentrate on these two sources. Thus, when measuring aspects like norms and values, methods such as interviews are relevant and useful. Nevertheless, for connections and networks, it

is usually difficult to observe actual relationships, and other methods need to be considered (Van Deth, 2003).

**Figure 5-5: Van Deth's Measurement Model of Social Capital**



*Source: Van Deth (2003: 83)*

Other researchers and scholars have tried to find more quantitative ways to measure social capital. Among them, Grootaert et al. (2004) have developed an Integrated Questionnaire for the Measurement of Social Capital (SC-IQ). This questionnaire has been developed within the structure of the World Bank's efforts against poverty, and contains questions related to economic development that can be influenced by social capital.

When analysing trust the researcher has two options: on one hand, it is possible to use Putnam's definition of trust as a central component of social capital; or it is possible to use the concept at a more localised level, in relation to entrepreneurial

dynamics. However, Kim and Aldrich (2005) focus on the level of relationships, the strength of ties and the density and range of networks. In addition, as presented before, it is important to consider a critical approach to social capital, as dependent of structural conditions influenced by hierarchy, market or power relationships, and not as a ‘free’ resource accessible to everybody.

For this study, in the measurement of social capital, a number of variables were defined using previous questionnaires designed in the last decade by various researchers (Adler and Kwoon, 2002; Van Deth, 2003; Kim and Aldrich, 2005; Parker and Van Pragg, 2006).

The variables used in previous studies include size and composition, contents of network exchanges (Renzulli et al., 2000), strength and density (Aldrich, 1989; Davidsson and Honig, 2003) and trust and community activities (Mitchell et al., 2007). Social capital variables, given together with their measurements, are specified in Table 5-5, which specifies the nature and measurement of the variables. The dummy variables denoted by the prefix D were employed to inject the qualitative explanatory variables into a log linear model, while the continuous variables were represented by the numerical data.

**Table 5-5: Social Capital Measurement**

Variables	Abbreviation	Type of Variable and Transformation	Concept Derived From
Close relative(s) help in business at start-up	DCLSRETVS	Dummy variable Yes = 1 otherwise = 0	Davidsson and Honig, 2003; Prasad et al., 2013; Santarelli and Tran, 2013; Van Deth, 2003;
Close relative(s) help in business now	DCLSRETVN	Dummy variable Yes = 1 otherwise = 0	Davidsson and Honig, 2003; Prasad et al., 2013; Santarelli and Tran, 2013; Van Deth, 2003;
Importance of informal networking in growth	DINFNTG	Dummy variable Yes = 1 otherwise = 0	Lam et al., 2007; Shaw et al., 2009; Van Deth, 2003;
Membership of formal groups	DFRMEMBR	Dummy variable Yes = 1 otherwise = 0	Lam et al., 2007; Davidsson and Honig, 2003; Prasad et al., 2013; Shaw et al., 2009; Van Deth, 2003;
Importance of formal groups for business	DFRMGRP	Dummy variable Yes = 1 otherwise = 0	Lam et al., 2007; Shaw et al., 2009; Van Deth, 2003;
Number of times’ participation in formal group activities	DFRMGRPPT	Dummy variable If 1 or > per month = 1 otherwise = 0	Lam et al., 2007; Davidsson and Honig, 2003; Santarelli and Tran, 2013; Prasad et al., 2013; Shaw et al., 2009; Van Deth, 2003;
Contribution of money in the formal group	DCNTRGRP	Dummy variable Yes = 1 otherwise = 0	Lam et al., 2007; Shaw et al., 2009; Van Deth, 2003;
Help of friend(s)/acquaintances in business	DFRNDS	Dummy variable Yes = 1 otherwise = 0	Lam et al., 2007; Shaw et al., 2009; Van Deth, 2003;

Getting together informally for arts and crafts (Group 1)	DGTTGTHR1	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Help of Group 1 in business	DGRPHELP1	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Getting together informally for sports and exercise (Group 2)	DGTTGTHR2	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Help of Group 2 in business	DGRPHELP2	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Getting together informally for shopping, talking, etc. (Group 3)	DGTTGTHR3	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Help of Group 3 in business	DGRPHELP3	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Participation in community activities (Group 4)	DPCOMACT	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Help of Group 4 in business	DGRPHELP3	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Belief in helping others	DBLFHLP	Dummy variable Yes = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003;
Getting along with members of business association/sector	DGETBAS	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Getting along with family members	DGETFAM	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Getting along with friends/acquaintances	DGETFAA	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Getting along with neighbours	DGETNGB	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Getting along with sports club members	DGETSPCM	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Business advice from business owner from the same business sector	DBADBOS	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Business advice from different business sec.	DBADBOD	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Business advice from supplier	DBADSPP	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Business advice from customer	DBADCUS	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Business advice from professional consultant	DBADPCSLT	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Business advice from friend, relative, etc.	DBADFRA	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Van Deth, 2003
Trust in people from own race or ethnicity	DTSTRCE	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in family members	DTRSTFAM	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in same gender	DTRSTSGR	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in different gender	DTRSTDGR	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in neighbourhood /community	DTRSTNBR	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in people from same business assoc.	DTRSTSBA	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in people from same business sector	DTRSTDBA	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in people from other business sector	DTRSTDBS	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in suppliers	DTRSTSPLR	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in customers	DTRSTCUST	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in employees	DTRSTEMP	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003
Trust in friends	DTRSTFRND	Dummy variable If>2 = 1 otherwise = 0	Grootaert et al., 2004; Sappleton, 2009; Van Deth, 2003

## **5.7 Summary**

This chapter has examined the conceptual and measurable dimensions of the growth of women-owned enterprises, such as employment, sales and profit growth and provided the theoretical model that guides the conduct of the study reported in this thesis. The main body of the literature review focuses on factors that affect the growth of women-owned enterprises and detailed discussions about the effects of human and social capital on organisational growth. In this chapter a theoretical framework linking the factors that influence the growth of women-owned businesses and their hypothesised relationships has been developed and presented. The independent variables – human and social capital – and the dependent variable – the growth of women-owned enterprises – have also been operationalised and their dimensions outlined. The research design and methods necessary to carry out this research are described in the next chapter.

## **Chapter 6      Research Methodology and Design**

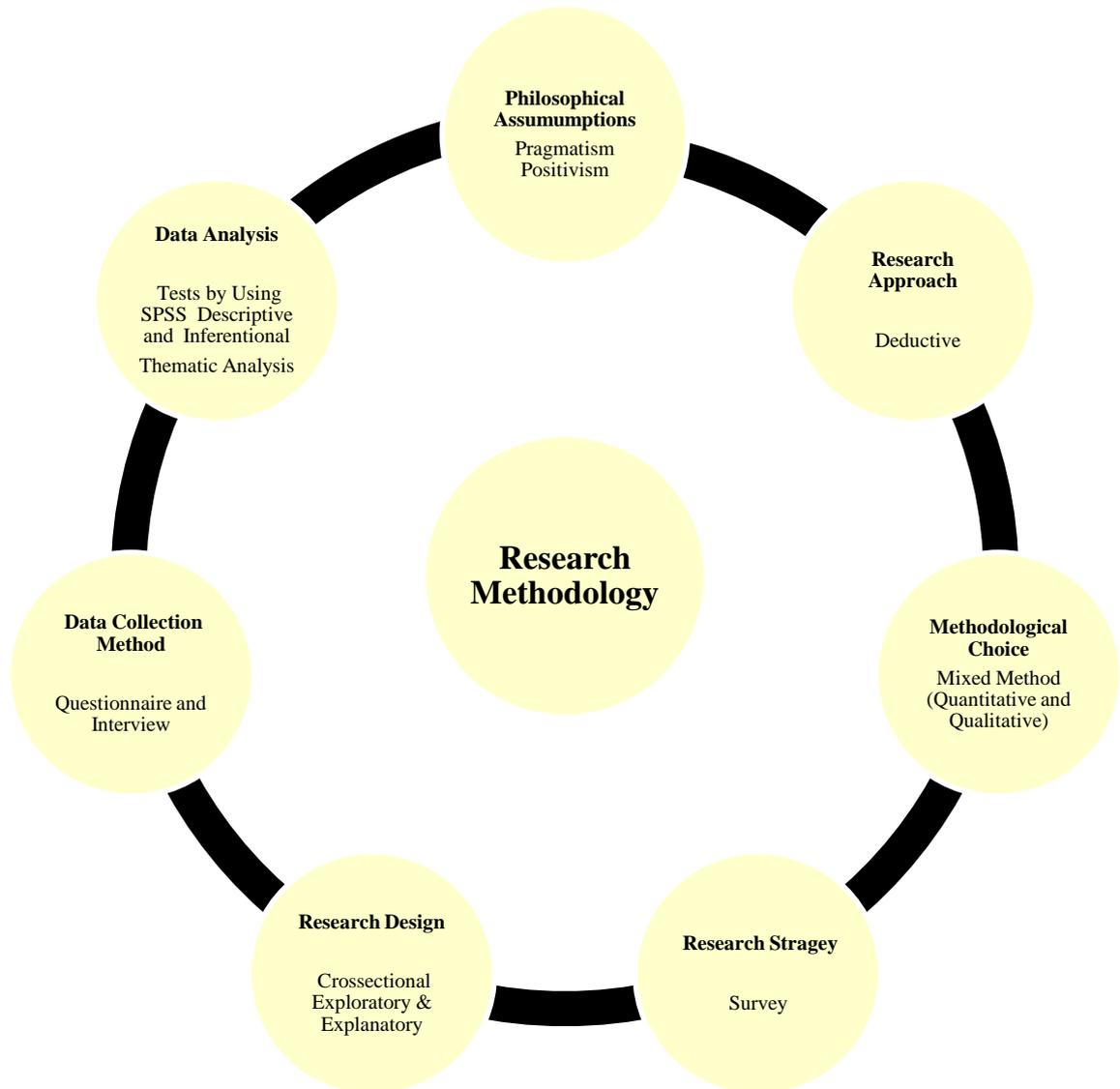
### **6.1 Introduction**

This chapter details the research design and the methodology of the empirical study on which the arguments in this thesis are based. The research rationale and details of the research design components in the order in which they were selected, and selection of the different research methods are discussed. Collectively, the selected research methods represent an overall view of the philosophical positions of the study and approach adopted during the course of this investigation.

This chapter also offers the theoretical justification for the selection of the research methods through which the research topic is examined. Thus, the ultimate goal of this chapter is to understand and to apply the research methodology to deal with the relevant research questions.

The following sections describe the research philosophy, research approach, methodological choice, research strategy, research design, data collection methods, data analysis techniques, and reliability and validity issues. The structure of the chapter is based on the ‘research onion’ of Saunders et al. (2009: 83) and the ‘research design’ of Sekaran (2003: 118). Figure 6-1 summarises the choices for different layers of the ‘research onion’ and ‘research design’. The details of these choices are given in the following sections. The chapter concludes with a summary of the discussion.

**Figure 6-1: Research Methodology Adopted for the Study**



## 6.2 Research Philosophy

Research can be categorised according to its purpose, process, logic and outcome (Hussey and Hussey, 2003). Research philosophy is more concerned with development of knowledge and the nature of that knowledge (Saunders et al., 2009). The philosophical stance of the research can help clarify the research design; knowledge of the philosophy can help to determine which research strategy and design would be suitable. It can also help the researcher identify and create complex research designs even outside their domain of experience (Easterby-Smith et al., 2009). As mentioned in the introduction and theoretical framework chapters, I intend to achieve three outcomes from this research study, namely, to critically review and evaluate the factors affecting the growth of women-owned enterprises within the realm of human based capital, to test the proposed causal and relational impacts of human and social capital factors on the growth of women-owned enterprises, and to strengthen, extend, and develop our understanding of how these relationships work or unfold. Thus, based on a positivist epistemological position and a pragmatic ontological position (Saunders et al., 2009), I am taking a philosophical stance that warrants the use of mixed methods to enquire into a specific situation (Easterby-Smith et al., 2009). Mixed methods research (quantitative and qualitative research when combined) can help to facilitate one another (Bryman and Bell, 2007). Quantitative research establishes and explains relationships among variables whereas, qualitative research helps to explore how these relationships are established (Johnson et al., 2007).

For this study, the mixed method approach has helped to get closer to the world of entrepreneurs - the quantitative survey has helped to test the cause-effect relationships between dependent and independent variables. The interview materials have helped to elaborate the relationships between variables by identifying and refining the understanding of those cause-effect relationships. This has facilitated to create a more refined and nuanced theoretical model. The results of this study presented in Chapter 7 are based on systematic protocols and techniques in order to test hypotheses (using quantitative results), whereas

Chapter 8 provides the analysis of first-hand information provided by women entrepreneurs through interviews.

### **6.3 Research Approach**

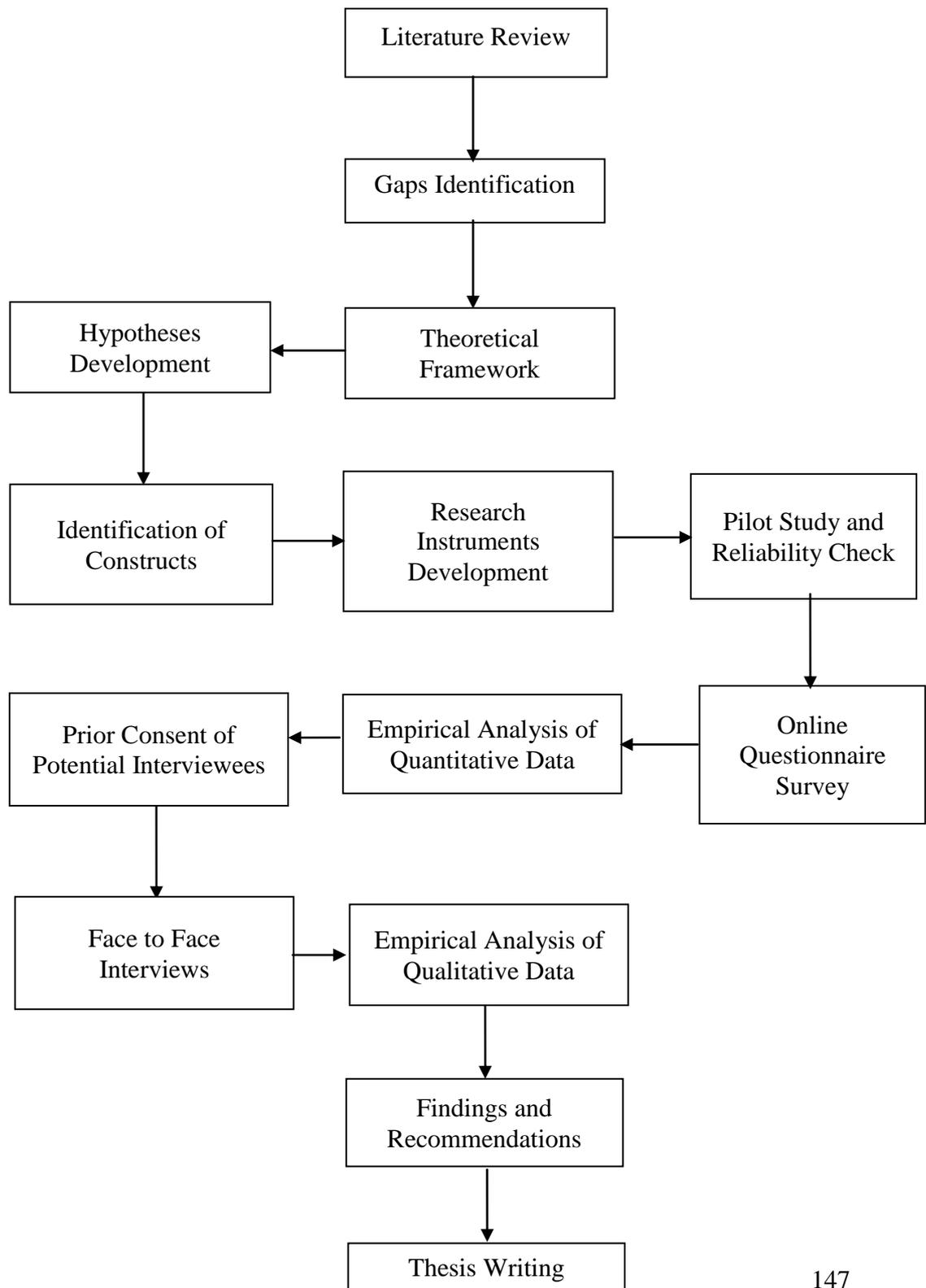
From a positivist perspective, the study adopts a deductive research approach, similar to that adopted by natural scientists, who seek the underlying causal laws that explain the phenomenon under scrutiny. This requires a highly structured methodological approach to collection and analysis of empirical data (Neuman, 2006), allowing the research to test theoretical propositions deductively, usually on the basis of statistical analyses of the data (Easterby-Smith et al., 2009).

This approach starts from the expected relationships as identified in the existing literature and involves a movement from theoretically derived propositions to the collection of data with which to test those propositions. In this movement, concepts have to be operationalised, quantifiable data collected, and then subjected to evaluation that is independent of the researcher's interests. Therefore, in adopting the deductive approach, I have chosen the mixed method. In the initial phase, I use survey method to collect quantitative data that are used to test the hypotheses formulated and described in Chapter 5. By subjecting these hypotheses to statistical testing, it is aimed to determine whether human capital and social capital are causally related to the growth of women-owned enterprises.

To examine the social meanings of the phenomenon women's entrepreneurship qualitative data are collected through one-on-one interviews and this method is complementary to the main survey method above. Accordingly, in addition to hypotheses testing mentioned above, this helps to gain an in-depth understanding of how the women entrepreneurs themselves experience and understand how their businesses have grown and what role human and social capital have played in it. Figure 6-2 describes different steps of the deductive approach applied for this study. The hybrid use of the large sample survey method and detailed interviewing of women entrepreneurs allows me to be deductive in testing a theory of the growth of women's entrepreneurial ventures, and thereby also gain

the benefits of positivist approach. Under the deductive approach, I use statistical techniques to test the general features of the proposed theoretical framework (Sekaran, 2003).

**Figure 6-2: Research Process Based on Deductive Approach**



## 6.4 Research Strategy

A clear research strategy allows third parties to evaluate how carefully the researcher has applied the particular strategy and assess the legitimacy of the proposed investigation. At this point a clear distinction must be made between research strategy, research design and tactics. Strategy is more concerned with the overall approach adopted by the researcher, whereas design and tactics are more concerned with the details of data collection and analysis methods (Sekaran, 2003; Gray, 2009). The extant literature suggests many research strategies, including experiment, surveys, case studies, grounded theory, ethnography and action research. The research strategy applied for any study may be either cross-sectional or longitudinal, based on the time horizon. This research is cross-sectional as it studies the role of human and social capital in the growth of women-owned enterprises at a particular time.

Research strategy refers to the general plan about how the researcher wants to answer a set of research questions. It should thus contain clear objectives derived from the research questions, specific sources of data collection and any inevitable contextual constraints known to the researcher. Therefore this study adopts survey strategy and interview strategy to assess the impacts of human and social capital factors on the growth of women owned enterprises, the main objective of the study derived from the research problem presented in Chapter 1.

I have adopted the survey strategy within a sample of owner-managers/entrepreneurs of women owned enterprises in the UK. This strategy is usually associated with deductive approach and is one of the most common tools in management science research. Use of surveys in this study allows me to collect large quantities of data from a sizeable population of women entrepreneurs in a highly economical manner (Bryman and Bell, 2007). In addition, face to face interviews have helped me to get an in-depth understanding of growth processes as understood by the actors themselves.

The research strategy undertaken is linked to the philosophical underpinning described at the beginning of the chapter. The mixed methods and deductive approach have been selected in this thesis; they all finally serve a common purpose of testing theoretical propositions.

## **6.5 Research Design**

Research design is one of the components or phases of the complete empirical research process (Sekaran, 2003: 56). It deals with planning, the location of the study, the selection of representative sample from the study's population domain, data collection and analysis. The research design of any study is a framework of the research in action and can be exploratory, descriptive and/or explanatory (Miles and Huberman, 1994; Yin, 2009). This study is both exploratory (by discovering ideas about and gaining insight into the problem) and explanatory (by studying the cause and effect relationship) in nature.

In this study, the research process can be defined by the following steps:

- Observation; that is, broad area of research interest identified
- Preliminary data gathering; that is, literature survey and industry data
- Research problem delineated and purpose, context, aim and objectives defined
- Developing theoretical propositions; that is, clear identification and labelling of concepts and theoretical relationships
- Generation of hypotheses and operationalisation of variables
- Selection of research methods
- Data collection, analysis and interpretation
- Hypotheses substantiated, research questions answered
- Writing up the thesis

Having so far defined the research problem, theoretical framework, variables and methodological position, the next step is to design the research in terms of the requisite data collection and analysis (Sekaran, 2003: 117). The research design

involves a series of rational decisions involving all of the research methods and components that enable the conduct of the research. The main purpose of using data from the interviews is to explore the proposition while focusing on developing a deeper and richer understanding of growth by examining growth from the entrepreneur's viewpoint. The purpose of using a questionnaire is to test associations between independent and dependent variables already described (Gray, 2009; Oppenheim, 1992).

Survey research design requires the researcher to take extra care over issues of reliability and validity regarding data collection instruments, data, results and findings. I have inculcated the required rigour and quality by applying triangulation (especially for data collection by using quantitative and qualitative methods), which are discussed in the following sub-section.

### **6.5.1 Application of Triangulation**

Triangulation is a concept that has its roots in the surveying branch of civil engineering wherein a place is exactly located with the help of triangulation. The concept that was first introduced to management by Webb et al. in the 1960s and again by Denzin in the 1970s (Bryman and Bell, 2007), is applied by management researchers either to reduce an occurrence of errors because of lack of data, observations, methods or theories, to get multiple perspectives and angles on the subject matter (Robson, 2002). This involves combined application of different methods, study groups, research settings and/or methodological perspectives in dealing with a phenomenon (Flick, 2002). Use of multiple sources in triangulation increases the reliability and validity of the research that allows the researcher to accept as convincing and accurate the results and findings from the data analysis (Yin, 2009) and to be confident about providing recommendations based on their findings.

Triangulation may take place in data collection sources, methodologies, approaches, analyses and theories which combine to strengthen the utility and contribution of the research studies (Marshall and Rossman, 1989; Miles and

Huberman, 1994). Thus, researchers apply triangulation to validate their results and be confident about providing recommendations based on their findings.

Neuman (2006) suggests that the use of multiple methods helps solve research issues because methodological weaknesses will tend to cancel each other out and hence help to reach a more reliable and valid set of conclusions. Brannen (1995) supports this claim by saying that triangulation enables the researcher to remove biases and develop a holistic view of the theory or phenomenon under investigation. Triangulation supports the use of evidence from a number of sources or through different data collection instruments, such as the interviews and questionnaires used in this study; or supports different designs, methods and approaches for the same study, such as hybrid methodologies and mixed methods research (Partington, 2002; Silverman, 2000). In this research study, I have applied the following forms of triangulation:

Data sources: Multiple regions selected with stratification in the sampling

Data collection: Primary data through questionnaires and interviews

Analyses: Both qualitative and quantitative analyses

Bryman and Bell (2007) emphasise that the combination of methods enhances the validity of conclusions since comparing results can generate mutual confirmation. In addition to such an increase in validity, there are five further reasons to combine study methods (Greer and Greene, 2003); first, where convergence of results is required; second, where overlapping facets of a phenomenon emerge from complementary methods; third, when the preceding method can help the following method; fourth, where contradiction and fresh perspective emerge; and, fifth, when combined methods can increase the scope and scale of the research. These arguments will be drawn on as they arise during the course of reporting the research.

## **6.6 Data Collection Methods**

As already mentioned I have collected data by adopting a survey design and at the same time sought to triangulate data collection. Secondary data from the academic literature and from industry have already been analysed in formulating the research propositions. Thus, the main aim of the survey is to assess the relationships between variables and their strength. This requires measurements of the variables based on valid data. This section explains the data collection process required for a selected cross-sectional survey design. A cross-sectional design was chosen because the survey involves selecting women-owned organizations as units from different contexts, both geographical and industrial (Easterby Smith et al., 2009).

The data collection method is an important component of the research design. There are two sources and types of data: secondary data, which already exist in the public domain and have been collected by others; and primary data, which are directly collected by the researcher for the purpose of the investigation. Different data collection methods have different biases associated into them, so applying triangulation and collecting data from multiple sources can increase accuracy and thus validity (Gray, 2009). In this study primary data were collected from women owner-managers/entrepreneurs in the UK and the unit of analysis of the study is the woman owner-manager/entrepreneur. Out of the three major primary data collection methods used in management science, i.e. interviews, questionnaires and observations (Bryman and Bell, 2007), questionnaires and interviews are used in this study.

### **6.6.1 The Sample**

Sampling plays an important role in the research design. The researcher has to use a sufficient number of units of analysis to provide enough primary data for statistically legitimate analysis to take place. Making use of sampling methods is a tactical, practical, feasible and advantageous approach because analysing a whole population is generally not possible. It is rare that a sample is exactly the same as a population. In this study, the sampling involved two stages: First, three regions

were selected within the UK; second, a sample of women entrepreneurs were selected from the total population of women entrepreneurs in the three regions.

There are two major types of sampling, using probability and non-probability methods. Criteria such as restriction, filtration, random selection, stratification, proportion, clusters and the probability of getting selected creates more detailed categories of method. Probability methods differ from non-probability methods in terms of whether elements in the population will have some chance or probability of selection (Saunders et al., 2009). In this study, I used probability sampling to provide respondents with an equal chance of being selected from the overall population. I took help from an online database (available through Thomson Local) of entrepreneurs actively running their businesses in three selected regions of the UK. This online database helped me in categorising women-owned enterprises operating for at least three years and employing more than one individual. There are two methods available for deciding the size of the sample to be used, based on number of variables and based on the margin of error required.

#### ***6.6.1.1 Based on the Variables***

The first method is to finalise the sample size based on variables, using the formulae provided by Stevens (1996) and Tabachnick and Fidell (2007). This allows a sufficient number of responses from which to carry out descriptive statistical analyses. Stevens (1996) recommends that for business research about 15 subjects are required per predictor or variable in order to increase the reliability of the equation or results. In this study, there are three major variables: human capital, social capital and enterprise growth; the rest are considered sub-dimensions. Hence, according to Stevens' (1996) formula the required sample size would be  $15 \times 3 = 45$ .

Tabachnick and Fidell (2007) recommend an equation to calculate sample size, taking into account the number of independent variables available for testing in the proposed theoretical framework. According to this method, it is  $N > 50 + (8 \times m)$  where  $m$  is the number of independent variables and  $N$  is the size of sample.

Considering all independent variables (including all sub-variables of human and social capital) as per the theoretical framework, this study requires a minimum  $50 + (8 \times 44) = 402$  respondents. More cases would be needed if the independent variables are skewed. A major problem is that there are approximately 100,000 women-owned enterprises in the three regions of the UK; hence 45 responses may not adequately represent the overall population. Thus, to increase the reliability and validity of the data, I also had to consider the margin of error.

#### ***6.6.1.2 Based on the Margin of Error***

The larger the size of a sample, the lower is the likely error in generalising across the rest of the population. Hence, probability sampling provides a balance between the accuracy of findings from the data collected and the resources invested in data collection such as time, money and efforts in checking and analysing that data. One must decide the tolerable margin of error; that is, the accuracy one requires from the estimated sample. For example, in business research normally a 95% level of certainty is implemented. This means that if this sample is selected 100 times, at least 95 of these samples would be certain to represent the population from which they are drawn (Saunders et al., 2009).

In this study, I wished to achieve a minimum 95% accuracy. Thus, sampling must be selected for a higher level of accuracy such as 97%. For a population of 1 to 10 million, 97% accuracy requires 1067 responses and 95% accuracy requires 384 responses (Saunders et al., 2003: 156). I selected three regions of the UK: Greater London, the East of England and the South of England as potential respondent locations. From the database of Business Connections (available from Thomson Directories), 2760 women entrepreneurs were selected (having employees and working for at least 3 years) at random and questionnaires were launched. Out of 2760 questionnaires launched through the online survey, 517 were received, which is more than the required 384 responses to achieve an accuracy level of 95%. The response rate of 18.73% lies within the range of other studies conducted to measure the growth of firms in the UK, such as 9.26% in the research

conducted by Altinay and Altinay (2006) and 22.26% in the study carried out by Basu and Goswami (1999).

### **6.6.2 Interviews**

I used interviews as a data collection tool in this study to support the assessment of the theoretical framework and to evaluate the findings of the questionnaires. Interviewing is a prominent technique when rich description and thorough assessment of variables are required.

Structured interviews have a standardized administration of schedule and issue the same questions to all respondents in the same order and context (Gray, 2009). Questions tend to be very specific and closed, with answers often having a fixed range of choices (Bryman and Bell, 2007). Standardization in the discussion can reduce any chance of variation and errors, but it may also reduce the opportunity to extract more information and may add to the researcher's bias. On the other hand, a variation can be more apparent if one applies semi-structured interviews, in which the researcher allows respondents to disclose more information on their own. Questions set in advance may act as a guideline to the interviewer but an actual semi-structured interview has more freedom to roam while maintaining a degree of control. The interviews were semi-structured, one-to-one and aimed to collect qualitative data from the respondents. Errors from the data collection and processing of interviews are controlled by way of appropriate questions, creating a rapport with interviewees, information recording, clear purpose, flexibility of questions, necessary use of prompts, probing and trial interviews to train the author (Gray, 2009).

Being responsible for recording and interpreting responses, the interviewer has to conduct the interviews within a clear ethical framework and with a sense of self-reflexivity to control for interviewer bias. Therefore, interviews require a protocol that provides control over an interview process. The interview protocol for this research study was designed as follows (Easterby Smith et al., 2009; Gray, 2009).

<b>Type of Interviews:</b>	Face to face and semi-structured
<b>Approximate length:</b>	45 to 70 minutes
<b>Level of respondents:</b>	Women owner-managers/entrepreneurs
<b>Approach:</b>	Information exploration and high level of probing
<b>Place of interview:</b>	Company offices or conference location
<b>Language of interview:</b>	English
<b>Confidentiality:</b>	Explicitly clear to the respondents that purpose of this research is purely academic and in no case will the identity of the individual or the organisation be disclosed
<b>Morality and Ethics:</b>	Each respondent is requested in advance and data collection is done on the receipt of consent of interviewee/participant
<b>Recording responses:</b>	Recording is done in all the interviews and the participants are assured that the recording will be erased after transcription
<b>Type of questions:</b>	Open-ended, describing and explaining the situation and growth of an enterprise

I conducted 42 interviews to support or validate the findings of the questionnaire. In response to the quantitative survey, 57 women entrepreneurs agreed to be interviewed one to one. Out of those 57 respondents, 42 were selected on the basis of the following criteria:

- a. Women who have been in business for more than 36 months
- b. Women working in each of the three different geographical regions
- c. Women representing all sectors, i.e., manufacturing, trading and services

The advantages of using interviews relate to the possibility of obtaining specific and in-depth knowledge of the role of social and human capital in the growth of women-owned enterprises. The design of the questionnaire included many ways in which the notion of social and human capital may be interpreted by women. Direct questions about social and human capital were embedded in questions related to education, training, experience, friends, social activities, networks,

family ties and communitarian activities. Particular attention was paid to the design of the questions because, as argued by Converse (1986: 15), ‘making questions conceptually clear may be the most difficult assignment for social scientists, for they are usually rather charmed by abstract thinking in the first place, and then are trained in its pleasures’. This aspect has indeed been particularly challenging for me as the researcher. Notwithstanding this, the questionnaire offered enough flexibility while adhering to the main categories mentioned above.

Another important aspect of conducting semi-structured interviews was the consideration of the context and history of the business. A process of establishing trust was set in place by beginning the interview with questions about the ideas that inspired the business and the type of values and vision held by women when starting their business. Many of these questions were evaluated by the interviewees as inspirational, in that they provided a good opportunity for them to clarify their aims and values. In addition, questions about turnover and profits were included, although answers were optional. This discretion facilitated a degree of flexibility and established a good atmosphere in which the interviewees could disclose certain other aspects related to the main research questions. Indeed, in some cases, the interview process revealed sensitive issues for women entrepreneurs.

As stated earlier, care was taken to interview an equal number of participants from the three geographical regions. All the interviews were conducted either face to face (at the participants’ workplaces) or on the telephone as per the choice and availability of the interviewees. All the interviewees were presented with a ‘confidentiality and anonymity’ statement. Therefore, pseudonyms for names and organisations have been used here. Tables 6-1, 6-2, and 6-3 illustrate pseudonyms, initials, respondents’ position and organisation sector for the three regions.

**Table 6-1: Interviewees for Qualitative Analysis  
(East of England Region)**

	<b>Pseudonym</b>	<b>Initial</b>	<b>Position</b>	<b>Business Sector</b>	<b>Age at Start-up</b>	<b>Marital Status</b>
1	Annie	A1	CEO/Owner	Services	33	Living with partner
2	Beatrice	B1	CEO/Owner	Services	37	Living with partner
3	Catherine	C1	CEO/Owner	Trading	29	Living with partner
4	Deborah	D1	CEO/Owner	Services	39	Divorced
5	Fareha	F1	GM/Owner	Services	34	Living with partner
6	Gia	G1	CEO/Owner	Manufacturing	41	Living with partner
7	Jacqueline	J1	CEO/Owner	Services	38	Single
8	Laura	L1	COO/Owner	Services	36	Divorced
9	Martha	M1	CEO/Owner	Services	32	Living with partner
10	Natalie	N1	CEO/Owner	Manufacturing	29	Living with partner
11	Radha	R1	GM/Owner	Trading	36	Living with partner
12	Sitara	S1	CEO/Owner	Services	37	Divorced
13	Tamara	T1	Owner	Services	29	Single
14	Zara	Z1	CEO/Owner	Services	36	Living with partner

One of the other purposes of the selection of semi-structured interviews was to acknowledge the authenticity of the female voice and the particularities of addressing women entrepreneurs' issues. The interview process, furthermore, allowed great scope for exploring ideas and establishing correspondences in the perception of social and human capital for women entrepreneurs. Each interview lasted from 45 to 70 minutes and was audio recorded. All the participants gave permission to record their interviews, which increased my ability to re-examine the data in detail. A large amount of data was generated, which were transcribed verbatim and saved to ensure accessibility, confidentiality and safety. As promised, audio files were deleted after they had been transcribed.

**Table 6-2: Interviewees for Qualitative Analysis  
(South East of England Region)**

	Pseudonym	Initial	Position	Organisation Sector	Age at Start-up	Marital Status
1	Amira	A2	CEO/Owner	Services	31	Living with partner
2	Chris	C2	Owner	Services	34	Living with partner
3	Dorothy	D2	CEO/Owner	Services	25	Single
4	Emma	E2	Owner	Services	29	Divorced
5	Francesca	F2	GM/Owner	Trading	31	Single
6	Kudisia	K2	CEO/Owner	Manufacturing	27	Living with partner
7	Lalita	L2	CEO/Owner	Services	33	Living with partner
8	Nicole	N2	CEO/Owner	Services	36	Divorced
9	Patricia	P2	CEO/Owner	Services	35	Living with partner
10	Rebecca	R2	CEO/Owner	Trading	26	Living with partner
11	Sara	S2	GM/Owner	Services	21	Living with partner
12	Tricia	T2	CEO/Owner	Services	31	Divorced
13	Victoria	V2	CEO/Owner	Trading	43	Divorced
14	Wendy	W2	COO/Owner	Services	36	Living with partner

The approach adopted for data analysis was based on the instructions generated by earlier researchers (Creswell, 2003; Denzin and Lincoln, 1998; Tesch, 1990). It included such steps as reading through the data, underlining themes and making notes to get an overall sense of its meaning. Initially emerging themes were noted, categories were formed and codes were attached to these categories. For thematic analysis, “theory driven approach” and prior–research-driven approach” were adopted (Boyatzis, 1998: 38). The process included generating a code from theory and/or previous research, reviewing and rewriting the code for applicability to the raw information, determining the reliability, and then validating and using the code for interpreting results (Boyatzis, 1998). This was done and the themes/categories were grouped to perform a first interim analysis, from which the researcher could check whether the data related to the research objectives. The interim analysis confirmed that the interviews had generated relevant data.

The data were analysed in detail according to the themes generated by the quantitative results (prior-research-driven approach). The results were then presented in tables identifying a list of categories under specific themes and an example of at least one typical quotation was also given in each category. The process from data collection to the presentation of data is described in the next sub-section.

**Table 6-3: Interviewees for Qualitative Analysis  
(Greater London Region)**

	Pseudonym	Initial	Position	Organisation Sector	Age at Start-up	Marital Status
1	Aisha	A3	CEO/Owner	Services	28	Living with partner
2	Beatrice	B3	CEO/Owner	Services	29	Living with partner
3	Charlotte	C3	CEO/Owner	Services	34	Living with partner
4	Emily	E3	CTO/Owner	Services	35	Living with partner
5	Fiona	F3	GM/Owner	Trading	37	Living with partner
6	Gemma	G3	CEO/Owner	Trading	32	Divorced
7	Iona	I3	CEO/Owner	Services	33	Single
8	Jennifer	J3	Designer	Services	32	Divorced
9	Kadene	K3	CEO/Owner	Services	35	Living with partner
10	Laura	L3	CEO/Owner	Manufacturing	31	Single
11	Madhuri	M3	GM/Owner	Trading	23	Living with partner
12	Nikita	N3	CEO/Owner	Services	34	Divorced
13	Rachel	R3	GM/Owner	Services	45	Single
14	Sharon	S3	CEO/Owner	Services	36	Single

### 6.6.3 The Survey Questionnaire Design

A questionnaire is an instrument that presents structured questions to extract information from respondents. These questions are usually in a pre-determined order and have a uniform scale to measure dimension. Questionnaires are one of the most popular instruments for data collection because they:

- Save time and cost
- Allow quick extraction of data from respondents

- Provide flexibility in arranging time and place
- Have readily available software tools for analysis, like SPSS
- Can make large samples feasible
- Lack the same potential for bias found in observation and interview methods (Boyce, 2003).

A poorly constructed and administered questionnaire cannot provide accurate data by which to analyse questions or test hypotheses. In preparing a questionnaire, the researcher must consider how he/she intends to use the information. One must know the statistical analyses to be used before a questionnaire is launched. I developed the questionnaire for this study to collect data with regard to entrepreneurial human and social capital variables and the performance of women entrepreneurs' firms (in terms of number of employees, sales/turnover and profits). The initial stage sought to gather data regarding the enterprises' relative access to and possession of human capital through established indicators (Boyce, 2003). Becker's (1964) definition of 'human capital' was employed to focus data collection on the owner's education and work experience.

