



UNIVERSITY OF LEEDS

This is a repository copy of *The Role of Competencies in Shaping the Leadership Style of Female Entrepreneurs: An investigation of micro and small businesses in the North West of England, Yorkshire and North Wales..*

White Rose Research Online URL for this paper:

<http://eprints.whiterose.ac.uk/87354/>

Version: Accepted Version

Article:

Bamiatzi, V, Jones, SA, Mitchelmore, S et al. (1 more author) (2015) The Role of Competencies in Shaping the Leadership Style of Female Entrepreneurs: An investigation of micro and small businesses in the North West of England, Yorkshire and North Wales. *Journal of Small Business Management*, 53 (3). 627 - 644. ISSN 0047-2778

<https://doi.org/10.1111/jsbm.12173>

Reuse

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

The Role of Competencies in Shaping the Leadership Style of Female Entrepreneurs: An investigation of micro and small businesses in the North West of England, Yorkshire and North Wales

Introduction

As the business environment becomes more turbulent, complex and dynamic, effective entrepreneurial leadership is increasingly viewed as a source of competitive advantage (Küpers, and Weibler 2008; Kuratko 2007; Yukl 2008). Although leadership is a critical issue in small business development (Thorpe, Cope, Ram, and Pedler 2009), there is limited research in this area, as previous leadership and management research has focused on large corporate contexts, ignoring the small sized-enterprise context (Cogliser, and Brigham 2004; Vecchio 2003). Against this background, our paper explores the leadership styles of successful female entrepreneurs.

Understanding leadership in the context of smaller entrepreneurial businesses, and specifically female owned ones, is a terra incognita in contemporary leadership research (Bass 1991; Buttner 2001; Jensen, and Luthans 2006); yet it is an area that offers valuable insights and contributions to advance our knowledge. De Bruin, Brush and Welter (2007), in their review of the advancement of research on women and entrepreneurship, note that previous results on differences between men and women entrepreneurs and their businesses leave some doubt about the continuation

of comparative samples and suggest that comparisons between groups of women would allow for a fuller understanding of the gendered processes within this context.

Prior research has indicated that management and leadership style is shaped according to a leader's personal traits and characteristics; yet few empirical studies have provided concrete linkages between these. To bridge this gap, we specifically investigate the role of competencies in shaping leadership style of the entrepreneurs in three regions of England and Wales, namely North West, Yorkshire and North Wales, whilst controlling for the role of owners age and prior experience in the industry. We ask:

“What are the specific leadership styles exhibited by female entrepreneurs in North West of England, Yorkshire and North Wales?”

“To what extent are these styles influenced by the specific competencies exhibited by these female entrepreneurs?”

In doing so, we make two distinct contributions to the literature. First, we provide new insights into leadership styles adopted by these entrepreneurs, presenting a detailed leadership profile of the successful entrepreneurs in the three regions. For the purpose of this study, we define a female entrepreneur as leading a business that is wholly or majority female-owned and managed (Carter, and Shaw 2006).

Second, we specifically investigate the role of owners' competencies in shaping leadership style. Due to the limited research existing on the topic in the small business and gender literatures, we draw inferences from the general bodies of leadership research, the newly established entrepreneurial leadership research and the gender psychology literature to inform our knowledge and arguments.

Synthesizing these different strands of the literature, we offer a more holistic view of entrepreneurial leadership within small businesses owned and led by females.

The paper is structured as follows: The theoretical foundations are explored first, followed by our research methodology. After this the analysis of the data is described, followed by a presentation of the research findings. Finally, we discuss our findings, their theoretical contributions and practical/policy implications, and provide suggestions for further research.

Theoretical Framework

Entrepreneurs as Leaders: An Introduction

Entrepreneurial leadership, from the perspective of the leadership role performed in entrepreneurial ventures, is emerging as a critical issue in our understanding of economic development (Leitch, McMullan, and Harrison 2013). This approach is viewed as a ‘new paradigm’, as the literature to date has focused on larger organizations (Nicholson 1998) and corporate entrepreneurship behaviors of middle management (Gupta, MacMillan, and Surie 2004). The challenge of understanding entrepreneurial leadership in the context of SMEs is relatively unknown (Jensen, and Luthans 2006; Leitch, et al. 2013). While our understanding of the strong relationship between quality of leadership and the management of SMEs is becoming clearer (Thorpe, et al. 2009), there is considerably less focus on the analysis of leadership and leadership development (Cogliser, and Brigham 2004; Leitch, et al. 2013).

Leadership capabilities are crucial for organizational success and sustainable competitive advantage (Luthans, and Youssef 2007). Inarguably, in SMEs the leadership role is even more important and influential than in a larger organizational context (Hale, and Cragg 1996); after all, the leader is typically the principal – in some cases even the sole – decision maker (Davidsson 1989; Storey, Keasey, Watson, and Wynarczyk 1994). Leitch, McMullan and Harrison (2012) in assessing the role of human, social and institutional capital on entrepreneurial leadership, found that the primary focus of the leaders in their study was on the enhancement of their skills, knowledge and abilities – their competencies. Therefore an owner's personal competencies and leadership capabilities will be particularly influential on the performance and success of the enterprise. Yet to date minimal empirical research exists on the intersection of small business leadership and leader competencies (Jensen, and Luthans 2006), although it has previously been recognized that the range of competencies required to run smaller ventures are qualitatively and quantitatively different from those needed in larger organizations (Johnson, and Winterton 1999).