Similarly, the number of employees, revenue/turnover and profit were taken as the indicators of 'enterprise growth' (Brush et al., 2002; Carter and Allen, 1997; Parker and Van Praag, 2006; Rosa et al., 1996). Data were also collected regarding the entrepreneur's social capital. While the term 'social capital' has been variably defined (Bourdieu, 1986; Portes, 1988; Lin, 2000), scholars within the entrepreneurship field have identified a person's individual access to and possession of social capital as being dependent upon the content, rational dimensions and size of their individual contact networks (Chaganti et al., 1995; Davidsson and Honig, 2003; Lechner and Dowling, 2003). Nahapiet and Ghoshal (1998) state that social capital amounts to the potential and actual resources gained by individuals from knowing others, being part of a network or merely having a good reputation. Defined in this manner, the data collected on social capital were expected to be very valuable in understanding the reputation of the enterprise. Data collection was informed by established network structure

(density, size, frequency of interaction, and intensity and durability of relationships) and social network theory (Mitchell, 1969). Entrepreneurs' personal contact networks were sought, and the works of Cromie and Birley (1992), Aldrich et al. (1989), Renzulli et al. (2000) and Aldrich (1987; 1989) greatly informed the formulation of the questions. Analysis and interpretation were guided by the theoretical framework and by prior findings of the role of human and social capital in the growth of enterprises.

### ***6.6.3.1 Question Types***

The Likert scale was principally used in the questions to maintain uniformity and ease of coding and categorising variables in responses. The questions were easy to understand but a pilot launch method was deployed to test the questions. The coding scale was explained to respondents, who were asked to select their answer using different scales for all the questions except demographic details. The academic purpose of the study was also explained beforehand to remove any bias. The following points, mentioned by (Pallant, 2007), were taken into account when designing the questions:

- Use of simple and easy to understand language
- No negatively worded questions
- No use of jargon and words with double meanings
- No use of abbreviated words
- All questions to the point for measuring the required dimensions

When a logical procedure is followed for questionnaire design, for example pilot testing the questionnaire before conducting the main survey, bias is reduced and validity increased; ethical considerations also benefit.

### ***6.6.3.2 Piloting of the Questionnaire***

To improve the questionnaire and avoid ambiguous words, sentences or phrases, two preliminary tests were undertaken before the formal questionnaire was launched. Firstly, a pre-test was made on three fellow researchers at Royal

Holloway for final wording and sentence checking. The quasi-final version of the questionnaire was then piloted on seven women entrepreneurs in the East of England region. Their feedback regarding their comprehension of the questionnaire was discussed in detail and suggestions were incorporated into the final version of the questionnaire.

## **6.7 Data Analysis Techniques**

The raw data obtained from the questionnaires were coded for descriptive statistics. Systematic coding of data was required because they may have been collected in a hurry or respondents may have not entered the details correctly. Questionnaire data were checked for any inconsistencies. Respondents normally do not answer every question in a questionnaire, so it was necessary to code the data. Various statistical tests were carried out using SPSS software package for coded and categorised data (Pallant, 2007). Interview data were transcribed, categorised, unitised and then analysed according to the theoretical propositions (Saunders et al., 2009).

### **6.7.1 Quantitative Approach and Analysis of Questionnaire Data**

A questionnaire survey was used to gather quantitative data to investigate the hypotheses. As stated earlier, the questionnaire encompassed a mixture of scaled, rank-order items, and multiple choice and open-ended questions that were designed to determine the role of social and human capital in women-owned enterprises growth in the UK. The simple and straightforward nature of the questionnaire design eased the process of questionnaire administration, as well as the data tabulation and analysis conducted at a later stage. Furthermore, respondents were able to answer the questions without any difficulties.

### **6.7.2 Empirical Analysis**

SPSS was employed to analyse the quantitative data. Random sampling was used to minimise the biases which arise in the collection of data; however, in practice, the sample broadly represented the social spectrum and covered three regions of

the United Kingdom. The independent variables were grouped into two main categories of human and social capital, and together the three dependent variables (compound employment growth rate, compound sales growth rate and compound profit growth rate) and the nine hypotheses were analysed using statistical techniques such as regression, bivariate analysis (Field, 2006; Wright, 1997), kitchen sink method and moderation analysis. The correlation between the variables was performed using the Pearson product-moment correlation coefficient, which was computed to establish the strength of the relationship between the dependent (compound growth rates) and independent variables (human and social capital).

Despite the usefulness of correlation measures, they do not show the predictive power of variables. The effect of independent variables on dependent variables can be mapped out after a regression analysis has been performed. Being a parametric technique, regression analysis requires that certain assumptions are fulfilled in advance, chief among them the 'normality of the response variable' (Pallant, 2007). To normalise the data, transformations such as inversion, log and square root were applied. They did not normalise the response variables. Therefore, the Box-Cox transformation was applied (Cook and Olive, 2008; Velilla, 1993) and the results were tested for ordinary least squares (OLS) such as linearity, heteroscedasticity, independence of observations, autocorrelation and collinearity; no issues were noted.

Moderation analysis was carried out because it is not only descriptive but also underscores the functional relationships among the variables being investigated. SPSS, as fronted by Preacher and Hayes (2008), was employed for the purpose of determining the moderating effect of human capital on the relationship between social capital and the growth of enterprises in terms of employment, revenue, and profit.

The multiple regression analysis that was performed depended upon the relationship between the dependent and the independent variables. After

identifying the significance of the specific blocks of variables, the significance of independent variables was identified using the kitchen sink method for multiple regressions (Basu and Goswamy, 1999; Altinay and Altinay, 2006). This model was run using each of the dependent variables with all the independent variables to progress to a simpler model of regression estimation as shown

$$\log y_i = \alpha_0 + \beta_{i1}D_{xi1} + \beta_{i2}D_{xi2} + \beta_{i3} \log x_{i3} + \dots + \beta_{i44} D_{xi44} + u_i$$

Where  $D$  denoted the dummy variables and  $i$  ranged from 1 to  $N$ . When running the initial regression, all variables were run, and subsequent stages entailed the elimination of insignificant variables using the P values of 0.2, 0.1 and 0.05 respectively. A regression model was thus arrived at by eliminating all variables with  $P > 0.05$ .

#### **6.7.2.1 Bivariate Analysis**

Bivariate analysis (correlations) involved the determination of inter-correlations between social capital and compound growth rates, and human capital and growth of women-owned enterprises. These were measured using Pearson product-moment correlation coefficients, which were calculated to establish the significant positive or negative influences of both human and social capital on the compound growth rates. The results were used to test the six hypotheses,  $H_1$ – $H_6$ .

#### **6.7.2.2 Regression Analysis**

As previously mentioned, multiple regressions require the fulfilment of certain assumptions, chief among them is the normality of the response of the dependent variable. Normality tests were used to determine whether or not the data followed a normal distribution. Normality tests include the Lilliefors test for normality, D'Agostino's K-squared test, the Cramér–von-Mises criterion, the Anderson–Darling test, the Shapiro–Francis test for normality, Pearson's chi-square test and the Shapiro–Wilk test (Gujarati, 2003). For these data, the Shapiro–Wilk test and Kolmogorov–Smirnov test, together with the third and fourth standardized moments (kurtosis and skewness), were employed to test normality.

For the Shapiro-Wilk normality test, if the value of  $p <$  chosen value of  $\alpha$  (alpha), then the null hypothesis,  $H_0$ , that the population is from a normally distributed population, is rejected, and vice versa. In the application of Box-Cox transformation, values  $< 1$  were traced out. The transformed growth rates of the dependent (Z) variables took the form of:

Transformed employment growth rate,	$Z_E = (\text{employment growth rate}) * \lambda$
Transformed sales growth rate,	$Z_S = (\text{sales growth rate}) * \lambda$
Transformed profit growth rate,	$Z_P = (\text{profit growth rate}) * \lambda$

Where,  $\lambda$  denotes the minimum root mean square error (RMSE).

### ***6.7.2.3 Ordinary Least Squares Assumptions***

#### ***Linearity***

The assumption is that a linear relationship exists between two variables (Hair, et al., 1998). The standard deviation was used to determine the linearity of the data set (the similarity between the standard deviation of residuals and that of the dependent variable).

#### ***Homoscedasticity***

This is mainly related to the dependence relationships between variables. For this study, homoscedasticity was observed via graphical analysis, especially through residual analysis (Hair et al., 1998), from which a pattern of linearity was determined.

#### ***Independence of Observations and Auto-Correlation***

The Durbin Watson Coefficient (DWC) was used to test for the independence of the observations and for the presence of auto-correlation whereby a value of 2 or close to 2 is taken to indicate the independence of observations and no auto-correlation.

***Multicollinearity***

According to Hair et al. (2007), multicollinearity occurs when one independent variable is highly correlated with a set of other independent variables. Values of tolerance and inflation factors ratios (VIF) were used to trace multicollinearity.

***Inter-Correlations (With the Transformed Variables  $Z_E$ ,  $Z_S$ , and  $Z_P$ )***

An evaluation of the relationships between the predictors and the transformed variables  $Z_E$ ,  $Z_S$ , and  $Z_P$  were carried out. The Pearson product moment formula was used to calculate the strength of these relationships. Regression analysis was performed separately on both social capital and human capital variables to establish their significance on the compound growth factors. The regression analysis gives the coefficients for the human capital and social capital variables, which are used to construct the transformed, predict and models.

***6.7.2.4 Moderation Effect of Human Capital on Social Capital and the Growth of Women-Owned Enterprises***

The moderation effect was investigated through the last three hypotheses ( $H_7$ – $H_9$ ), which were constructed to determine the extent to which human capital is responsible for the relationship between growth and the social capital of women-owned enterprises. The effect of human capital as a moderating variable was calculated on the interaction of social capital (independent variable) and compound employment growth rate, compound sales growth rate, and compound profit growth rate (DVs) respectively for hypotheses  $H_7$ ,  $H_8$ , and  $H_9$ .

Moderation can be tested by analyzing the interaction effect of a predictor and the moderating variable on a response variable. This can be achieved by regression analysis where the statistical significance of an interaction between independent variable (IV) and moderating variable (MV) predictors in a linear regression line is assessed by forming a new variable that is the product of independent variable and dependent variable (DV) and including this product term in a regression, along with the original predictor variables. The significance of interaction term

indicates a moderating effect of MV on the relation of IV and DV (Baron and Kenny, 1986).

### **6.7.3 Qualitative Approach and Analyses of Interview Data**

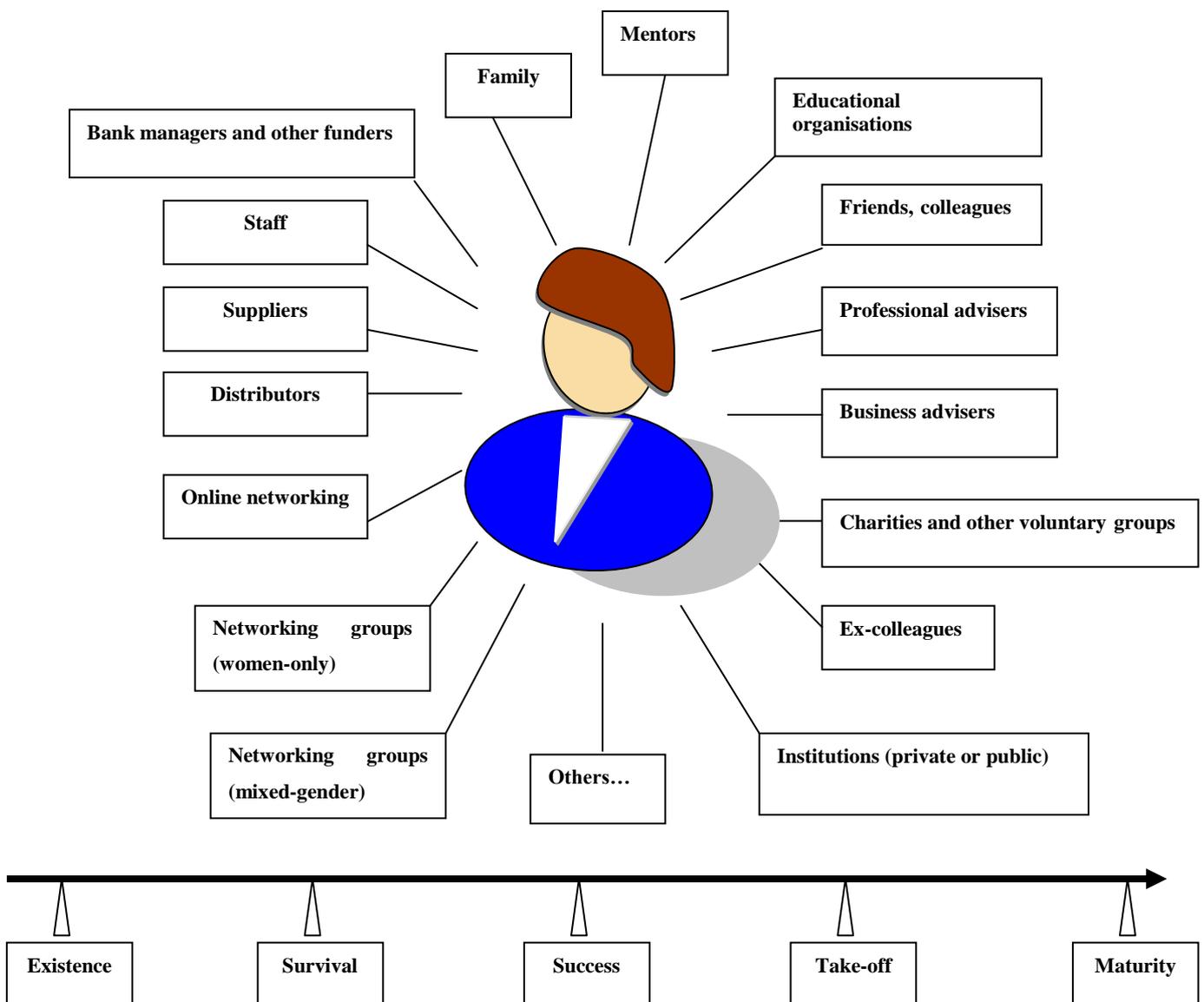
Within the last decade, various studies have been conducted for the purposes of measuring social capital. Although some of the researchers have used quantitative methods (Batjargal, 2005; Bosma et al., 2004; Davidsson and Honig, 2003; Pennings et al., 1998), others' work has been qualitative in nature (Grootaert and Van Bastelaer, 2002; Narayan, 2002). Van Deth (2003) summarises the measurement of social capital along two main dimensions: the structural (networks or connections) and the cultural (social norms or obligations and values and trust). Van Deth indicates some particular characteristics/variables that are included in this study. His model shows networks and trust to be the dominant variables in the measurement of social capital. When measuring aspects such as values and norms, methods such as interviews are considered to be more useful and relevant.

According to Van Deth (2003), the concept of trust presented some problems in measurement. This is because it is very difficult to determine whether trust is an element of social capital. Despite this, trust can be measured within the different cultural contexts in which it takes place. In understanding trust from the cultural perspective within which the questionnaire is conducted, questions about *trust in family members, trust in suppliers, and trust in different gender*, etc. have been used in this research. However, to dig deeper into the relationship between human capital and social capital and the growth of women-owned enterprises, there was a need to employ qualitative techniques.

Detailed interviews with 42 women entrepreneurs in the second stage helped in acquiring information about the durability of their social capital as well as the ways in which they build, maintain and utilise it. The qualitative data, collected in response to open-ended questions, were analysed and interpreted. These detailed descriptions helped to fill the gaps on how women entrepreneurs' individual

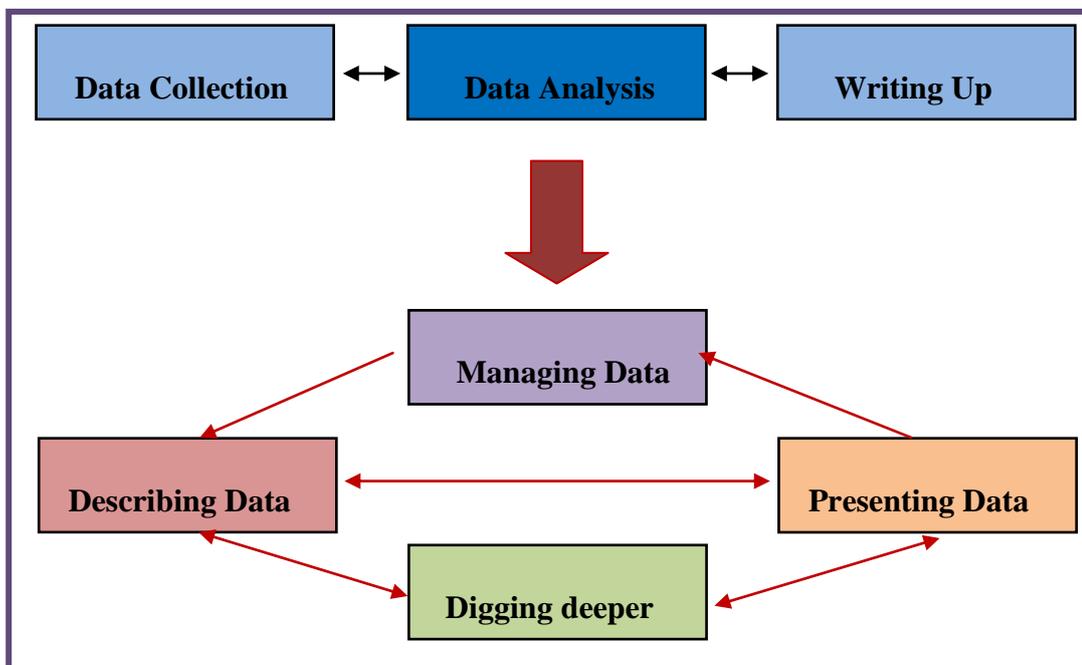
capabilities such as training, education and prior experience in the same field, as well as social connections, affect growth in different stages of the business cycle. These findings provided useful insights into the effect of social and human capital on the growth of women-owned enterprises. The use of in-depth interviews with the women entrepreneurs produced detailed narratives of building and using social and human capital. They further elucidated what kind of social contacts help in growth and in what kinds of situations or environmental settings.

**Figure 6-3: Possible Contacts, Links and Networks at Different Stages of Enterprise Growth**



A map of relationships (Figure 6-3) was designed to organise the information provided in relation to the diverse contacts and networks accessed and the types of resources exchanged within these relationships at different stages of the organisation's life cycle. Women entrepreneurs were asked to map out their main relationships, links, networks, and people with whom they had any sort of relationship that had contributed to their entrepreneurial activities at different stages. They were asked to describe the strength of the relationship, the density and frequency of the contact, and to add the type of services, information or support received or provided.

**Figure 6-4: The Process of Qualitative Data Analysis**



*Based on Froggatt (2001: 432)*

The process of using different theoretical and methodological approaches helped strengthen the validity of the outcome and confirmed that it could occur under different conditions with different groups. The triangulation of qualitative and quantitative methods proved to be a critical test, because of its comprehensiveness, enabling closeness to the situation under investigation because of the increased sensitivity to the multiple data sources.

In the first step, 'managing the data' (Froggatt, 2001: 432), the data were organised and prepared (included transcription). Cross-case analysis was performed by grouping together answers from different questions, or by analysing different perspectives on central issues. A few readings were conducted to complete indexing in the 'describing data' stage (Froggatt, 2001: 432).

Codes development for this study was based on either 'theory-driven' approach or 'prior-research-driven' approach (Boyatzis, 1998: 38). In theory driven approach, the elements of the code were derived from the hypotheses generated or elements of the theory (Boyatzis, 1998; Strauss and Corbin, 1990). I also used Crabtree's (1992) 'template analytic technique' by using other researcher's (e.g. Churchill and Lewis' (1983) growth stages) framework to process and analyse the information. 'Codes used by other researchers and their findings provide help in developing a code from prior data or prior research' (Boyatzis, 1998; 37). For this study, I used Miller and Crabtree's (1992) 'editing style of analysis' for constructing codes based on quantitative findings especially refuted hypothesis (H3). I also used Strauss and Corbin's (1990) 'axial coding' by clustering categories (e.g. use of different elements of social capital and/or human capital) identified by other researchers.

The analysis of qualitative data involves constant comparison, repeated coding, grouping, generating concepts, drawing networks and representing the author's conceptualisation (Patton, 1990). I achieved the same by conducting this in four stages: In the first stage, I created a framework matrix in MS Excel with rows represented by cases and columns by key themes generated from theory and prior research. Then I copied the data from interviews (transcription files) and pasted the way it was. In the second stage of charting or indexing, I summarised the data in each cell. I created new sub columns if there was new sub themes emerging. Mapping and Interpretation was done in the third stage, where I grouped similar cases together and observed that how particular cases responded to sub-themes and if those cases had similar characteristics. In the final stage, I wrote up the

results in narratives including quotes lifted directly from the framework matrix to support my arguments.

All these stages were conducted repeatedly in the ‘digging deeper’ stage (Froggatt, 2001: 432) until I was satisfied that the analysis captured the meaning of the data. I was sure of this only when I was able to create an overall framework of how the codes and concepts fitted together and I was able to identify the interrelationships between the codes. This led to the explanation of whether and how human and social capital possessed by women entrepreneurs impacted on their firms’ growth. I was then satisfied that the data collection and analysis had contributed to answering the research questions.

While ‘presenting the data’ (Froggatt, 2001: 432), pseudonyms were assigned sequentially and in alphabetical order, separately for all three geographical regions. For confidentiality and anonymity, the names of the organisations have not been mentioned, but the relevant business sectors can be viewed in Tables 6-1, 6-2, and 6-3. Segments of texts have been used to illustrate each of the categories to be answered by the data (presented in indented, italicised text), with an indication of name and abbreviation, as well as geographical location of the interviewee who said the particular phrase.

## **6.8 Reliability and Validity Issues**

Reliability measures two aspects: consistency and stability. The reliability measurement indicates how scales have measured a concept as a set. Validity measures can be obtained using factor analysis.

The reliability of a scale indicates its degree of error. General reliability tests include test–retest reliability and internal consistency. Test–retest reliability is measured by giving a test to same respondents on two different time occasions and then calculating a correlation between two different time horizon scores. Higher test-retest results can justify the reliability of the scale implemented.

Reliability refers to the extent to which a scale produces consistent results if repeated measurements are made (Saunders et al., 2007). Cronbach's alpha coefficient is the most common tool by which to measure reliability. It measures how well a set of items (or variables) measures a single uni-dimensional latent construct and is employed in this study to estimate the reliabilities of the variable groups in each part of the questionnaire.

Cronbach's alpha coefficient indicates an average correlation among the items that have developed the scale. Such a value ranges from 0 to 1, with 1 indicating greater reliability. A coefficient of reliability range of between 0.30 and 0.80 is acceptable (Pallant, 2007). The Cronbach's alpha formula is;

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Here N is equal to the number of items, c-bar is the average inter-item covariance among the items and v-bar equals the average variance.

Table 6-2 lists the coefficient alpha of the variable group in each part of the questionnaire.

**Table 6-4: Reliability of the Variables**

Content	Variable	Cronbach's alpha
Part 1	Demographic Data	
Part 2	Compound Employment Growth Rate	0.7181
Part 3	Compound Sales Growth Rate	0.6932
Part 4	Compound Profit Growth Rate	0.6728
Part 5	Human Capital	0.7564
Part 6	Social Capital	0.6726
Total		0.7275

The validity of a scale means that the developed items measure what we think we are measuring or, in other words, when applied to dimensions for operationalising variables, the scale is measuring what it is supposed to measure. Scale validation

involves experimental evidence as there is no clearly defined process by which to carry it out. The three main types of validity are content, criterion and construct. Content validity means the adequacy by which a measure or scale has been sampled from intended domain content. Criterion validity is the degree of relationship between scale scores and the measurable construct. Construct validity tests a scale in terms of theoretically derived hypotheses involving the nature of the underlying variable or construct. This is explored by investigating their causal relationship with other variables. Related validity is called convergent and unrelated is called discriminant validity. Separate tests are carried out to measure all these aspects of data and scale quality measurements (Stangor, 2006). For this study, in order to ensure the validity of the measured variables, the measuring items with respect to each variable were drawn from the relevant literature (see Section 5.6). Hence, the variables are considered to be adequate.

As far as the qualitative data is concerned, the trustworthiness (Easterby-Smith et al., 2009) and rigour that resembles reliability and validity in quantitative research are mainly ensured using triangulation. In addition, maintaining methodological coherence, choosing the appropriate sample, collecting and analysing data concurrently using pilot interviews, interviews that are complemented by the survey, thinking theoretically, and focusing on theory development helped verification of reliability and validity of the qualitative study (Yin, 2009).

During any social research, especially using qualitative technique, self-reflection on constraining conditions is crucial to the “empowerment capacities of research and fulfilment of its agenda” (Ely, 1991: 178). For this research, I made sure to follow the process of reflexivity to recognise, do something about, and acknowledge the limitation of this research. For example, co-operation of respondents for providing adequate, reliable and accurate information is vital in obtaining data in any sort of social research. For this study, there is a possibility of some ‘biases’ that arise from the gender differences between the researcher and the respondents. Though, it does not matter that much for the questionnaire. However, there is a possibility that women respondents would not have responded

in exactly the same way to a female researcher during the interviews. I made sure to build a rapport and put the respondents at ease, then assured them about the anonymity and confidentiality before conducting the interviews to minimise these biases. In addition, I fulfilled other ethical considerations as explained in the following section.

## **6.9 Ethical Considerations**

It is important to consider ethical issues when executing the research in social sciences. Neuman and Baron (1995) narrate in this context that a researcher must safeguard the human rights of the participants and guide them to supervise their interest while they participate in the subject research. Christians (2000) mentions the minimum requirement for a research to undertake in domain of “research ethics” is to commence participant awareness regarding subject matter of research, informed consent, privacy and confidentiality, and accuracy. I addressed all of the above mentioned ethical considerations during execution of the current research.

During the primary data collection, I informed all the women entrepreneurs participating in the study regarding the application and adoption of the current research. I got their consent to participate in addition to making them assured of their right to withdraw their input towards the current research before its publication.

I sent them an online survey questionnaire along with a letter to explain the nature of the research. Participation in the current research was voluntary and the participants were informed and assured about the anonymity and confidentiality. The personal information associated with the unique identification of an individual participant in either personal or professional capacity was not requested except the contact details of those who were willing to participate in the interview process. This practice provided a strong basis for maintaining the higher level of confidentiality and anonymity for the women entrepreneurs participating in the current research.

Although, a generic criterion for ethical consideration in research while taking different approaches, has been suggested by academic scholars (Christians, 2000; Hussey and Hussey, 1997). Research and, accordingly, the work related to research that is executed during drafting of a research thesis, by its very nature is very unpredictable and in many situations which are leveraged by uncertainty, decisions usually have to be made as according to the situation of the research case as under consideration (Gilbert, 2001; Shaw et al., 2005). I addressed a few guidelines from the generic ethical considerations during the data collection and drafting of this research: First, I informed all the potential participants about the purpose and rationale of the study and briefed them about the intended value of their participation. Second, I made sure that the interdependency as acquired by the current research did not clash with the academic and research ethical issues. Third, I considered the factor of academic freedom including the freedom to formulate an academically motivated critical opinion. Yet, I ensured not to be offensive and critical towards the integrity or reputation of any woman entrepreneur participating in the study. Fourth, I took utmost care to maintain the anonymity of all the participants as according to the Data Protection Act and the University of London Research Ethics Policy.

### **6.10 Summary**

This chapter describes the research philosophy, strategy, design and methods that underlie the conduct of this study. It details key concepts and justifies the selection of methods applied. It further elucidates the possible data collection processes and describes in detail the actual ones used. Data analysis methods and processes as well as data presentation techniques have been discussed.

Both qualitative and quantitative research approaches are central to this study, as the effect of human and social capital on the growth of women-owned enterprises is a complex phenomenon. The growth process of any firm is dynamic and must be illustrated by a detailed qualitative analysis; furthermore, combining both research methods was considered an appropriate approach as it may result in gaining the best of both methods (Saunders et al., 2009). The results of the

quantitative and qualitative research are presented in the next two Chapters (7 and 8).

In the next Chapter (7), I present the results of the quantitative analysis to test the hypotheses for assessing the effect of human capital and social capital on the growth of women-owned enterprises. To develop and extend our understanding of how these relationships work, the results of the qualitative analysis are presented in Chapter 8, which explores the relationships in detail and provides a basis to develop a theoretical framework.

## **Chapter 7      Quantitative Results**

### **7.1 Introduction**

As explained in Chapter 6, the initial data were collected through 517 filled questionnaires submitted online by women entrepreneurs from three regions, i.e. Greater London, South East, and East of England, during 2007-08. In addition to determining the correlation of the growth of women-owned enterprises with human and social capital possessed by women entrepreneurs, a range of variables in the questionnaire delineated in the previous chapter helped in describing the profile of women entrepreneurs who took part in the study.

The second section of this chapter details the profile of respondents according to their status in the company, business sector, ethnicity, age, marital status, education and work experience. The third section presents descriptive statistics related to the dependent and independent variables. The basic elements of empirical analysis have been explained in the fourth section. The correlation of the growth of women-owned enterprises with social capital and different associated variables is shown in the fifth section. The sixth section uses regression to test the thesis hypotheses on social and human capital and the growth of women-owned enterprises. The seventh section explains the significance of independent variables by applying another econometric method – the kitchen sink method for multiple regressions. In section eight, appropriate statistical methods are applied to determine the moderating effect of human capital on the relationship of social capital to compound sales growth rate, compound profit growth rate and compound employment growth rate. The final section summarises the quantitative results.

## 7.2 Profile of Respondents

The majority of the respondents (491, 95.71%) are operating heads and the owner/majority shareholders of their organisations. Only 17 (3.31%) were majority owners of the firms but not responsible for day-to-day operations, whereas 5 (0.97%) were acting as the operating heads but did not have a majority share in the business. This determines that the majority of respondents not only run the day-to-day operations for their organisations but are also strategic decision makers.

**Figure 7-1: Regional Distribution of Respondents**

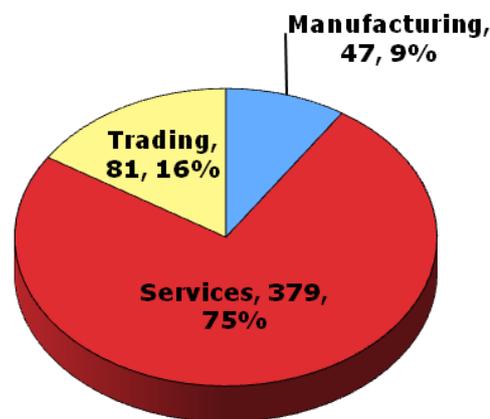


According to the UK Global Entrepreneurship Monitor (GEM) report (Harding et al., 2006), the female Total Entrepreneurial Activity (TEA) for Greater London, East of England and South East of England was 4.07, 3.69 and 3.85 respectively. A similar trend is reflected in the number of respondents for this study from the Greater London and the South East of England regions. Of the 517 participants, 183 (35.81%) were from Greater London region, whereas 179 (35.03%) and 149 (29.16%) were operating from the East of England region and South East of England region, respectively. The response rate from the East of England region was higher than the South East of England region. One reason for this higher response rate may be my rapport and credibility in the region because of my previous work there in women's enterprise development.

### 7.2.1 Business Sector

The GEM report on ‘Women and Entrepreneurship’ (Allen et al., 2008) mentions the presence of a significantly higher percentage of women-owned entrepreneurial ventures in the consumer-oriented extractive and transformative sectors (e.g. services and trading), especially in high income countries such as the UK.

**Figure 7-2: Business Sector Profile**



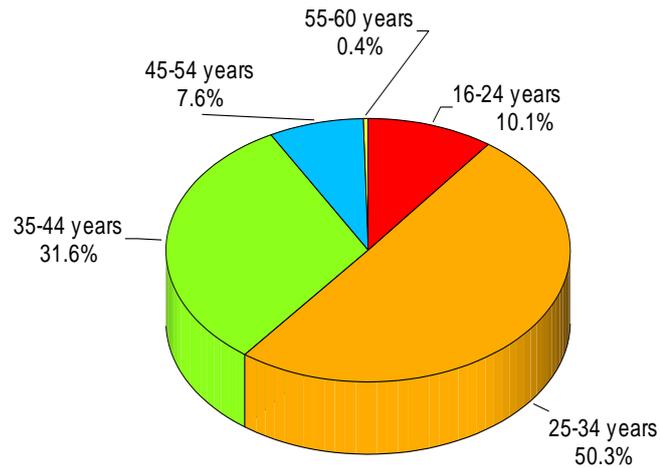
The business sector profile for this study reflects the same trend, with a majority of respondents (75%) working in the services sector, followed by trading (16%) and manufacturing sectors (9%). One reason for this is the shift of the wider economy from manufacturing to consumer-oriented sectors, because of the higher costs of labour and raw materials in the UK. However, another important reason may be that women entrepreneurs either choose small, locally focused service businesses, or they operate in low-tech industries, and mostly their business ideas are not scalable (Carter et al., 2007).

### 7.2.2 Age

Most respondents (310, 60.34%) started their businesses before they were aged 35, while 162 (31.33%) did so when they were 35–44 years of age. Thirty nine (7.6%) started their businesses after the age of 44, whereas only two respondents

(0.39%) decided to register after the age of 54. These results confirm the findings of Birley et al. (1989), Carter et al. (2001) and Shaw et al. (2005) that women start their businesses at a young age.

**Figure 7-3: Age at Start-up**



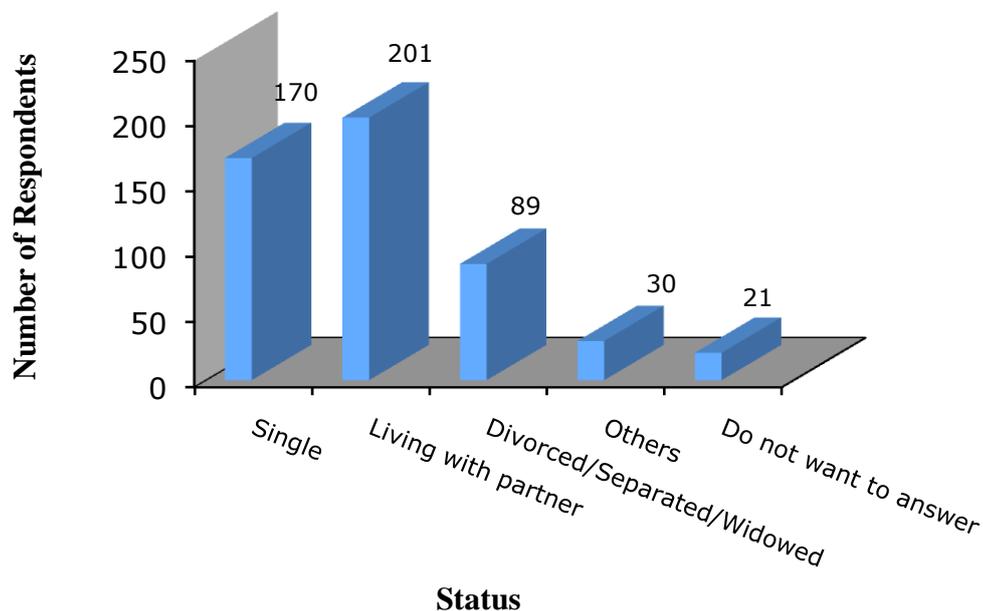
The GEM report reveals that ‘in high-income countries, the age window for women’s entrepreneurial activity broadens, with early stage entrepreneurial activity most likely among women age 25 to 44 and established business ownership most likely among women 35 to 54 years old’ (Allen et al., 2008). These findings are supported by the results of this study, with 420 (81.87%) women starting their businesses when they were aged between 25 and 44.

### 7.2.3 Marital Status

Brindley and Ritchie (1999), while investigating the motivation of women entrepreneurs to start their own businesses, found that the need for flexibility due to childcare responsibilities, and their negative experiences (such as gender discrimination and/or childcare difficulties) of previous employment were among the main reasons.

The largest group of respondents (201, 38.87%) of this study was living with their partners when they started their businesses. Almost 32% of respondents were single, whereas 89 (17.21%) were either divorced, or separated or widowed at the time of business start-up. A majority (280, 54.15%) had children, and one of their main motivations was the flexibility to combine work with family life.

**Figure 7-4: Marital Status at Start-up**

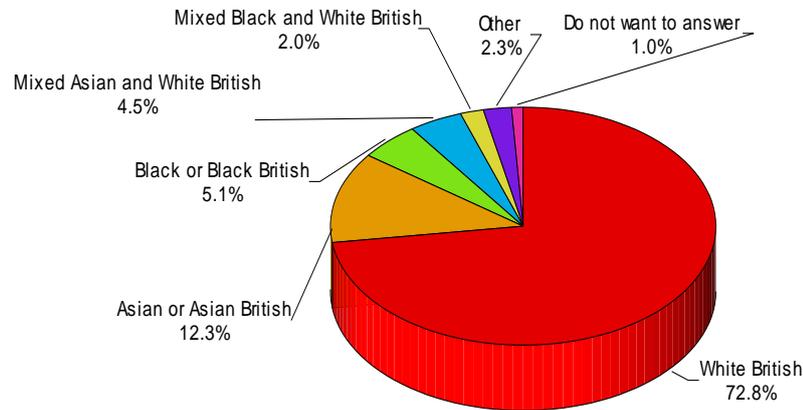


#### 7.2.4 Ethnicity

Ram and Jones (1998) claim that a higher percentage of South Asian women are in self-employment than white women in the UK. However, (Dhaliwal, 1998) classifies ethnic women in business either as ‘independent women’ or ‘hidden women’. While ‘independent women’ are entrepreneurs in their own right, ‘hidden women’ play an important role in family businesses. Most either own a minority or no shares in the business (Dhaliwal, 1998). The same is reflected in the ethnic profile of the respondents for this study. The majority of respondents were White British women entrepreneurs. Asian or Asian British was the second

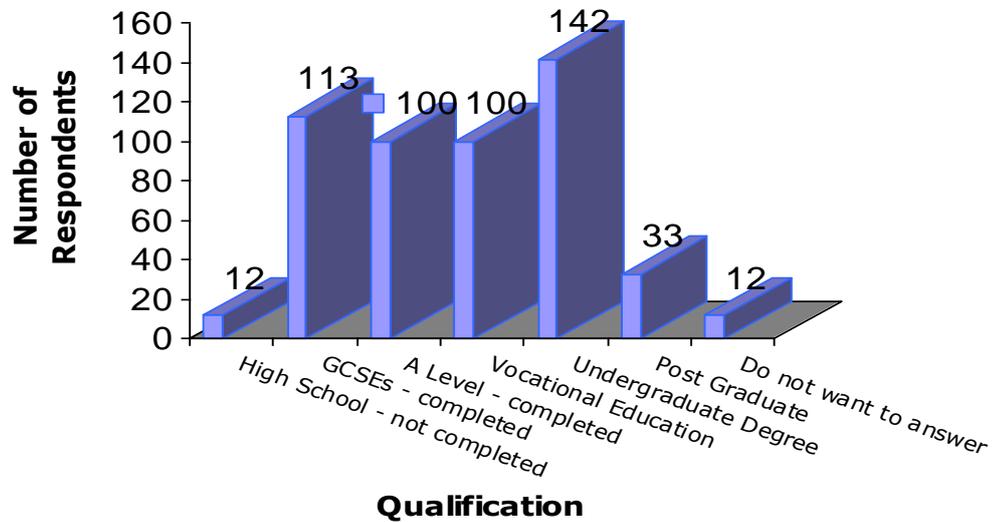
largest group, followed by Black or Black British and mixed Asian and White British.

**Figure 7-5: Ethnicity Profile**



### 7.2.5 Educational Qualification

Educational qualification is one of the most cited variables for general human capital (Becker, 1964; Boden and Nucci, 2000; Kugler et al., 2007). According to the GEM report, women entrepreneurs in high income countries are better educated than those in low/middle income countries. In G7 countries, more than half of women entrepreneurs have passed secondary school, and more than a quarter possess undergraduate and postgraduate degrees (Allen et al., 2008: 28). The present study confirmed these findings: more than a quarter of respondents (27.73%) stated that they held undergraduate degrees when they started their own businesses. Although only 33 (6.54%) had a postgraduate degree, 113 (22.07%) had completed their GCSEs, and 100 (19.53%) had finished their A-levels or attained vocational education before embarking upon their entrepreneurial ventures.

**Figure 7-6: Educational Qualification**

Only 12 (2.34%) women entrepreneurs did not complete their secondary education. Given that education is one of the most important variables of general human capital (Becker, 1964; Boden and Nucci, 2000, Kugler et al., 2007), the overall educational profile of the respondents shows that they are educated beyond high school.

However, most respondents had studied in subjects other than business management. Only 83 (16.50%) had gone through formal business education, such as diplomas in business management, BBA, MBA, etc.; the remaining 420 (83.50%) had not attended any business related training or capacity building activity, restricting their specific human capital.

### **7.2.6 Work Experience**

While educational qualifications and overall work experience may increase one's general human capital, work experience in the same sector is considered the source of specific human capital (Kugler et al., 2007). According to the GEM report, the involvement of women in waged work (whether full-time or part-time) increases their chances of embarking upon their own entrepreneurial initiatives, as compared to housewives, students and/or retired women (Allen et al., 2008).

Marlow (1997) mentions dissatisfaction with previous employment as a significant motivating factor for starting a business, other factors, such as generation of ideas, access to resources and social capital (accumulated while at work), also help women establish businesses of their own (Allen et al., 2008: 9). A large number of respondents (i.e. 315, 61.52%) had prior work experience in the same industry/sector in which they started their businesses, with an average of 2.6 years.

### **7.3 Descriptive Statistics**

As described in Chapter 6, the data were organised into two main groups of independent variables, relating to human capital and social capital. Three dependent variables – compound employment growth rate, compound sales growth rate and compound profit growth rate – were measured by change in employment, sales and profit of the businesses respectively since the start-up of the business.

Table 7.1 presents the descriptive statistics for this study. N denotes the number of valid responses out of the total 517. Quite a few women entrepreneurs (510, 98.7%) were willing to share the information about the number of employees for the purpose of this study.

The response rates for sharing employment and sales figures were both high – 510, 98.8% and 497, 96.1%, respectively. This confirms the previous literature (Rosa et al., 1996; Edleman et al., 2005), which shows that extracting information from entrepreneurs about annual sales turnover and number of employees is least problematic as these two are mainly recorded for administrative and legal reasons (Barkham et al., 1996; Freel and Robson, 2004). The slightly higher response rate for number of employees reflects the findings by Basu and Goswamai (1999), and Altinay and Altinay (2006) that entrepreneurs are less reluctant to share this information than sales/revenue and profit figures. However, according to Birley and Westhead (1990) and Edleman et al. (2005) entrepreneurs feel reluctant to share information about their customers and profits. The response rate for sharing

the profit figures was 4 and 2 percentage points lower than the sales and employment figures respectively. However, it was still very large, with 488 (94.4%) respondents sharing their profit level. One of the main reasons for this high response rate could be the promise of confidentiality and anonymity of the results.

**Table 7-1: Descriptive Statistics**

Variable	N	Min.	Max.	Mean	Standard Deviation
Human Capital	515 (99.6%)	1.00	4.00	1.7359	1.30852
Social Capital	502 (97.1%)	9.00	40.00	29.2769	5.71417
Compound Employment Growth Rate	510 (98.7%)	-1.57	55.18	12.3310	7.90710
Compound Sales Growth Rate	497 (96.1%)	-20.54	87.76	23.6906	12.04340
Compound Profit Growth Rate	488 (94.4%)	-1.33	90.70	22.0678	12.37924

The compound employment growth rate ranged from -1.57% to 55.18%, with a mean=12.3310 and sd=7.90710, showing the majority of results in the first two quartiles. The compound sales growth rate ranged from -20.54% to 87.76%, with a mean=23.6906 and sd=12.04340, showing the majority of results in the first two quartiles. The compound profit growth rate ranged from -1.33% to 90.70%, with a mean=22.0678 and sd=12.37924. The grouping of independent variables into two categories is explained in Table 7-2, which specifies their nature and measurement. Table 7-2 also describes whether these are log or dummy variables. All dummy variables have a prefix D and are used to ‘incorporate qualitative explanatory variables into a linear model’ (Altinay and Altinay, 2006: 211). For the first independent group of variables, social capital, N was 502. The variable social capital was a total score of 40 items (Grootaert et al., 2003; Van Deth, 2003). The score ranged from 9.00 to 40.00, with mean= 29.2769 and sd= 5.71417. The score for the second group of variables, human capital, ranged from 1 to 4, with mean= 1.7359 and sd= 1.30852. Human capital variable was measured as an aggregate of four items (Davidsson and Honig, 2003).

**Table 7-2: Independent Variables**

Variables	Abbreviation	Name of Variable and Transformation
<b>Entrepreneur's Human Capital</b>		
Education	DGRAD	Dummy variable If degree = 1 otherwise = 0
Work experience in the same sector	DWEXP	Dummy variable Yes = 1 otherwise = 0
Number of years' work experience in the same sector	DNYEXP	Dummy variable If > 1 year = 1 otherwise = 0
Business management education or training	DBMET	Dummy variable Yes = 1 otherwise = 0
<b>Entrepreneur's Social Capital</b>		
Close relative(s)' help in business at start-up	DCLSRETVS	Dummy variable Yes = 1 otherwise = 0
Close relative(s)' help in business now	DCLSRETVN	Dummy variable Yes = 1 otherwise = 0
Importance of informal networking to growth	DINFNTG	Dummy variable Yes = 1 otherwise = 0
Membership of formal groups	DFRMEMBR	Dummy variable Yes = 1 otherwise = 0
Importance of formal groups for business	DFRMGRP	Dummy variable Yes = 1 otherwise = 0
Number of times participation in formal group activities	DFRMGRPPT	Dummy variable If 1 or more per month = 1 otherwise = 0
Contribution of money to the formal group	DCNTRGRP	Dummy variable Yes = 1 otherwise = 0
Help of friend(s)/acquaintances in business	DFRNDS	Dummy variable Yes = 1 otherwise = 0
Getting together informally for arts and crafts (Group 1)	DGTTGTHR1	Dummy variable Yes = 1 otherwise = 0
Help of Group 1 in business	DGRPHELP1	Dummy variable Yes = 1 otherwise = 0
Getting together informally for sports and exercise (Group 2)	DGTTGTHR2	Dummy variable Yes = 1 otherwise = 0
Help of Group 2 in business	DGRPHELP2	Dummy variable Yes = 1 otherwise = 0
Getting together informally for shopping, talking, etc. (Group 3)	DGTTGTHR3	Dummy variable Yes = 1 otherwise = 0
Help of Group 3 in business	DGRPHELP3	Dummy variable Yes = 1 otherwise = 0
Participation in community activities (Group 4)	DPCOMACT	Dummy variable Yes = 1 otherwise = 0
Help of Group 4 in business	DGRPHELP3	Dummy variable Yes = 1 otherwise = 0
Belief in helping others	DBLFHLP	Dummy variable Yes = 1 otherwise = 0
Getting along with members of business association/sector	DGETBAS	Dummy variable If>2 = 1 otherwise = 0
Getting along with family members	DGETFAM	Dummy variable If>2 = 1 otherwise = 0
Getting along with friends/acquaintances	DGETFAA	Dummy variable If>2 = 1 otherwise = 0
Getting along with neighbours	DGETNGB	Dummy variable If>2 = 1 otherwise = 0
Getting along with sports club members	DGETSPCM	Dummy variable If>2 = 1 otherwise = 0
Business Advice from business owner	DBADBOS	Dummy variable If>2 = 1 otherwise = 0
Business Advice from different business sector	DBADBOD	Dummy variable If>2 = 1 otherwise = 0
Business Advice from supplier	DBADSPP	Dummy variable If>2 = 1 otherwise = 0
Business Advice from customer	DBADCUS	Dummy variable If>2 = 1 otherwise = 0
Business Advice from professional consultant	DBADPCSLT	Dummy variable If>2 = 1 otherwise = 0
Business Advice from friend, relative, etc.	DBADFRA	Dummy variable If>2 = 1 otherwise = 0
Trust in people from own race or ethnicity	DTSTRCE	Dummy variable If>2 = 1 otherwise = 0
Trust in family members	DTRSTFAM	Dummy variable If>2 = 1 otherwise = 0
Trust in same gender	DTRSTSGR	Dummy variable If>2 = 1 otherwise = 0
Trust in different gender	DTRSTDGR	Dummy variable If>2 = 1 otherwise = 0
Trust in neighbourhood/community	DTRSTNBR	Dummy variable If>2 = 1 otherwise = 0
Trust in people from same business association	DTRSTSBA	Dummy variable If>2 = 1 otherwise = 0
Trust in people from same business sector	DTRSTDDBA	Dummy variable If>2 = 1 otherwise = 0
Trust in people from other business sector	DTRSTDDBS	Dummy variable If>2 = 1 otherwise = 0
Trust in suppliers	DTRSTSPLR	Dummy variable If>2 = 1 otherwise = 0
Trust in customers	DTRSTCUST	Dummy variable If>2 = 1 otherwise = 0
Trust in employees	DTRSTEMP	Dummy variable If>2 = 1 otherwise = 0
Trust in friends	DTRSTFRND	Dummy variable If>2 = 1 otherwise = 0

## 7.4 Empirical Analysis

The study's objectives are to explore the relationship between dependent variables (compound growth rates) and independent variables (social capital and human capital), and to measure the strength of the relationship (if any). Nine hypotheses were developed (recalled in Box 7-1) based on the available literature. The blocks of independent variables are used to analyse variations in three dependent variables (compound employment growth, compound sales growth and compound profit growth of women-owned enterprises) through a range of statistical techniques such as bivariate analysis (correlation), regression, kitchen sink method, and moderation analysis.

Correlation between two variables measures the direction and magnitude of the linear relation between them (Wright, 1997; Field, 2006). The Pearson product-moment correlation coefficient was calculated to determine the strength of the relationship between dependent and independent variables. Pearson correlation (also known as zero-order correlation) gives an indication of both the direction (positive or negative) and the strength of the relationship (Field, 2006). Positive correlation shows that if one variable increases, the other increases. Whereas negative correlation means that if one variable increases, the other decreases (Pallant, 2007). However, Field (2006: 144) notes that 'Correlations can be a very useful research tool but they tell us nothing about the predictive power of variables'. To evaluate further the possible impact of the blocks of independent variables (social capital and human capital) on the dependent variables (employment growth, sales growth and profit growth) and to verify the results of correlation analysis, regression analysis was also performed.

As regression analysis is a parametric technique, it has some standard assumptions which need to be met before running it. The first and the most important assumption is the normality of the response variable. As all the three response variables were non-normal, it was necessary to make the data normal before applying any parametric technique. For achieving the normality, transformations such as log, square-root, inverse, etc., were applied in vain.

Finally, application of the Box-Cox transformation made the data normal, (Cook and Olive, 2008; Velilla, 1993). Other assumptions of OLS, such as heteroscedasticity, linearity, independence of observations, multicollinearity, autocorrelation, etc., were also tested on the transformed variables and no issues were found. The results were estimated using OLS and verified the conclusions of the first six hypotheses drawn in the correlation analysis.

The main objective of the last three hypotheses (H<sub>7</sub>–H<sub>9</sub>) was to test whether human capital moderates the relationship between social capital and the rates of employment growth, sales growth and profit growth. Moderation analysis was performed as it has ‘an ability to go beyond the merely descriptive to a more functional understanding of the relationships among variables’ (Preacher and Hayes, 2004: 717).

After identifying the significance of specific blocks of variables, the significance of independent variables was identified through another econometric method – the kitchen sink method for multiple regressions (Altinay and Altinay, 2006; Basu and Goswamy, 1999). This was run by including all the following listed variables to move to a simpler model, to estimate regression:

$$\log y_i = \alpha_0 + \beta_1 D_{xi1} + \beta_2 D_{xi2} + \beta_3 \log x_{i3} + \dots + \beta_{44} D_{xi44} + u_i$$

OR

$$\log y_i = \alpha_0 + \sum_{i=1}^{44} \beta_i D_{xi}$$

Where  $D$  represents a dummy variable and  $i$  has a range from 1 to  $N$  (where  $N=44$ ; all the variables are presented in Table 7-2). In the first stage, all the variables were included in the model. The consequent stages involved eliminating insignificant ones (those with  $P$  values of greater than .2, .1 and .05 respectively). This helped formulate the regression model by excluding all variables with  $P > .05$ .

**Box 7-1: Hypotheses for the Study**

**Social Capital and the Growth of Women-owned Enterprises**

**H<sub>1</sub>:** *Firms owned by women entrepreneurs having a higher level of social capital show higher employment growth.*

**H<sub>2</sub>:** *Firms owned by women entrepreneurs having a higher level of social capital show higher revenue growth.*

**H<sub>3</sub>:** *Firms owned by women entrepreneurs having a higher level of social capital show higher profit growth.*

**Human Capital and the Growth of Women-owned Enterprises**

**H<sub>4</sub>:** *Firms owned by women entrepreneurs having a higher level of human capital show higher employment growth.*

**H<sub>5</sub>:** *Firms owned by women entrepreneurs having a higher level of human capital show higher revenue growth.*

**H<sub>6</sub>:** *Firms owned by women entrepreneurs having a higher level of human capital show higher profit growth.*

**Human Capital as a Moderator between Social Capital and the Growth of Women-owned Enterprises**

**H<sub>7</sub>:** *Firms owned by women entrepreneurs with higher social capital will show higher employment growth, if they have a higher level of human capital.*

**H<sub>8</sub>:** *Firms owned by women entrepreneurs with higher social capital will show higher sales growth, if they have a higher level of human capital.*

**H<sub>9</sub>:** *Firms owned by women entrepreneurs with higher social capital will show higher profit growth, if they have a higher level of human capital.*

The following section explains the correlation of dependent variables (employment growth, sales growth and profit growth, respectively of women-owned firms) with blocks of independent variables, namely human capital and social capital.

## **7.5 Bivariate Analysis (Correlations)**

### **7.5.1 Inter-Correlations of Social Capital and Compound Growth Rates**

There is a positive relationship between the growth of firms and social capital of the entrepreneur (Batjargal, 2005; Bennet and Richardson, 2005; Liao and Welsh, 2001). However, the impact of gender is unclear. In their study of women entrepreneurs in the USA, Brush et al. (2006) concluded that social capital plays an important role in the growth of women-owned enterprises. One of the objectives of the present study is to examine these findings based on a sample of women-owned enterprises in the United Kingdom.

The Pearson product-moment correlation coefficient was calculated in order to confirm the significant positive influence of social capital possessed by women entrepreneurs on the compound employment growth rate ( $r = .200$ ,  $P < .001$  level) and compound sales growth rate ( $r = .173$ ,  $P < .001$ ) of their enterprises.

These results support hypotheses  $H_1$ , 'firms owned by women entrepreneurs having higher level of social capital show higher employment growth' as well as  $H_2$  that '*firms owned by women entrepreneurs having higher level of social capital show higher sales growth*'. There was no significant link between social capital and compound profit growth ( $r = .082$ ,  $P > .05$ ), although it was apparent at  $P < .10$ . The findings could not, therefore, support  $H_3$ , '*firms owned by women entrepreneurs having higher level of social capital show higher profit growth*'.

**Table 7-3: Inter-Correlations of Social Capital and Compound Growth Rates**

Variable	1 (SC)	2 (CGER)	3 (CSGR)	4 (CPGR)
(1) Social Capital	--			
(2) Compound Employment Growth Rate	.200***	--		
(3) Compound Sales Growth Rate	.173***	.649***	--	
(4) Compound Profit Growth Rate	.082	.389***	.632***	--

\* Correlation is significant at the .05 level (2-tailed)

\*\*Correlation is significant at the .01 level (2-tailed)

\*\*\*Correlation is significant at the .001 level (2-tailed)

Note: To explore the correlation between variables, continuous data were used.

### 7.5.2 Inter-correlation of Human Capital and Growth

Education, work experience in the same industry, market and product knowledge, and skills and training constitute an individual's human capital. Human capital plays a positive role in the growth of enterprises by increasing productivity (Bates, 1990), raising the level of idea generation and opportunity recognition (Hayton, 2005), and improving products and services (Burns, 2007). These same arguments generated the hypotheses for testing the relationship of the level of human capital and compound growth rates of women-owned enterprises. The Pearson product-moment correlation coefficient was calculated in order to confirm the significant positive influence of human capital possessed by women entrepreneurs on the compound employment growth rate ( $r = .147$ ,  $P < .001$  level) and compound sales growth rate ( $r = .142$ ,  $P < .01$ ).

These results support hypothesis  $H_4$ , *'firms owned by women entrepreneurs having higher level of human capital show higher employment growth' as well as*

H<sub>5</sub> that ‘firms owned by women entrepreneurs having higher level of human capital show higher sales growth’.

There was also a significant link between human capital and compound profit growth ( $r = .097$ ,  $P < .05$ ). This result supports hypothesis H<sub>6</sub>, ‘firms owned by women entrepreneurs having higher level of human capital show higher profit growth’.

**Table 7-4: Inter-Correlations of Human Capital and Compound Growth Rates**

Variable	1 (HC)	2 (CEGR)	3 (CSGR)	4 (CPGR)
(1) Human Capital	--			
(2) Compound Employment Growth Rate	.147***	--		
(3) Compound Sales Growth Rate	.142**	.649***	--	
(4) Compound Profit Growth Rate	.097*	.389***	.632***	--

\* Correlation is significant at the .05 level (2-tailed)

\*\*Correlation is significant at the .01 level (2-tailed)

\*\*\*Correlation is significant at the .001 level (2-tailed)

Note: To explore the correlation between variables, continuous data were used.

## 7.6 Regression Analysis

A Pearson correlation was performed on the data to test the hypotheses H<sub>1</sub>–H<sub>6</sub>. The objective was to determine the relationship between dependent and independent variables, as well as to predict changes in the dependent variables in response to changes in the independent variables. To validate the results generated from Pearson product-moment correlation coefficient, a more sophisticated exploration of the inter-relationships within the variables was achieved by

conducting regression analysis. The results generated have been presented in the following sub-sections.

### **7.6.1 Compound Employment Growth**

For compound employment growth, the Pearson correlation shows a positive correlation with social capital (see Table 7-4). Regression analysis is a parametric technique and some standard assumptions must be fulfilled before it is run (Saunders et al., 2009). The first and foremost of these is the normality of response (dependent) variable. The data for all of the three dependent variables (employment growth rate, sales growth rate and profit growth rate) were non-normal, raising the need to make the data normal before conducting the analysis. Transformations such as log, square root and inverse, etc., were applied but failed to achieve normality. Finally, application of the Box-Cox transformation made the data normal (Cook and Olive, 2008; Velilla, 1993). The results of the normality tests are graphically represented in Appendix IV.

The Box-Cox transformation is a particular way of parameterising a power transform – a function applied to create a rank-preserving transformation of data – that has advantageous properties, including great improvements in model fit. In applying the Box-Cox transformation, any values less than 1 are deleted. Next, the value of lambda having a minimum root mean square error (RMSE) was found as:

$$\text{lambda} = .30 \text{ and RMSE} = 6.16$$

This transformed rate of employment growth (dependent variable) was termed  $Z_E$ :

$$Z_E = (\text{Employment Growth Rate}) * .30$$

### 7.6.1.1 Assumptions

#### a) Normality

For these data, the Kolmogorov-Smirnov test, the Shapiro–Wilk test as well as the third and fourth standardised moments (skewness and kurtosis) were used to test the normality. According to Shapiro and Wilk (1965), the null hypothesis is that the population is normally distributed, if the p-value is less than the chosen alpha level, then the null hypothesis is rejected (i.e. one concludes the data are not from a normally distributed population). If the p-value is greater than the chosen alpha level, then one does not reject the null hypothesis that the data came from a normally distributed population, e.g. for an alpha level of .05, a data set with a p-value of .32 does not result in rejection of the hypothesis that the data are from a normally distributed population.

To test the normality of this dataset, alpha level was considered to be .05. The tests of normality were conducted and confirmed that the data were normal. As per the Kolmogorov-Smirnov and Shapiro–Wilk tests (Table 7-5):  $P = .069 > .05$ . and  $P = .067 > .05$  respectively. The P-values of .069 and .067 ( $>.05$ ) indicate normal distribution. Similarly, the values of skewness =  $-.043$  (.110) and kurtosis =  $.243$  (.214) also confirm the normality of the dataset.

**Table 7-5: Tests of Normality**  
**Compound Employment Growth Rate (Transformed)**

	Kolmogorov -Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
$Z_E$	.054	497	.069	.994	497	.067

a. Lilliefors Significance Correction

#### b) Linearity

The assumption of linearity is that there is a straight-line relationship between two variables (where one or both variables can be combinations of several variables, (Hair et al., 1998). ‘Linearity is important in a practical sense because Pearson’s  $r$  only captures the linear relationship among variables; if there are substantial

nonlinear relationships among variables, they are ignored' (Tabachnick and Fidell, 2007: 83). Standard deviation was used to assess linearity for this dataset. Since the standard deviation of residuals (.321) is almost the same as the standard deviation of the dependent variable (.322), this indicates linearity in both models.

**c) Homoscedasticity**

Homoscedasticity refers to the assumption that dependent variable(s) exhibit equal levels of variance across the range of predictor variable(s). 'Homoscedasticity is desirable because the variance of the dependent variable being explained in the dependence relationship should not be concentrated in only a limited range of the independent values' (Hair, et al., 1998: 73). Testing homoscedasticity, especially in regressions is best accomplished through graphical analysis, particularly an analysis of residuals (Hair, et al., 1998). For this dataset, homoscedasticity was also observed graphically; that is, the observed dependent variable was plotted against standardised residuals. A linear pattern was observed, indicating linearity.

**d) Independence of Observations**

The Durbin Watson Coefficient (DWC) was used to determine independence of observations. A DWC of 2 or close to 2 indicates independence. The DWC values in Models 1 ( $d=1.842$ ) and Model 2 ( $d=1.879$ ) were close to 2, so the observations were independent in both models.

**e) Auto-Correlation**

DWC is also used to assess auto-correlation. Again, a DWC of 2 or close to 2 indicates no auto-correlation. As above, the DWC values in both models were close to 2, so there is no problem of auto-correlation.

**f) Multicollinearity**

Multicollinearity occurs when any single independent variable is highly correlated with a set of other independent variables (Hair, et al., 1998). 'An extreme case of multicollinearity is singularity' (Tabachnick and Fidell, 2007: 143), in which an independent variable is perfectly predicted (i.e., correlation of 1.0) by one or more

other independent variables. Variance inflation factor ratios (VIF) and tolerance for all the variables are two criteria by which to trace multicollinearity. The values of tolerance = 1.000 > .20 and VIF = 1.000 < 4 confirm that there is no multicollinearity.

#### **7.6.1.2 Inter-Correlations (With Transformed Variable $Z_E$ )**

The relationship of predictors (social capital and human capital) with the transformed variable  $Z_E$  was evaluated. Since the relation (between social capital and human capital, and  $Z_E$ ) was linear, the Pearson product-moment formula was used to calculate the strength of relationship. The results show a significant relationship between both social capital and  $Z_E$  ( $r = .806$ ;  $P = .031$ ) and human capital and  $Z_E$  ( $r = .754$ ;  $P = .002$ ).

Regression analyses were applied separately on social capital and human capital. Both social capital ( $p=.031 < .05$ ) and human capital ( $p=.002 < .05$ ) were significant, hence supporting hypotheses  $H_1$  and  $H_4$ .

Table 7.6 and 7.7 summarise Model 1 and Model 2 respectively. In Model 1, social capital is used as a predictor and the transformed variable  $Z_E$  is the predictand. The model summary was  $R^2 = 0.65$ ,  $AR^2 = 0.646$ ,  $F = 14.423$ ,  $P = 0.031$ . The final model is shown as below:

$$Z_E = 1.989 + .05 * \text{social capital} \quad (\text{Model 1})$$

**Table 7-6: Compound Employment Growth and Social Capital - Regression Analysis**

	<i>B</i>	<i>SE B</i>	<b>Sig.(p)</b>
<b>Model 1</b>			
<b>Constant</b>	1.989	.075	
<b>Social Capital</b>	.050	.021	.031*

\* p<.05, \*\* p<.01, \*\*\* p<.001.

In Model 2, the predictor is human capital and the transformed variable  $Z_E$  is the predictand. The model summary was  $R^2 = 0.57$ ,  $AR^2 = 0.521$ ,  $F = 26.213$ ,  $P = 0.002$ . The final model is shown as below:

$$Z_E = 2.084 + .035 * \text{human capital} \quad (\text{Model 2})$$

**Table 7-7: Compound Employment Growth and Human Capital-Regression Analysis**

	<i>B</i>	<i>SE B</i>	<b>Sig.(p)</b>
<b>Model 2</b>			
<b>Constant</b>	2.084	.024	
<b>Human Capital</b>	.035	.011	.002**

\* p<.05, \*\* p<.01, \*\*\* p<.001.

### 7.6.2 Compound Sales Growth

For compound sales growth, the Pearson correlation shows a positive correlation with social capital at .001 level (see Table 7.3) as well as with human capital at .001 level (see Table 7.4).

To apply regression analysis, the normality of the response variable (compound sales growth rate) was checked. The results of both Kolmogorov–Smirnov and Shapiro–Wilk tests showed non-normality ( $p < .001$ ). The Q-Q and P-P plots showed lack of fit. A visual observation of the histogram as well as stem and leaf plots showed positive skewness. Transformations such as log, square root and inverse, etc., were applied but failed to achieve normality; the Box-Cox transformation was applied to make the data normal. The results of the normality tests are graphically represented in Appendix IV.

In applying the Box-Cox transformation, any values less than 1 were deleted from the data; there were seven such cases. The value of lambda having minimum RMSE was found as:

$$\lambda = .20 \text{ and RMSE} = 9.6630$$

The transformed rate of sales growth was termed  $Z_S$ :

$$Z_S = (\text{Sales Growth Rate})^{*.20}$$

To test the normality of this dataset, the alpha level was considered to be .05. The tests of normality were conducted and confirmed that the data was normal. As per the Kolmogorov–Smirnov and the Shapiro–Wilk tests (Table 7-8):  $P = .200 > .05$ . and  $p = .607 > .05$  respectively. The P-values of .200 and .607 ( $>.05$ ) indicate normal distribution. Similarly, the values of skewness = -.050 (.110); -.45 and kurtosis = .330 (.220); 1.5 also confirmed normality for the dataset (Table 7-8).

The relationship of the predictors with the transformed variable  $Z_S$  was evaluated. The assumption of linearity was checked before calculating the strength of the relationship between predictors and the predictand. Standard deviation was used to assess linearity for this dataset. Since the standard deviation of residuals (.179) was almost same as the standard deviation for the dependent variable (.177), linearity was confirmed.

**Table 7-8: Tests of Normality**  
**Compound Sales Growth Rate (Transformed)**

	Kolmogorov -Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Z <sub>S</sub>	.026	490	.200*	.997	490	.607

a. Lilliefors Significance Correction

\*. This is the lower boundary of true significance

In addition to normality and linearity, other assumptions such as homoscedasticity, independence of observations and auto-correlation were observed. Homoscedasticity was observed graphically; that is, the observed dependent variable was plotted against standardised residuals. A linear pattern was observed. The Pearson product-moment formula was used to calculate the strength of the relationship between social capital and human capital, and Z<sub>S</sub>.

The results showed a significant relationship between social capital and Z<sub>S</sub> (r = .692; P = .009) and between human capital and Z<sub>S</sub> (r = .769; P = .001).

Regression analysis was applied separately to social capital and human capital. Both social capital (P=.009 < .05) and human capital (P=.001 < .05) were shown to be significant, hence supporting hypotheses H<sub>2</sub> and H<sub>5</sub>. Table 7.8 summarises both models. In Model 3, social capital is used as a predictor and the transformed variable Z<sub>S</sub> is the predictand. The model summary was R<sup>2</sup> = .478, AR<sup>2</sup> = .459, F = 19.652, P = 0.009. The final model is shown as below:

$$Z_S = 1.746 + .044 * \text{social capital} \quad (\text{Model 3})$$

**Table 7-9: Compound Sales Growth Rate and Social Capital - Regression Analysis**

	<i>B</i>	<i>SE B</i>	<b>Sig.(p)</b>
<b>Model 3</b>			
<b>Constant</b>	1.746	.044	
<b>Social Capital</b>	.044	.017	.009**

\* p<.05, \*\* p<.01, \*\*\* p<.001.

In Model 4, the predictor is human capital and the transformed variable  $Z_S$  is the predictand. The model summary is  $R^2 = .59$ ,  $AR^2 = .547$ ,  $F = 22.513$ ,  $P = .001$ . The final model is shown as below:

$$Z_S = 1.820 + .022 * \text{human capital} \quad (\text{Model 4})$$

**Table 7-10: Compound Sales Growth Rate and Human Capital - Regression Analysis**

	<i>B</i>	<i>SE B</i>	<b>Sig.(p)</b>
<b>Model 4</b>			
<b>Constant</b>	1.820	.013	
<b>Human Capital</b>	.022	.006	.001**

\* p<.05, \*\* p<.01, \*\*\* p<.001.

### 7.6.3 Compound Profit Growth

For compound profit growth, the Pearson correlation shows a positive but not significant correlation with social capital (see Table 7-3). The correlation is significant with human capital at .05 level (see Table 7-4).

To apply regression analysis, the normality of the response variable (compound profit growth rate) was observed. The results of both Kolmogorov–Smirnov and Shapiro–Wilk tests showed non-normality ( $p < .001$ ). The Q-Q and P-P plots showed lack of goodness of fit. A visual observation of the histogram as well as stem and leaf plots showed positive skewness. Again, the Box-Cox transformation was applied to make the data normal. The results of the normality tests are graphically represented in Appendix IV.

In applying the Box-Cox transformation, any values less than 1 were deleted from the data; there were two such cases. The value of lambda having RMSE was found as:

$$\lambda = .20 \text{ and RMSE} = 10.07$$

The transformed rate of profit growth was termed  $Z_p$ :

$$Z_p = (\text{Profit Growth Rate})^{*.20}$$

**Table 7-11 Tests of Normality  
Compound Profit Growth Rate (Transformed)**

	Kolmogorov -Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
$Z_p$	.039	486	.079	.994	486	.607

a. Lilliefors Significance Correction

The tests of normality were conducted but the data were non-normal. The response variable was transformed a second time, taking the value of lambda (.10) having second smallest value of RMSE (10.09):

$$Z_p = (\text{Profit Growth Rate})^{*.10}$$

The tests of normality were conducted again and confirmed that the data were normal. As per the Kolmogorov–Smirnov and the Shapiro–Wilk tests (Table 7-11):  $P = .079 > .05$ . and  $P = .607 > .05$  respectively. The P-values of .079 and .607 ( $>.05$ ) indicate normal distribution. Similarly, the values of skewness =  $-.072$  (.111); .65 and kurtosis =  $.407$  (.221); 1.84 also confirmed the normality.

The relationship of the predictors with the transformed variable  $Z_P$  was evaluated. The assumption of linearity was checked before calculating the strength of the relationship between predictors and the predictand. Standard deviation was used to assess linearity for this dataset. Since the standard deviation of residuals (.073) was the same as the standard deviation for the dependent variable (.073), linearity was confirmed.

In addition to normality and linearity, other assumptions such as homoscedasticity, independence of observations and auto-correlation were observed. Homoscedasticity was observed graphically that is, the observed dependent variable was plotted against standardised residuals. There were no problems of auto-correlation either.

The Pearson product-moment formula was used to calculate the strength of the relationship between social capital and human capital, and  $Z_P$ . The results showed a significant relationship between social capital and  $Z_P$  ( $r = .316$ ;  $P = .031$ ) and between human capital and  $Z_P$  ( $r = .389$ ;  $P = .030$ ). Regression analysis was applied separately to social capital and human capital. Both social capital ( $P=.031 < .05$ ) and human capital ( $P=.030 < .05$ ) were shown to be significant, hence supporting hypotheses  $H_3$  and  $H_6$ . In Model 5, social capital is used as a predictor and the transformed variable  $Z_P$  is the predictand. The model summary was  $R^2 = .10$ ,  $AR^2 = .091$ ,  $F = 14.693$ ,  $P = .031$ . The final model is shown as below:

$$Z_P = 1.309 + .032 * \text{social capital} \quad (\text{Model 5})$$

**Table 7-12: Compound Profit Growth Rate and Social Capital - Regression Analysis**

	<i>B</i>	<i>SE B</i>	<b>Sig.(p)</b>
<b>Model 5</b>			
<b>Constant</b>	1.309	.070	
<b>Social Capital</b>	.032	.017	.031*

\* p<.05, \*\* p<.01, \*\*\* p<.001.

In Model 6, the predictor is human capital and the transformed variable  $Z_P$  is the predictand. The model summary was  $R^2 = .151$ ,  $AR^2 = .142$ ,  $F = 19.703$ ,  $P = .030$ . The final model is shown as below:

$$Z_P = 1.876 + .052 * \text{human capital} \quad (\text{Model 6})$$

**Table 7-13: Compound Profit Growth Rate and Human Capital - Regression Analysis**

	<i>B</i>	<i>SE B</i>	<b>Sig.(p)</b>
<b>Model 5</b>			
<b>Constant</b>	1.876	.054	
<b>Human Capital</b>	.052	.031	.030*

\* p<.05, \*\* p<.01, \*\*\* p<.001.

## 7.7 Moderation Analysis

Moderation can be tested by analyzing the interaction effect of a predictor and the moderating variable (MV) on a response variable. This can be achieved by regression analysis where the statistical significance of an interaction between independent variable (IV) and moderating variable predictors in a linear

regression line is assessed by forming a new variable that is the product of independent variable and dependent variable (DV) and including this product term in a regression, along with the original predictor variables. The significance of interaction term indicates a moderating effect of moderating variable on the relation of independent variable and dependent variable (Baron and Kenny, 1986).

By conducting moderation analysis, we can study how moderator variable(s) alter the relationship between the regressor (independent variable) and the response variable (dependent variable). At particular level of the moderator the relationship between independent variable and the dependent variable will be stronger or weaker. In some situations the direction of the IV-DV relationship changes from positive to negative and when we conceptualize the effect of a metric moderator variable it is important to think how the IV-DV relationship is moderated by the moderator i.e., at what levels of the moderator will the relationship between independent variable and dependent variable be strongest or weakest (Baron and Kenny, 1986; Frazier et al., 2004; Muller et al., 2005).

For the purpose of testing hypotheses H<sub>7</sub>-H<sub>9</sub>, I conducted moderation analysis through regression. The effect of human capital as a moderating variable was calculated on the interaction of social capital (independent variable) and compound employment growth rate, compound sales growth rate, and compound profit growth rate (DVs) for hypotheses H<sub>7</sub>, H<sub>8</sub>, and H<sub>9</sub> respectively.