McGrath and MacMillan (2000) were among the few to concentrate on the topic. They claimed that an ever-changing and dynamic business environment, with increasing uncertainty and competition, requires a different type of leader; an “entrepreneurial leader”. Although McGrath and MacMillan’s research was not limited to small companies, and focused upon growth orientation, they ultimately defined the entrepreneurial leader as one who creates “an organization that does things...as a matter of course” and achieves success through “continual search for new opportunities” (2000, p. 301). Subsequently entrepreneurial leadership was linked to the development of an ‘entrepreneurial mindset’ for leaders who can

strategically manage their organizations within an increasingly competitive and changing global environment (Gupta, et al. 2004). Gupta, et al. (2004, p. 246-248) further defined entrepreneurial leadership as involving five main elements: framing the challenge that will push the team; absorbing uncertainty by shouldering the burden of responsibility for this challenge; path clearing through negotiating internal and external environments; building commitment by inspiring the team to 'buy into' their vision; and specifying limits through managing preconceptions and acknowledging limitations and working creatively within these.

Other studies have looked specifically at the human element of leadership. For example, Baum, Locke, and Kirkpatrick (1998) demonstrated the importance of the business founder's ability to convey a clear vision to employees. Hiam (2002) identified the importance of building trust and commitment of employees, whereas Ireland, Hitt, and Sirmon (2003) talked about the role of human capital in nourishing strategic entrepreneurial behavior and entrepreneurial leadership. More recently, continuing this discussion, Roomi and Harrison (2011) defined entrepreneurial leadership as "having and communicating the vision to engage teams to identify, develop and take advantage of opportunity in order to gain competitive advantage." (2011, p. 2).

Indeed, when their business reaches a certain threshold, entrepreneurs undergo a transition where they need to build a team around them with complementary competencies. This transition phase occurs when businesses have survived the early challenges of their existence and begin to struggle with developing new skills that match the opportunities and threats they are likely to encounter (Zahra and Filatotchev, 2004). The ability and skill in attracting other key management members and then building the team is one of the most valued capabilities for lead

entrepreneurs as the quality of the entrepreneurial team is strongly connected with the growth potential of a new venture (Watson, Ponthieu, and Critelli 1995). Female entrepreneurs have been found to bring in human capital that complements their competencies. Women report, and are able to recognize, the gaps in their human capital, in areas such as finance, and have been shown to engage in a participative management style (Lerner and Almor, 2002) which draws on the competencies of others to complement their own.

Finally, some attention has also been placed on the different leadership styles and practices employed by small business leaders. Initial studies by Ardichvili, Cardozo, and Gasparishvili (1998) examining leadership styles and practices of 256 Russian small business owners, showed that they would involve peers in decision making, but not subordinates and would also exhibit few authoritarian but more situational styles of leadership. In general, entrepreneurial leaders have been frequently linked to transformational leadership styles. Acknowledging that transformational leaders are driven by the need “to transform individuals, teams and firms by going beyond the status quo and (affecting) their firms ability to innovate and adapt”, it has been claimed that transformationally led firms are more likely to be entrepreneurial (Ling, Simsek, Lubatkin, and Veiga 2008, p. 557). This is further supported by research that makes positive links between transformational leadership and entrepreneurial leaders (Visser, De Coning, and Smit 2005), with crucial dimensions centered on strategy, communication, and personal and motivational factors (Agbim 2013).

Gender and Entrepreneurial Leadership

Leadership research has long considered the role of gender in leadership styles and characteristics, with leader stereotypes generally considered to be masculine (Koenig, Eagly, Mitchell, and Ristikari 2011). The literature has traditionally posited certain traits and capabilities for entrepreneurial success (and indeed successful leadership) as being typically associated with men (Halford, and Leonard 2001; Jones 2012; Marlow, and Strange 1994), with females positioned as having less capability in these areas. However, the empirical evidence so far has not been conclusive (Appelbaum, Audet, and Miller 2003).

Brush (1992) identified four major areas of research on female entrepreneurs centered on individual characteristics, organizational characteristics, process of business creation and acquisition and environmental factors, suggesting that there are “more differences than similarities between male- and female-owned business” but that “there are few gender-based differences in certain psychologically based entrepreneurial traits” apart from those linked with risk-taking propensity and energy levels (1992, p. 12). Brush also emphasized the assumed homogeneity of women, with little research across groups of women, effectively masking the wider, gendered complexities of business ownership and the differing reasons for, and attitudes towards, approaches to entrepreneurship and leadership generally.

Taking into consideration the above, scholars have argued that female entrepreneurs, in contrast to their male counterparts, would adopt different leadership styles. Indeed, since the 1980s, many studies in the small business and entrepreneurship literature have been conducted upon this premise (Ahl 2006; Henry, Foss, and Ahl 2013), with many of them providing supporting evidence

(Koenig, et al. 2011). For example, Alimo-Metcalf (1995) showed that women's constructs of leadership "relate to notions of transformational and interactive leadership whilst men's are linked to transactional models with males' primarily concerned with 'entrepreneurship' and 'vision' as a priority and women with 'team management and effective service delivery" (1995, p. 5). Eagly, Johannesen-Schmidt, and van Engen's (2003) meta-analysis of 45 studies of transformational, transactional and laissez-faire leadership styles found that women were more transformational and "engaged in more of the contingent reward behaviors that are a component of transactional leadership" (2003, p. 569). Other research has shown that female managers perceive themselves to be more transformational than males (Carless 1998). Indeed, Eagly and Carli (2003) suggested that female leaders are more likely to lead in a style that is better suited to contemporary economic and organizational conditions than their male counterparts.