### **7.7.1 Moderating Effect of Human Capital on Social Capital and Z<sub>E</sub>**

Under this hypothesis, I assumed that human capital alters the relation between social capital and compound employment growth rate employment growth (Z<sub>E</sub>). To test the hypothesis H<sub>7</sub>, human capital was taken as the moderating variable and the two variables social capital and employment growth were treated as independent variable and dependent variable respectively. As both the predictors (moderating variable and independent variable) were in metric form, I centralised the moderating variable (human capital) and independent variable (social capital) by taking the deviation of these variables from their respective means. This

reduced the problem of multicollinearity i.e., minimised the correlation between human capital and social capital. The interaction terms were calculated by using continuous data. The moderating effect was explored by applying three models as defined below:

$$Z_E = \gamma_0 + \gamma_1 \text{SC} \quad (\text{Model 7})$$

$$Z_E = \gamma_0 + \gamma_1 \text{SC} + \gamma_2 \text{HC} \quad (\text{Model 8})$$

$$Z_E = \gamma_0 + \gamma_1 \text{SC} + \gamma_2 \text{HC} + \gamma_3 \text{SC} \times \text{HC} \quad (\text{Model 9})$$

Model 7 is a simple relation of compound employment growth rate with the social capital and the parameter  $\gamma_1$  that indicates the weight of social capital on transformed compound employment growth. In Model 8, two predictors social capital and human capital have been taken and the parameters  $\gamma_1$  &  $\gamma_2$  are the impact of these predictors on employment growth respectively. Similarly in Model 9, the effect of interaction term (SC×HC) has been considered in addition to the effect of main factors (SC & HC). The ordinary least square (OLS) estimates under Models 7, 8 and 9 are presented in the following table:

**Table 7-14: Results of Moderation – Compound Employment Growth**

	Predictors	R <sup>2</sup>	Estimate	t-statistic	P-Value
Model 7	SC	0.53	0.128	5.249	0.000***
Model 8	SC	0.52	0.120	4.739	0.000***
	HC		0.227	1.601	0.110
Model 9	SC	0.59	0.113	4.413	0.000***
	HC		0.261	1.836	0.067*
	SC X HC		0.019	2.059	0.040**

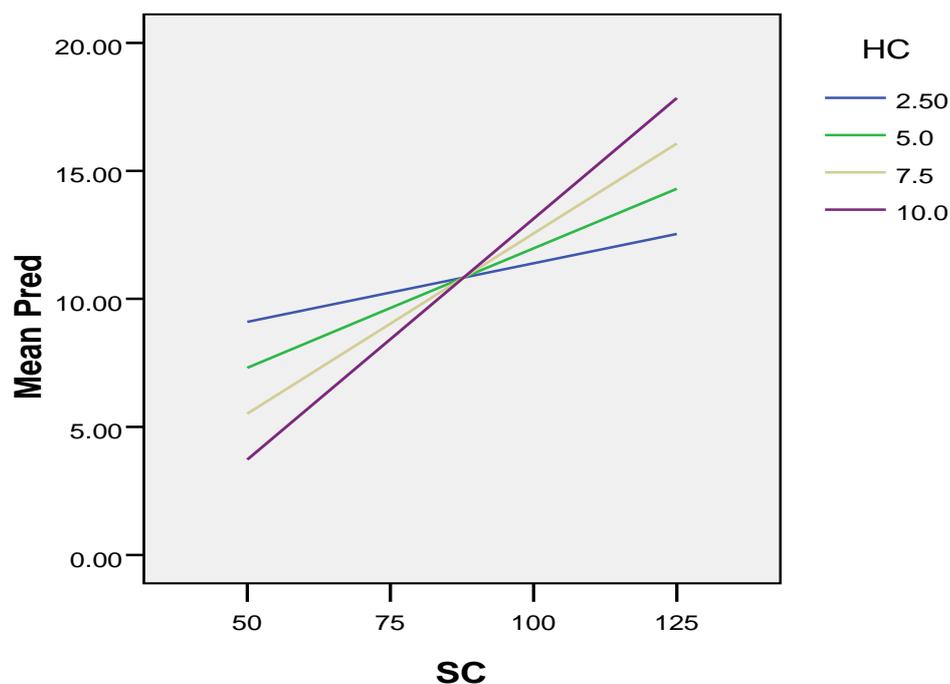
\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

Model 9 suggests a better fit (R<sup>2</sup>=0.59) when compared to Model 7 and Model 8. Social capital is observed to be significant under model and the value of coefficient decreased from Model 7 to Model 8 and marginally under Model 9. The significance of the interaction term under Model 9 and the significance of

both the main effects are sufficient evidence to conclude that human capital alters the relation between social capital and compound employment growth rate. Also the positive sign of the interaction suggests the positive impact over compound employment growth rate i.e., the firms owned by women entrepreneurs with more social capital have more employment growth, if they have higher level of human capital.

This can also be verified from the following graph where the four predicted lines are plotted against social capital values. The four lines reflect the change in compound employment growth rate against the change in social capital at four different levels of human capital. The movement of the lines shows an increasing trend in employment growth and social capital when human capital is also of increasing nature. These findings support the hypothesis H<sub>7</sub> that “*Firms owned by women entrepreneurs with higher social capital will show higher employment growth, if they have a higher level of human capital.*”

**Figure 7-7: Line Graph of Interaction between Social Capital and Human Capital as Predictors of Compound Employment Growth**



### 7.7.2 Moderating Effect of Human Capital on Social Capital and $Z_s$

Under this hypothesis it was assumed that human capital alters the relation between social capital and compound sales growth rate. Human capital was considered as the moderating variable and the two variables, social capital and compound sales growth rate, were treated as independent variable and dependent variable respectively. Since both the predictors (moderating variable and independent variable) are in metric form, both human capital variable and social capital variable were centralised by taking the deviation of these variables from their respective means. The action reduced the problem of multicollinearity i.e., minimised the correlation between human capital and social capital. I explored the moderating effect by taking into account three models as defined below:

$$\mathbf{Zs} = \gamma_0 + \gamma_1 \mathbf{SC} \quad (\text{Model 10})$$

$$\mathbf{Zs} = \gamma_0 + \gamma_1 \mathbf{SC} + \gamma_2 \mathbf{HC} \quad (\text{Model 11})$$

$$\mathbf{Zs} = \gamma_0 + \gamma_1 \mathbf{SC} + \gamma_2 \mathbf{HC} + \gamma_3 \mathbf{SC} \times \mathbf{HC} \quad (\text{Model 12})$$

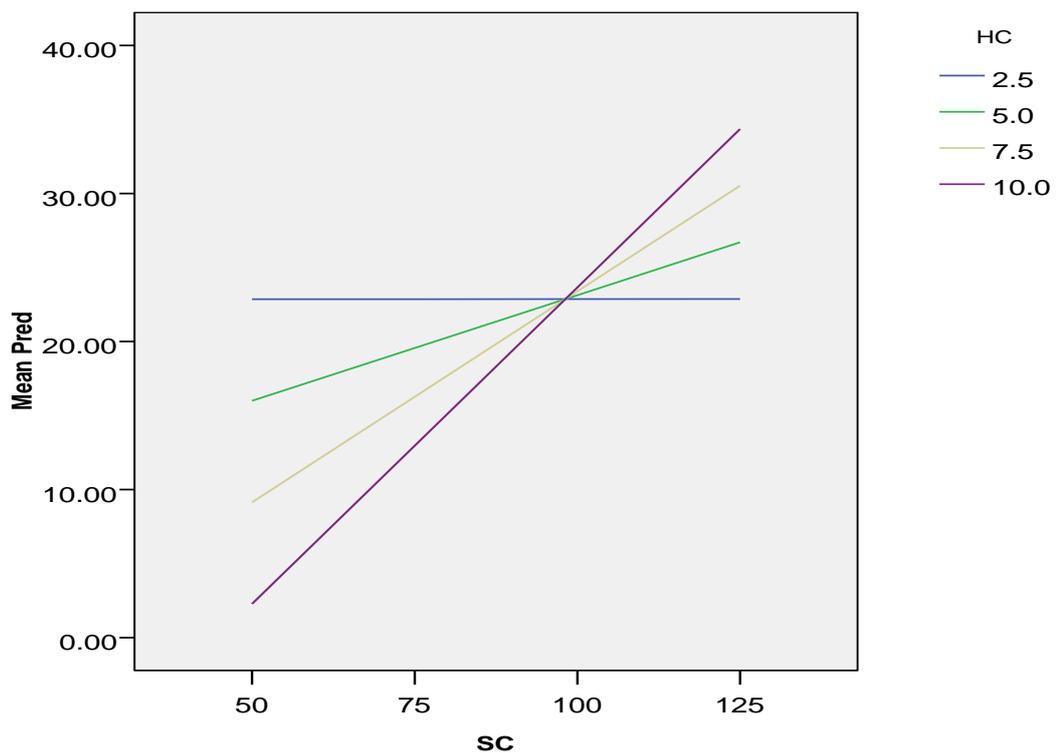
Model-10 is a simple relation of sales growth with the social capital and the parameter  $\gamma_1$  indicates the weight of social capital on sales growth. In Model-11, two predictors social capital and human capital were taken and the parameters  $\gamma_1$  &  $\gamma_2$  were the impact of social capital and human capital on sales growth respectively. Similarly in Model12, I calculated the effect of interaction term ( $\mathbf{SC} \times \mathbf{HC}$ ) in addition to the main factors' ( $\mathbf{SC}$  &  $\mathbf{HC}$ ) effect. The ordinary least square (OLS) estimates under Models 10, 11, and 12 are presented in Table 7-14.

Model 12 suggests slightly better fit ( $R^2=0.491$ ) when compared to Model 10 and Model 11. Social capital is observed to be significant under Models 10, 11 and 12. The value of coefficient decreased from Model 10 to Model 11 and remains stable from Model 11 to Model 12.

**Table 7-15: Results of Moderation – Compound Sales Growth Rate**

	Predictors	R <sup>2</sup>	Estimate	t-statistic	P-Value
Model 10	SC	0.46	0.206	4.756	0.000***
Model 11	SC	0.471	0.202	4.460	0.000***
	HC		0.189	1.537	0.062*
Model 12	SC	0.497	0.202	4.408	0.000***
	HC		0.191	1.849	0.053*
	SC X HC		0.057	2.163	0.034**

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

**Figure 7-8: Line Graph of Interaction between Social Capital and Human Capital as Predictors of Compound Sales Growth Rate**

The significance of the interaction term under Model-12 is also observed that indicates the sign of moderating effect of human capital over the relation between social capital and sales growth. The significance is evident in Figure 7-14 where the average predicted compound sales growth rate is plotted against social capital

under different values of human capital. Again the trend of lines indicates the change in sales growth against social capital under the variation of human capital. These findings support the hypothesis  $H_8$  that “*Firms owned by women entrepreneurs with higher social capital will show higher sales growth, if they have a higher level of human capital.*”

### 7.7.3 Moderating Effect of Human Capital on Social Capital and $Z_p$

Under this hypothesis it was assumed that human capital (HC) alters the relation between social capital and compound profit growth rate. The steps taken in sections 7.7.1 and 7.7.2 were repeated to explore the moderating effect by taking into account three models as defined below:

$$Z_p = \gamma_0 + \gamma_1 SC \quad (\text{Model 13})$$

$$Z_p = \gamma_0 + \gamma_1 SC + \gamma_2 HC \quad (\text{Model 14})$$

$$Z_p = \gamma_0 + \gamma_1 SC + \gamma_2 HC + \gamma_3 SC \times HC \quad (\text{Model 15})$$

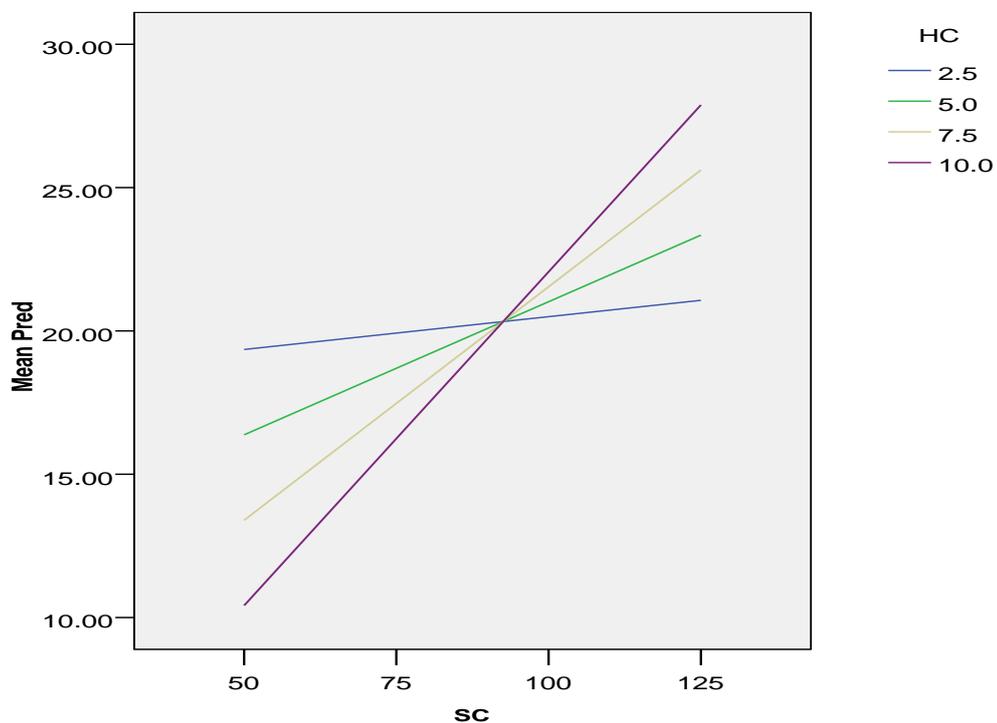
Model 13 is a simple relation of profit growth with the social capital and the parameter  $\gamma_1$  indicates the weight of social capital on profit growth. In Model 14, I have taken two predictors social capital & human capital and the parameters  $\gamma_1$  &  $\gamma_2$  are the impact of these predictors on profit growth respectively. Similarly in Model 15, I have considered the effect of interaction term (SC×HC) in addition to the main factors effect. The ordinary least square (OLS) estimates under Models 13, 14, and 15 are presented in Table 7-16.

Model 15 suggests a better fit ( $R^2=0.20$ ) when compared to Model 13 and Model 14. Social capital is observed to be significant under Model 13, 14 and 15. The value of coefficient for social capital decreased from Model 13 to Model 14 and improved under Model 15.

**Table 7-16: Result of Moderation – Compound Profit Growth Rate**

	Predictors	R <sup>2</sup>	Estimate	t-statistic	P-Value
Model 13	SC	0.15	0.120	2.555	0.011**
Model 14	SC	0.19	0.118	2.408	0.017**
	HC		0.230	1.892	0.048**
Model 15	SC	0.20	0.122	2.476	0.014**
	HC		0.251	2.110	0.037**
	SC X HC		0.028	1.958	0.044**

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

**Figure 7-9: Line Graph of Interaction between Social Capital and Human Capital as Predictors of Profit Growth**

The significance of the interaction term under Model 15 suggests the presence of moderating effect of human capital over the relation of social capital and profit growth. The same is supported by the line movement in Figure 7-9. Therefore,

these findings support the hypothesis H<sub>9</sub> that “*Firms owned by women entrepreneurs with higher social capital will show higher profit growth, if they have a higher level of human capital*”.

## 7.8 Kitchen Sink Model – General to Specific Approach

After identifying the significance of specific blocks of variables (human capital and social capital), I analysed the significance of specific variables through an econometric method known as the Kitchen Sink Model (Basu and Goswamy, 1999; Altinay and Altinay, 2006). All the listed variables were included as follows to move to a simpler model, for the estimation of regression:

$$\log y_i = \alpha_0 + \beta_1 D_{xi1} + \beta_2 D_{xi2} + \beta_3 \log x_{i3} + \dots + \beta_{44} D_{xi44} + u_i$$

Where D represented a dummy variable and i had a range from 1 to N. In the first stage, all variables were included in the model. The consequent stages involved eliminating the insignificant ones (with P values of greater than 0.9, 0.7, 0.5, 0.3, and 0.1 respectively).

Before applying the ‘general to specific approach’ to test the significance of independent variables, the White’s test and the Lagrange multiplier tests were conducted for the sample’s heteroscedasticity (Basu and Goswamy, 1999) and confirmed that the sample was homoscedastic. Variance inflation factors ratios (VIF) for all the excluded variables at each stage confirmed that the multicollinearity was not a problem for the variables in the model. The final model/equation for dependent variables is presented in the following sub-sections.

### 7.8.1 Compound Employment Growth Rate – Impact of Independent Variables

#### 7.8.1.1 Social Capital

Multiple regression technique was run in order to assess the social capital items on transformed Employment Growth Rate. The response variable  $Z_E$  and 40

predictors (social capital items) were used in the analysis to observe the possible significant/insignificant effect of Social Capital items on  $Z_E$ . Fourteen items had significant effect at  $P < 0.20$ . Again multiple regression analysis was performed to observe the significant effect of social capital items on  $Z_E$  ( $P < 0.10$ ) and 12 items were found to have a significant effect. In the next stage, 10 items were again observed to be having a significant effect on  $Z_E$  ( $P < 0.05$ ). In this stage, 7 items were again observed to be having a significant effect on  $Z_E$  ( $P < 0.01$ ). The model summary was  $R^2 = 0.625$ ,  $AR^2 = 0.59$ ,  $F = 14.467$ ,  $P = 0.000$ . In the last stage, multiple regression technique on these seven significant items of social capital was applied. This time all the seven items showed significant effect on  $Z_E$ . The model summary was  $R^2 = 0.671$ ,  $AR^2 = 0.593$ ,  $F = 15.965$ ,  $P = 0.000$ , so the final model becomes:

$$Z_E = 1.422 + 0.021 \text{ Effective networking}^* + 0.085 \text{ Importance of formal groups for business}^{**} - 0.054 \text{ Help of friends/relatives/acquaintances at start-up}^* + 0.026 \text{ Advice from members of sports club} + 0.023 \text{ Business advice from community/neighbourhood}^* - 0.032 \text{ Business Advice from customers}^{**} + 0.024 \text{ Business advice from employees}^*$$

The kitchen sink model results for significant variables are illustrated in Table 7-17. The model has  $R^2$  value of 67.1 per cent. This illustrates that OLS estimation for this model describes 67.1 per cent of the variation in the dependent variable, compound employment growth. The absolute values of all the coefficients ( $\beta$ ) between 0 and 1 indicate that the functional relationship between the dependent variable and all independent variables is estimated to be concave (irrespective of being positive or negative). This means that the marginal contribution of each explanatory factor to growth is subject to diminishing returns (Basu and Goswamy, 1999; Altinay and Altinay, 2006).

**Table 7-17: Kitchen Sink Model Equation - Compound Employment Growth Rate and Social Capital Items**

	B	Std. Error	t	Sig.	95% CI for B	
					Lower	Upper
(Constant)	1.422	.055	25.768	.000***	1.313	1.530
Effective networking	.021	.009	2.393	.017*	.004	.039
Importance of Formal Group for Business	.085	.026	3.250	.001**	.034	.137
Help of friends/relatives/acquaintances since start up?	-.054	.023	-2.298	.022*	-.100	-.008
Members of your sports / recreation club	.026	.010	2.733	.007**	.007	.045
Business Advice from neighbourhood and/or community	.023	.011	2.163	.031*	.002	.044
Business Advice from your customers	-.032	.012	-2.631	.009**	-.055	-.008
Business Advice from your employees	.024	.011	2.122	.034*	.002	.046

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

### 7.8.1.2 Human Capital

The response variable  $Z_E$  and 4 predictors (human capital items) were used in the analysis to observe the possible significant/insignificant effect of predictors on  $Z_S$ . Two items were found to be significant at  $P<0.20$ . Again multiple regression analysis was performed by using these two significant predictors and both were found significant at  $P<0.10$ .

**Table 7-18: Kitchen Sink Model Equation - Compound Employment Growth Rate and Human Capital Items**

	B	Std. Error	t	Sig.	95% CI for B	
					Lower	Upper
(Constant)	1.783	.007	267.035	.000	1.681	1.886
Work experience	.063	.011	4.134	.027**	.056	.071
No. of years of work experience	-.009	.001	-3.717	.014**	-.013	-.005

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

In the final stage, Table 7-18 shows these predictors' significance at  $P<0.05$ . The model summary was  $R^2 = 0.652$ ,  $AR^2 = 0.487$ ,  $F = 11.876$ ,  $P = 0.000$ . The final model is shown as below:

$$Z_E = 1.783 + 0.063 \text{ Work experience}^{**} - 0.009 \text{ No. of years of work experience}^{**}$$

## 7.8.2 Compound Sales Growth Rate – Impact of Independent Variables

### 7.8.2.1 Social Capital

The response variable  $Z_S$  and 40 predictors (social capital items) were used in the analysis to observe the possible significant/insignificant effect of Social Capital items on  $Z_S$ . The results of multiple regression (Kitchen Sink Model) showed that six items had a significant effect on  $Z_S$ .

**Table 7-19: Kitchen Sink Model Equation – Compound Sales Growth Rate and Social Capital Items**

	B	Std. Error	t	Sig.	95% CI for B	
					Lower	Upper
(Constant)	1.655	.045	37.142	.000	1.567	1.742
Number of Formal Groups	-.009	.005	-2.064	.040*	-.018	.000
Financial Contribution to Formal Group	.032	.008	3.970	.000***	.016	.048
Business advice from business owner in the same business sector	.034	.010	3.259	.001***	.014	.055
Business advice from members of your sports / recreation club	.024	.010	2.504	.013*	.005	.043
Getting along with the members of same business association	-.031	.012	-2.627	.009**	-.055	-.008
Business advice from suppliers	.027	.009	3.019	.003**	.009	.044

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

The model summary was  $R^2 = 0.712$ ,  $AR^2 = 0.513$ ,  $F = 19.078$ ,  $P = 0.000$ . The final model is shown as below:

$Z_S = 1.655 - 0.009 \text{ No. of formal groups}^* + 0.032 \text{ Financial contribution to formal groups}^{***} + 0.034 \text{ Business advice from business owner in the same business sector}^{***} + 0.024 \text{ Business advice from members of sports club}^* - 0.031 \text{ Getting along with the members of same business association}^{**} + 0.027 \text{ Business advice from suppliers}^{**}$

### 7.8.2.2 Human Capital

The response variable  $Z_S$  and 4 predictors (human capital items) were used in the analysis to observe the possible significant/insignificant effect of predictors on  $Z_S$ . Only one item was found to be significant ( $P < 0.20$ ). Again multiple regression

analysis was performed by using this single significant predictor and the results shown below explain the significance of work experience:

$$Z_S = 1.814 + 0.068 \text{ Work experience}^{***}$$

**Table 7-20: Kitchen Sink Model Equation – Compound Sales Growth Rate and Human Capital Items**

	B	Std. Error	t	Sig.	95% CI for B	
					Lower	Upper
(Constant)	1.814	.013	140.718	.000	1.789	1.839
Work experience	.068	.016	4.176	.000***	.036	.101

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

### 7.8.3 Compound Profit Growth Rate – Impact of Independent Variables

#### 7.8.3.1 Social Capital

Multiple regression was applied on response variable  $Z_P$  and 40 predictors (social capital items) and 10 items were observed to have significant effect at  $P<0.20$ . The model summary was  $R^2 = 0.242$ ,  $AR^2 = 0.217$ ,  $F = 3.439$ ,  $P = 0.000$ . Again multiple regression analysis was performed by using these 10 significant predictors and 4 items were observed having a significant effect on  $Z_P$  at  $P<0.10$ . The model summary was  $R^2 = 0.195$ ,  $AR^2 = 0.178$ ,  $F = 11.451$ ,  $P = 0.000$ . In the final stage, again multiple regression technique was applied on these 4 significant items of social capital. The results are outlined in Table 7-21.

From the results of the Table 7-21, all these four items were again observed to be having a significant effect on  $z$  ( $P<0.05$ ). The model summary was  $R^2 = 0.177$ ,  $AR^2 = 0.170$ ,  $F = 25.913$ ,  $P = 0.000$ . The final model is shown as below:

$$Z_P = 1.314 + 0.025 \text{ Close relatives in business at start-up}^{***} + 0.041 \text{ Importance of formal groups for business}^{***} + 0.018 \text{ Financial contribution to formal group}^{***} - 0.014 \text{ Number of formal groups}^{***}$$

**Table 7-21: Kitchen Sink Model Equation – Compound Profit Growth Rate and Social Capital Items**

	B	Std. Error	t	Sig.	95% CI for B	
					Lower	Upper
(Constant)	1.314	.010	136.185	.000	1.295	1.333
Number of formal groups	-.014	.002	3.789	.000**	-.017	.038
Financial contribution to formal group	.018	.003	5.397	.000**	.011	.024
Importance of formal group for business	.041	.011	3.847	.000**	.020	.062
Close relative(s) and/or friends working at start-up	.025	.007	3.789	.000**	.011	.024

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

### 7.8.3.2 Human Capital

The response variable  $Z_S$  and 4 predictors (human capital items) were used in the analysis to observe the possible significant/insignificant effect of predictors on  $Z_S$ . Two items were found to be significant at  $P<0.20$ .

**Table 7-22: Kitchen Sink Model Equation – Compound Profit Growth Rate and Human Capital Items**

	B	Std. Error	t	Sig.	95% CI for B	
					Lower	Upper
(Constant)	1.338	.005	253.045	.000*	1.328	1.348
Work experience	.028	.009	3.302	.001*	.011	.045
No. of year work experience	-.002	.001	-2.908	.004*	-.004	-.001

\* p<0.10, \*\*p<0.05, \*\*\* p<0.01

Again multiple regression analysis was performed by using these two significant predictors and the results shown below explain the significance of work experience:

$$Z_P = 1.338 + 0.028 \text{ Work experience}^{**} - 0.002 \text{ No. of years of work experience}^{**}$$

## 7.9 Quantitative Results – Summary

The objectives of conducting a quantitative analysis were to discover the relationship between dependent variables (compound growth rates) and independent variables (social capital and human capital), as well as the moderating effect of human capital on the relationship between social capital and compound growth rates of women-owned enterprises in England.

The nine hypotheses developed were tested by applying different statistical techniques such as Pearson product-moment correlation, regression and moderation analysis. Table 7-24 shows the result (either ‘acceptance’ or ‘rejection’ of the hypothesis) for each statistical test carried out on the data. It is important to note the concept of trade-off between statistical and substantive significance before it is applied in the acceptance and rejection of findings. Statisticians always contest the significance of correlation and regression in results. Almost every positivist management science researcher applies these statistical tests to interpret their data. Other schools of research argue that achieving statistical significance to an accuracy of 0.05 is neither a necessary nor sufficient condition for inferring conclusions or making recommendations. Therefore, researchers must consider the substantive significance of results reported and what makes them interestingly different. The size, elasticity and reason for the reported coefficients make the substantive understanding of regression coefficients both difficult and interesting (McCloskey and Ziliak, 1996; Seth et al., 2009). For this study, these statistical techniques helped to test the hypotheses.

The quantitative results show (Table 7-23) that social capital has a significant, positive impact on employment and sales growth rate, but its effect on profit growth rate is insignificant. One of the possible explanations is that women entrepreneurs might have been reluctant to share their exact profit figures for the purpose of tax reduction, which is in line with other research studies (Fadahunsi et al., 2000; Wang and Altinay, 2012). Another explanation could be that when sales of any company increases, it is up to the decision-making operations to make cost-

price mechanisms work and generate profit. Many internal decisions and actions determine the final profit figure, so generating profit is an internal process to the company rather than directly associated with (structurally or relationally embedded) social capital. Keeping in view of these insignificant results and to explore complex independent variables in detail, it is necessary to study entrepreneurs' level of education, experience and training (for understanding the in-depth impact of human capital); and relationships, the strength of ties (Van Deth, 2003) and the density and range of networks (Kim and Aldrich, 2005) for understanding the impact of entrepreneurs' social capital on the growth of their enterprises.

**Table 7-23 Quantitative Results – Summary**

<b>H #</b>	<b>Method</b>	<b>Statistical Technique Applied</b>	<b>Result</b>
<b>H<sub>1</sub></b>	Bivariate	Pearson product-moment formula	Supported
	OLS	Regression	Supported
<b>H<sub>2</sub></b>	Bivariate	Pearson product-moment relation	Supported
	OLS	Regression	Supported
<b>H<sub>3</sub></b>	Bivariate	Pearson product-moment relation	Not Supported
	OLS	Regression	Supported
<b>H<sub>4</sub></b>	Bivariate	Pearson product-moment relation	Supported
	OLS	Regression	Supported
<b>H<sub>5</sub></b>	Bivariate	Pearson product-moment relation	Supported
	OLS	Regression	Supported
<b>H<sub>6</sub></b>	Bivariate	Pearson product-moment relation	Supported
	OLS	Regression	Supported
<b>H<sub>7</sub></b>	Moderation	Regression	Supported
		Line Graph	Supported
<b>H<sub>8</sub></b>	Moderation	Regression	Supported
		Line Graph	Supported
<b>H<sub>9</sub></b>	Moderation	Regression	Supported
		Line Graph	Supported

As mentioned earlier in Chapter 6, Van Deth (2003) suggests that while measuring the aspects of social capital such as connections or networks, it is difficult to observe 'actual relationships' by quantitative methods (and their effects on the growth of enterprises in the context of this study). For this reason, and to enhance the validity of the conclusions (Bryman and Bell, 2007), 42 women entrepreneurs were interviewed on one to one basis. The results of those interviews are given in the next chapter.

## Chapter 8      Qualitative Results

### 8.1 Introduction

This chapter presents the findings from 42 in-depth interviews conducted with women entrepreneurs across three regions in the UK. As described in the previous chapter, the quantitative data were used to test the nine hypotheses and to determine the significant variables that affect the growth of women-owned enterprises in the UK.

The objectives of conducting the interviews were to verify, explore and explain the results of the quantitative study. The purpose was not only to reveal and understand whether there was any relationship between dependent and independent variables but also to find ‘how’ social and human capital, in real cases, affect the growth of women-owned enterprises. These detailed interviews helped to discover new insights and to find out what was happening (Fukuyama, 1998; Saunders et al., 2009). Another objective was to extend and develop our understanding of how these relationships (between human based capital and growth of women owned enterprises) work or unfold. The range of questions used helped in understanding how women entrepreneurs build and use their human capital and social capital, and consequently why and how these forms of capital help them achieve employment, sales and profit growth.

In this chapter, I show how important constituents of social capital such as social networks (Aldrich, 1989; Renzulli et al., 2000), social participation (Burt, 1992; Putnam, 2000), social activity (O' Donnell et al., 2001) and trust (Burt, 1992; Putnam, 2000; Requena, 2003) play a role in the growth of women-owned enterprises in the UK. It also explains the processes whereby human capital plays a role in enterprise growth. Women entrepreneurs' views about the relationship of

growth to their education, work experience and especially business management education are presented in detail.

During the interviews, the women entrepreneurs were asked to describe how their human capital had contributed towards their ability to access, build and use their social capital and consequently helped them grow their enterprises. The fourth section of this chapter attends to matters concerning the moderating role of human capital between social capital and growth of women-owned enterprises. The final section provides a summary and sets the scene for further discussion presented in the next chapter.

## **8.2 Social Capital and Growth of Women-Owned Enterprises**

### **8.2.1 Social Capital – Participants’ Perception**

Social capital is ‘notoriously difficult to define and operationalise’ (Sapleton, 2009: 196). However, each characterisation of social capital in the literature portrays some similar constituents. These include social networks (Aldrich, 1989; Renzulli et al., 2000), social norms and behaviour (Burt, 1992; Putnam, 2000), social participation and activity (O’ Donnell et al., 2001) and trust (Burt, 1992; Putnam, 2000; Requena, 2003).

One of the first few tasks for me was to comprehend the participants’ perception and understanding of their social capital. Without explaining to them the different notions and constituents of social capital, they were asked about their perception and knowledge of social capital and what they thought about it.

#### ***8.2.1.1 Networks: Different Sources for Different Sectors***

Perceptions about social capital varied depending on the nature and form of the business. Most of the women entrepreneurs operating in the services sector (26 out of 30) described both local and regional networks and professional groups as their major sources of social capital. The following quotation is typical:

*I like to go to some events with colleagues in the industry. We exchange gossip and we know what is going on. I have always had a good relationship with them and I can always discuss problems with them. I think they are my social capital. (L<sub>1</sub>)*

Traders and caterers considered ‘existing customers as their best contacts’ along with suppliers and distributors, ultimately forming their social capital. One of the traders commented:

*I invest most of my time, energy and efforts on my customers who are my ambassadors, and my real social capital. (M<sub>3</sub>)*

They also referred to exhibitions and events related to their work as great sources of contacts for building their social capital as well as attracting customers.

All four manufacturers considered their suppliers and/or distributors as their major sources of social capital as they served as a link between them and their customers. As stated by one women entrepreneur:

*I think my most valued social capital is my suppliers. (K<sub>2</sub>)*

In the early stages of existence, institutions (such as Business Link, a government-funded body working for the establishment and development of enterprises in England) and professional groups provide access to information, advice, knowledge transfer and – eventually – customers to small and medium enterprises, especially in the trading and manufacturing sectors. Most of the respondents (27 out of 42) praised Business Link and considered it one of the major sources for developing their social capital.

*It would have been really difficult for me to set up my business without the help and knowledge I gained from Business Link. It was not only knowledge gained through training but also finding a contact at that*

*training programme. We became friends and she helped me a great deal in setting up my business and then referring me to a number of clients and suppliers. (S<sub>3</sub>)*

### **8.2.1.2 Trust: The Ultimate Source for Building Social Capital?**

Trust and shared values are the basis of durable relationships and the construction of significant social capital (Deakins et al., 2007). The majority of participants (29 out of 42) acknowledged the importance of building relationships based on trust, and described trust as the ultimate source, and one of the most important building blocks, of their own social capital. Dorothy based in the South East of England region argued:

*You need people whom you can trust and they understand your situation. They are the ones who build your social capital. I like to work with people who match me in quality and integrity, people from whom I know what to expect. (D<sub>2</sub>)*

Trust is usually a product of repeated interactions that foster norms of reciprocity, reliability and dependability. One of the participants, Iona stated:

*I deal with so many people on daily basis – customers, suppliers, employees and sometimes local stakeholders. In my opinion, only those are part of my social capital with whom I have repeated interactions, dealings and/or transactions over a period of time. I have tried and tested them over time and they have come up to my expectations. They have established credibility over a period of time, and I know they will not betray my confidence, and will help me, if I need them in future. (I<sub>3</sub>)*

Iona's point of view mentioning trust (based on repeated interactions, dealings and transactions) as a source of social capital was shared by nine other participants. The same has been mentioned by other researchers (Coleman, 1988; Putnam, 1993) in different academic studies.

### ***8.2.1.3 Social Participation and Social Activity: A Catalyst in Building Social Capital***

According to Sappleton (2009: 196), social capital is ‘the degree of trust in others, social integration and social activity that facilitates cooperative relations between individuals’. A majority of participants (32 out of 42) stated that their social capital emanates from their social participation and social activities. One interviewee working in the services sector described as follows:

*I live in a village. We have monthly residents’ meetings in the local church where we organise variety of events. It is an excellent opportunity to interact with others, to know them better, and to make friends. I think these people with whom I meet, interact and share my social life are my social capital. (D<sub>1</sub>)*

Nikita lives in London, and her response, below, is shared by most of the city dwellers among the respondents:

*I make sure that I attend local social events in my community. While I am attending these events I try to mingle and mix with other community members. I believe that my community is my social capital – these are the people to whom I can look for help, if need arises. (N<sub>3</sub>)*

A few participants (6 out of 42) talked about their involvement in charitable organisations and identified this as a major source of building social capital. A typical quotation shared by these six participants was that by Francesca:

*I am a member of a local charity. I volunteer my time and contribute some money regularly. My voluntary activities give me satisfaction for sure, but there’s a bonus as well. While contributing my time for these social activities, I have made some honest, trustworthy, dependable and reliable friends. I think they are my social capital. (F<sub>2</sub>)*

#### 8.2.1.4 Social Norms and Behaviour: A Source of Social Capital

According to Coleman (1990: 241), ‘a norm is a property of social system, not of an actor within it’. Norms are one of the most commonly discussed forms of social capital (McElroy et al., 2006). Putnam (2000: 19) defines social capital as something which ‘refers to connections among individuals – networks and the norms of reciprocity that arise from them’. Most of the participants (29 out of 42) talked about norms of reciprocity and obligations in different contexts, but when asked about their understanding of social capital only a few participants (9 out of 42) talked about the norms of reciprocity as a source of their social capital. They emphasised reciprocity more in the way a sense of obligation and expectation, which defines the ‘rules’ of the game, supporting Ostrom’s (2005) view that obligations and expectations are actually ‘rules’, rather than merely ‘norms’.

**Table 8-1: Social Capital – Participants’ Perspectives**

<b>Category</b>	<b>Typical Quotation</b>
<b>Social Networks</b>	<i>My friends, family and all the stakeholders associated with my business are my social capital. I keep on adding to it by networking.</i>
<b>Trust</b>	<i>All those in my ‘inner circle’ whom I can trust – those who understand and help me, no matter what happens – are my social capital.</i>
<b>Social Activity and Participation</b>	<i>I volunteer for a local charity. It is such a satisfactory feeling to help others. But I have been able to make quite a number of friends there as well. We meet each other, interact, spend time and work for a common cause. I think these people are my social capital.</i>
<b>Social Norms and Behaviour</b>	<i>In my community, I have a circle of friends who know each other very well. I think they are my social capital. Why? Because, I am sure they will help me whenever I need them and the feeling is mutual because I am willing to help them all the time as well.</i>

It means that you will be helped only if you have helped or willing to help someone. A typical quotation was expressed by Charlotte, from the Greater London region:

*I have friends, family members and some business contacts with who I have established a rapport. They are my social capital, because there's a feeling of association based on reciprocity and obligations. I know if I am helping them, they will reciprocate the favour, if needed. This is an unwritten agreement between us based on mutual expectations. (C<sub>3</sub>)*

Overall, social networks generated the highest number of references, and appeared to be considerably important in defining the participants' social capital. Table 8.1 gives typical quotes related to each category generated from the interviews.

### **8.2.2 Social Capital – Does it Facilitate the Growth of Women-Owned Enterprises?**

Nahapiet and Ghoshal (1998: 243) define social capital as comprising 'both the network and the assets that may be mobilized through that network'. The network perspective stresses the importance of vertical and horizontal associations between people and of relations within and among such organisational entities as community groups and firms (Woolcock and Narayan, 2000). This approach is crucial to this study, since it draws attention to the relationships between social capital and the entrepreneurial practices of accessing resources, establishing alliances and developing ventures.

One of the objectives of conducting these interviews was to find out participants' views about the role of social capital in facilitating growth in terms of employment, revenue and profit. The aim was to fill the holes left or strengthen the results of the quantitative study. The qualitative data helped me to verify and explore the existence and strength of the relationship between social capital and the growth variables. During these interviews, I was able to capture considerable information about that was missing in quantitative findings such as how women

entrepreneurs use different sources for building and using social capital for the growth of their enterprises. All the participants confirmed the effect of different sources of social capital on employment and sales growth. I have quoted their comments in the following sub-sections and the whole process has been explained in the case study narrated in section 8.2.3. I observed that while most of the interviewees were reluctant to quote their profit figures, they mentioned that increase in revenue positively impacts on their company's profit as well. Some of them were aware that increase in revenue did not necessarily translate into profit because of margins and the expenses incurred to grow their business. The qualitative findings confirmed the results of the hypotheses  $H_1$  and  $H_2$ . However, for  $H_3$ , the participants' views were divided.

To dig deeper, all the interviewees were shown a map of relationships and associations (Figure 6-4). This map was designed to organise the information provided by the participants in relation to the diverse contacts and networks accessed, association and groups joined, social activities and civic engagements performed and the types of resources exchanged within these relationships, association and activities at different stages of the organisation's growth (Roomi, 2009).

Women entrepreneurs were asked to map out their main relationships: links, networks, associations, institutions and people with whom they had any sort of relationship contributing to their entrepreneurial activities. They were also asked to describe the strength of the relationship, the density and frequency of the contact, and the type of services, information or support exchanged. Their replies have been described in the following subsections to explain whether different forms of social capital possessed by women entrepreneurs in the UK helped them in their enterprises. If yes, how did this help facilitate their firms' growth? The respondents not only identified the type of people with whom they had relationships but also discussed how those relationships affect their firms' performance over time.

Women entrepreneurs' views about their social networks have been grouped into the following categories based on the survey questionnaire (by applying theory-driven and prior-research-driven approaches of code development):

- Family and Friends
- Networking Groups (women-only)
- Networking Groups (mixed gender)
- Ex-Colleagues
- Mentors
- Business and Professional Advisors
- Suppliers/Distributors and Customers
- Staff
- Business Institutions and Associations

#### **8.2.2.1 Family and Friends**

Almost all women entrepreneurs (40 out of 42) referred to friends and family members as sources of help, especially in the earlier phases of their firms' development. For some (17 out of 42), they provided financial support at the start-up. For the majority of women entrepreneurs in the trading and services sectors (21 out of 38), their partners or at least one of other family members provided physical presence or help in running the business from the very start.

Twenty-seven entrepreneurs reported that the emotional support provided by their partners and other family members was most important. An example of such support was given by Tricia:

*Running your own business is such an emotional roller-coaster ride. One day you are ecstatic with joy on getting a new client or securing a big order but the next day you are down with shipping delays or unable to secure finance for opening up a new branch. One always needs an emotional soundboard to discuss all this. I am lucky to have a partner who is always there whenever I need to talk. (T<sub>2</sub>)*

Kudsia, an electronics engineer by degree, owns a manufacturing firm in the South East of England. She belongs to an ethnic minority community, with very few women in the 'working sphere' from her ethnic background. She emphasised the role of family in her business success:

*In the last three years, the number of employees in my company has doubled and the revenue quadrupled. Many people ask me about the secret of my success. There could be many but the most important of them all is the trust my husband has in me. Never has he put any restriction on my mobility or my interaction with men. Whenever I need him, he is always there to help either financially or emotionally as well.*

(K<sub>2</sub>)

Two of the above mentioned quotes have highlighted the pivotal importance of husband's cooperation and emotional support for the success of women entrepreneurs. But the support of friends and family was not limited to emotional support but it's another important aspect was the financial support rendered not only in start-up but also in the later stages of business development. The majority of women entrepreneurs (26 out of 42) mentioned it in their interviews. Fareha expressed her experience in following words:

*I started my business with my own money and ran it successfully for six years. People asked me about opening up a branch in Stevenage but I was reluctant to invest such a huge amount. Partly, because I did not have that much amount of money and partly I did not want to take that risk alone. I discussed it with three close friends and Catherine, one of them joined me with her money and expertise. I knew I could rely upon her, so rest is history. That branch was so successful that now we have salons in four other places, including Watford, Milton Keynes, Hitchin and even in Central London. (F<sub>1</sub>)*

The interviews revealed that while overall amalgamation of a woman's family responsibilities and the requirements of her entrepreneurial venture make an excessive burden on her, her family and (especially) her husband's emotional and financial support play a crucial role in growing her enterprise. It was emotional support for Tricia, but for Kudsia and Fareha it was impossible to grow their businesses without the financial help of their family members and friends respectively.

#### **8.2.2.2 Networking Groups (Women-only)**

Most of the women entrepreneurs (29 out of 42) mentioned the friendly and supportive nature of women-only networking groups and highly valued them for emotional support, inspiration and encouragement. They pointed out that these groups provided them with a platform for sharing similar experiences and professional development especially in the 'existence' and 'survival' stages of their business. Here is a typical statement of interviewees who had a positive stance towards joining women-only networking groups:

*You become friendly very quickly with women; there is a sort of identification of the challenges you have to face in business and some other similarities. Women are generous with sharing information, views and contacts. The businesswomen network is very good support. Yes, I realise it takes time, effort and energy but benefits are so high that all this hard work is worth it. And please do not forget that these women-only networks are 'fun' too. (F<sub>3</sub>)*

Women-only networks were also thought of as a source for referrals and marketing especially by women entrepreneurs operating in the services sector. These networks help them in finding customers and act as an excellent 'word of mouth' promotional strategy saving advertisement costs when they are in the 'financial death valley' because of the shortage of cash inflow (Burns 2007: 167). A typical statement was expressed by Catherine:

*...you can't be an island, you need people! ... When I started my business I needed to meet people, I went to a lot of networking groups, especially women-only networking groups. People came to know about me, my services and my customer dealing. Now, most of my clients come from referrals. (C<sub>1</sub>)*

But how do these women-only networks help them grow? The interviewees came up with different answers ranging from advice, information, referrals to clients and even some partnership deals as well, impacting on their sales/revenue growth. But one of the most common themes was recommendation based on trust – recommendation to financial institutions or possible clients, recommendation of possible contractors and distributors. The majority (22 out of 42) termed these groups as one of the sources for recommendation of credible and trustworthy employees. A typical statement on this role of networks was reported by Jacqueline:

*You need to know people who you know are reliable and dependable. This is the point of networking, to make contact with people. It is like when you need a service, nine times out of ten times I tend to ask if somebody can be recommended. The response is always positive, saving me money, time and energy. (J<sub>1</sub>)*

More established women entrepreneurs, especially belonging to manufacturing and science and technology sectors, mentioned the absence of high-flying business women from women-only networking groups and pointed out the lack of business 'drive' in these groups. Five of them stated that the presence of men in a network makes it more professional and useful. This observation points out about the absence of 'bridging social capital', mentioned in the literature as being crucial for accessing resources to develop and grow businesses. Madhuri offers a typical statement of these interviewees who saw little or no value in attending women-only networking groups:

*Our business is based around a high tech industry and my experience of going to women-only networking group is not positive at all. Most of the women who come to those events are in the services sector looking for female clients. Whereas we are in growth oriented, high tech business, which is serious stuff. On contrary, I find mixed gender networking events more powerful and useful. (M<sub>3</sub>)*

### **8.2.2.3 Networking Groups (Mixed Gender)**

Many women entrepreneurs (25 out of 42) expressed the limited or non-availability of opportunities provided by women-only networking groups at the growth stage, while pointing out the importance of mixed gender formal and informal networks at this stage. A typical statement was expressed by Tamara:

*I did not get any benefit in the later stages of the business as most of the members of the women-only networks had limited approach about the development of their businesses. The moment I joined mixed gender formal groups, I realised they were talking big. I met a number of people out there who were so creative in generating ideas, identifying opportunities and also willing to help. (T<sub>1</sub>)*

There was a clear demarcation between women in manufacturing, science and technology oriented services, and financial services as compared to women operating in services especially for women clients. All the women in the former sectors praised the importance of mixed gender networking groups and described them as being one of the most effective ways of building their social capital. The participants explained that these groups were not only 'mixed' from gender perspective but also in terms of variety in sectors and differences in industries as well. One of the participants, Natalie, described it as follows:

*I recognise that when we have men in our group [women-only network – special days] people are more business-like. I think that sometimes women-only networks are very much influenced by appearances. Women*

*can be very judgmental, observing how you look, what you wear, if you have lipstick on, etc. That's why I prefer mixed groups. (N<sub>1</sub>)*

Another typical statement of interviewees who preferred mixed gender networks was from Laura:

*Building a long-term relationship based on trust is not an easy ride, especially with men. One has to prove herself that she deserves it. It's not like a 'sisters network' where you can say and express whatever comes to your mind. It's far more professional and focussed, sometimes boring, indeed. But the rewards are manifold as well. Last year, I wanted to diversify my products portfolio and Tim (whom I met at a networking event three years ago and with whom I established a rapport over time) helped me immensely. (L<sub>1</sub>)*

Laura and Natalie's quotations pointed out to the need for investing time and effort for cross-gender and sector network described as 'bridging social capital' in the literature (Narayan, 2002). While 'bonding social capital' (with members of the same gender or sector/industry) helped them in the start-up process, 'bridging social capital' (with members of the different gender or sector/industry) ameliorated their access to finance and specialised human resources. Three of the participants talked about using their contacts (from mixed gender networking groups) to access finance for growth, whereas 11 participants acknowledged them as helpful in the recruitment process. Other useful contributions included referral of clients (seven participants), recommendations of suitable suppliers (four participants), advice at crucial decision times (nine participants) and partnership in new projects (two participants).

Although the majority of women interviewed (40 out of 42) stated that they had not experienced problems in mixed groups, a couple of women mentioned certain issues, as follows:

*Women with other women feel more comfortable when showing vulnerability; with men, women need to show a tougher or braver face. We have to be professional, to-the-point and focussed in our networking events. The moment you show a relaxed attitude, men start having different perception about you. (D<sub>1</sub>)*

#### **8.2.2.4 Ex-Colleagues**

Most of the women entrepreneurs (36 out of 42) had prior work experience before starting their own company. Only eight of them referred to help rendered by their ex-colleagues, especially in the start-up phase of their business. Sharon's statement was typical of those who got help from their ex-colleagues:

*At the start, when having financial difficulties my company was so 'resource-hungry'. At that time, it was Tom (my ex-colleague) who helped me a lot by sparing his valuable time. I could just pick up the phone and consult him on important issues. (S<sub>3</sub>)*

Almost none of the interviewees talked about the involvement of their ex-colleagues in the growth stage of their businesses. Only one, Chris, mentioned that when she wanted to open up a new branch in nearby city she needed somebody who was trustworthy, reliable and dependable. Her immediate thought was one of her ex-colleagues, Richard (who was a good friend as well). She offered him a partnership, which he accepted. Since then they have opened three more branches in other cities. The number of employees has increased from 11 to 43 and their revenue has almost quadrupled. Chris did not want to share her profit figures.

#### **8.2.2.5 Mentors**

In addition to family, friends, customers, suppliers/distributors, etc., mentors emerged as a major element of women entrepreneurs' social capital. Mentors influence businesswomen at the personal level, by increasing their self-confidence and by providing advice and emotional support. They are usually professional

and/or business advisors who help entrepreneurs secure financial returns. In quite a few cases (17 out of 42), mentors were professional advisors who solved problems at critical moments during the growth of the business. As one of the interviewees commented:

*I have been very lucky to have two mentors; my ex-colleague and a consultant with whom I met at the local Chambers. They are always there at the end of the line for any question, and have helped me to gain confidence and business opportunities. (R<sub>3</sub>)*

Another typical statement of interviewees who had used mentors as their advisors was expressed by Martha:

*I found a mentor through my women-only network; her name is Veronica, she is brilliant, a great motivator — and always available when I need to make a decision. (M<sub>1</sub>)*

The data generated through interviews confirmed the vital role of mentors in the take-off stage of growth, where mentors built women entrepreneurs' confidence, motivated them, showed them new opportunities and provided them with expert advice as well.

#### **8.2.2.6 Business and Professional Advisors**

Entrepreneurs need extra financial, human and sometimes technical resources in the growth phase (Brush et al., 2004a), as growth depends on innovation and value addition. Most interviewees were of the view that professional and business advisors helped them in this stage, in addition to mixed gender, formal and informal networks. According to Beatrice:

*I was at a party where one of my business advisors introduced me to a 'business angel'. Within the next four months, he invested almost half a million in my company, giving it wings to fly. (B<sub>1</sub>)*

### **8.2.2.7 Suppliers, Distributors and Contractors**

For women in manufacturing and catering, suppliers and contractors represent a valuable relationship for developing the businesses. As expressed by some women (11 out of 42), suppliers and contractors both serve as a link between them and their customers, and provide opportune help:

*Local suppliers are very important for us. You get mutual support, they give you a good deal, then you hire them, and when you need them, they help you out. For example, I print a very expensive manual, and my printer gives me credit, that is why I consider him as my social capital.*  
(K<sub>2</sub>)

It was mentioned by some other interviewees as well that how their distributors, contractors and suppliers helped them in the growth process and to achieve their goals either by providing them inventory/raw material at easier/flexible credit terms or by introducing them to potential customers (and in a couple of cases to their new partners).

### **8.2.2.8 Customers**

As mentioned in Section 8.3.1, traders and caterers considered ‘existing customers as their best contacts’, who, along with suppliers and distributors, ultimately formed their social capital. The question remains how customers help women entrepreneurs grow their businesses apart from their repeat custom and patronage. A typical statement was expressed by Tamara as follows:

*I feel my customers have contributed in my firm’s growth. Yes, they purchase my services regularly but their real contribution is the publicity and reputation building they do for me. Most of my new clients are being referred by my existing clients.* (T<sub>1</sub>)

### 8.2.2.9 Staff

The dedication and devotion of staff were cited by almost all women entrepreneurs as an important factor in growth. A couple of typical statements are given below:

*I feel lucky that I got such a supportive staff that put extra effort in the 'take-off' and 'maturity' stages. (D<sub>1</sub>)*

*I think my main social capital is my staff, working with such a dedication. Some of them were there working day and night when my business was small. They worked really hard and supported it through thick and thin. Now I make sure that I take care of them and compensate them for all their efforts. (Z<sub>1</sub>)*

### 8.2.3 Social Capital and Growth: A Case Study

The quantitative results enabled me to test hypotheses. The interviews, however, both enabled me to confirm the quantitative results and understand the role of social capital and the contribution of its different sources to the growth of women-owned enterprises. One-on-one interviews provided an opportunity to become familiar with the case histories of 42 women entrepreneurs. I came to know their stories of success (and failure), which were full of struggle, tenacity, perseverance, hard work, creativity and innovation. These case studies helped me understand the entrepreneurial careers of these women, and the impact of their social capital on their businesses.

One example (Box 8-1) is that of Catherine (C<sub>1</sub>) – a successful entrepreneur who runs a 'Child Safety Specialist' company providing consultancy services and safety equipment to customers such as the National Health Service, local councils, safety and accident prevention organisations, community action groups and charities.

### **Box 8-1: Social Capital and Enterprise Growth Case Study**

After completing her A-levels, Catherine joined XYZ company as a management trainee. Following the birth of her first child, she decided to stay at home. A few months later, she got bored with her routine and ventured into the business of renting childcare safety equipment. She promoted her business through trade shows. At first the response was not very good, but through direct B2B sales and marketing she started to make some income.

During a family discussion at the dinner table, the subject of child resistant tablets and bleach bottles was raised. Catherine's younger sister mentioned that children were dying from playing with matches. The news set Catherine thinking, and she questioned why there was nothing in which to keep matches safe, despite them being a major danger in the home. Her husband took a dental floss flip lid container from the bathroom and suggested there must be some way something similar that could be produced to safeguard matches. Having discussed possible designs, including boxes with a catch similar to that on dental floss containers, Catherine decided to explore the possibility of creating such a product. Thinking she had something that no one had thought of, and that yet seemed to be so obvious, Catherine approached a Patent Agent to begin the process of developing the product, thinking that it may also be financially successful. The agent liked the product and predicted that it would do well in the market.

Encouraged by the agent's positive feedback, Catherine approached XYZ company and a few other suppliers to promote the idea. There was no response at all. She talked to one of her former colleagues at XYZ company, who suggested that large retailers were not interested in engaging with single-product companies and steered her towards a company that was already supplying the retailer with a range of products. The owner of the company invited Catherine for an interview. She took a paper drawing of the product rather than a 3D prototype and was rejected right away. Yet Catherine was not disheartened by the experience. She talked to her husband and asked him to invest some money to set up their own venture to market her matchbox product. She contacted some of her ex-colleagues to help her find plastic moulding and marketing companies.

With continued efforts and a referral from one of her ex-colleagues, she was able to sign a contract with a marketing company as an equal shareholder. They worked on the product for a year but it did not take off. The shareholding

company sold their shares to two product designers. The new partners decided to manufacture the product and launch it at the forthcoming 'Baby and Child Show'. Unfortunately, the launch was not successful as the response was quite low. The new partners got disappointed and pressured Catherine into buying out their share. She approached one of her best friends for a loan and purchased the whole company. That was a weight off her shoulders. By becoming her own boss, she no longer had to consider her partners' wishes. But she was on her own with no formal training in how to run her own business.

Catherine decided to network with local businesses to seek information and opportunities. She joined the Small Business Network and started attending their monthly meetings. There she met Peter who was running his own marketing company. Peter asked her if she had ever considered getting her product known and endorsed by companies or people who had no direct benefits from doing so, such as the Fire Services. Catherine listened to Peter carefully and approached one of the local fire services. Within a couple of months they endorsed her product, providing it with much needed credibility. This was the beginning of a new era for her business. Not only was Catherine able to sign a couple of contracts for large orders, but she also started to think of diversifying her business.

Catherine realised the importance of being part of a network. She started attending Home Safety meetings in different parts of the region and made her way onto the Regional Safety Advisory Council. She attended their meetings, unaware that at that time the local authorities were involved in buying products for equipment loan schemes. Over time, she noticed that there was a gap in knowledge between the nursery equipment suppliers and the local authorities, who needed the safety equipment, about the wide range of products (such as stair gates) available. Utilising her product knowledge from her experience at XYZ company, and by building her own network with people in the 'right places', she decided to become the liaison between the two groups. Catherine built her own knowledge of safety products and started presenting this to local authorities. She soon became recognised as a professional in the field. She became more widely known through regional safety committees, and as her reputation grew she could see the potential for money to be made. The workload increased, money started to pour in, and she continued providing services and supplying products. There were times when she used to question whether she was 'flogging a dead horse' and how long she should continue to have meagre revenue and face cash flow problems. But by building and using her social capital in an appropriate manner, she was in a position within just three years to hire 21 employees, with annual revenue of £3.7 million.

For a long time after Catherine started her business, it was running at a slow pace. She had come up with an innovative product idea but was struggling to raise enough funds to develop it and was failing to attract major buyers. But then, suddenly the situation changed and there was a steep increase in growth. When I asked her how it all happened, she stated:

*The key determinants of success in this industry are the core competencies of providing quality, effectiveness and reliability. I achieved all these through my contacts – the contacts I developed through attending formal networking events, by providing best services to the customers, and by building a rapport with my suppliers. These contacts facilitated me in getting information about new products and potential customers, helped me in introducing investors, and supported me in creating my reputation among other buyers and suppliers. All these factors have contributed towards my firm's growth in terms of revenue, profit, and number of employees.*

Catherine's case study helped me to understand the sources and use of social capital in different stages of growth. Her social capital played a role from the very beginning of her entrepreneurial career until the take-off stage of her business. In the start-up phase of the business, her family helped her generate an innovative idea and recognise the opportunity, her husband gave her the initial start-up capital, and her ex-colleagues introduced her to potential partners and gave references where applicable.

Catherine's formal network contacts provided her with the idea of getting endorsements and increasing the sales of the innovative product so as to survive and become successful. And in the take-off stage, her continued professional networking and appearance at industry meetings improved the quantity and quality of her professional contacts that provided her with the start-of-the-art information, which she assimilated and acted upon to generate further ideas and diversified her business. One can clearly see the same pattern in Table 8-2, which

consolidates the results of data generated from all the interviewees illustrating their possible contacts, links and networks at different stages of enterprise growth. For this purpose, a map of relationships (Figure 6-3) was designed and shown to the interviewees to collect the information about diverse contacts and networks accessed and the types of resources exchanged within these relationships at different stages of the firms owned by women entrepreneurs. The findings were aggregated as shown in Table 8-2. The detailed commentary on Table 8-2 (pattern of social capital use by women entrepreneurs) has been elucidated in Section 9.3.2.

**Table 8-2: Sources of Social Capital at Different Growth Stages**

<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">High</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Usage</div> <div style="border: 1px solid black; padding: 5px;">Low</div> </div>	↑	Family and Friends	Customers	Networks (Mixed Gender, mainly informal)	Networks (Mixed Gender, both formal and informal)	Suppliers and/or Distributors
	Institutions such as Business Link	Staff and Suppliers	Business Advisors	Professional Advisors	Staff	
	Ex-Colleagues	Professional Advisors	Customers	Mentors	Customers	
	Networking Group (Women-only)	Institutions and Professional Groups	Mentors	Staff	Networks (Mixed Gender, both formal and informal)	
	Bank Managers	Family and Friends	Educational Institutions	Suppliers and/or Distributors	Professional and Business Advisors	
	Mentors	Networking Group (Women-only)	Family and Friends	Family and Friends	Family and Friends	
		<b>Existence</b>	<b>Survival</b>	<b>Success</b>	<b>Take-off</b>	<b>Maturity</b>

## 8.2.4 Social Capital and Enterprise Growth: Results

### 8.2.4.1 Social Capital and Employment Growth

The interviews conducted with women business owners helped me understand that greater access to social capital brings more business opportunities, to the extent that some respondents found long-term business partners from social networking events. Others found their financiers, suppliers, workers and, of course, customers from their contacts, who included friends, family and extended contacts (such as friends of friends). The help extended by these stakeholders played a positive role in furthering growth of women-owned businesses. The qualitative findings explained the positive impact of entrepreneurs' networks (both in density and frequency) on employment growth. Amira, one of the respondents shared her experience as follows:

*I work in telecom industry providing consultancy services. Within the first year of starting my company, I was fortunate enough to find a couple of large contracts from multi-national companies. I was referred to these companies by my clients. For me, the biggest challenge was to hire more employees who could provide the best customer service. I had to deliver within four weeks. It seemed difficult to hire credible employees and to train them according to my customers' needs. I called a couple of members of the professional network I belong to, and asked for some referrals. One of them was helpful to do some match making. That's how I found our customer services engineer, who did really well.*

(A<sub>2</sub>)

This example and the discussion in the earlier sub-sections develop the argument that structurally embedded social capital (heterogeneous ties such as professional networks and membership organisations) as well as relationally embedded (strong ties) social capital provide women entrepreneurs with more access to resources, information, capabilities and knowledge that are not available internally. Women entrepreneurs' social capital (both structural and relationally embedded) plays a significant role in hiring effective and efficient employees (by cutting the

‘transaction cost’) to deal with the challenges of growth. Especially, when a company is on the growth path, the need arises for more employees in order to provide better customer services and to run the business smoothly.

In addition to correlation and regression, the “general to specific approach” to test the significance of independent variables shows that effective networking, membership of formal business groups, help of friends and relatives, and business advice from customers and employees play significant role contributing to the employment growth of women-owned enterprises. The same was mentioned by interviewees. Therefore, based on the statistical results outlines in Table 7-24 and the qualitative analysis of the interviews, I accept hypothesis H1 - *Firms owned by women entrepreneurs having a higher level of social capital show higher employment growth.*

#### **8.2.4.2 Social Capital and Sales Growth**

The statistical analyses show that the relationship between social capital and sales growth is positively correlated and significant. This is also supported in the interviews. Based on the results, hypothesis H2 (*Firms owned by women entrepreneurs having a higher level of social capital show higher sales growth*) is accepted. There are two main explanations for such a strong impact of social capital: firstly, it provides direct support for physical activities such as trading and financial support like investment in the business; secondly, it provides a unit for influencing the decisions of others to avail services or products from connected entrepreneurs or extend emotional support. The impact of those persons who form the social capital of women entrepreneurs is therefore significant in furthering their sales growth. The majority of women entrepreneurs confirmed this fact in their interviews.

The quantitative tests determining the significance of independent variables reveal that membership and financial contribution to formal membership associations and business advice of suppliers play significance importance in the sales growth of women-owned enterprises. I encouraged the interviewees to describe the

strength of their structural and relational social capital, the density and frequency of the contact, and the type of services, information or support exchanged. The interview findings in Table 8-2 describe how women entrepreneurs use their social capital at different stages of business growth and how it helps to facilitate their firms' growth. In the case of those women entrepreneurs who work in the manufacturing and high-tech sectors, the preference is for mixed group networking to enhance their bridging social capital and help generate ideas, source financial and/or human capital, and find customers with diverse geographical and economic profiles. These new customers then contribute to the sales/revenue of these kinds of businesses. However, for women entrepreneurs operating in the services sector, local, women-only networking groups, friends, family, suppliers and networks of extended contacts play an important role in attracting customers and increasing sales/revenue.

#### ***8.2.4.3 Social Capital and Profit Growth***

The statistical results suggest that although there is a positive correlation between social capital and profit growth, it is neither strong nor significant enough to accept the hypothesis on statistics alone. One can see from the previous discussion that social capital can increase employment growth and sales growth, which in turn can increase profit growth. However, when sales of any company increases, it is up to the decision-making operations to make cost-price mechanisms work and generate profit. Many internal decisions and actions determine the final profit figure, so generating profit is an internal process to the company rather than directly associated with (structurally or relationally embedded) social capital.

The interviews help in developing a better understanding of this phenomenon. While, women entrepreneurs highlighted the importance and significance of developing, maintaining and using social capital and how it helps them in increasing sales/revenue, they also shed light on different factors affecting the net profit made by their entrepreneurial ventures. They termed it to be an internal decision made by an organisation rather than directly associated with their social capital. They also mentioned that the only way social capital can directly

influence a company's profit is when customers are willing to pay a premium for any service or a product because they are a part of an entrepreneur's social capital. However, this phenomenon is difficult to achieve and sustain. Based on this, there seems to be no apparent direct influence of social capital on profit growth. On the basis of which, I defer to the statistical analyses and partially accept hypothesis H3 (*Firms owned by women entrepreneurs having a higher level of social capital show higher profit growth*).

Another important point to mention here is the operationalisation issues concerning the measurement of profit, which respondents were less willing to share – it is not beyond imagination that those who did reply to questions of profits somehow provided inaccurate information and that this hindered any statistical analysis.

### **8.2.5 Social Capital and Enterprise Growth: Summary**

The network perspective of social capital highlights the importance of human relationships between individuals as well as relationships within and among organisational entities such as community groups and firms (Woolcock and Narayan, 2000). The participants in this study were asked about their social networks and the role of their 'networks' in their firms' growth. They identified family and friends, networking groups (both mixed gender and women-only), mentors, and professional and business advisors as playing important roles in the growth stage of their organisations' life cycle. A number of participants described their ex-colleagues, staff members, customers and distributors/suppliers as part of their social network (and consequently of their social capital).

All the participants acknowledged the value of belonging to groups, and the benefits of maintaining good relationships with different people connected with the business. An in-depth analysis of the interviews showed the positive impact of entrepreneurs' networks (both in density and frequency) on employment, sales and profit growth of their firms. Table 8-3 presents an overview of the situation, with some typical quotations.

**Table 8-3: Social Capital – The Network Perspective**

Category	Typical Quotation
Family and Friends	<i>My partner has always been the core of my strength. It was near to impossible to develop and grow my business without his financial and emotional help. If he would not have been so supportive, the only other option left for me was to jump on the bandwagon and work in traditional women-based businesses where margins are quite low, and the competition is cut-throat.</i>
Networking Groups (Women-only)	<i>One year before starting my business, I started going to women entrepreneurs networks, attending seminars and training programmes, and consciously meeting other women in business. It took a lot of my time, effort and energy, but I tell you, it was worth it. I got my first investor, first supplier of raw material, and first customer through my contacts I made during that year. The process has not stopped even in the fifth year of my business. I still get my clients, my suppliers and even investors from my extended network. I am going to open my fourth branch in two months' time with the financial share of someone whom I met at a house warming party.</i>
Networking Groups (Mixed Gender)	<i>It was daunting for me at first but I got out there (to attend a networking group meeting), met new people and talked about my business. It was inspirational to meet successful entrepreneurs. I met Peter (my business partner) on a formal networking breakfast. We were introduced to each other. The moment I discussed my future growth ideas with him, he showed his interest and since then there's no way back. We are going to establish our new branch in July this year.</i>
Mentors and Advisors (both Business and Professional)	<i>I attended a network meeting in Cambridge, where I met 'S', a serial entrepreneur. She was kind enough to be my mentor as well as professional advisor. Until I met her I was a local trader, now with her help, guidance and motivation, I have business in seven European countries.</i>

Perceptions about what exactly was social capital varied depending on the nature and form of the business. For women in the local services sector, local and regional networks, as well as professional groups, are crucial for getting together and attracting potential customers. For manufacturers, suppliers and contractors serve as a link between them and their customers. Advisors, mentors and local business development institutions such as Business Link were quoted as valuable sources for developing 'bonding social capital' to access information and to spread word-of-mouth information.

Women-only networks play a crucial role in developing and building contacts with like-minded entrepreneurs and are a critical source for ideas, information and advice in the earlier phases (existence and survival) of business development. However, some participants confirmed that women-only networks affected the diversity of links and the 'bridging social capital' that is important for accessing resources (Brush et al. 2004, 2006b). This confirms the need for creating bridging social capital through participating in cross-gender networks and professional groups, especially in the 'take off' stage of the business.

Most of the interviewees validated the findings of the recent literature (Anderson et al., 2007) that building social capital is not only about joining groups and networks, exchanging cards, attending networking events and contacting others when needed. The development of significant social capital is based on trust built over time through long-standing relationships in which values and principles may be shared. The more one 'gives' or is willing to share, the better maintained one's social capital is. The same results confirm the presence of trust as a source of social capital (Putnam, 1993). They also authenticate the findings of Fukuyama (1995), who equated trust with social capital, and Lin (1999) who saw trust as a collective asset resulting from social capital construed as a relational asset, placed in the individual. Most of the respondents (37 out of 42) emphasised the value of trust and the importance of building 'multiplex ties'. They considered strong multiplex ties more important than 'weak ties' in the growth stage of the business.

The interviewees confirmed the positive role of their social capital in the growth of their enterprises in terms of employment and sales. Though some of the entrepreneurs assumed that increase in their revenue meant eventual increase in profit as well, most of the entrepreneurs were aware of certain other factors and decision which contributed to their profit figures. These findings confirmed the quantitative results of this study for the first two hypotheses and partly confirmed the third hypothesis.

The finding that the sources of social capital vary in different stages of growth is one of the contributions of this study to the literature of social capital and entrepreneurship. Figure 8-2 and Section 9.3.2 illustrate these findings in detail. One of the important findings is that women entrepreneurs can more successfully use their social capital in the survival, success and take-off stages of their businesses if they start building it in the start-up (existence) or even pre-start up phases, as this gives women entrepreneurs time to build and maintain trust and credibility. Although the building of social capital mainly takes place in the early stages of the Churchill and Lewis (1983) growth model, maintenance and utilisation may occur in any stage.

### **8.3 Human Capital and Growth of Women-Owned Enterprises**

#### **8.3.1 Human Capital – Participants' Perception**

As stated earlier in the literature review chapter, the basis of the concept of human capital lies in the fact that knowledge and learning, creativity and innovation, competencies and capabilities have no substitute as far as the overall economic development of a country is concerned (Rastogi, 2000). The literature on human capital identifies education (Becker, 1964), formal training and education (Becker, 1964; Ram et al., 2007), extent and nature of experience (Neergaard et al., 2006) and total number of years of experience in particular industry (Ashour, 1997; Bontis et al., 1999) as important sources of human capital.

All the participants were asked to identify different sources of human capital. The objective of this particular investigation was to clarify whether their

understanding of the concept was in line with the definition and sources of human capital identified in this research. They were asked about their perception and knowledge of human capital in general and to identify whether they possess any human capital. If they answered yes to the latter, they were asked about the sources of their human capital. Further, they were briefed on four different components of human capital and were inquired whether any component of human capital contributed to the growth of their enterprises. If yes, how and which components of human capital played any role in the growth process.

#### ***8.3.1.1 Education: The First Response***

The majority of the entrepreneurs (29 out of 42) described education as one of the major sources of (general) human capital. They were of the view that there may be other sources, but in today's world, education (especially formal education) has become a major yardstick for judging any human being's capacity to perform professional tasks. A typical statement was made by Nikita from the Greater London region:

*For me, the first criterion to measure anyone's human capital is education. How many years of formal education one has and from which school or university? (N<sub>3</sub>)*

When asked about their own human capital, 26 participants mentioned either formal or informal education as one of the main building blocks of their human capital. The following quotation is typical:

*I think, before anything else, my university degree is the main building block of my human capital. (P<sub>2</sub>)*

#### ***8.3.1.2 Experience: The Unanimous Voice***

All the entrepreneurs pointed towards experience in the same industry or sector as the crucial element for defining human capital. Many of them described it as more important than anything else. According to one participant:

*Experience in the same industry can do wonders – that is the first thing I look for in my employees – that is the ultimate source of human capital.*  
(R<sub>2</sub>)

In answering questions about their own human capital, quite a few (23 out of 42) mentioned their experience in the same industry as a reason for starting their own business, calling it their human capital. A typical statement was made by Rachel, from the Greater London region:

*In July 2003, I was made redundant from my job at another HR consultancy firm. I decided to use my wealth of experience (of 16 years) in the industry and with love and encouragement of my family and friends I started this company. Now, I have 29 employees and two branches in London.* (R<sub>3</sub>)

### **8.3.1.3 Formal Training: Another Dimension**

A majority of entrepreneurs (29 out of 42) referred to specialised industry training as a source of human capital. All four women entrepreneurs from the manufacturing sector described formal technical training as the most important source for human capital. Laura's statement was representative of the other three manufacturers:

*Education is important and no doubt, it enhances one's human capital – but in my work where we deal with high tech gadgets, the 'real' ingredient of human capital is formal technical training and education one gets before joining the industry. Obviously, practical experience adds value to it over time.* (L<sub>3</sub>)

Entrepreneurs in the services sector pointed towards on-the-job-training in the same industry as a vital asset for any employees' human capital. One typical statement was communicated by Jennifer:

*Well, for me, the 'real' human capital is the training one gets – not in school or university but at the job, dealing with customers face-to-face.*

*(J<sub>2</sub>)*

While talking about their own human capital, 19 entrepreneurs mentioned formal training and business and management education as part of their own human capital. A typical statement was that by Deborah:

*My part-time MBA has earned me more credibility from my own team – and they can see that I do try to implement what I have learnt and make changes. It has made a difference to my human capital. (D<sub>1</sub>)*

**Table 8-4: Human Capital – Participants' Perspectives**

Category	Typical Quotation
Education	<i>My degree is my human capital. It has given me confidence, and introduced me to a number of opportunities out there in the practical life.</i>
Experience	<i>There's no match for the experience you gain in the industry. The practical, hands-on work experience shapes your human capital, which you'll be able to cash in at any juncture of your career.</i>
Number of Years of Experience	<i>The more experience one has in the industry, the more human capital one possess.</i>
Formal Training (Business and Management Training)	<i>After completing my MBA, I am much more confident in management decisions, I am more active; I agree, disagree or suggest alternatives. I have an overall understanding of what business functions are and the general responsibilities that go with it. I think this formal training in business management is one of the most important parts of my human capital.</i>
Age	<i>I feel more confident, spontaneous and experienced with every passing year. I think my age has contributed to my human capital as well.</i>

#### **8.3.1.4 Age: An Interesting Aspect**

Only four of the women entrepreneurs mentioned age as a constituent element of human capital as well. They were of the view that age contributes to the experience of individuals and hence gives them courage and confidence to make their decisions more effectively. One typical quotation on this interesting aspect and some typical quotations on other dimensions mentioned by the participants are presented in Table 8-4.

#### **8.3.2 Human Capital – Does it Play any Role in the Growth**

One important observation of the study was that all the participants were more familiar and clear about the concept of human capital than social capital. After I briefed them about the concept, they did not feel any problem in discussing their own human capital and how it helped them in establishing and developing their businesses. As mentioned in the previous section, the participants of the study were aware and vocal about education and experience being the main building blocks of their human capital. The majority of participants mentioned both formal training (both off-the-job and on-the-job) and business and management education as being part of their human capital.

The participants were asked to describe their own human capital and its role in the growth of their enterprise, if any. The aim was to dig deeper, to find out the type of interventions, decisions and their use of human capital in the growth process. Their responses have been grouped into the following four categories (by applying theory-driven and prior-research-driven approaches of code development):

- Education (General)
- Education (Business and Management)
- Experience
- Training

### 8.3.2.1 Education (General)

All interviewees expressed the importance of (general) education to growth, especially in the survival and existence stages of their businesses. Thirteen participants also mentioned the benefits of education to the growth of their enterprises.

The benefits and advantages of having a general education include enhanced confidence, communication skills, identification of opportunities and creative thinking. Confidence building was one of the most cited benefits of general education. One of the typical statements was that by Wendy:

*My degree has proved to be incredibly valuable in the business world. From day one of my business, it gave me confidence and opened many doors for me and my business. That confidence gave me courage to take the plunge; to gain knowledge and information from the outside world; to plead my case with other stakeholders such as my bank manager, my suppliers and customers; and to become the owner of a £5 million company in just six years. (W<sub>2</sub>)*

Another benefit of attaining formal education, quoted by 11 participants, was improved communication skills. Amira narrated her own experience in the following words:

*I am positive that my degree in Psychology and English from Cambridge University has helped me in running my business successfully. During those three years, in addition to literature and psychology, I learnt communication skills. I have been using those skills for seven years now. Whether I have to get my loan application approved or to secure a new order, I use those skills and never have been disappointed. (A<sub>2</sub>)*

Some participants (7 out of 42) believed that their formal education had taught them the art of opportunity recognition, classifying them as entrepreneurs and distinguishing them from other business-owners. Beatrice's statement was typical:

*My degree equipped me with analytical capabilities, which I use for spotting opportunities, analysing the business environment and acting upon at the right time. Last year, I introduced a new service as a result of this analytical process. I have trebled my overall revenue within eleven months. (B<sub>1</sub>)*

Sharon shared with four other participants another benefit of attaining formal education – creative thinking:

*I am a science graduate but I run a business in the beauty industry. My degree has added immense value to what I do. I am comfortable with numbers and financial statements. That is my competitive edge, working in an industry full of women (who are) shy of crunching numbers. I feel that my creative thinking and hard work are also because of my academic training at one of the best universities in England. (S<sub>3</sub>)*

Overall, all the participants were positive about the impact of their education on the growth of their enterprises. For some of them, education provided them the confidence to plead their business case with potential investors, others used their communication skills (learnt during formal education) to secure new customers, and others believed that formal education taught them the art of opportunity recognition and creative thinking, which they used to diversify and grow their businesses.

### **8.3.2.2 Education (Business and Management)**

The literature on business and management education has developed specialised Masters and MBA programmes with what some think is an excessive emphasis on analytical approaches to decision-making (Mintzberg and Gosling, 2002;

Simpson, 2006) and on a mastery of decision-making techniques such as accounting and financial management (Messmer, 1998). The participants of this study described specialised business and management education as ‘highly effective’. The analysis of data revealed four major categories of benefits associated with business and management education: increased confidence level, improved team work and interpersonal skills, enhanced credibility, and retention of human capital.