Different approaches to leadership have also been found – for example, effective communication and people skills, consensus building and communication, with women having more social capital than their male counterparts (Runyan, Huddleston, and Swinney 2006). Furthermore, it is suggested that women entrepreneurs perceive their lack of management experience and business skills as a major constraint (Heilbrunn 2004). For example, Langowitz and Minniti (2007) suggested that women across many nations and cultures tend to perceive themselves and the entrepreneurial environment in a less favorable light than men. Indeed in the same study, the authors found that subjective issues have a greater influence on women's entrepreneurial propensity.

On the contrary, other studies indicate that today female entrepreneurs are perceived as being tougher than other women (Ahl 2006), suggesting that female

entrepreneurs of the 21st century may not conform to the traditional feminine stereotypes of leadership or that wider cultural perceptions may not reflect the lived experience of female leaders. In addition, scholars argue that it is not a question of ‘if’ gender is an issue but ‘how’ gender affects women’s perceptions and experiences of entrepreneurship (Ahl, 2006; Hughes, Jennings, Brush, Carter, and Welter 2012; Marlow, and McAdam 2012; Marlow, and McAdam 2013; Ahl, and Marlow 2012) and that this is not the same for all women (De Bruin, Brush, and Welter 2006; Hughes, et al. 2012).

In parallel, research methodologies using gender as a variable to explore the behaviors and dispositions of male and female entrepreneurs are also being challenged (Ahl 2006; Hughes, et al. 2012). This is due to the homogenizing effect of matched pair studies, which position men and women as inherently and essentially different (Carter, Shaw, and Britain 2006). Others argue that traditional conceptualizations of female entrepreneurs have posited a view that women are likely to have 'different' attitudes regarding areas such as leadership, profit and growth that position them as less successful (Marlow, and McAdam 2013; Sexton, and Bowman-Upton 1990). Women are subsequently viewed as deficient and inferior to the 'true' entrepreneurship and leadership involved in the masculinized, economically driven motives of high growth, high profit and jobs created (Ahl 2006; Marlow, and Strange 1994). For these reasons, and to challenge such homogenous accounts, there are calls to focus on women as an explicit research group.

Indeed, Gundry and Welsch (2001) argued that differences between women entrepreneurs are of specific interest and that future research should “further examine variables across categories (strategic or otherwise) of women-owned businesses” (2001, p. 467). This is supported by Eagly and Johannesen-Schmidt, who

suggest that differences between the leadership styles of women might actually be linked to factors other than gender and that ‘debates on sameness versus difference can obscure the array of causal factors’ that can produce differences or similarities” (2001, p.781). For example, factors such as age and education are increasingly suggested as being an important aspect of leadership style and perceptions of leadership style (Oshagbemi, 2004; Barbuto Jr, Fritz, Matkin, and Marx 2007). Barbuto Jr, et al. (2007) found that older leaders were considered to be more transformational in their leadership style, and that those with an advanced degree were also perceived by their employees as having a transformational style. However, the importance of examining both the personal and the organizational dimensions of leadership style is also recognized (Galanou, 2010); the current study seeks to address this issue through its focus on micro and small businesses.

Entrepreneurial Competencies and the Role of Gender

There is widespread acceptance that the success, performance and growth of SMEs are heavily dependent on the competencies of the entrepreneur. Competency theory is based on studying successful leaders, by researching their behaviors, attitudes and skills into measurable aspects, and looking for ways of bringing them together in order to create individuals who demonstrate superior performance (Mitchelmore, and Rowley 2010). Research and practice related to competence is motivated by aspirations to achieve superior performance, thus achieving business success (Spencer, and Spencer 2008). However, one of the key challenges in the competence literature is that there are many definitions of competence (Hayton, and McEvoy 2006). The terms ‘skills’, ‘expertise’, ‘acumen’ and ‘competency’ are interrelated and are often used interchangeably in the literature (Smith, and Morse 2005).

Different frameworks and clustering of entrepreneurs' competencies have been proposed. Typically competencies of entrepreneurs are divided into two major categories, managerial and entrepreneurial, both equally required to survive and succeed (Chandler, and Hanks 1994). Managerial competencies are the competencies required to run a business successfully. For example, Smith and Morse (2005) identified two broad themes of managerial competencies: functional competencies, such as marketing and finance, and organizational competencies, such as the skills related to organizing and motivating, personal skills and leadership. Entrepreneurial competencies have been identified as a specific group of competencies relevant to the exercise of successful entrepreneurship and the development of small and new businesses (Colombo, and Grilli 2005). Man, Lau, and Chan (2002) identified six competency areas under entrepreneurial competencies; these were opportunity, relationships, conceptual, organizing, and strategic and commitment competencies. Finally, based on the work of Chandler and Jensen (1992) and Herron and Robinson (1993), Baum and Locke (2004) identified nine entrepreneurship competencies; knowledge, cognitive ability, self-management, administration, human resource, decision skill, leadership, opportunity recognition, and opportunity development.