An increased confidence level in accounting and financial management was mentioned by nine participants as an effective outcome from attending these educational programmes. They attributed financial knowledge as one of the most valuable contributing factors to their business growth. One of the participants revealed:

*One of the best contributing factors of attending formal ‘General Management Diploma’ is that I have become sure of myself after reading about financial matters especially, which I had no clue about before. In my business meetings, I am more confident and know that what my financial managers or other party’s managers are talking about. Based on the information provided, I can take even better ‘calculated risks’. The same is evident from my last year’s EBITA figures, which have doubled in the last three years. (C<sub>1</sub>)*

Another participant, Sara, said:

*I attended a part-time MBA at my local university while running my own business. It was one of the best decisions I’ve ever made in my entrepreneurial career – it made me more professional and introduced me to finance. I started reading my financial statements, which now make more sense. I can also calculate figures, and check my company’s financial position easily. (S<sub>2</sub>)*

Seven participants found an improvement in team-working and interpersonal skills, primarily due to group interaction during their business and management education programmes, which they also perceived as beneficial in decision making. Three of them found that the requirement to participate in discussions with peers in tutorial settings and in smaller study groups for some assignments and presentations led to an increase in their inter-personal skills. They cited improvement in skills such as team building, negotiating, conflict management and wider communication as some of the benefits of those educational programmes. One of the typical statements was provided by Jennifer:

*I think the tasks generally made us have to work alongside other people. It was an issue for me. I prefer to work alone so the experience helped me hone the skills, which are related to handling yourself properly in a work environment. (J<sub>3</sub>)*

A number of participants explicated benefits such as increased confidence, more effective inter-personal skills and enhanced credibility. But the question remains whether they were able to convert these intrinsic benefits into monetary gains. An answer to this question may be found in Annie's statement, which was typical:

*I definitely feel a lot more independent after completing my part-time MBA. As my confidence has grown, I am much happier to go out and focus on business development activities where in the past I would prefer to do with a colleague. I am also demonstrating a greater variety of skills in general. There is a difference between learning and practice, so where you have learnt something you go and try it out. I did – I expanded my business from local to national level with the help of a new partner and have succeeded to secure orders from all across the UK. (A<sub>1</sub>)*

Women entrepreneurs also illustrated that business management education not only enhanced their credibility (in their own view, as well as that of others), but

also made them more assertive in their dealings with clients and colleagues. This assertiveness was beneficial in dealing with their clients, customers, suppliers and employees. Tricia supported this view:

*I have more credibility from my own team – and they can see that I do try and make changes. I do make a difference to them and stand in their corner. One of the great things I learned on the MBA, despite being an owner-manager now, I do need to stand by and support the team. They acknowledge my support and have shown me the same with their loyalty and hard work. Due to their dedication and devotion, I was named as one of the best women entrepreneurs (in my region) last year. (T<sub>2</sub>)*

Four entrepreneurs talked about employee incentives, describing them as a win-win situation for retaining valuable human capital. Fiona told me that she studied for a diploma in HR at a university in London, where she learnt about employee retention as the most valuable tool for restricting brain drain. She stated:

*After attending an HR certificate programme, I realised the importance of employee retention. It takes at least 6 to 9 months to train an employee, especially for technical jobs. Now, I always try to save those expenses, and above all my time and energy. I give all my employees lucrative incentives, sometimes even the shares of my business, to retain them and make them an effective and efficient stakeholder in my business, and I know it works. (F<sub>2</sub>)*

The interviewees highlighted the importance of business and management education by expressing that their education provided them with managerial knowledge, which enhanced their confidence to calculate risks effectively and intelligently. They were in a better position to identify and evaluate resources to invest in and utilise, and to acquire a competitive edge on their competitors to grow their businesses. Women entrepreneurs' business and management education magnified the effect of their growth aspirations, since it provided them

the ability to manage a growing business and to gain access to additional resources.

### 8.3.2.3 *Experience*

A detailed analysis of the collected data revealed that 36 women entrepreneurs (out of 42) had some kind of experience working in the same industry as their own businesses. A further analysis revealed following four major benefits associated with industry-specific experience: increased confidence level, credibility, building partnerships and faster decision making. The interviewees discussed these benefits and the effects of the length of experience on business growth. The results and their typical statements for each category are given below.

Increased confidence was mentioned by 21 participants as one of the main benefits of having experience in the same industry/sector. They were of the view that their confidence levels increased with the length of their experience in the same industry. One of the participants revealed:

*After working in the industry for nine years, I decided to start my own business. I feel that experience of working in the same industry gave me significant self-confidence. I was dealing with the clients at the front end. I knew their needs and demands. On the other hand, I had knowledge and connections with major suppliers, and an overall understanding of their market and its needs as well. All this knowledge and information boosted my confidence and I used it for my benefit. I made the right decision to take the plunge and only in six years I run an £9 million company with 41 employees. (S<sub>1</sub>)*

Participants also mentioned that the more they worked in a particular industry the more comfortable they felt starting their own business in the same industry. However, Charlotte, from the Greater London region, had a contradictory view:

*After a few years of experience, it becomes difficult to create your own name (brand) in the industry because people know you for so many years and they start associating you with the company you are employed in. I worked for my boss only for three years. One day, I came to office – it was not a brilliant day. I told myself, enough! I can create my own world, my own name, my own empire – and I have no regrets. (C<sub>3</sub>)*

Twenty-seven participants revealed that work experience gave them credibility and goodwill, which ultimately helped them develop their businesses more quickly. They also mentioned that it helped them source raw materials or inventory at more flexible/easier terms because suppliers/distributors already knew them. Moreover, regardless of market conditions, previous managerial experience enabled a defter and more nuanced navigation of the market as well. Women entrepreneurs in the services sector talked about how they used their skills and knowledge to make their name/brand in the industry, which helped them attract a pool of customers from the start. One typical statement is quoted here:

*After a decade of working in web and mobile application product management for some big names such as ABC, MNL and XYZ, I set up my own business. The credibility of those multinationals gave me and my work, credibility as well. A number of clients I secured already knew me and my work. It was not difficult to convince them that I could deliver. The growth path was much easier for me as compared to any newcomer. (N<sub>3</sub>)*

A number of participants (12 out of 42) related faster decision making to their work experience in the industry. Nine of them indicated that they had secured partnerships with business angels or other technical people from the industry because of previous industry presence. Iona shared her experience as follows:

*I was working in the sector for 11 years and was promoted as the head of department for a multinational company, when one of my ex-*

*colleagues approached me and offered me a partnership in his new business. After careful consideration I accepted it as an equal partner. It was a decision which I am proud of. Now, we are one of the top companies in our field in London, competing with a number of multinationals. (I<sub>3</sub>)*

#### **8.3.2.4 Training**

A majority of participants (28 out of 42) highlighted that attending specialised training programmes has boosted their self-confidence and self-esteem tremendously. The main contributing factors were: broader business knowledge, tools, methods and theories; peer to peer learning; and the sense of achievement from completing the qualification. One typical statement was that by Deborah:

*Professional trainings I've attended have given me the tools for my business I didn't have before – the knowledge – that has given me confidence in that sense. I met a number of entrepreneurs and senior managers at those meetings, giving me the confidence I can achieve what other people have. This confidence has been translated into growth of my business as I took a strategic decision to buy one of my competitors with financing from a business angel, whom I met at one of those programmes. I have recruited more employees, my revenue figures have changed and there's more profit as well. (D<sub>1</sub>)*

Six participants mentioned 'challenging self' as one of the benefits of attending these training programmes. Gia, one of the entrepreneurs from the East of England region, attended the 'Management Essentials' training programme organised by the local branch of Business Link. She stated:

*For me, it was a self-challenge – having to put in the discipline and learning was a key factor and succeeding in the application of that. Engaging in a community that was not a traditional work environment and working from a theoretical/academic perspective which I had not*

*done since leaving university 10 years ago. I am happy that I made the decision of attending that programme as I was able to achieve better knowledge of management skills, which I apply in my business almost every day. (G<sub>1</sub>)*

Some women entrepreneurs (10 out of 42) felt that attending training programmes had somewhat increased their openness in communication, particularly as they were more confident in their own knowledge and skills. Fiona explained:

*The business skills I have learnt have given me immense confidence in sharing information in a much more structured manner by using a common business language approach. It has also enabled me to translate my experience in a structure that other people could understand. (F<sub>2</sub>)*

Another benefit of attending formal training (mentioned by nine women entrepreneurs) was the inspiration and support received from other attendees of those training programmes. They felt that their training fellows were both inspiring and supportive and they enjoyed working with like-minded people, either in on-the-job training or in study groups. One participant summed it up as follows:

*When you are self-employed you can be isolated and tend to forget there are other people like you around and this brings it home. Entrepreneurs from various backgrounds brought their knowledge and skills to the table, especially in the group activities. There was great support and encouragement for each other and that really helped not only in the programme but afterwards as well. (T<sub>1</sub>)*

### **8.3.3 Human Capital and Growth: A Case Study**

The results generated from the quantitative data confirmed hypotheses H<sub>4</sub>–H<sub>6</sub>. The case studies that came from the one-on-one interviews helped in comprehending

the role of human capital in the growth of the women's enterprises. The case of Kadene (K3), given in Box 8-2, reveals how different aspects of her human capital helped her achieve growth in terms of employment, revenue and profit.

**Box 8.2: Human Capital and Enterprise Growth  
Case Study**

After completing her bachelor degree in education, Kadene worked for nearly six years as a teacher in a primary school. Though her work was rewarding, she needed a change. She was on the lookout for something creative that would involve her sense of aesthetics and autonomy. But she was unable to make a firm decision until she was sent on a professional development training programme by her employer. During the class discussions, one of the participants mentioned the shortage of good quality nurseries for children in London.

After returning to work, Kadene asked her colleagues and friends who had children about their experiences with their children's nurseries. To her surprise, only a few of them were happy; most mentioned the need for more quality nurseries. This encouraged Kadene to conduct some more research. On the basis of this research she concluded that there was a gap in the market and a possibility to make some money while doing something different from her routine job.

Kadene realised that 'starting a business from scratch was no different from planting a garden that calls for a number of steps to allow it to bloom'. She needed financial and human resources to take the plunge. She decided to get herself trained in the field, took leave from her work and joined professional courses. She went to a couple of banks to arrange funds, but with no luck. One of her cousins, Jackie, was running a restaurant and a property business in Central London. Kadene approached her with an invitation to invest and become her partner. Jackie declined her offer because of her involvement in other businesses but offered Kadene some money as a loan. This she accepted immediately.

Kadene opened her first nursery in Barnet. Her aim was to provide working parents with a nursery that not only cared for their children in a safe, friendly and welcoming environment, but also to develop good communication with parents to know what they really want. Her degree in education and her experience as a school teacher helped her to be sympathetic and considerate when dealing with parents and treating children with love and care. She employed quality staff through her connections in the education sector. Within no time, Kadene was able to develop an established clientele by providing excellent services and

applying her imagination and creativity to offer innovative solutions to parents' everyday issues. She paid off all her loan with interest within two years of her start-up.

Encouraged by an overwhelming response to her innovative services, by the end of her fourth year, Kadene opened the second branch of her nursery in Harrow. Children's safety and well-being coupled with innovative educational inputs continued to be her nurseries' main mission. To differentiate her nurseries and make them more enterprising, she developed a calendar of events aimed at providing children with a combination of fun and learning opportunities and to instil in them a drive for excellence. She kept herself updated on new knowledge and information about the field by becoming a member of professional bodies such as Pre-school Learning Alliance. She hired more staff and began to concentrate on managing the two branches.

After opening the second branch, Kadene became aware of her lack of business knowledge. Although she had good knowledge and understanding of the field, she did not understand enough about how to run a business. She decided that she needed formal support as well as knowledge to run her own business effectively and efficiently. She hired a part-time accountant and administrator and studied part-time at a local university to complete her MBA. Her objective was to learn business management skills. The classes were held on two evenings per week and on alternate Saturdays. She spent two years completing the course and passed with flying colours.

After completing her MBA, Kadene started to apply the management skills she had learnt. She was able to read, understand and forecast financial statements. This gave her control over her cash flow. She improved her website and designed a new marketing campaign using social media, which generated a positive response from new clients. Looking at the demand, she opened up another branch in Watford.

The university she attended organises monthly lectures by renowned entrepreneurs for alumni and local businesses. Kadene started to attend these lectures, which provided her with an opportunity to network with other businesses and alumni. At these lectures she met a consultant who gave her the idea of going for a franchising model. She liked the idea and decided to grow by selling franchises of her nurseries. She hired the same consultant to develop a plan and market it. The idea proved to be a huge success: within 14 months Kadene was able to establish 19 nurseries in different parts of London. When I interviewed her she was planning to grow not only in other regions of the UK but also in the UAE and other countries of the Arabian Peninsula.

It is quite evident from this case study that Kadene's human capital helped her generate her business idea, take the decision to start her own business and run it in a unique manner. She used her degree in education and six years of experience in the industry to come up with innovative ideas for providing distinctive services for parents and remarkable fun and learning opportunities for children. After opening up her second branch, she started to feel the 'growing pains' usually experienced by most small businesses in the growth stage. Although Kadene hired some professional help she decided to build her own capacity to be familiar with business management skills. She was prepared to get trained and learn the 'tricks of the trade'. During the interview, she proudly praised her own decision to take some time out of her busy schedule. She described its benefits as follows:

*In the beginning, my passion was to work with children and make some money. But after opening up the second branch I realised that the opportunities of making money were unlimited. I wanted to run my business in a professional manner so I decided to go back to the university to do my MBA. There, I learnt frameworks, theories, and their practical application in other businesses. It gave me immense confidence to use this knowledge to grow my own business in a structured manner. It also enabled me to translate my experience in a structure that other stakeholders of my business could understand. Now, I have so many ideas and opinions around business expansion which are often founded on the knowledge I gained on the MBA.*

This case study is typical of other interviews in which women entrepreneurs expounded the benefits of human capital even in the pre-start-up phase, when their education and experience helps them generate ideas and be creative to generate resources. In the existence and survival stages, their human capital enables them to market their product and services innovatively, source their raw material or inventory at cheaper prices and/or manage their cash flow in an effective manner. Their human capital, in the form of their expanding knowledge base and absorptive capacity becomes their organisation's competitive edge. It gives them

self-confidence, equips them with effective team-building and communication skills and helps them accelerate the growth process through faster decision making or building partnerships. Most of the women entrepreneurs were vocal about turning these intrinsic gains into monetary benefits both in terms of revenue and profit.

### **8.3.4 Human Capital and Growth - Results**

#### ***8.3.4.1 Human Capital and Employment Growth***

The literature review has supported education, management training and industry experience as measures of human capital. The participants of this study responded positively in identifying the sources of human capital, and in the interviews revealed their perception that it helps in establishing and developing the business through team work, training and decision making. In the start-up phase, having an entrepreneur or a team of entrepreneurs with the required skills is very important as it reduces the costs of hiring a number of employees, thus allowing the company to save resources and progress to the next phases of survival and growth.

The statistical analyses suggest that there is a significant correlation between the development of human capital and an increase in employment growth. This result of the correlation and regression analyses is confirmed by the women entrepreneurs, who refer in interviews to the strong influence of various human capital dimensions such as business skills, training, experience and education on the growth of their businesses. These dimensions of human capital in turn infuse organisational learning, creativity and innovation, and the building of competencies and capabilities in the companies.

The interviews enabled me to find out that through women entrepreneurs' own education, experience and/or training, they are aware of the importance of effective customer services provision. They recognise that employees are at the interface between organisation and customers, and thus their performance at the consumer interaction interface is vital. This encourages women entrepreneurs to invest in hiring and retaining employees. Hence, there is a significant correlation

of entrepreneurs' human capital with employment growth of their enterprises. Therefore, based on these findings, hypothesis H<sub>4</sub> (*Firms owned by women entrepreneurs having a higher level of human capital show higher employment growth*) is accepted.

#### **8.3.4.2 Human Capital and Sales Growth**

It is found both from the quantitative survey and the interviewees' responses that a higher level of human capital can bring an increase in sales, resulting in the acceptance of hypothesis H<sub>5</sub> (*Firms owned by women entrepreneurs having a higher level of human capital show higher sales growth*). There are two ways to look into this phenomenon: Firstly, women entrepreneurs' own human capital plays a vital role in the earlier phases of the business life cycle when there are fewer/no employees and most of the actions and decisions are made by women entrepreneurs on their own. Secondly, this is due to the fact that organisation design and business process is feasible when action is taken by the stakeholders – employees, investors, suppliers and consumers. However, agency theory claims that there is conflict between principal and agent. This means that if agents – that is, managers to whom responsibility and authority are delegated by the owners – are not motivated and do not perform to the required standards of the company and industry in line with competitors, then sales may not increase. Both the managers and employees have to deploy their skills along with the entrepreneur as collective human capital in order to convert this resource into sales growth. This is backed up by both researchers in the women's entrepreneurship domain (Greene et al., 2003; Brush et al. 2004, 2006) and the respondents to this study.

The interviewees mentioned that as the firm's growth life cycle progresses, soft skills such as confidence, communication and creativity are equal in importance to specialised technical knowledge. These factors play a significant role in generating ideas for new, unique and different products or services, which in turn, attract more customers and help in generating and growing sales.

### **8.3.4.3 Human Capital and Profit Growth**

The statistical analyses demonstrate that there is a high and significant correlation between an increase in human capital and profit growth. Firstly, this is evident from the acceptance of the previous two hypotheses that any increase in human capital can proportionately increase growth of employees and sales. Only if there is something wrong with the business process, can it decrease profit after an increase in employees and sales. Thus one can accept this hypothesis straightforwardly, assuming that decision-making and business operations are not taken so that they affect the profits in a negative manner or human capital is in itself related to the quality of decision making and business operations. Secondly, this hypothesis is backed up by studies that show that human capital gives the organisation a competitive advantage as other companies cannot imitate or reproduce the same amount of human capital in a short time (Barney, 1991) without capital investment in attracting talent – the recruitment and retention process. Thus, once formed human capital gives a long-term advantage to any start up organisation.

Thirdly, the “general to specific approach” to test the significance of independent variables confirms the positive significance of work experience on the profit growth of women-owned enterprises. Last but not the least, the interviewees agreed with the valuable and effective role of human capital and its underlying attributes such as education, training and industry experience, and personal characteristics in increasing sales and profit. Hence, based on both the qualitative findings and statistical results, I accept hypothesis H6 (*Firms owned by women entrepreneurs having a higher level of human capital show higher sales growth*).

### **8.3.5 Human Capital and Growth - Summary**

The female entrepreneurs participating in the study grouped human capital into the categories of education (general as well as business and management education), experience, training and age. They talked about the particular importance of education and experience in the earlier phases of a firm’s life cycle. They were asked to identify the components of human capital which helped them

grow their businesses. They identified enhanced confidence, communication skills, identification of opportunities and creative thinking as the main benefits of attaining a general education. They gave examples of the specific benefits of acquiring such an education.

**Table 8-5 Human Capital -  
How does it help in the growth of women-owned enterprises?**

Category	Typical Quotation
Education	<i>My degree equipped me with analytical capabilities, which I use for spotting opportunities, analysing the business environment and acting upon at the right time. Last year, I introduced a new service as a result of this analytical process and trebled my overall revenue within eleven months.</i>
Business and Management Education	<i>I definitely feel a lot more independent after completing my part-time MBA. As my confidence has grown, I am much happier to go out and focus on business development activities where in the past I would prefer to do so with a colleague. I am also demonstrating a greater variety of skills in general. There is a difference between learning and practice, so where you have learnt something you go and try it out. I did – I expanded my business from local to national level with the help of a new partner and have succeeded to secure orders from all across the UK.</i>
Work Experience	<i>My work experience in the industry has helped me a lot in accessing resources both financial and human for growing my business. My experience has provided me with credibility and confidence. I am more confident in decision making regarding the purchase of inventory, hiring staff, and establishing partnerships.</i>
Training	<i>Engaging in a community that was not a traditional work environment and working from a theoretical/academic perspective which I had not done since leaving university 10 years ago. I am happy that I made the decision of attending that training programme as I was able to achieve better knowledge of management skills, which I apply in my business almost every day.</i>

Business and management education was also considered as a useful source of human capital. Participants mentioned their enhanced self-confidence and their

increased accounting and financial management skills, credibility, inter-personal skills and assertiveness as major benefits of attending such programmes. Their responses helped in understanding the tremendous help of business education, especially financial and strategic management knowledge, in the decision making phase of growth.

All the participants acknowledged the usefulness of work experience, especially that in the same industry/sector. An in-depth analysis of the interviews revealed that work experience increased the confidence level and credibility of entrepreneurs in the industry. The data also revealed the positive role of experience in building strategic partnerships and facilitating faster decision making ultimately leading women entrepreneurs to growth in terms of revenue, profit and employment.

A majority of participants also mentioned training as a positive factor in building entrepreneurs' human capital and the growth of their enterprises. They confirmed that training not only provides the tools and techniques needed for growth but also presents the challenge to acquire soft skills such as team building and conflict resolution. Table 8-5 presents an overview of the situation with some typical quotations.

The most important finding of the interviews was unanimous acceptance of all women entrepreneurs that human capital played an effective role in the growth of their businesses and either one or more than one elements of human capital contributed to the growth of their businesses in terms of employment, revenue and profit.

## **8.4 Effect of Human Capital on Social Capital and Growth**

### **8.4.1 Introduction**

As mentioned in section 8.3.3, the participants in the study were clear about their human capital and its role in achieving growth. Both the quantitative and

qualitative results of this study have established a positive relationship between human capital and the growth of women-owned enterprises in the UK.

Another objective of this study was to know in detail how human capital and social capital variables combine to affect the growth of enterprises. The quantitative results accepted the hypotheses H<sub>7</sub>-H<sub>9</sub> and found the moderating role of human capital. To confirm these results during interviews, I tried to dig deeper by posing open-ended questions. The interviewees were asked whether any component of their human capital (general education, business and management education, formal training and work experience) helped them in building and using their social capital. If yes, whether there was any effect on the growth of their enterprises in terms of employment, revenue and profit? The results generated from these responses are given below.

#### **8.4.1.1 (General) Education**

The participants pointed out increased confidence and credibility as outcomes of general education, and related these to building and using their social capital. Wendy (see also section 8.3.2.1) talked about her degree at a reputable university and how she utilised the connections she made during her education for her business development and growth:

*I graduated from Imperial College - London, worked in the IT industry for four years and decided to establish my own software house. I was confident to deliver and produce results – my degree gave me that confidence. I approached a couple of class-fellows to join me. One of them accepted my offer. I applied for loan from a bank and pleaded my case with confidence. I knew I had a degree from Imperial, four years' work experience in a multinational company and a professional partner, who had degree and professional credibility as well. We worked hard and proved to be a success. (W<sub>2</sub>)*

Another point of view was contributed by Martha, who secured a PhD in Bio-medicine from Cambridge University in 2003:

*I entered a business plan competition with two of my fellow PhD scholars and won it. We started our business in 2003 by using the prize money as seed-corn funding. I must say that our doctorate degrees gave us credibility for securing finance in the start-up phase. It was easier to access business support organisations and we made most of it to grow. It [PhD] gave me confidence to go out there in more of a man's world and let my customers know that I could deliver. It [PhD] allowed me to meet my business partners and develop this business with 26 employees and £4 million turnover. (M<sub>1</sub>)*

These examples show that women entrepreneurs' human capital based on their formal education provides them a perceived legitimacy to have an access to value-rich social capital. The social capital acquired with the help of their human capital, in turn, creates opportunities for them to have access to (both financial and human) resources, which gives a competitive advantage to their firm contributing to better performance and growth.

#### **8.4.1.2 Business and Management Education**

In addition to knowledge, skills and information, confidence and credibility were given as important benefits of business and management education. Nine participants believed that their education had helped them gain a central position in networks and business associations. Five participants mentioned that their increased confidence in business management skills puts them in a position to offer their advice and information to other business owners. They were willing to share knowledge they had gained with business people around them, which created many opportunities for them to further grow their businesses. Two participants (Chris and Fiona) cited that they were able to secure financing in this way. Two others (Annie and Sitara) were able to extend their product/service lines in partnership with another business person. Laura confirmed that she was able to

join with another woman entrepreneur to distribute her products in Eastern Europe. Annie described her experience as follows:

*My part-time MBA gave me confidence to deal with figures and numbers. I was able to read financial statements and started advising to my close business friends. It improved my business acumen and raised my social position in their eyes. One of them asked me to do a partnership with him in a new venture. I accepted it and now I am running a portfolio of businesses. My friends call me a 'serial entrepreneur'. (A<sub>1</sub>)*

Six entrepreneurs suggested that the information and knowledge they gained during their business management education helped them in spotting opportunities and generating ideas which they shared with potential financiers and were able to secure funding to grow their businesses.

*In July 2006, I attended the 'General Management Diploma Programme' at Harvard. Not only was it expensive but quite hard as well. For me, it worked wonders. I learnt how to think 'differently' from my competitors. I applied it to my business and sought finance from one of the class fellows of the same programme. The concept was simple but unique based on creativity and innovation, which I learnt during that management course. (S<sub>2</sub>)*

#### **8.4.1.3 Experience**

The data revealed that experience in the same industry increased participants' confidence levels, raised their credibility, helped build partnerships and equipped them with faster decision making techniques. Further evaluation of the qualitative data (gathered through interviews) showed that experience in the same sector helped them even more than general and business education to build credibility in the sector. Seventeen participants mentioned that experience in the industry

helped them build contacts with suppliers that were useful in all stages of their business life cycle.

Twenty-seven participants spoke of their prior work in the industry as a key to helping them secure a customer base from start-up. Natalie's quotation, mentioned in section 8.3.2.3, is relevant here as well.

Eleven participants mentioned that, because of their experience, they were able to establish themselves as experts in the industry. This enhanced their credibility and placed them at a central position in professional networks. Throughout different phases of their business cycle this central position earned them such rewards as access to confidential information, availability of finance through business angels, referrals to clients and recommendations about suitable human resources. Five of these participants mentioned that, because of their 'expert' status in the industry, new potential entrepreneurs had approached them with creative ideas. Three of them took up these opportunities and greatly increased their business revenue. One typical statement is quoted here:

*My 17 years' work experience in the industry earned me an 'expert' status. It enhanced my authority as a professional among my customers, colleagues and even business competitors. I met 'Ricardo' (my business partner) at one of the industry exhibitions where I presented the keynote address. He offered me finance to start our own business, and I accepted. In only nine years, we have more than 100 employees and an annual turnover of around £10 million. I think the connections I made during those 17 years have contributed immensely to our success. (F<sub>2</sub>)*

#### **8.4.1.4 Training**

Analysis of the data shows that the participants found a number of benefits in attending formal training, such as broader business knowledge; understanding of tools, methods and theories to strategically develop their businesses; peer-to-peer learning and support; self-challenging; and a sense of achievement from

completing the formal training. Thirteen participants mentioned that attending formal training programmes not only furnished them with latest skills and knowledge but also provided them with excellent networking opportunities. Their networks then helped them in accessing (financial and human) resources at less than market price or even provide resources simply not available through market transactions in addition to finding potential partners and accessing new markets.

An overall analysis of data reveals that formal training can be the seedbed for developing bonding social capital (with other business people from the same industry, gender or region) or bridging social capital (with business people from a different industry, gender, region, or in some cases even a different country). If entrepreneurs attending these programmes know how to build and utilise their social capital on these excellent networking occasions, they can find innumerable opportunities to develop their businesses. As Tamara said:

*I met Sara, a beauty consultant, at one of the training programmes organised by 'Enterprising Women' in Norfolk. We clicked and became 'friends'. I was running my own salon in Norfolk at that time with two part-time employees. Our friendship developed over time on the basis of mutual trust and respect. I must say she has been a real inspiration and motivation for me to run my business in a more 'professional manner'. She encouraged me to scale it up and look beyond. She even hooked me up with a business angel. Now, I have three salons, seven full-time employees and I am generating four times the revenue I was generating when I met her. (T<sub>1</sub>)*

#### **8.4.2 Human Capital, Social Capital and Growth: A Case Study**

Most of the 42 interviewees talked about the facilitating role played by human capital in building their social capital and its impact on the growth of their enterprises. One example is that of Jacqueline (J1), who had both education and experience of working in marketing. She also updated her knowledge and

information with training. Her case study, presented in Box 8-3, helped me comprehend the process. Over time, Jacqueline established herself as an expert in the field. Her expertise earned her credibility and specialist status, which facilitated her entry into informal and formal networks. She built and maintained her social capital, through which she grew her business in terms of employment, revenue and profit.

**Box 8-3: Human Capital, Social Capital and Enterprise Growth  
Case Study**

Jacqueline worked in the industry of field marketing and promotions for 11 years after getting her degree. During this time she received promotions and became an executive director supporting seven branches across the country. In February 2002, she was made redundant and remained jobless for three months. She was contracted by another marketing company to work on the launch of their new beauty range, but within two months that company went bust. Jacqueline tried to find another job but could not get one that she liked. Many of her friends, colleagues and even previous clients suggested she start her own business but she was reluctant to take the risk. While looking for a job, she started to reflect upon the idea.

She had joined the Direct Marketing Association and the Public Relations Consultants Association at the start of her professional career, but because of her job responsibilities she had not been an active member. She decided to become active in both associations. She updated her knowledge by attending short courses. This opportunity made her realise that she had a lot of experience, and that she could organise seminars and trainings herself on how not to conduct business in the field marketing and promotions industry. She started to organise seminars from different platforms, including professional associations and marketing companies. This provided her with the opportunity to develop contacts in the industry.

It was during one of her seminars that she met Fiona, who was running her own public relations business. Fiona told Jacqueline that she would be interested in investing should Jacqueline want to start her own field marketing and promotions company. Jacqueline discussed the offer with her life partner, Mark, who was a professional banker. He suggested that rather than accepting

Fiona's offer, Jacqueline should use her wealth of industry knowledge and experience to start her own business. He encouraged her to make a business plan and present it to some banks to secure a loan. Jacqueline prepared this plan, made two confident presentations and was successful in securing the finances to set up her own company.

Jacqueline started her own business with just two part-time employees and no contracts in hand. In the beginning, her own marketing strategy was to access her existing contacts, and become known by her fellow professionals. She used her knowledge and experience to work on the idea of improving how organisations communicate with women and to take female thinking into account in their marketing. She communicated her ideas by writing blogs on the subject. Her ideas were unique and the solutions she offered were original. Her erudition not only appealed to her existing contacts, earning her centrality in her formal and informal networks, but also gave her credibility in the field. She started to receive invitations to give lectures from industry associations and to work for different companies as a consultant.

Just five months after start up her company made a major leap forward when it gained its first large contract with a global giant selling FMCGs. The company provided staff for the national launch of a top brand perfume just 11 months into its existence, and signed contracts with other multinational brands as well. Jacqueline continued to lecture at national professional seminars. She was invited to Singapore to deliver a short training course. These engagements gave her credibility among other clients both nationally and internationally. She made sure to maintain relations with those contacts she made in the process.

Seven years after its start-up, and with an annual revenue of £2.8 million, her field marketing and promotions company employs nine full-time and six part-time staff at its head office, as well as a national database of 6400 freelancers, with 1470 employed for different contracts. The company offers product sampling, demonstrations, brand promotion, mystery shopping, leafleting, merchandising, auditing, exhibitions and hospitality, and has a customer list that includes such names as Unilever, Proctor and Gamble, Calvin Klein, Gucci, and many marketing companies on behalf of their clients.

For the growth of any business, an entrepreneur's pre-existing networks and her capacity to join new networks are both important (Lee and Jones, 2008) and Jacqueline's human capital facilitated her entry into new networks, which in turn, helped her tremendously in shaping up the trajectory of her resource-hungry firm.

The case study helped me to understand that Jacqueline's human capital (based on her education and work experience) gave her confidence, credibility and centrality in her networks. The perceived legitimacy of her education and experience earned her access to value-rich networks, which opened new doors of opportunities for her. Her human capital helped her gaining a status in her social network, which typified by weak ties provided 'brokerage opportunities' to access new markets.

### **8.4.3 The Moderating Role of Human Capital – Results**

I have combined three hypotheses (H<sub>7</sub>-H<sub>9</sub>) because their intervening variable is the same, affecting three separate dependent variables. I want to analyse the effects of human capital in these three hypotheses. Both statistical analyses and interviews suggest a strong and positive correlation for the moderating role of human capital on the relationship between social capital and the growth of employees and sales.

The data collected from interviewees reveal that social capital needs active efforts from employees and business owners in utilising their contacts, network and resources to generate business, leading to growth. When the business is in the start-up phase then this task is shifted to the owner (the entrepreneur herself) since at first it will be her own social capital that will help form the founding team. Later on the collective social capital of the whole team may be converted into employee growth, leading to more sales. Women entrepreneurs, in their interviews explained that converting resources like social capital into competitive advantage requires human capital and feasible processes. For example, if an entrepreneur receives information that may be beneficial for product development or improvement, it is up to the capability and capacity of the entrepreneur (that is, her human capital) to convert that information into an opportunity for business growth. Thus, the moderating role of human capital in using social capital to generate growth in employment, sales, and profit is confirmed.

The participants of the study described their education giving them self-confidence to find 'right' (kind of) partners to formulate effective entrepreneurial

teams and provided them credibility for securing finance in the start-up phase. Their experience was instrumental in the evaluation of different business development opportunities, which they are able to spot in the information generated through their contacts. These factors facilitate introduction of innovative products, services or processes, which eventually resulted in growth for the enterprise in terms of employment, sales and profit.

#### **8.4.4 The Moderating Role of Human Capital – Summary**

One of the objectives of this study is to investigate the simultaneous effect of social capital and human capital on women's enterprise growth, and to discover how these two factors interact to achieve employment, sales and profit growth in women-owned enterprises. In the section 8.4.1, rather than treating individual attributes and social attributes separately, the data collected through interviews have been analysed to explore the combined effect of individual and social attributes on the growth of women-owned enterprises. Table 8.6 presents an overview of the situation with some typical quotations. The overall findings of this study (based on the interviews and the case study) confirmed the quantitative findings that human capital (either one or more than one elements of human capital) plays a moderating role on social capital and growth of women-owned enterprises in terms of employment, revenue and profit growth.

In the first sub-section, the findings related to the impact of education on building social capital were presented. Increased confidence and credibility are two categories brought up by participants as main attributes contributing to their social network development.

The second sub-section revealed the effects of business and management education. Self-confidence and credibility gained through acquired knowledge, information and skills were highlighted, along with the networking aspects of joining an 'intellectually elite group'. It was further described how this linking social capital provides links to otherwise disconnected people and opens doors to

opportunities and resources resulting in employment, revenue and profit growth of enterprises.

**Table 8-6 Human Capital – How Does it Play a Moderating Role between Social Capital and the Growth of Women-owned Firms?**

Category	Typical Quotation
Education	<i>I feel that my educational qualifications [PhD] provided me the necessary confidence to go out and earn credibility in the field and gained an 'expert' status. I was able to generate contacts and friendships, which I nurtured with trust and mutual help. These contacts were quite helpful in the growth process of my organisation.</i>
Business and Management Education	<i>I was facing difficulty in understanding financial statements and decided to attend a training programme, 'Finance for non-financial managers'. I met another entrepreneur on the programme, we clicked and became good friends. He helped me to raise funds for growing my company nationwide.</i>
Work Experience	<i>A valuable resource which many business owners overlook for growing their businesses, are their contacts from previous work place. Having been employed for 14 years as a professional and reached my goal of being the director of one of the top multinational firms, I wanted to do something more. I am proud to say that the contacts I made during my employment days, helped me a lot in finding a business angel, supporting the business when needed, and in learning new skills for growing my business.</i>
Training	<i>When I started my business, I was referred to an organisation called 'Incredit' for training and development. I attended a series of workshops at their centre in Hitchin covering topics such as basic accounting, preparing a business plan, and the legal side of things. I met so many inspirational business owners who encouraged me and gave me advice on developing my business. I got fantastic marketing ideas and was referred to a potential investor for growing my business.</i>

The third sub-section illustrates how experience gained in the same industry over time provides women entrepreneurs with positions of ‘network centrality’, consequently increasing their access to resources, information and future opportunities. In the fourth sub-section, the participants described how attending formal training not only equips them with the latest skills and knowledge but also provide them with excellent networking opportunities. These skills and network connections are used to access resources and information as well as create opportunities for business development and growth. These resources and information pave a way for these entrepreneurs to grow their businesses in terms of employment, revenue and profit.

The case study summed up that how a woman entrepreneur used her education, experience and professional training to gain credibility as an expert. Her human capital helped her to gain a position of influence and centrality in professional network. She built and maintained her social capital, which eventually helped her in the growth of her business.

## **8.5 Summary**

This chapter has presented the results of the semi-structured interviews conducted with 42 women entrepreneurs from three different regions in the UK. Where Chapter 7 described the results of the quantitative analysis, this chapter has helped to explore and understand the effect of social and human capital on the growth of women-owned enterprises. It was discovered in the second section how women entrepreneurs built and utilised their social capital. The detailed analysis of the results confirmed the findings of the quantitative results that participants used their social capital – especially social capital’s networking component – on the basis of trust and norms to develop and grow their businesses.

The third section of the chapter illustrated the women’s perception and usage of different components of human capital during different life cycle stages of their businesses. It also described their interventions and decisions to acquire and use human capital. A detailed analysis of the interviews confirmed the quantitative

results that women entrepreneurs' human capital contributes positively to the growth of their enterprises in terms of employment, revenue and growth.

The fourth section explained how individual differences in human capital affect the social capital generated by social networks (based on trust and norms) and also explained their combinative effect on growth. The qualitative results generated in this section also confirmed and deepened the explanation of the quantitative findings for hypotheses H<sub>7</sub> to H<sub>9</sub>. The comprehensive discussion of both quantitative and qualitative results is explained in the next chapter.

## Chapter 9 Discussion

### 9.1 Introduction

This chapter builds on the findings from the empirical elements of the study reported in the last two chapters. The overarching goal of this chapter is to discuss and explore the theoretical difference made by this study to the literature related to the growth of women-owned enterprises. Box 9-1 reveals the theoretical contributions made by this study. The chapter is structured in such a manner to elaborate, examine and explore the relevance of these theoretical contributions to the literature. The discussion in the later sections provides an assessment of independent variables – social and human capital – on the growth of women-owned enterprises and leads to a finalisation of the theoretical framework initially proposed in Chapter 5. The chapter ends with an outline of the major factors that affect the growth of women-owned ventures in the UK.

### 9.2 Reflection on the Aim and Objectives

The aim of this research is to *'assess the impact of human based (social and human) capital on the growth of women-owned enterprises in the UK and to explain the ways in which social and human capital influence the growth of women-owned enterprises'*. In order to address this aim, four research objectives were developed. The first research objective *'to perform a detailed literature review in the field of women's entrepreneurship and to critically review the factors affecting it'* is achieved and presented in the second chapter of the thesis, which theorises the importance of the women entrepreneurship while relating with the socio economic benefits that can be achieved through motivating women to initiate the entrepreneurial activity. The chapter has particularly looked into the women's active entrepreneurial participation in the UK economy and has also explained the women's invisible entrepreneurship that is contributed through their

support for male relatives involved in entrepreneurial activities. The chapter also details the scholarly literature in the domain of motivation for women to engage in an entrepreneurial activity, the role of gender and socio-economic factors (such as age, employment, education, household income, work-life balance), and the impact of financial and non-financial capital.

The second research objective *‘to review and evaluate factors critical to the growth of women-owned enterprises within the realm of human based capital’* was achieved through conducting critical literature review as presented in the chapter 3 and 4. The research of academic and corporate scholars in domain of enterprise growth provided strong basis to develop the importance of human based social capital as an agent to increase or hinder the growth of women owned enterprises. The literature review presented in these chapters helped to develop a theoretical framework for this thesis, based on three main variables: social capital, human capital and the growth of women-owned enterprises.