Despite the interest in entrepreneurial competencies, studies on female entrepreneurs are rare. Most past studies on have examined only *specific* aspects of their competencies, and many are comparative to male business owners. Among the latter, some revealed that female entrepreneurs feel social adroitness and interpersonal skills to be their strongest skills (Birley, Moss, and Saunders 1987; Hisrich, and Brush 1984). Others have found women reporting being weaker in financial skills than men (Collerette, and Aubry 1990; Stevenson 1986). Some studies have shown that women tend to focus more on their teams' development,

empowering their employees and encouraging their achievements and perseverance (Bruni, Gherardi, and Poggio 2004; Brush, Carter, Gatewood, Greene, and Hart 2004; Gundry, Miriam, and Posig 2002). Others have noted that female entrepreneurs spend more time in networking, engaged in conducting market research, and show advantages in strategic planning, leading change (Greve, and Salaff 2003; Lerner, Brush, and Hisrich 1997; Morris, Miyasaki, Watters, and Coombes 2006) and innovation (Hisrich, and Brush 1984; Sexton, and Bowman-Upton 1990).

However, Biernat and Fuegen (2001) suggest that, just as with the comparison of leadership styles, the comparison of the competencies of female and male leaders can lead to males and females being judged to different standards and that this limits our understandings of the different competencies of different leaders in different contexts. For example, prior research indicates that human resource comprises a range of different aspects; these involve background, including family characteristics, education and experience (Cooper 1981; Birley, and Westhead 1990), goals (Davidsson 1989) and competencies (Chandler, and Jensen 1992; Mitchelmore, and Rowley 2010; 2013). Size and age has been shown to have an impact on business resources and performance (Venkataraman, and Low 1994). In general, studies such as these found that businesses were more successful when the owner-founder possessed greater amounts of human resources (Brush, and Chaganti 1998).

Summary

Entrepreneurial competencies have been clearly shown to have important implications for business growth and success, and an understanding of the nature and role of such competencies has important consequences for practice. At the same

time, evidence of fast growing entrepreneurial firms clearly highlights the importance of leadership for business success. Yet, although leadership is a personal attribute, and better leadership is thought to result through developing the competencies of individual leaders, exploring the linkages between competencies and leadership style development has received scarce attention in the past. When it comes to female entrepreneurs, the relevant discussion has been almost completely ignored. Acknowledging the increasing interest of female entrepreneurship and the role of women in the global economic environment, we bridge this gap in the literature, offering invaluable theoretical insights and practical contributions.

Methodology

Study Sample

In our study, we focus on three regions of the United Kingdom, which are in close approximation to each other, and exhibit great dynamism and growth: the North West of England, Yorkshire and Humber, and North Wales¹. Accounting cumulatively for 20 percent of all the companies registered in England and Wales, and for 21 percent of all the start-ups respectively, the three regions have significantly increased their contribution to the ‘entrepreneurial force’ of the country,

¹ According to 2013 national statistics, from 4.46 million enterprises registered in England and Wales, approximately 890 thousand were registered in the examined three regions. In addition, among the 240 thousand new start-ups registered in England and Wales, 21 percent came from the same three regions. So although, these regions have traditionally lagged behind in entrepreneurship, when compared to other regions in the UK, it seems that lately they are picking up the pace. (BIS, Business Population Estimates, 2013 & Size Analysis of Welsh Businesses, 2013)

exceeding in growth rates even the most traditionally entrepreneurial regions, such as London and the South East².

Our target population is micro and small³ female-led enterprises, which have been operating for at least two years in their respective industries. Inarguably, the first two years of an enterprise are the most crucial for survival, since 40 percent of all start-ups tend to fail within the first year (Shepherd, Douglas, and Shanley 2000). In the UK, the Office for National Statistics (2013) estimates that, on average, 28.2 percent of companies typically fail within the first two years of operations. Hence, it was deemed necessary to exclude newly established companies to enable comparability among the results of the survey. In addition, our focus was placed only on female leaders of micro (less than £1.6 million turnover) and small companies (up to £8 million turnover) due to their overwhelming representation in the targeted enterprise population⁴.

To identify the sample for our analysis we used a combination of judgment and snowballing sampling (Goodman 1961). This technique is most suitable for sampling special populations, which are either difficult to estimate or not easily identifiable from secondary databases, due to unreliable or limited available information (Churchill Jr, and Iacobucci, 2009). In such cases, an initial sample of respondents, representative of the study criteria and the population of interest, is first identified and used subsequently as “informants to identify others with the desired characteristics” (Churchill Jr, and Iacobucci 2009, p. 582).

² The three regions exhibited an 11 percent increase in the number of enterprises in 2013, whereas the relevant increase in London was 4 percent and for England and Wales together was 2 percent (BIS, Business Population Estimates)

³ Size classification is defined with respect to firm total turnover according to the EU regulation 2003/Act 361

⁴ According to the 2010 BIS Small Business Survey on Female owned enterprises, only 2 percent of the population is of medium size and even less than 1 percent are large firms.

In our case, we identified respondents initially through different women's networks and entrepreneur support programmes, such as Forward Ladies in Yorkshire and Chwarae Teg in Wales. These initial respondents were requested to identify other eligible participants by providing our team with the necessary contact details. In addition, acknowledging that not all female entrepreneurs are members of a network or a support programme/ association, we further used the directory of regional entrepreneurs as well as direct personal contacts to facilitate the dissemination of the questionnaire more widely in all three regions of interest.

Survey Design and Methods

The survey questionnaire⁵ was split into three sections. The first section focused on the profile of the entrepreneur (age, years of business experience, qualifications, family history of enterprise) as well as the profile of their business (annual sales, number of employees, business sector, legal status, stage of business development).

The second section of the questionnaire focused on leadership attributes as identified by the relevant literature. A range of different types and taxonomies has been proposed for the determination of leadership styles and attributes (Bass, and Bass 2009). In small group formations, leaders have been classified according to their roles, behaviors and functions within their groups, all typically converging around the leader's focus on facilitating productivity and support for their group members (Bales, and Slater 1955). On the other hand, leadership in organizations and institutions has often been linked to the managerial style of the leader and the tasks adopted.

⁵ Please find a sample in the appendix.

Combining these approaches, we employed the Multifactor Leadership Questionnaire (MLQ) designed by Bass and Avolio (1997), augmented with detailed questions on the decision making approach adopted (autocratic vs. democratic leadership style). The MLQ is a widely employed tool, used to diagnose the behavioral aspects of leaders. It is based on the following seven factors, measuring transformational vs. transactional leadership attributes:

- *Idealized Influence* indicates whether a leader holds subordinates' trust, maintains faith and respect, shows dedication and overall acts as a role model;
- *Inspiration Motivation* measures the degree to which a leader provides vision and significance in one's work;
- *Intellectual Stimulation* shows the degree of encouragement a leader provides to others by creating an environment that is tolerant of experimentation;
- *Individualized Consideration* indicates the degree to which interest in others' well-being and personal contribution in the group/team is shown;
- *Contingent Reward* focuses on the degree to which a leader tells others what to do to be rewarded, emphasizes expectations and recognizes accomplishments;
- *Management-By-Exception* assesses how content a leader is with standard performance;
- *Laissez-Faire* measures the extent to which a leader will let others do their own thing.

The tool comprises of 21 five likert-scale items, with each factor being determined by three specified items in the questionnaire, randomly deployed. A set of 8 five likert-type scale questions have been added into the questionnaire, specifically focusing on the leadership/managerial style of the study group, along with two more

questions that focus on the decision making approach the leader adopts for strategic and non-strategic decisions.

The third and final section of the questionnaire was focused on entrepreneurial competencies. Many scholars have proposed various lists and clusters of entrepreneurial competencies, with varying levels of categorization. However, these are broad and it is difficult for any individual to demonstrate these simultaneously (Wu, and Lee 2005). Mitchelmore and Rowley (2010; 2013) in their reviews of the entrepreneurial competencies literature offered a framework, which integrated previous research in this area, embracing both entrepreneurial and managerial competencies. In our study, we adopt their Female Entrepreneur Competence (FEC) Framework (Mitchelmore, and Rowley 2010; 2013). Four classes of competencies were surveyed namely, Personal and Relationship Competencies, Business and Management Competencies, Entrepreneurial Competencies, and Human Relations Competencies.

To validate the reliability and interpretation of the questions in our survey, the instrument was pilot-tested first with a small sample of female entrepreneurs. Three female entrepreneurs were contacted and requested to participate in this phase of the study, identified through personal networks. No specific problems were evidenced through this phase, whereas some slight adjustments to the survey instrument were made to alleviate possible tensions in some of the definitions provided.

All questionnaires were sent out to prospective respondents either through email (SurveyMonkey link) or through post, in hard-copy format, accompanied by a cover letter explaining the study and ensuring the confidentiality of the survey research. A

reminder letter and a second wave of questionnaires followed within the first month of the initial contact. Overall, we collected 66 questionnaires throughout the two waves, which yielded a sample of 58 usable and valid responses⁶. No significant differences were observed between the two waves of data collection⁷.

In addition to the above, we conducted ten interviews to further validate and strengthen the results from the previous two phases. For the selection of the interviews, personal contacts and networks of participants were again utilized in the respective regions of focus, matching the diversified sample of survey responses. To be more precise, four interviews were conducted in the area of Yorkshire, three interviews in North Wales and three in the North West. All interviews lasted for approximately an hour and they were all recorded with the consent of the respondent. In all cases, the same questionnaire was completed in full in order to have a common reference point⁸. The results from this analysis were used to validate, augment, and even interpret the survey findings, as shown in the discussion section.

Data Description

In Table 1, we present summary statistics on the characteristics of our female entrepreneurs and their enterprises. More specifically, we observe that the study sample is quite diverse with respect to the demographics of the participant female entrepreneurs. In particular, there is a range of different age groups, educational

⁶ We had to exclude 8 responses because they were missing crucial answers for our analysis.