The third objective of this research *‘to measure the impact of human capital and social capital on the growth rate of women-owned enterprises in terms of employment, sales, and profit’* was achieved through measuring the strength of the relationship between the social and human capital of women entrepreneurs by collecting and analysing the primary data (through questionnaire and interviews) using multiple quantitative and qualitative techniques. The results generated from the research analysis were presented in Chapter 7 and 8. These results were discussed in detail to describe the relationship between women entrepreneurs’ human based capital and the growth rate of their enterprises in terms of employment, sales and profit. The concept of human and social capital and its role towards the growth of women owned enterprises remained at the core of the discussion in these chapters.

The fourth objective of the research, *‘to strengthen, extend and develop our understanding of how these relationships (between human based capital and the growth of women-owned enterprises) work or unfold’* has been achieved in the

following sections. The empirical findings related to the role of human based social capital towards women-owned enterprises (as presented in Chapter 7 and 8) have been extended and developed theoretically, while analysing the mechanism of relationship between human based social capital and women-owned enterprises.

### **9.3 Influence of Respondents' Profiles**

Some scholars have argued that female entrepreneurs' gender influences their access to social capital (Greene et al., 2003; Brush et al., 2004, 2006a). However, these studies do not explore the impact of women entrepreneurs' profile characteristics on the access and formation of their human capital and social capital, and subsequently their role in enterprise growth. The present research contributes to the literature in this domain by proposing an influence of women entrepreneurs' profile characteristics on building, maintaining and using human capital and social capital for enterprise growth. The following sub-sections discuss the impact of different profile characteristics of women entrepreneurs.

#### **9.3.1 Ownership**

It was found that the majority of respondents (95.71%) are both operating heads and major shareholders in their firms. These women entrepreneurs are therefore strategic decision makers who hold greater discretionary powers over matters of expansion and growth than those employees who have no shareholding interests. Thus, their personal expertise, skills and experience, along with their social networks, may influence their businesses more than these women entrepreneurs realise. This also reflects the issue of trust between principal (the women owner) and agent (their employee) described by agency theory (Fama, 1980).

According to strategic human resource management concepts (Torrington et al., 2007), any decentralisation of authority increases the chances of a substantial increase in the collective human and social capital of the enterprise. For the purpose of this research, only the human and social capital of owner-managers/entrepreneurs was taken into consideration.

### **Box 9-1: Summary of Theoretical Contributions of the Study**

#### **General**

- The impact of women entrepreneurs' profile on building and using social capital and human capital

#### **Social Capital and the Growth of Women-owned Enterprises**

- The important role of 'multiplex ties' for enterprise growth
- The use and sources of social capital vary according to the business type/sector
- The use and sources of social capital vary in different growth stages
- The importance of bridging and linking social capital in growth
- The crucial role of 'trust' among women entrepreneurs to their use of social capital

#### **Human Capital and the Growth of Women-owned Enterprises**

- The significance of entrepreneurs' own human capital in the early stages of growth
- Impact of human capital on the growth of enterprises (not just at start-up)
- The critical importance of 'experience in the same industry' for enterprise growth
- The importance of soft skills (confidence, communication and creativity) in addition to technical knowledge for enterprise growth
- The combined impact of all human capital variables

#### **Moderating Role of Human Capital**

- The importance of education and experience as sources for credibility and providing centrality in networks
- The role of training programmes in building bridging and linking social capital
- The importance of collective social capital (not just the entrepreneur's individual social capital through collective human capital) as the firm grows

### **9.3.2 Business Sector**

All the respondents come from one of three regions of a single country, thus a common national and business culture may have some effect on the evolution of their respective industrial environments. With increasing labour and material costs, and government policies aimed at service sector growth, the UK has since the 1990s become a hub for many service industries such as banking, retail, trading, insurance and finance. The same is reflected in the survey results: 75% of respondents operate in the services sector. Other reasons for this may be the higher requirements of capital, team and time for establishing a manufacturing business as compared to the small, low-tech, local, consumer-oriented and transformative service businesses.

The present literature does not account for the fact that the social and human capital requirements of manufacturing and service industries are different. However, this study finds that the need to build, maintain and use ‘bonding social capital’ is much higher for women-owned businesses in the services sector than in the manufacturing sector, where ‘bridging social capital’ is more crucial for the success of enterprises. The interviewees refer to ‘different sources of social capital in different sectors’ (as described in Section 8.3). These include local and regional networks and professional groups for entrepreneurs in the services sector, whereas suppliers and/or distributors are the major sources of social capital for manufacturers.

### **9.3.3 Age**

The resource requirements may differ at different stages in a business’s life cycle, such as initiation, growth or maturity (Churchill, 2000; Churchill and Lewis, 1983). In the same manner, people have different sets of skills, experience and social networks based on their age and status. Hence an entrepreneur’s age can affect the social and human capital that is infused in the business’s start up and growth. It is found in the literature that most women entrepreneurs start their businesses between the ages of 25 and 35. This has been reflected in the profiles of respondents to this study. More than 60% of respondents were younger than 35.

The interviews confirmed the influence of age on entrepreneurial activity (as well as on building and using human and social capital) and on the ultimate success of the ventures.

#### **9.3.4 Marital Status**

The majority of the respondents were single, single mothers, divorced, separated or widowed. This suggests their need for a flexible work-life balance and independent earnings. Previous work experiences, the need to become independent in life and the requirements of childcare are also motivations for women to start their own business. This reasoning is in line with the current literature. During the interviews, two important observations were made: Some participants talked about the help and guidance provided by their partners/spouses and explained how it helped acquiring human, technical, and financial resources. Quite a few interviewees also mentioned the problems they faced after their break-up and how their personal situations encouraged them to build their human capital and/or inspired them to go out and meet other people to create their 'own entrepreneurial world'.

#### **9.3.5 Ethnicity**

The respondents were largely of British White ethnicity (more than 72%). However, other studies suggest that more South Asian women are in business in the UK; however, because they are hidden within family businesses their numbers are not apparent (Dhaliwal and Scott, 2010; Ram and Jones, 1998). There is no indication of a link between any particular ethnicity having higher skills and better networks, and this study does not investigate any influence of ethnicity on the building and use of social and human capital by women entrepreneurs in the UK.

The above discussion reveals that although these attributes are taken into account for demographic purposes, many of them may have strong influence on the formation and use of social and human capital. While the research has not directly studied the role of these factors, this discussion suggests that any future research

analysing the effects of social and human capital on enterprise growth should take them into account.

#### **9.4 Role of Social Capital in the Growth of Women-Owned Enterprises**

It is difficult to define and measure the concept of social capital in relation to entrepreneurship and innovation (Sapleton, 2009); however, the literature suggests that continuous social and technological changes have compelled businesses to develop new paradigms of innovation and adaptation, leading to a deep renewal of organisational processes and activities. Small start-up businesses rely on the networks of their entrepreneurs, owners or management team, whereas large firms depend upon the increasing importance of lateral and external relationships and new organisational forms of networks that emerge from internal and external collaboration between corporations across continents (Kurkato, 2005). Therefore, any business faces the same need to build social capital, which can be achieved by cultivating relations with different stakeholders and building the network based on the advice, expansion, integrity, solidarity and degree of trust between network members.

Nahapiet and Ghoshal (1998) conceptualise three dimensions of social capital: relational, structural and cognitive (for details please refer to Chapter 4). Claridge (2004) mentions that structural social capital facilitates mutually beneficial collective action through established roles and social networks supplemented by rules, procedures and precedents. On the other hand, cognitive social capital, which includes shared norms, values, attitudes and beliefs, predisposes people towards mutually beneficial collective action (Krishna and Uphoff, 2002). Cognitive and structural forms of social capital are commonly connected and mutually reinforcing, and they may affect productivity (Uphoff and Wijayaratra, 2000). Finally, relational dimensions provide a context in which trust, rules and norms can be applied. For this study, I have considered the formation of social capital in various dimensions, such as help from the entrepreneur's network in the business at different stages, getting along with others, building and maintaining

trust, the importance of being a member of the network, sharing business advice and monetary contributions, and growth of the network. These measures have been applied empirically, and overall they define and constitute the social capital that has been observed in the quantitative and qualitative findings. This study is the first of its kind being conducted in the UK investigating the effect of women entrepreneurs' social capital on the growth of their businesses applying both quantitative and qualitative methods. Another study (Roomi, 2009), which is partly based on the qualitative findings of this research, is the first research publication so far to explore the building and utilisation of social capital by women entrepreneurs in the UK.

As stated in Chapter 4, it is possible to look at social capital from four different perspectives, namely, communitarian, network, institutional and synergic (please refer to Section 4.2.1). This thesis measures and explains women entrepreneurs' social capital from 'network' and 'communitarian' perspectives. The network perspective (Granovetter, 1973; Woolcock and Narayan, 2000) relates to the process through which entrepreneurs seek resources from within their network and utilise them. For example, a woman entrepreneur might utilise the network to find a business lead or to acquire a better status. On the other hand, from the communitarian perspective, a club, association and civic group can help a woman entrepreneur as a collective asset, which in turn results in a contribution of the group members towards cooperation based on trust, solidarity and integrity in supporting women entrepreneurs' business activities.

In addition to testing the hypotheses generated in Chapter 5, this study has found that the use and impact of social capital largely depend on how women entrepreneurs activate their networks in accessing resources, what type of resources they gain access to and what returns they receive from their reciprocal relations. The respondents of this study explained that social capital is just one of many factors for a successful start-up. Too concentrated an effort to build up social capital may hinder the progress of start-up businesses. For example, a few interviewees said that they had not found women-only networking events

advantageous. However, social capital is crucial for the growth of their businesses. During tough times for business such as an economic crisis, organisations cannot rely only on their fixed competences for growth; neither can they restrict their innovations to a single market path (Costa and Peiró, 2009). This is when the importance of ‘who you know’ and ‘how much you know’ become manifold. Overcoming crises in the growth stages of a business and dealing with such circumstances/changes require an intensive development of social capital from the beginning of the business based on cooperation among individuals and groups within and between organisations. The major theoretical contributions of this study in the field of social capital, based on these in-depth interviewees and findings of the quantitative analysis, are discussed in the following sub-sections.

#### **9.4.1 Importance of ‘Multiplex Ties’ for Enterprise Growth**

The ties or relationships that help to build social capital can be defined into three categories: weak, strong and multiplex (Carter et al., 2003). Service providers such as banks, service clubs and trade associations are counted as formal and weak ties (Davidsson and Honig, 2003). Strong ties are found in the informal support of close friends, family, relatives and local communal relations. According to Carter et al. (2003: 8), ‘some network relationships involve the exchange of multiple resources, providing instrumental value, like career advice, as well as friendship’. Mentors are one of the examples of this kind of relationship. ‘The relationship that develops between a mentor and a protégé increases the likelihood that the protégé will be connected to and benefit from the mentor’s own network contacts’ (Ibarra 1993; Carter et al., 2003: 8). These multiplex ties, in the form of fellow business owners, business advisers or informal mentors could substantially increase the general reachability of women entrepreneurs within their networks. Thus, women-owned businesses tend to derive their social capital from the spheres of work, family and social life rather than through formal ties (Brush, 1992; Ibarra, 1993). This finding is echoed by the women respondents in this research, most of whom have created their social capital based on three important factors, namely network, trust and social

activities. Their networks included family, friends, relatives, existing customers, suppliers, distributors, employees and local stakeholders. These subjects have become part of women entrepreneurs' social capital through repeated transactions, interactions or dealings. The interviewees emphasised the value of trust and importance of building 'strong multiplex ties'. They explained that such tried and tested repeated iterations with their 'strong multiplex ties' establish credibility over time and add a degree of reciprocity, reliability and dependability.

One of the most important contributions of this study to the literature of social capital and women's entrepreneurship development is to highlight the importance of 'multiplex ties' in the growth stages of the business. This adds a new dimension to Granovetter's (1973) concept of 'the strength of weak ties'. As stated in Chapter 4, Granovetter (1973) emphasised the importance of weak ties for business growth. This finding was further confirmed by other researchers such as Kern (1998) and Bratkovic et al. (2009), who emphasised that 'weak ties' were better than 'strong ties' in the growth stages, since 'strong ties' affect decision making, increase risk aversion and even inhibit innovation as firms remain loyal to established suppliers rather than seeking new and better solutions. However, Brush et al. (2004; 2006a), while working specifically in the area of women's entrepreneurship, have highlighted the importance of strong ties for the growth of women-owned enterprises.

When the study respondents were asked to map out their relationships, links, networks, associations, institutions, contributions and entrepreneurial activities, they highlighted network contributions that they utilised at every stage of their business venture (see Table 8-2). The findings from the interviews add to the literature that during the 'success' and 'take-off' stages of the firm's growth 'multiplex ties' (combination of strong and weak ties through formal and/or informal networks such as entrepreneurs' mentors and advisers, staff, and customers) play a significant role when entrepreneurs need to utilise their social capital. The data collected from interviewees confirm that women entrepreneurs join and participate in formal or informal networks where they are able to find or

are referred to other entrepreneurs and/or professionals as their mentors/advisers. At these stages, customers' feedback and referral create opportunities for product development and/or improvement resulting in sales growth. All these 'multiplex ties' help achieve growth for these organisations by helping them acquire resources, formulate strategies, attract more customers and increase revenue.

#### **9.4.2 Different Sources of Social Capital at Different Growth Stages**

As mentioned in Section 9.2, the social and cultural settings and personal profiles can determine women's access to networks and their use of social capital. The literature illustrates that there are no great differences in the aims of accessing and/or mobilising resources pursued by women or men when joining or participating in networks (Carter et al., 2001; Kransiqui et al., 2007). Brush et al. (2004; 2006b) mention that there may be variations in the ways in which women build relationships and the benefits they obtain from joining certain types of networks during the growth process, however, they do not explain it further. In addition to testing the hypotheses, the interviews conducted for this study provided an opportunity to explore women entrepreneurs' journey of accessing, building and utilising social capital. While analysing the data, I was able to fill the gaps identified in Chapter 4 (please refer to Section 4.4) and discovered that an interesting and unique finding of this study is the use of different sources of social capital by women entrepreneurs at different growth stages. The literature on women's entrepreneurship is silent in this area.

The pattern of social capital use by women entrepreneurs at different business stages has enabled me to determine what sources of social capital contribute to the growth of their enterprises. Not all of their contacts and networks are equally important in all stages of their business. Table 8-2 illustrates the change in the usage of a range of contacts and links in different stages of the growth. During the initial phases of the business, women entrepreneurs ask help from institutions, as well as from friends and colleagues. Mentors and women-only networking groups also help them develop self-confidence and self-efficacy. Since the company strategy is to stay alive, organisation is simple and the owner does or is involved

in doing everything by supervising subordinates (if any), supplying energy, direction and capital (Churchill, 2000; Burns, 2007). Systems and formal planning are minimal or non-existent, and the strategy is to keep costs at a minimum so as to remain alive. That is where women-only or local networks help in marketing the products and services through word of mouth and other relational marketing strategies.

In the second (survival) stage, the primary goal is to establish a customer base and product portfolio. There are enough satisfied customers, and the focus of attention shifts from existence to the relationship between revenue and expenses to ensure an economic return on assets and labour (Burns, 2007). Customers, staff and suppliers become more helpful as they help in maintaining cash flow, which is a crucial at this stage. As the business starts to grow, women entrepreneurs' requirements change and they need more specific resources from their social capital; for example, women entrepreneurs may need training, premises, funding or partnerships. Many women entrepreneurs spoke of the limited or non-availability of opportunities provided by business support organisations and women-only networking groups at this time; however, they pointed out the importance of mixed gender formal and informal networks at this stage.

The company enters its third stage (success) when it has already enough customers, the owner has supervisors and managers, and planning, marketing, financial and operational systems are in place. The owner increasingly adopts a strategic monitoring role and moves away somewhat from the former close identity with the business (Churchill, 2000; Burns, 2007). Business/professional advisers become important to improving systems and devising operational and strategic planning, if the entrepreneur wishes to grow the enterprise. Mixed networks and mentors also help entrepreneurs consolidate resources for investing in the growth of their business and take their company into the fourth (take-off) stage.

The Churchill and Lewis growth model includes an opportunity for growth after the third (success) stage, which tends to involve the making of a conscious decision after which already developed networks and contacts (both formal and informal) play a major role for the acquisition of resources, especially financial resources. Although women entrepreneurs rely on friends and family for emotional support in every phase, they need extra financial, human and sometimes technical resources in the growth phase, since this depends on innovation (either technical innovation in the case of manufacturing sector or non-technical innovation in the case of services or trading sectors) and value addition.

Stage five (maturity) requires good managerial skills and financial resources from entrepreneurs (Burns, 2007). Both staff and distributors and suppliers become important sources of social capital that can help women entrepreneurs to move the company through this stage and make it really successful and large.

Analysis of the data reveals that women entrepreneurs can more successfully use their social capital in the survival, success and take-off stages of their businesses if they start building it in the start-up (existence) or even in the pre-start-up phase. This gives them time to build and maintain trust and credibility. Although their social capital is mainly built in the early stages of the Churchill and Lewis growth model, its maintenance and utilisation may occur in any stage.

### **9.4.3 Different Usage and Sources of Social Capital for Different Sectors**

Another important contribution of this study to the existing literature is that the use and sources of social capital vary according to the types of business, whether product manufacturing or service provision, and the life cycle stage of the business, whether existence, survival, success, take-off or maturity. As stated in Section 4.4, the present literature does not account for the fact that the social capital requirements of manufacturing and service industries are different. This study finds that the need to build, maintain and utilise social capital varies by sector for women-owned enterprises. The need also varies at different stages irrespective of sector. However, it becomes more complex when firms are in

different sectors. The need for developing ‘bonding social capital’ (built through local, women-only networks and professional groups) is much higher for women-owned businesses in the services sector than in the manufacturing sector, where ‘bridging social capital’ (built through mixed gender and multi-sector groups and business associations) is more crucial for the success of enterprises.

For women in the local services and retail sectors, bonding social capital plays a significant role in the ‘existence’ and ‘survival’ stages. This type of social capital provides information and advice, and becomes a source for generating ideas for attracting customers and improving services. However, women-only networks affect the diversity of links and the bridging social capital, which is important for accessing resources to grow businesses (Brush et al., 2004, 2006). Therefore, in the ‘success’ and ‘take off’ stages, mentors, advisers, suppliers, distributors, staff and even customers help entrepreneurs access information and formulate innovative strategies. This confirms the need for building and using bridging social capital by participating in cross gender networks as well as professional groups for women entrepreneurs, especially in the ‘success’ and ‘take off’ stages of their businesses.

For women entrepreneurs operating in the manufacturing and high technology sectors, bridging social capital plays an important role from the start for generating ideas, accessing resources, building bridges with other companies and individuals for innovation and creativity, and attracting customers with diverse geographical and economic profiles, all of which helps achieve growth. Another vital discovery of this study has been the importance for women entrepreneurs working in the manufacturing sector, of suppliers and contractors who serve as a link between them and their customers. These suppliers and/or contractors also play a role in introducing innovative ideas for product design and modification. The links they create compensate for asymmetrical information about access, timing and referral advantages, and by reducing transaction costs they help women entrepreneurs grow their businesses.

#### **9.4.4 The Importance of Bridging and Linking Social Capital for Growth**

Another finding of the study is that once it is built or accumulated, social capital requires the dynamic capabilities of women entrepreneurs to be converted into a competitive advantage for the organisation. This requires the structural, cognitive and relational dimensions of social capital to come into play, allowing the utility of the social capital to be realised. In order to benefit from social capital, such personal traits as motivation, ability and experience are necessary. Many experienced and professionally educated respondents augmented this finding by suggesting that at start-up companies are hungry for financial and non-financial resources, which can be derived from any network member. However, once companies decide to grow they need financial and specialised human resources to innovate and have a competitive edge. At that particular stage it is not enough just to rely on bonding social capital.

The risks of depending on bonding social capital alone are the expenditure of other valuable resources such as time and finances, which can increase the opportunity cost of not realising other resources. For example, a particular network may prevent the business start-up from expansion, or women-only networks may limit the application of the innovative ideas of men coming to the start-up. Portes (1998) has also talked about bonding social capital becoming 'negative social capital' by limiting an individual's freedom of action and taking away their privacy.

This research reveals that at the 'take off' stage of the business, bonding social capital sometimes becomes a liability for women entrepreneurs. By concentrating on their bonding social capital, women entrepreneurs risk isolation from other sources (from different groups, gender, or members of associations) which can provide them with access to potential information and resources. At this stage, women entrepreneurs need to build and use social capital across different groups, member of associations and gender (bridging social capital) based on repeated transactions that emerge from multiplex ties. The research finds out that in multiple cases bridging and linking social capital have facilitated women

entrepreneurs achieve growth by providing asymmetric information and reducing their transaction costs. However, effective utilisation of their bridging and/or linking social capital is only possible at the ‘take-off’ stage if they start building it in earlier stages of their businesses.

#### **9.4.5 The Role of Trust**

Once women entrepreneurs have built their social capital, it characterises a set of resources that inheres in the organisational structure of relations, within a department, unit, group or team, thus enabling the collective action that leads ultimately to competitive advantage. This study finds that trust also plays a crucial role in building and utilising social capital for enterprise growth in women-owned enterprises.

Trust, the core element in ‘agency theory’ and ‘stewardship theory’, has gained considerable importance in the last few decades in circumstances where trust between management and employees is shaken. Agency theory assumes conflicting and/or non-identical interests between principal and agent, whereas stewardship theory assumes no conflict between the two. The common element is trust between the two parties.

As stated earlier in Chapter 8, building social capital not only concerns joining groups and networks, exchanging cards, attending networking events and contacting others when needed. The development of significant social capital is based on trust built over time through long-standing relationships in which values and principles may be shared. The more one ‘gives’ or is willing to share, the better maintained is one’s social capital. The results of this study show that for women entrepreneurs, building trust is the pre-requisite for the formation and effectiveness of social capital and its contribution to economic advantage. This confirms the presence of trust as a source of social capital (Coleman, 1988; Putnam, 1993) and authenticates the findings of Fukuyama (1995), who equated trust with social capital, and Lin (1999a), who saw trust as a collective asset resulting from social capital construed as a relational asset, placed in the

individual. This research finds that for women entrepreneurs, trust - as a main element of social capital - exists at different levels and acts as the foundation for developing cooperation and coordination of expectations, interactions and organisational behaviour between individuals.

#### **9.4.6 Summary – The Role of Social Capital in the Growth**

The above discussion fills the gaps identified in Chapters 4 and 5 about the role of social capital in the growth of women-owned enterprises. This study confirms many preoccupations of the domain of women's entrepreneurship as well as the dominance and relevance of social capital in that domain. By testing the hypotheses through a sample of women-only entrepreneurs, this study confirms that social capital can increase the growth of employees and sales but does not directly impact profit growth. The qualitative analyses of the interviews show that the profit growth of women-owned enterprises depends on a number of other factors and strategies, including ploughing the money back into business for growth and development. An interesting finding of this thesis is that some women entrepreneurs have mentioned that their marketing efforts through their social capital channels create certain opportunities where consumers agree to pay a premium for the provision of services.

The study shows that the use and sources of social capital vary according to the business sectors and growth stages of enterprises. An important contribution is to highlight the importance of 'multiplex ties' in the growth stages of the business, adding a new dimension to Granovetter's (1973) concept of 'the strength of weak ties'. The research also contributes to the existing literature that in the start-up phase of women-owned enterprises, bonding social capital (through strong ties) does play a positive role in accessing information, attracting customers through word of mouth, and establishing reliability among customers, suppliers and employees. However, the time and effort invested in 'strategic networking' (either by creating bridging and/or linking social capital or strengthening multiplex ties) rather than spending time and effort on bonding social capital proves to be instrumental in the growth of women-owned enterprises. The study also finds that

a strong and expanding network based on trust helps build social capital, whereas business advice, participation in decision-making, spreading the word, and monetary help are its utility aspects.

### **9.5 Human Capital and the Growth of Women-owned Enterprises**

This section discusses and compares the findings for human capital: its formation and role, the factors that affect it, its use, and its effects on the growth of women-owned enterprises.

As set out in Chapter 4, hundreds of definitions of human capital may be found in the literature, from Schultz (1961) to Youndt et al. (2004). For the purpose of this study, human capital is considered to be “The set of abilities, skills, knowledge, innovation and experiences of employees/managers which also includes firm’s values, culture and philosophy” (Edvinsson and Malone, 1997). The relevant literature has enabled me to select the appropriate measures of human capital, such as education, experience, formal training and number of years of training in the same industry (Becker, 1964; Ashour, 1997; Bontis et al., 1999; Dakhli and De Clercq, 2004; Nakhata, 2006; Neergaard et al., 2006 and Ram et al., 2007). The majority of the 42 female entrepreneurs who were interviewed agreed with the importance of these dimensions in defining human capital.

Education, training and previous work experience are the key components of any entrepreneur’s human capital, reflecting the degree of their development of managerial knowledge and capability creation in the organisation (Becker, 1964). All the participants agreed on the major sources of human capital formation as education, business and management education, work experience and professional training. Respondents also agreed on the effects of these measures on the growth of sales, employees and profit. They described that higher levels of education and the extent of prior experience contribute to confidence building and increase the belief of owners and employees that efforts put into an entrepreneurial initiative may lead to a targeted outcome.

The results of this study suggest that in the context of a developed country like the UK, women entrepreneurs' human capital forms the base for an enterprise's growth in the form of sales, employees and profit. The importance of human capital is enhanced because of the various push-pull factors and barriers to entering the world of business that are experienced by female entrepreneurs. During the course of this study, I have found causal and statistically significant relationships between human capital and the growth of women-owned enterprises in the quantitative survey. The same has been inferred from the qualitative interviews, where interviewees talked about the effect and significance of their own human capital on the growth of their enterprises. Thus, this study establishes important empirical support for the basic theoretical proposition that the use of human capital in an entrepreneur's behaviour affects the overall growth of their enterprises.

The major theoretical contributions of this study to human capital and women's entrepreneurship literature based on these in-depth interviewees and the findings of the quantitative analysis are discussed in the following sub-sections.

### **9.5.1 Significance of Entrepreneur's Human Capital in Early Stages of Growth**

According to Human Capital Theory, firms with too few employees or too little collective human capital cannot function appropriately (Becker, 1993). Many of the female entrepreneurs interviewed for this study restricted their idea of human capital to their own profile, and spoke more about their own education and their increasing confidence and business knowledge in managing their start-up ventures. They emphasised the importance of individual human capital of the owner-managers rather than the collective human capital of the organisations, especially in the start-up phase. In their interviews they mentioned that a firm can either directly invest in recruiting the required talent to meet market demand or respond to competitor action; this is possible with strong financial resources, which is not always the case in women-owned start-up ventures. Therefore, for

women-owned enterprises there is a strong reliance on women entrepreneurs' own human capital especially in the early phases of growth.

The statistical findings of this study are in line with the qualitative findings and add to the consensus of the literature on women's entrepreneurship that women entrepreneurs with higher human capital are more likely to identify opportunities, generate ideas and show creative thinking. One interesting contribution of this study to the existing literature is the significance of human capital (especially education and experience) in the earlier growth stages of women-owned businesses.

Women entrepreneurs highlighted the importance of formal education as a component of individual human capital. For example, one female business owner said that a degree from a renowned educational institution helped her a lot in the business world. She mentioned that her degree helped her accumulate explicit knowledge and skills useful for her entrepreneurial venture, thus increasing faith in the achievement of desired performance levels. The interviews enabled me to discover that because of their own education, experience and/or training, in the early stages of growth women entrepreneurs are aware of the importance of effective customer services provision. They recognise that employees are the interface between an organisation and its customers, and thus their performance at the consumer interaction interface is vital. This encourages women entrepreneurs to invest in hiring and retaining effective and efficient employees. Hence, there is a significant correlation of entrepreneurs' human capital with the employment growth of their enterprises.

According to Cohen and Levinthal (1990), prior knowledge helps entrepreneurs to locate, combine and leverage resources in exploiting new business opportunities. Additionally, knowledge helps them combine different resources to create novel products (Parker and Van Praag, 2006), as well as handle complex information when identifying and pursuing business opportunities (Shane, 2000). This study finds that women entrepreneurs use formal knowledge from education and

published materials, as well as knowledge observable in the workplace to generate ideas, identify opportunities and achieve core competences in promoting innovative products or services. It further reveals that women entrepreneurs in the UK use their previous knowledge and industry experience to improve their managerial knowledge, reputation and social and business networks in the creation of new products. Their knowledge and industry experience also help them realise the need to engage capable employees to increase their output of products/services, as well as to promote and sell these products/services in the early stages for generating more income, influencing growth.

### **9.5.2 Impact of Firm's Overall Human Capital on the Growth of Women-Owned Enterprises**

The literature review has supported education, management training and industry experience as measures of human capital. The participants in this study responded positively in identifying these as sources of human capital, and in the interviews revealed their perception that they help establish and develop the business through team work, training and decision making. In the start-up phase, having an entrepreneur or a team of entrepreneurs with the required skills is very important as it reduces the costs of hiring a number of employees, thus allowing the company to save resources and progress to the next phases of 'success' and 'take-off'.

According to the Churchill and Lewis model (1983), business owners acquire financial and human resources either to create innovative products, services and solutions in the 'take-off' stage of business; or to improve existing products for competitive advantage and increase sales to sustain ventures in saturated markets. However, Greiner (1972) holds that in start-ups, entrepreneurs establish innovative ventures by introducing new products and services to achieve growth, whereas the entrepreneurial drive to innovate is seldom found in professional teams that manage the matured ventures. Further, Burns (2008) states that entrepreneurs in corporate ventures encourage their employees to create innovative products and services for growth. He explains that entrepreneurs in

start-ups create innovative products and/or services for first mover advantage, adopt innovative methods to improve sales in the same markets, or enter new geographical areas to improve sales in declining products to achieve high income for growth (Burns, 2008).

It is found both from the quantitative survey and the interviewees' responses that a higher level of human capital can bring an increase in sales and profit, resulting in the growth of enterprises. From the base of their human capital, women entrepreneurs create and introduce innovative products/services at different stages of their entrepreneurial careers for competitive advantage to achieve growth. There are two ways to view this phenomenon. Firstly, women entrepreneurs' own human capital plays a vital role in the earlier phases of the business life cycle when there are fewer/no employees and most of the actions and decisions are made by women entrepreneurs on their own. Secondly, this is due to the fact that organisation design and business process is feasible when action is taken by the stakeholders – employees, investors, suppliers and consumers. However, agency theory claims that there is a conflict between principal and agent. This means that if agents – that is, managers to whom responsibility and authority are delegated by the owners – are not motivated and do not perform to the required standards of the company and industry in line with competitors, then sales may not increase. Both the owner-managers/entrepreneurs and employees have to deploy their skills as collective human capital in order to convert this resource into enterprise growth.

### **9.5.3 Importance of Entrepreneur's Experience for Enterprise Growth**

Another contribution of this study to the literature is the identification of the crucial impact of women entrepreneurs' work experience on the growth of their enterprises. Loscocco et al. (1991) found a positive correlation between the industry specific experience of entrepreneurs and the growth of their businesses. However, Coleman (2007) in a study of entrepreneurs conducted in the USA found a negative effect of previous work experience on growth. He argued that experience made entrepreneurs more aware of the risks of high growth; therefore, they chose to grow their businesses slowly as compared to non-experienced

entrepreneurs. Women entrepreneurs participating in this study pointed out that experience in the same industry prepared them for avoiding committing mistakes, solving complex issues, creating innovative products and/or services, and calculating risks, hence growing their businesses in terms of employment, sales and profit.

The literature in the entrepreneurship domain states that entrepreneurs exploit changes in the existing state of things that motivate them to create and introduce new products and or services. They pro-actively affect market changes before their competitors, rather than waiting for others to act, and so create scope for competitive advantage for as long as the new goods or services are not imitable by their competitors (Kurkato, 2005; Surie and Ashley, 2008). Moreover, some authors state that entrepreneurs use creative ideas and take calculated risks to implement changes in existing products (Burns, 2008; Chen, 2007).

This study finds that women entrepreneurs with work experience and industry-specific training spend less time seeking, gathering or analysing information because they are already familiar with industry norms, organisational cultures and markets' responses. This in turn increases their confidence to seek and identify opportunities, generate ideas for innovative products and/or services, take risks and become more efficient and effective – entrepreneurial efforts which may translate into higher performance and growth. This is complemented by the high level of quality education found in the UK as a developed economy and technically advanced country. This accumulation of human capital works in the manner of a chain reaction, as entrepreneurs with greater training and professional experience expect their ventures to grow because of the better technology, increased professionalism, creativity and innovation, and legitimacy they bring to their entrepreneurial activities. The work experience and formal training that is taken then leads to faster growth. This gain is again helped by an increase in human capital in terms of employing capable and trained staff.

#### **9.5.4 Soft Skills and Growth**

Scholars who support the trait theory state that entrepreneurs generate creative ideas (due to creativity and innovation) and take risks (due to confidence) to implement modern methods in achieving new products, services, markets, systems and processes for competitive advantage and high income to achieve growth (Burns, 2008; Gatewood et al., 2002). However, critics of this theory hold that it has drawbacks because it reflects only static entrepreneurial characteristics of entrepreneurs that over a period of time may change in a dynamic business environment. Conversely, supporters of cognitive theory state that cognitive factors such as educational background, family background, ethnicity, education, knowledge, experience and skills influence entrepreneurs to establish novel ventures in new products (Burns, 2008; Johnson, 2001). One of the important contributions of this study is the finding that as women-owned enterprises' growth life cycle progresses, soft skills such as confidence, communication and creativity are equal in importance to specialised technical knowledge and education. These factors play a significant role in generating ideas for new, unique and different products or services, which in turn attract more customers and help generate and increase sales.

The statistical findings of this study (the 'general to specific approach' to testing the significance of independent variables) are in line with the qualitative findings and add to the literature of women's entrepreneurship in showing that women entrepreneurs' human capital (especially experience in the same industry) gives them self-confidence, knowledge and understanding of customers' needs and demands, and connections with suppliers. This helps them identify and secure business development opportunities; generate new ideas for products, services, systems or procedures; and show creative thinking for cutting costs and increasing their customer base, all of which eventually results in an increase in their sales or revenues.

### **9.5.5 Combined Impact of all Human Capital Variables**

An important aspect of this empirical work is that it complements the usual measures of general and domain-specific human capital such as education and experience with the additional measures of industry-specific training and business/management education. Most of the previous research studies refer to the importance of human capital (greater for women entrepreneurs than their male counterparts) and explore one or two components of human capital. However, they are unable to establish a clear link between other measures of human capital and the growth of women's enterprises. For example, Karlan and Valdivia (2011) and Roomi and Harrison (2009) look at the impact of business and management training on enterprise performance; Nakhta (2006) and Neergard et al. (2006) study the effect of education and experience; and Ram et al. (2007) consider only the role of training and education in entrepreneurship development. However, the present study explores the effect of different aspects of human capital (such as education, training, business and management education and experience in the same industrial sector) on the growth of women-owned enterprises.

### **9.5.6 Summary – The Role of Human Capital in Growth**

In addition to testing the hypotheses, this study adds value to the literature on women's entrepreneurship by establishing a positive relationship between human capital possessed by women entrepreneurs and the growth of their enterprises. As stated in Chapter 4, the precise effects of human capital on the growth of women-owned enterprises were not clear cut. Some scholars could not find any impact of women entrepreneurs' education (Sanyang and Huang, 2005; Manolava et al., 2007; Coleman, 2007; Bruhn et al., 2010) or even experience (Sanyang and Huang, 2005; Coleman, 2007) on the growth of their enterprises. However, others have been able to find a positive correlation between education (Stevenson and St-Onge, 2005; McCormick, 2001) and training (Carter and Brush, 2005; Roomi and Harrison, 2009), and the growth of women-owned enterprises.

Being the first of its kind, this research studies the role of all variables of human capital on the growth of women owned enterprises in the UK. It confirms the

positive impact of education and training on the growth of women's enterprises and establishes a strong effect of experience in the same industry on growth. The study reveals the importance of soft skills such as creativity, innovation, communication and negotiation for women entrepreneurs. It further adds to the literature by showing that although an entrepreneur's human capital is vital in the start-up and early growth stages, a firm's collective human capital plays a crucial role in the 'take-off' and 'maturity' stages of growth.

### **9.6 Human Capital as a Moderator between Social Capital and Enterprise Growth**

In order to realise the opportunities of social capital (networks and relationships), an organisation needs human capital (constituted of knowledge, skills, abilities and expertise). It is this concept that the present research has attempted to validate in the domain of women's entrepreneurship. The results of the questionnaire and interviews suggest that the growth of women-owned businesses in the three regions of the UK validates this conceptual proposition. Based on quantitative and qualitative results, I find strong support for the theoretical proposition that human capital moderates the relationship between social capital and enterprise growth.

Social capital (comprised of the network and relational assets) requires the mobilisation of these resources (Nahapiet and Ghoshal, 1998). From a societal perspective, it can have a negative impact in the form of opportunity costs, isolation from competitors or low returns on investments of time and money. Also, large social capital exposes the start-up businesses to criticism as much as support. These flaws arising from efforts to develop social capital were voiced by many interviewees. Nevertheless, the respondents suggested that the concept of social capital and an associated wave of social networking technologies, portals and agencies have promoted and helped their businesses to a great extent. Social capital enables businesses to solve two economic problems. Firstly, the faster disclosure of information to consumers and competitors leads to easy access to potential customers and sales. Secondly, network ties lead to a reduction in transaction costs. These advantages were experienced by many of the 42

interviewees, for whom much of the marketing of their start-up ventures was done through their contacts and networks.

As discussed previously, human capital has been the backbone of start-up ventures for women entrepreneurs. Respondents outlined the importance of general education, business or management education, work experience and formal training. Most of the women entrepreneurs confirmed that human capital plays a significant role in converting information or resources (generated through social capital) into business opportunities. They confirmed that human capital acts as a resource by which to implement or refine innovative or entrepreneurial ideas. Through their use of human capital women entrepreneurs create dynamic capabilities to produce more resources and utilise existing ones. Thus, human capital not only directly affects the growth of their enterprises but also affects how women entrepreneurs could use their social capital to do the same. This study adds value to the present literature in the field. The theoretical contributions derived from both quantitative and qualitative results are discussed in the following sub-sections.