⁷ The response rate is not cited here because unfortunately we do not know exactly how many female business owners were finally reached throughout the two waves, and the different networks approached to get a representative sample. Estimating from secondary databases the entire female business population has always been troublesome even for the government (for further details on the topic please check the BIS Small Business Survey 2010 "Women Led businesses boost" and the "Women in Business: Office for National Statistics" - 2009 Report)

⁸ The interviewees were given enough time to answer -on their own- the questions in each section. Yet, before moving on to a following section, the interviewer would initiate a conversation to get a deeper understanding of the reasoning behind the answers provided. Examples are offered in the discussion section.

background and levels of experience. The majority of our respondents hold either a professional or a bachelor (or above) degree in related or non-related subjects, and have at least five years experience in their respective industry.

The majority (91 percent) of our respondents are between the age of 24 and 55 with only one representative from the youngest population group (19-25 years old). This is not surprising as such. Statistically women of that age bracket are very limited among the entire population of female entrepreneurs⁹. In addition, it has long been suggested that women become self-employed and/or start a business to achieve better flexibility and work-family balance, specifically after motherhood; hence at later stages in their lives (Hisrich and Brush, 1984; Kepler and Shane, 2007; Lombard 2001; Brush, Carter, Gatewood, Greene, and Hart 2006).

With respect to the firm characteristics, most of the firms in the sample are at least four years old, with a very good representation (35 percent) of firms with more than 12 years in the industry and some very young businesses too (within their second year of operations). Regarding their focus, the majority of the firms examined converge around business services or wholesale/retail, with just a few concentrating on other services and even fewer on manufacturing. Finally, the sample includes firms at different phases¹⁰ in their development.

----- Insert Table 1 here -----

⁹ As reported by the National Labour Force statistics in 2012, among the entire self-employed female population, the women of that age bracket were approximately 2.4 percent. Acknowledging that the female self-employed population also includes those women who run enterprises with no employees (which naturally are excluded from our sample), it is easy to distil that the final percentage of female-owners of that age category is even lower.

¹⁰ Initial phase of conception and development of products/services; Surviving phase with sufficient sales for breakeven; Stable and profitable phase; Growth orientation, growing from within or seeking finance for growth; Maturity phase, being many years in the industry and customers

In Table 2, we take a closer look at the surveyed female entrepreneurs and their leadership styles. In particular, we describe here the anatomy of the respondents' leadership style with respect to behavioral aspects (Panel A) and management aspects (Panel B). To derive the score for each style per respondent, we summed the respective scores on individual items, as per the instructions of Bass and Avolio (1997). We observe that the investigated female entrepreneurs are described as transformational leaders in nature, scoring on average at the upper range of moderate (8+) and/or high levels in all factors included in the instrument. The highest average scores are observed in leaders' role in influencing (9.14) and developing the well being of their subordinates (8.84). The only factor that does not follow the same pattern is the *Laissez-Faire* with a mean score of just 4.54 out of a maximum of 12. Yet, it is important to note that the study population spans the entire range of the scale, with the minimum scores being zero -0- and the maximum 12 in almost all factors.

Hence, with a first look at the above data, we can infer that, although our female entrepreneurs are mainly transformational leaders, they are not willing or ready to release control of their businesses to their employees. This is further understood and corroborated when looking at the analysis in Panel B. Indeed, we observe that on average our female entrepreneurs adopt a moderate to high autocratic and/or bureaucratic (5.12 and 5.26 respectively) approach rather than the expected democratic style (4.8). In addition, the *Laissez-Faire* approach receives on average the lowest scores with just 3.96 out of a maximum of 8.

----- Insert Table 2 here -----

Finally, in Table 3 four major categories of competencies are examined, namely entrepreneurial, management, human relations and personal with multiple items measuring each one. It is obvious from the table that all four categories are well defined in our sample with all items measuring, with a high degree of reliability, different facets of each category. Indeed, inter-item correlations for each category are fairly strong with Cronbach's alphas t-tests ranging from 0.693 (for management competencies) up to 0.798 (for human relations), suggesting overall a good degree of convergent validity. In all cases, the factor means are above the scale midpoint, with personal competencies scoring the highest (3.234), and management competencies the lowest (2.698). Admittedly, the female leaders in our sample seem to perceive themselves to be well equipped with entrepreneurial and even better personal competencies, but not so much with managerial skills.

----- Insert Table 3 here -----

Robustness Tests

To further verify the four factors in the competencies table (Table 3), we investigated the homogeneity of the variables loading in each construct by running an exploratory Principal Components Analysis (PCA) on the latent variables contributing to each factor. It was revealed that Entrepreneurial and Personal factors only have one component, while Human Relations has two components but one dominates, with more than 50 percent loading; so, for these three competencies, we are satisfied that the instrument captured and measured exactly what we were aiming for.

For the management competencies, the results of this analysis indicated that the eight variables loading on the factor could be reduced into two – rather than one –

principal components with weights of 33 percent and 19 percent indicating a more complex structure in the model. Although further research with a bigger sample is required to identify the two components, given the nature of the eight directly observable variables, we could speculate that one component captures the ‘high level/strategic’ managing skills of ‘management competency’ (Familiarity with the Market, Planning Business Activities, Managing the Financials, Business Administration) while the second captures the ‘day-to-day/operational’ respective skills (Acquisition of appropriate resources, Marketing and Sales, Operational Systems Development, Ability to use technology), and both of them together build up to the overall ‘management competency’.

Data Analysis and Results

To address the study research questions and thus identify the role of entrepreneurs’ competencies in shaping leadership style, we employ a combination of univariate and multivariate (Ordinarily Least Squares) analyses. We first employ t-tests to examine the role of the four competencies against the seven factors of leadership behavior (Panel A) and the four factors of management style (Panel B). We split the sample based on the scores of each leadership factor using, as a cut-off point, the median of each individual factor as shown in Table 3 (low for scores below the median and high for scores equal to or above the median). We then calculated the means of each competence per group (low-high) and estimated the statistical significance of mean differences as depicted in Table 4.

The first observation is that not all competencies shape leadership style to the same extent. In particular, it is clear that human relations and personal

competencies are significantly different across the high and low groups for almost all factors related to transformational leadership (apart from the Laissez-Faire factor). This finding indicates that female entrepreneurs who perceive they have high levels of human relations and personal competencies are more likely to adopt a transformational leadership style in their firms. However, the perceived level of management skills does not seem to impact on transformational leadership style adoption, whereas entrepreneurial competencies may positively affect some of the factors related to transformational leadership (such as motivation, simulation, consideration and management-by-exception) but not all. Interestingly, no specific competence seems to be directly related to the adoption of laissez-faire behavior.

When looking, however, at Panel B, we can see that there are no significant differences across the level of each competence between the management style groups (low-high). There are only two observed significant relationships: personal competencies seem to be negatively related to the adoption of bureaucratic management styles and human relations competencies are negatively related to the adoption of a laissez-faire style.

----- Insert Table 4 here -----

Following the above, the data was tested under a multivariate setting. This step aimed at further corroborating the above findings, whilst exploring the combined effects of each competence on shaping leadership behavior and style, and accounting for the role of external characteristics. In each of the models in Table 5, the dependent variable is the score of each entrepreneur on the different leadership styles, while the independent variables are the respective scores on each competence factor. In addition, a number of control variables were added to the model, namely

the age, qualifications and respondent's experience, and the age and stage of development of the firm.

Interestingly, we observed that, although on average personal and human relations competencies univariately affect all factors related to the adoption of transformational leadership style, when examined jointly, some of the coefficients are no longer flagged as significant. Clearly, human relations and personal competencies affect mostly factors associated with the personal development and emotional support of subordinates. Entrepreneurial competencies have a positive and significant effect on the development of the appropriate environment for a transformational leader to effectively lead. Management competencies relate to the support of subordinates so they can promote themselves and the firm's goals. Again, no competencies are directly related to the laissez-faire leadership style. When using the four management styles as our dependent variables, similarly to our previous findings, we see that no significant relationships are identified; there is only a direct positive effect between personal competencies and autocratic management style.

The addition of the control variables also yielded a few interesting findings. Specifically, that the age of the entrepreneur has a singular negative effect on leaders' expectations from their subordinates. Entrepreneurs' qualifications negatively influence their laissez-faire behavior, and are also negatively related to the adoption of a bureaucratic management style. Experience is positively related to the adoption of an autocratic management style as well as to a leader's expectations from their subordinates, but negatively related to the influence they project on the latter. Firm age has a positive effect on both levels of autocratic and bureaucratic management styles adopted, whereas the stage of company development is only negatively related to the level of motivation provided by the leader.

With the exception of just a couple of models (Reward in Panel A and Laissez-Faire in Panel B), the estimated models present acceptable levels of goodness of fit and explanatory power, as supported by F and adjusted R² statistics. In addition, mean variance inflation factors (VIF) (not reported here) are below 2 in all models, thus raising no concerns for collinearity.

----- Insert Table 5 here -----

Discussion

Profile of Female Entrepreneurs in the North West of England, Yorkshire and North Wales

The first goal of our paper was to provide a detailed leadership profile of the female entrepreneurs in our study. Taking first into consideration their behavioral aspects, we show that in line with past studies (Alimo-Metcalfe 1995; Bass 1991), these female entrepreneurs are inclined to adopt a transformational leadership approach. These leaders are particularly interested in achieving high levels of trust, faith and respect with their subordinates; they place significant emphasis on their well being and their personal development, whilst providing them with inspiration and intellectual stimulus to develop their creativity and ideas, and this was also evident in our interviews.

“...we do a lot of personal development with the teams, a lot of 1-1 sessions and we try to give people more responsibility to handle themselves...in difficult situations...people feel that I am their ‘rock’; they can always rely on me to support them and I have heard people saying how proud they are to have been working with me” (Interview 4, Design Firm)

At the same time, and contrary to past studies showing women to be participative and democratic in their management style (Eagly, and Johnson 1990), we reveal that our female entrepreneurs are not willing or ready to release control to their employees. When it comes to management, they tend to follow a rather moderate to high autocratic approach, and in some cases even a high bureaucratic stance. Chaganti (1986) has long suggested that irrespective of gender, the ‘masculine’ style of decisiveness and goal-orientation are prerequisites for a successful leader. Indeed, when the respondents were asked to denote how they dealt with decision-making on operational and strategic level, 20 percent admitted making all operational decisions on their own, whereas 45 percent suggested that they do consult with their employees before making any decisions but they make the final decision effectively on their own. Only 8 percent suggested ‘blind’ trust in their employees for operational issues. When it comes to the strategic decisions, however, the message is even clearer; 39 percent admitted to making decisions without any consultation, whereas 49 percent do consult with their employees, but they will typically make the final decision on their own. In addition, not one allowed employees to make strategic decisions, feeling that it is entirely their responsibility to run the business¹¹.