### **9.6.1 Importance of Education and Experience as Sources of Credibility**

The results of this study suggest that in the context of women's entrepreneurship, education (both general and industry specific) and experience serve as factors for gaining credibility and centrality in networks. The importance of education increases when it is industry specific and relevant to the issues and challenges faced by other entrepreneurs in the network. Thus, this study confirms the causal relationship between human capital and social capital, first mentioned by Leenders and Gabbay (1999) and then by Lin and Huang (2005). The same holds true for women-owned enterprises in the UK. This study develops the theoretical premise that women entrepreneurs' position in social networks is positively related to their knowledge and expertise, hence increasing their social capital because of their importance and influence on other members.

Further, this study ascertains that women entrepreneurs with higher education and experience are in a better position to help other members of their (formal or informal) networks for giving advice for help. They have sufficient knowledge and skills to absorb information generated from their social, economic and political environment, and to transform it into opportunities to generate revenue and maximise their profits. Women entrepreneurs' position of centrality helps them build their social capital with other entrepreneurs as well as with suppliers, distributors, customers and other resource providers such as banks and other business support organisations. Lam et al. (2007) argue that the chances of realising the benefits of being a member of a network increase with higher human capital. This study substantiates the same argument for the literature on women's entrepreneurship by revealing that business stakeholders such as suppliers, distributors, customers and even other business owners are willing to have a longer-term relationship with a female entrepreneur (on favourable terms for her) when they realise that she has the ability to operate her businesses more effectively and efficiently on the basis of her knowledge and skills gained through education and previous experience.

### **9.6.2 Effective Role of Training Programmes in Building Bridging and Linking Social Capital**

A higher level of human capital can prepare entrepreneurs to change their behaviour and course of action in reaction to changes anticipated or caused by the external environment (Manolova et al., 2007; Smallbone and North, 1995). While a higher level of formal education as a component of general human capital leads to increased level of productivity (Becker, 1993), off-the-job training assists them in the accumulation of the knowledge and skills useful to achieve increased performance levels (Davidsson and Honig, 2003). Entrepreneurs attending skills and technical training programmes are more likely to grow their businesses because of their knowledge and understanding of the latest/better technology, enhanced professionalism and managerial skills (Manolova et al., 2010).

As stated in Section 9.3.4, in the ‘take-off’ stage of the enterprise growth, women entrepreneurs need bridging and/or linking social capital more than bonding social capital. At this stage, bonding social capital sometimes even becomes a liability for the business, whereas bridging and/or linking social capital provide entrepreneurs with asymmetric information and help them reduce transaction costs. The participants of this study have revealed that attending formal training provides them excellent networking facilities with members of different genders, groups and associations, as well as entrepreneurs working in different sectors and industries. Women entrepreneurs participating in this study have been able to broaden their business and technical knowledge by attending such training programmes and have been successful in making connections for building their bridging and/or linking social capital. They use their bridging social capital to access resources and information and to create opportunities for business development and growth. This finding is another contribution to the present literature on women’s entrepreneurship that formal off-the-job training can be the seedbed for developing bridging social capital for women entrepreneurs, providing them with excellent networking opportunities for developing connections with business people from a different industry, gender, region, or in some cases even a different country.

### **9.6.3 Significance of Collective Social Capital and Human Capital**

The interviewees confirmed that in the ‘take-off’ and ‘maturity’ stages it is possible for human capital to moderate significantly when the accumulation of social and human capital has happened both at an individual (owner/entrepreneur/employee) level and collectively at an organisational level. This is because neither an owner isolated from their employees or network, nor an organisation isolated from its market or competition can achieve growth in its sales and profit.

As stated earlier, in the start-up phase a woman entrepreneur uses her social capital to generate and mobilise resources, and form a team with appropriate human capital. All the participants acknowledged this and explained that

converting resources like social capital into competitive advantage requires the ability to identify opportunities, act in a timely manner and provide solutions in the form of products or services. To identify the ‘right’ opportunities and to act effectively, women entrepreneurs need to assimilate information from the economic, social and political environment and their education, experience or training. Either or all of these human capital elements build an entrepreneur’s capability and capacity to convert that information into an opportunity, especially in the ‘existence’, ‘survival’ and ‘success’ stages of the business. Entrepreneurs’ own social capital helps them in later stages as well. However, in the ‘take-off’ and ‘maturity’ stages the collective social capital of the organisation (possessed by owners and managers) becomes especially important.

Women entrepreneurs increase the collective social capital of the organisation by employing managers with knowledge and experience, who bring their wealth of connection and networks with them. This collective social capital built through inducting new human capital can be utilised for finding the right partners for developing products or services, building links with new suppliers and distributors, exploring untapped markets, and eventually growing the business in terms of sales and profit.

#### **9.6.4 Summary – The Moderating Role of Human Capital on Social Capital and Growth**

As the first of its kind, this research studies the moderating role of human capital on the relationship between social capital and growth of women-owned enterprises in the UK. The study establishes the importance of education and experience as sources of credibility and centrality in networks, which help women entrepreneurs to access resources for the growth of their enterprises. It determines the important role of attending training programmes for building bridging and linking social capital in addition to learning skills and knowledge for enhanced professionalism. And, last but not least, the study reveals the significance of collective social capital through acquiring and developing collective human capital, especially in the ‘take-off’ and ‘maturity’ stages of growth.

## **9.7 Factors Affecting Women's Entrepreneurship**

Based on both the quantitative and qualitative findings, and the discussion conducted in the earlier part of this chapter, this section discusses how the factors that affect the growth of women-owned ventures directly depend upon social and human capital, which in turn heavily rely on various push–pull factors and the demographic dimensions and profile characteristics of female entrepreneurs.

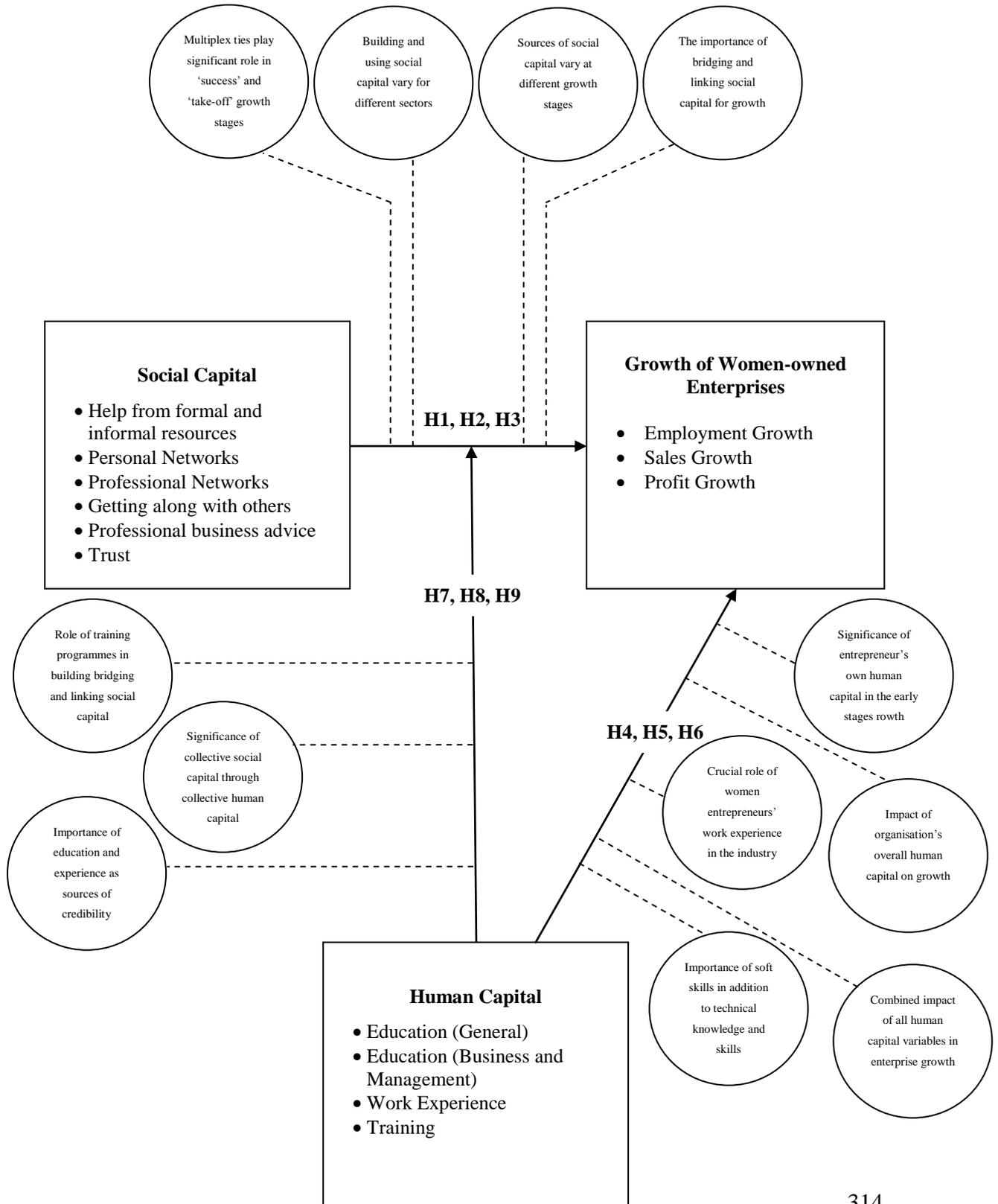
The research domain of women's entrepreneurship espouses a range of theories which apply to various phenomena. Many topics in this field do not form a congruous whole. The literature on entrepreneurship has very much been dominated by the male perspective. The growth and participation of women in the arena of entrepreneurship has, however, helped expand the research of this domain. This thesis has attempted to focus on theoretical development, applying it to the large and growing population of women entrepreneurs, with the aim of making policy makers aware of research results that have implications for fostering women's entrepreneurship.

Women-owned businesses are considered to be short of resources, mainly in respect of finances in the form of access to capital and venture capital funding (Gatewood et al., 2002). Businesses owned by men have higher average venture capital funding and debt finances (Coleman, 2000) compared to those owned by women due to several structural, sectoral and gender issues, as well as network and social capital in the form of trust, network behaviour and influence (McManus, 2001). The gender and performance issues of women entrepreneurs can be influenced by network support, referrals, training and human capital (Anna et al., 2000; Manolova et al., 2007). This has been echoed by respondents in their measurements of social and human capital in the questionnaire and interviews.

It is not only development factors that affect women's entrepreneurship; other barriers come from family pressure, gender role expectations, isolation, partner conflicts, long hours, childcare, work–life balances, lack of education, lack of

family support, the gender pay gap and occupational segregation (Winn, 2004; Carter and Shaw, 2006).

**Figure 9-1: Summary of the Findings and Contributions**



For example, corporate executives can seek support from colleagues or an organisation's resources, whereas many interviewees confirmed that a female entrepreneur has to rely on the network ties of her family, friends or employees. One can easily understand or categorise these factors affecting women's entrepreneurship based on expectancy theory (Gatewood, 2004). This theory comprises expectancy, instrumentality and valence, and states that, to a certain extent, effort can lead to performance; there is a relationship between this performance and a desire to perform, and valence is the importance or anticipated satisfaction with results. Thus, women entrepreneurs who wish to grow their enterprises have to believe in their human capital of knowledge, skills and expertise; be motivated to make the required efforts; and examine or monitor the relationship between their entrepreneurial activities and outcomes (Manev et al., 2005; Manolova et al., 2006; Wiklund and Shepherd, 2003). This again leads one to focus on how human capital at the level of the individual owner or employee, and the network contacts of social capital shape the founder's activities and expectations when deciding the strategic direction of the venture (Greene et al., 1997). A higher level of investment in human capital and social capital will lead the entrepreneur to expect higher growth. This supports the fundamental concept of this thesis. Any deficiencies in the creation of human and social capital will reduce women entrepreneurs' resources, investment and ultimately growth.

## **9.8 Summary**

The purpose of this chapter was to discuss the study's results and findings within the context of the present literature. Such a comparison makes it possible to identify the correct measures of social and human capital and enabled me to discuss what this thesis adds to the current literature on women's entrepreneurship. Social and human capital were analysed in terms of their formation sources, roles, the factors affecting them and their usage, and their effects on enterprise growth. The chapter ensures that the current study is situated on the research continuum of women's entrepreneurship in the context of social and human capital: intangible factors that are critical from day one to the success of start-up ventures. The main findings and theoretical contributions of the study

are summarised in Figure 9-4. The main boxes are related theoretically, testing the nine hypotheses of the study. The circles connected with dotted lines show the main findings and contributions of the study to the literature of women's entrepreneurship, while testing the hypotheses.

The purpose of using a variety of forms of analysis and comparison was to provide a robust insight into the associations between the applied constructs and their underlying dimensions. The following chapter presents the conclusions and the overall contributions of this study, as well as the limitations of the research and its implications for theory and practice. It also describes what can be done to replicate this research or extend its scope.

## **Chapter 10      Conclusion**

### **10.1 Introduction**

During the last few years, human based capital has gained importance as one of the key factors influencing the growth of entrepreneurial ventures. Given the increasing importance of women's entrepreneurial activities for economic development across the globe, it is vital to understand different contributing factors to the establishment and growth of women owned enterprises. Little research has been conducted to understand the relationship between growth and the human based capital possessed by women entrepreneurs in the UK. The notable examples of human based entrepreneurial capital are human capital and social capital, both of which have been at the empirical heart of this study.

This chapter takes the following path to the thesis' conclusion. I address the research questions in Section 10.2 and summarise the logic and main arguments of the research project. Sections 10.3, 10.4 and 10.5, respectively describe and assess the various contributions of the study to empirical knowledge about women's enterprise growth, to the theory of women's entrepreneurship and to the practice of women's enterprise growth. Based on both the quantitative and qualitative findings and the discussion conducted in Chapter 9, Section 10.5 communicates practical recommendations for entrepreneurs and policy makers. The chapter also identifies the main limitations of the study and outlines possible directions for future research. It ends with some concluding thoughts.

### **10.2 Research Summary**

This section presents an overview of the logic and main arguments of the thesis. It summarises the research questions and the research design (what I aimed to do

and how I set out to do it); and highlights the research findings and theory construction (what I found and how I interpreted it).

This research into the growth of women-owned enterprises has been motivated by a surge in the entrepreneurial activities of women in the UK and research conducted by the 'Diana Group' (Brush et al., 2006b; Gatewood, 2004) within the domain of female entrepreneurship. In the last decade or so the UK government and non-profit organisations have increased their support for and attention to the development of women's entrepreneurship, leading to more accountability and increased efforts from women entrepreneurs and small business owners. Due to the subject's importance and the support provided by the government and non-profit organisations, a considerable amount of literature has been produced in the last few years. Most of the available research recognises the importance of women's entrepreneurship, explores the barriers for start-up and growth and investigates the problems caused by non-availability of financial capital.

The main aim of this research has been to 'assess the impact of human based (social and human) capital on the growth of women-owned enterprises in the UK and to explain the ways in which social and human capital influence the growth of women-owned enterprises'. To achieve this aim, the research project had four objectives (described in Section 1.4). The first of these, '*to perform a detailed literature review in the field of women's entrepreneurship and to critically review the factors affecting it*' was achieved in Chapter 2, which highlighted the importance of women's entrepreneurial activity, and pointed out the socio-economic benefits of encouraging women to begin a journey of entrepreneurship. In addition to the data on women's active entrepreneurial participation in the UK economy, this chapter reviewed the women's invisible entrepreneurship through their hidden contribution in the businesses owned by their male relatives. The literature on women's motivation to start their own businesses, the role of gender and socio-economic factors (such as age, employment, education, household income, work-life balance), and the impact of financial and non-financial capital

was analysed in detail. Achieving the first objective provided an understanding of women's entrepreneurship and the issues women faced due to gender differences.

The second objective of the research project, *'to review and evaluate factors critical to the growth of women-owned enterprises within the realm of human based capital'* was accomplished through the literature review conducted in Chapters 3 and 4. Theory related to enterprise growth helped to pin-point the importance of different factors and issues related to growth, especially in the area of human based capital. The proposed and tested theoretical framework was developed through a critical review of different theoretical perspectives that have emerged in the existing literature, focusing on the three main variables: social capital, human capital and the growth of women-owned enterprises.

These identified factors and the gaps in the existing literature provided a base for outlining the theoretical framework that provided the deductive basis to achieving the third objective of the study, *'to measure the impact of human capital and social capital on the growth rate of women-owned enterprises in terms of employment, sales, and profit'*. This objective was achieved by measuring the strength of the relationship between the social and human capital of women entrepreneurs and the growth of their enterprises, along with the proportionate direction of variability between them. Alongside this proposed theoretical framework, a set of hypotheses was developed and tested, based on quantitative and qualitative analyses of primary data in the form of a questionnaire and interview responses. The results of the investigation were presented in Chapters 7 and 8 in an attempt to gain a better understanding of women-owned enterprises' success rate and growth in terms of employment, sales and profit. These chapters formed the basis for a complex understanding of the role of human and social capital in the growth of women-owned enterprises. In the process, the study thoroughly investigated the concepts of social and human capital, their effects and the moderation of human capital on the growth of women-owned enterprises.

The fourth objective of the study, '*to strengthen, extend and develop our understanding of how these relationships (between human based capital and the growth of women-owned enterprises) work or unfold*' was accomplished in Chapter 9. This chapter extended and developed our understanding of how the relationships between human based capital and the growth of women-owned enterprises work. The empirical findings detailed in Chapters 7 and 8 were explored theoretically in Chapter 9.

The main theoretical conclusion of the study is that human based capital possessed by women entrepreneurs plays an important role not only in enterprise start-up, as already established in the literature, but also in their growth in terms of employment, sales and profit. Women entrepreneurs use different sources to build and use their social capital at different stages of growth and in different industry sectors. The human capital possessed by entrepreneurs gives them credibility and centrality in networks and helps them accumulate and use social capital, which in turn helps them grow their businesses. During the start-up or early stages of growth, women entrepreneurs' own human and social capital is very important; however, in the later stages of growth the collective human and social capital of the organisation becomes crucial for its sustained growth and development.

### **10.3 Contributions to Empirical Knowledge**

#### **10.3.1 Understanding Human Based Capital and its Role in the Growth of Women-Owned Enterprises**

This thesis has generated a rich and detailed set of materials about human based capital and its role in the growth of women-owned enterprises in the UK. It is one of the first studies to explore the moderating effect of human capital on the relation between social capital and the growth of women-owned enterprises. The research's innovative quality is based on its development of a theoretical framework that examines the impact of such factors as social and human capital on the growth of firms owned or managed by women in the UK. The theoretical framework is for the first time tested empirically and theoretically. No study in the

area of entrepreneurship in the UK has investigated the combined causal effect of human and social capital on the growth of firms started or owned by women only.

Furthermore, no available study establishes a direct relationship between social capital and human capital possessed by women entrepreneurs across the same set of dimensions as this study. This does not mean that social capital and human capital are my inventions as a researcher; rather, the study has extended their usage by elaborating their influence and testing the different set of dimensions that measure these variables by using a “general to specific approach” (to test the significance of independent variables). The study explores both the combined and “general to specific” effects of different aspects of human capital (such as education, training, business and management education and experience in the same industrial sector) and social capital (such as help from formal and informal resources, use of personal and professional networks, getting along with others, professional business advice, trust, etc.) on the growth of women-owned enterprises in terms of employment, sales and profit.

Some studies have been conducted in developing countries and other parts of the world that explore the impact of human capital on women-owned enterprises. Most of the available studies look at the importance of human capital for women entering into entrepreneurship, meaning that there is a dearth of empirical research into the impact of human capital on the growth phases of women-owned enterprises. This research contributes to the empirical knowledge on women’s entrepreneurship by filling this gap – investigating the effect of human capital on an exclusively female sample of growth-oriented businesses. Moreover, this study is one of the first to study the combined impact of all human capital variables, whereas previous studies have focussed either on education and experience (Nakhta, 2006; Neergard et al., 2006), training (Dhaliwal, 2010; Ram et al., 2007) or business and management education (Roomi and Harrison, 2009; Karlan and Valdivia, 2011).

### **10.3.2 Understanding the Role of Human Based Capital in the Growth Process of Women-Owned Enterprises**

An innovative quality of this research arises from its re-interpretation of an existing body of knowledge in the domain of women's entrepreneurship that has not previously correlated social and human capital as major drivers of the growth of women-owned businesses. As the first to report rich and meaningful data from three regions of UK about women entrepreneurs and the causes of their success and growth, this study is unique. The methodological triangulation applied in this study and its deductive approach uniquely equips it for carrying out previously unconduted empirical work. The use of a different methodological approach to address issues concerning women entrepreneurs adds further originality.

The study has used both questionnaires and face to face interviews. This has made it possible to establish the impact of individual measures of human capital both quantitatively and qualitatively. While the quantitative results helped test the hypotheses regarding social capital, human capital and growth, the findings from the interviews contribute to the literature by highlighting the importance of the individual measures of social and human capital. To the best of my knowledge as a researcher, it is the first detailed study to involve a large questionnaire and interview sample in consideration of the combination of human and social capital in the growth of women-owned enterprises. The first-hand information collected from women entrepreneurs through face to face interviews helped me to understand the growth process of women-owned enterprises.

The interview data collected assisted in comprehending patterns in how women entrepreneurs accumulate, improve and use different sources of human based capital at different stages of business growth and in different sectors. The findings contribute to an awareness of what comprises the social and human capital of women business owners and entrepreneurs and how they can build and use it. The empirical contributions of this study can help women entrepreneurs make better decisions in increasing these resources for success of their organisations.

#### **10.4 Contribution to Theory of Women's Entrepreneurship**

The distinctive contribution of this study is its development of an integrated model based on the perspective of social and human capital that attempts to derive the development process of women-owned enterprises from how they progress in terms of such intangible resources. In the present study, this integrative model of social and human capital and the growth of women-owned businesses has been developed according to dimensions that have not been combined in previous studies (please refer to Figure 9-4). Thus, the main theoretical contribution of this research is its refinement and development of the concept of social and human capital coupled with the growth of women's business ownership.

At the level of theory, another contribution of this research is its exploration of how women entrepreneurs use their social capital at different stages of business growth and how it helps to facilitate their firms' growth. The study also shows how the acquisition and utilisation of social capital differs for women entrepreneurs operating in different sectors such as manufacturing, services and trading.

As explained in Chapter 9, one of the most important contributions of this study to the literature of social capital and women's entrepreneurship development is to highlight the importance of 'multiplex ties' in the growth stages of the women-owned businesses, adding a new dimension to Granovetter's (1973) concept of 'the strength of weak ties'. These 'multiplex ties' help women entrepreneurs achieve growth by helping them acquire resources, formulate strategies, attract more customers and increase revenue.

The study's other theoretical contribution is the importance of bridging and linking social capital (through strategic networking) for the growth of women-owned enterprises. The findings of the study show these to be more instrumental in the growth phases than bonding social capital, which plays a significant role in the start-up and pre-start-up phases.

The literature on social capital considers trust an important precondition for building and maintaining social capital (Putnam, 1993; Fukuyama, 1995). This study adds that women entrepreneurs acknowledge and realise for themselves that trust is a key to the accumulation of social capital and consider trust as the foundation for developing the cooperation and coordination of expectations, interactions and organisational behaviour among individuals.

One interesting contribution of this study to the existing literature is its discovery of the significance of human capital (especially education and experience) in the earlier growth stages of women-owned businesses. Women entrepreneurs with higher human capital are more likely to identify opportunities, generate ideas and show creative thinking in introducing novel products, services, location, processes or systems, which makes their growth path exponential rather than incremental. The study also notes that in the “take-off” and “maturity” stages of the business, the accumulation and use of collective human capital is more beneficial as it brings increased professionalism, creativity, innovation and technical know-how.

There are contradicting views in the literature on entrepreneurship (Loscocco et al., 1991; Coleman, 2007) of the effect of entrepreneurs’ work experience on the growth of their enterprises. This study notes that work experience in the same industry is positively correlated with the growth of women-owned enterprises, as those entrepreneurs with more experience spend less time seeking, gathering and analysing information. They have more confidence to take risks and translate their innovative ideas into entrepreneurial growth opportunities. The study offers substantial support to cognitive theory, and adds that the role of cognitive factors such as education, experience and training in improving women entrepreneurs’ soft skills such as confidence, communication and creativity, which play a significant role in the enterprise growth.

Some scholars have identified a causal relationship between human capital and social capital (Leenders and Gabbay, 1999; Lin and Huang, 2005). However, the existing literature offers little help in theorising the moderating role of human

capital on the relationship of social capital and enterprise growth. This study contributes to the knowledge of women's entrepreneurship as the first to study the moderating role of human capital. It develops the theoretical premise that those women entrepreneurs with higher human capital gain credibility and centrality in networks, accumulating social capital based on their importance for other network members and their business stakeholders. The study also finds that attending training programmes provides women entrepreneurs with access to bridging and linking social capital, which can be extremely helpful in accessing resources and growing their entrepreneurial ventures.

Another important contribution of this study is that in the "take-off" and "maturity" stages the collective human capital and social capital of the organisation, in addition to the owner's own human and social capital, become very important. In order to respond to market demand and competition, women entrepreneurs have to make business strategies that allow their own social and human capital to accumulate along with the collective social and human capital of their employees.

### **10.5 Contribution to Practice of Women's Entrepreneurship**

The study investigates the extent to which specific characteristics of women's entrepreneurship and the dimensions of social and human capital can influence a firm's growth in terms of its sales, employees and profit. The literature review highlighted the importance of the concepts of social capital, human capital and enterprise growth and their various theories and dimensions. This shows that social capital and human capital are two of the most important aspects to be managed if women entrepreneurs want their start-up ventures to grow. It was further shown that the lifecycle stages of businesses need different quantities and dimensions of social and human capital for success and growth. The research findings of this study have many practical implications for both women entrepreneurs, policy makers and business support organisations.

### **10.5.1 Implications of the Study for Policy Makers and Business Support**

#### **Organisations**

A number of measures for promoting women's entrepreneurship have already been established in developed economies such as the UK, the USA and EU member countries. Efforts so far have focussed on actions and support measures in the following seven areas: (1) business support for start-ups, (2) seed and venture capital funding, (3) general or sectoral training, (4) counselling or mentoring, (5) information, (6) advice and consultancy, and (7) networking (European Commission, 2002). The findings of this research have the following implications for policy makers and business support agencies.

Women entrepreneurs' cultural backgrounds, personal profiles and location within the UK were found to affect personally their start-up ventures and consequent growth trajectories. Their strategies and feedback varied as a result of these demographic characteristics as well as their industry/sector of operation. This study suggests that a woman entrepreneur's personal attributes, such as family status, marital status or income level, affect her sources of social and human capital, and in turn affect enterprise growth. The findings suggest that the greater the experience in industry, education in business or formal training for business processes, the greater the control women entrepreneurs have over their enterprises and the formation of social and human capital within them. Therefore, policy makers should give more attention to increasing the human capital of younger generations, with an emphasis on enterprise development skills. These skills enhance human capital, which has a positive effect on the building and utilisation of social capital, consequently affecting the start-up and growth of women-owned enterprises.

The research finds that those women entrepreneurs who have more human capital (especially with technical education/knowledge and experience) have improved access to and credibility within networks, helping them accumulate higher social capital. Their human capital also helps them to spot opportunities, come up with innovative ideas, take calculated risks and discover new or improved markets, all

of which contribute to developing and growing their businesses exponentially. This creates a need for policy makers and business support agencies to encourage and facilitate female science and technology graduates to start their own entrepreneurial ventures by creating science and technology parks, establishing business incubators and providing venture capital opportunities.

It was found that the average age of woman entrepreneurs in the UK was between 25 and 44, with 91.65% of the 517 respondents being in that range. As age increases we found a decreasing rate of women starting up in business. Hence, innovation or risk-taking may be linked to younger age, which matches the findings of the literature. Thus, an expansion of social and human capital alone may not help the growth of start-up ventures, but encouraging younger women and providing them with incentives to start their businesses would allow them to realise the benefits of social and human capital.

The findings of this study suggest that women entrepreneurs in the UK have an advantage compared to those in developing or transitional economies. The UK government encourages a greater level of women's business activity through policy initiatives, clear regulations and subsidies for women entrepreneurs. These regulations can be incorporated into an entrepreneur's planning regardless of the industry in which they operate because they enable start-up ventures to enhance their growth by achieving corporate objectives. Women business owners act as links in realising the effects of any such policies as a component of their own social capital. Generalising the findings of this study for all women entrepreneurs worldwide is difficult as not all countries provide the same business climate and opportunities as the UK.

### **10.5.2 Implications of the Study for Women Entrepreneurs**

Organisational stakeholders and owners should have complete knowledge of business processes and market opportunities for growth. This is possible in the case of entrepreneurs through the formation of an organisation's social and human capital. In order to respond to market demand and competition, women

entrepreneurs have to make business strategies that allow their own social and human capital to accumulate along with that collectively of their employees. This enables the creation of resources of social and human capital for the organisation. In order to benefit from social and human capital, it is therefore necessary for women entrepreneurs to build their social and human capital ideally before starting their businesses. This will allow them to maintain and utilise these resources in an effective and efficient manner once they are on the growth path.

Overall, in order for women entrepreneurs to make their ventures more likely to survive and grow, they must adopt a developmental strategy for social expansion and the accumulation of human capital on both individual and organisational levels. The top-down command approach associated with traditional management style may not help in this regard, so it is better to adopt a participative bottom-up approach to management, which encourages the utilisation of social and human capital on behalf on the development and growth of the business.

The present management literature contains many growth models for organisations and entrepreneurship. Categorising the efforts of each growth driver for an organisation would enable a woman entrepreneur to achieve the optimum allocation of resources. This in turn requires an overcoming of barriers and the generation, development and mobilisation of accumulated resources (Brush et al., 2006a; Churchill, 2000; Garnsey, 1998; Storey, 1994). This is possible when entrepreneurs have the necessary profile characteristics in terms of education, attitude, experience, traits, abilities, personality and behaviour to succeed (Brush et al., 2004b; Greene et al., 2003).

There are factors that directly or indirectly affect drivers of business growth like the personal profiles of female entrepreneurs, or unquantifiable growth drivers like social and human capital. Thus one can either improve the availability of the resources required to grow the business or improve the accumulation or development of such resources as human capital or social capital. It is not possible to provide every aspiring entrepreneur with the required resources or to acquire

resources on their behalf. However, this study has helped me synthesise the best practices adopted by successful women entrepreneurs to build and use their human and social capital. These best practices have been summarised as recommendations for potential and existing entrepreneurs in the following sub-sections.

#### ***10.5.2.1 Recommendations for Building and Using Social Capital***

It is important to understand that the concept of social capital goes beyond “networking”. It involves the building and maintaining of networks and the norms of behaviour that underpin them. In addition to networking, social capital encompasses the building of trust, access to certain groups, and the construction and maintenance of durable relationships with different people and organizations.

There is a need to learn how women entrepreneurs can build and use the relevant aspects of social capital and, in some cases, they should even be able to learn how to un-acquire it. Examples might be if entrepreneurs have some contacts which can be harmful for the growth of their businesses such as non-suitable close relatives or friends working at the key positions in their organisations or other stakeholders who can affect the growth with their views or actions.

“Women-only” networks represent a suitable solution for business women who are starting their business (generally in the services sector); however, joining mixed-networks adds value to the creation of social capital for those providing services/products to clients irrespective of gender. Similarly, for women entrepreneurs running their enterprises in high-technology and manufacturing sectors, bridging social capital is more crucial in the growth stages.

“Women-only” networks play an important role in the early stages of small enterprises; however, women entrepreneurs’ interaction with high-flying managers and/or experienced business owners makes a crucial difference as businesses grow, especially in the “take-off” and “growth” phases. Therefore,

women entrepreneurs should pay special attention to recognising their source of social capital.

Women entrepreneurs should go beyond local, regional and professional networks. They should not be relying on one-dimensional measures of social capital and they should be able to recognise the need to choose among its varieties. In other words, the choice of joining networking groups must be taken strategically considering the time required for nurturing social capital, and it should be dependent upon the nature of each woman's business.

Social capital is not a "wonder drug" or miracle for curing all the problems faced by women entrepreneurs in the growth process; however, it can act as a catalyst or lubricant to facilitate and accelerate the growth process. Therefore, women entrepreneurs should try to encourage the supply and/or acquisition of human capital where and when necessary to address specific deficiencies in growing their enterprises.

#### ***10.5.2.2 Recommendations for Building and Using Human Capital***

As discussed in Section 10.4, women entrepreneurs' own human capital – especially education and experience – help them acquire attributes such as confidence, communication and creativity. This study finds that experience in the same industry raises women entrepreneurs' self-confidence, knowledge and understanding of customers' needs and demands, and their connections with suppliers. Potential entrepreneurs should gain some experience in the same industry to help them generate new ideas for products, services, systems or procedures; showing creative thinking for cutting costs and increasing their customer base. Those governments and policy makers who are interested in promoting entrepreneurship to carry the employability agenda forward should place special emphasis on providing opportunities for gaining experience. This can be achieved by providing government funded internship schemes.

One of the important aspects of building human capital is the acquisition of formal professional training. Women entrepreneurs should try their best to take up these opportunities because they allow them not only to gain cutting edge knowledge and information but also to build bridging social capital with entrepreneurs and/or managers who work in different industry sectors and geographical regions, and who possess different skills and attributes.

Finally, we can conclude that although women's entrepreneurship is in its infancy in most parts of the world, it has a huge potential to grow and help develop national economies. Thus, if networks, governments, non-profit organisations, academia and other stakeholders are able to help women entrepreneurs build and utilise social and human capital, they may be able to increase the growth of their businesses and become the economic stimulus for many countries.

### **10.6 Research Limitations**

Despite the application of a multi-method approach and its promising results, there are research limitations to this study. They can be divided into two categories: research design and theoretical limitations. These limitations should be noted and may be addressed in future studies.

The limitations of the research design include the low response rate of 517 responses from a total of 2,760 launched questionnaires and the limited geographical reach of the online survey and interviews, which covered only three regions of the UK. As an effort of a single researcher, the study was constrained by the resources available in term of time and expenses.

Another limitation is linked to the characteristics of the sample and population. The sample for this study was taken only from women-owned organisations that had been in operation for at least 42 months (so as to study the growth rate of these organisations) in three regions of the UK. It excluded any organisation that had been in business for less than 42 months. Therefore, while studying this

thesis, it should be kept in mind that the results of this research are generalisable only for organisations that have been in business for three years and more.

The study questionnaire was completed online. While this improved its reach and accessibility to entrepreneurs and reduced the turn-around time, it gives rise to the limitation that only those entrepreneurs who had access to the Internet participated in the study, and hence those micro-entrepreneurs who do not use technology or the internet for their businesses were excluded. This limitation was minimised by the fact that this study was targeted at growth-oriented SMEs rather than start-up micro enterprises. According to Giannakouris and Smihily (2011), 99% of SMEs in the UK have access to internet and email.

The cooperation of respondents in providing adequate, reliable and accurate information is crucial in obtaining data in any sort of social research. In this study there is a possibility of some biases arising from the gender difference between the researcher and the respondents. This matter is less for the questionnaire. However, it is possible that women respondents would not have responded in exactly the same way to a female researcher during the interviews. I made sure to build a rapport and put the respondents at ease before conducting the interviews so as to minimise these biases. The data were tested for their reliability and validity to check for researcher bias using data consistency and normality. The results were found to be normal and it can thus be said that the researcher's bias within the study was minimised (Neuman, 2006).

While conducting research in any context, social culture, values and norms will influence any individual's opinion, behaviour or response to any specific issues, and respondents are likely to give "socially accepted" responses (Sekaran, 2003). This may have affected the validity of some of the data in this research too. However, the confidential nature of the research and the promise of non-disclosure of personal information may have helped to minimise this bias.

In addition, the research is not immediately utilised or its value felt by the research community as this is a process based on the understanding, learning and usage cycles of each individual. Thus, social and human capital research in the domain of women's entrepreneurship may prove beneficial in the long term but not in the short run. The intangible effects of the research are comparable to the tangible advantages for practising women entrepreneurs, such as policy support from government towards social and human capital development, which may prove advantageous to the whole nation over a long period. These theoretical limitations may be apparent at the end of the study; however, they fade over time and become negligible when the research proves to be just a milestone on a particular research continuum.

### **10.7 Avenues for Future research**

I would like to detail new research avenues that emerge from the findings, contributions and limitations of this study. The first of these may examine whether a focus on other countries or different regions of the UK or different demographic profiles changes the structure and composition of the measurements of social and human capital. As stated earlier, some respondents give "socially accepted" responses when answering personally administered questionnaires (Sekaran and Bougie, 2010). Conducting similar research in different cultural settings will provide opportunities to study the same questions in the context of different social structures, norms and values.

The second research direction might focus on increasing the sampling of the survey and interviews, or arranging other methods of data collection such as focus groups comprising women entrepreneurs from multiple UK regions. This will help researchers establish the differences between the circumstances of various women entrepreneurs under which their social and human capital are affected, and why.

A third possibility for further research is in the form of longitudinal studies. This study is based on data collected within a fixed time period. A longitudinal study

has the potential to explore whether and how an improvement in the human and social capital possessed by women entrepreneurs can raise the chances of growth of their enterprises.

Fourth, this study's research sample comprises organisations from three UK regions. A larger sample covering more UK regions would provide a more valuable contribution to theory. In addition, a larger sample comprising both men- and women-owned enterprises may help provide a basis for comparison based on gender and/or industry sector such as manufacturing, services and trading, etc. Samples from other countries might also be included, so as to compare women's entrepreneurship across different cultures, business dynamics and national settings.

Finally, researchers with a specific interest in human based capital and growth should remember that any study which can help produce hard evidence for how the survival and growth of enterprises can be improved through developing entrepreneurs' individual or organisational collective human and/or social capital will be of value for both theory and practice. Such a topic is likely to remain a fertile ground for research for the foreseeable future.

## **10.8 Epilogue**

In an age in which women around the world are increasingly gaining access to the same employment and career possibilities as men, it is no surprise that we are also seeing a rise in the number of female entrepreneurs. The entry of women into the world of business has significant economic implications, as it greatly increases the potential number of entrepreneurial ventures in any given country, and can therefore contribute to that country's economic growth. As this study has shown, women entrepreneurs in the UK are presented with particular challenges and opportunities. In other, less egalitarian countries, these challenges and opportunities are more marked. This research refines and develops the concept of social and human capital for the growth of women owned enterprises, and also makes women entrepreneurs, policy makers and academics aware of what role

entrepreneurs' human and social capital can play in the survival and success of their organisations. There are implications in this discovery for the academic study of entrepreneurship – to what extent can we generalise between the genders about such factors as growth, the life cycle of a business, or the relationship of social and human capital, for example? And there are also implications for politicians and business organisations, who must consider the different paths that are open to male and female entrepreneurs when deciding policies that are designed to encourage and support entrepreneurial activities.

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## **Appendices**