“I do normally ask people before making any serious decision; and we do have a system of how employees need to deal with operational, the mundane daily decisions. Yet when it comes to most significant ones, it is all down to me...it is my company after all.” (Interview 7, Catering)

Interestingly, we observe that management approach is positively influenced by leaders’ experience and firm age. This finding can be interpreted in two ways: from

¹¹ For the operational decisions, the rest of the respondents (27 percent) suggested that they would consult with their employees before making any decisions and they reached a decision together. Yet when it comes to strategic decisions, only a 12 percent of the respondents admitted following through a common decision

one point of view, the more experienced the leader is, the more confident she will be in her ability and knowledge in managing the company. Hence, it is understandable that she will not seek consultation from others, but will accept full responsibility and control of the company she owns and leads.

“...there are times when you do have to make decisions and there may be roads you embark upon and want to get them to a certain place before you’ll actually engage with the staff, so I think the strategic planning – at that level - for us works better if it’s kept at board level.” (Interview 8, Business Services)

“I don’t feel anyone in the company sees the commercial aspect of the company as well as I do...When it comes to product lines I’ll pick them on my own purely because I’ve done them so many times and I kind of know the formula I work with, if that makes sense...and I’ll tell them we’ve introduced this product... if I think it’s a sure certainty I’ll just do it and tell them that it’s coming” (Interview 1, Online Retail)

On the other hand, the older the company is, the more confident the leader becomes in the success of her past adopted management practices, and the less willing she will be to change them in the future. Acknowledging that among the most prominent reasons for firm failure is poor management skills (Berryman 1983; Chaganti, and Chaganti 1983; Gaskill, Van Auken, and Manning 1993; Lewis, and Churchill 1983) or bad management practices (Acquino 1990; Jennings and Beaver 1997), when a company succeeds for many years this is typically attributed to good management. Hence, it is understandable that the leaders of successful companies might be less willing to change their successful practices (Kotter 1996; Sull 2005). Of course, for leaders to ensure that successful past practices are employed, they will have to adopt a more controlling management style, hampering any changes.

Regarding the industrial segregation of the firms, it has been suggested that female owned firms would be concentrated in retail sales and in personal and educational service industries (Kalleberg, and Leicht 1991). Indeed, our sample is mainly service oriented. Yet it is not retail that attracts the majority of female entrepreneurs in our sample, but mainly hospitality and education services. Although our sample consisted of firms at different development stages, the in-depth interview analysis revealed that all participants were interested in growing their businesses further. This finding is particularly interesting since it challenges past notions suggesting female entrepreneurs are growth averse (Shane 2008); especially those running small businesses (Ahl, and Marlow 2012). It has indeed been suggested that smaller business owners would not be willing to grow their businesses, being traditionally positioned within the 'lifestyle' sector. Yet this does not seem to be the case among our interviewees.

Finally, with respect to competencies, it is clearly observed that, in line with past studies, the female leaders in this study perceive themselves to be well equipped with entrepreneurial and personal competencies, but not so much with managerial skills (Heilbrunn 2004). They indeed seem to highly trust their communication, human relations and interpersonal skills as well as their ability to be creative and take advantage of opportunities, but not their administrative, marketing, sales, and financial skills. Female leaders have been considered - sometimes even accused of - being more people oriented (Terborg 1977). These traits are suggested as both strengths and weaknesses. Yet, what is particularly interesting is the fact that most of the women in our study are highly educated (with some of them having business related doctoral degrees), rich experience in related or non-related industries, and great support from their immediate-close environment (with more than half of them

having a business owner in the family). Hence, whereas in the past, women's suggested weaknesses or lack of prominence in leadership roles were associated with objective barriers such as lack of education, family and workplace restraints (Kalleberg, and Leicht 1991) or even gender-related discrimination stereotypes (Sexton, and Bowman-Upton 1990), these female leaders are limited by their own perceived ability to successfully manage a company (Langowitz, and Minniti 2007).

"I think what I'm really good at is ideas and getting some of the way along, but I can get myself into a bit of a mess because I don't think in a very detailed way." (Interview 6, Business Services)

"This process thing – it's taken me ages – it shouldn't have taken as long but that's 'cos my mind isn't that way geared up – working in warehouse distribution, and operations and processes that require a full warehouse. It's a different environment from where I've come from so it's all a big learning curve but at the same time it's definitely not a strength. I can see the vision and I can see where I want to take it but sometimes it's quite frustrating because I'm not doing that well." (Interview 1, Online Retail)

Perceived Competencies and Leadership Style

With respect to the role of competencies in shaping the leadership style of the examined female entrepreneurs, we make three main observations. Firstly, not all competencies have the same impact on leadership style formation. A clear connection of human relations (responsibility delegation motivation of others, hiring the right people, monitoring performance) and personal competencies (decision making skills, interpersonal skills, perseverance, self-confidence, communication and self-management skills) to transformational leadership style is revealed (Table 4).

In addition, we reveal a positive connection between entrepreneurial skills and transformational leadership style. In fact, the female entrepreneurs in our sample, who believe they are well equipped with entrepreneurial skills, seem to place a lot of emphasis on providing the right stimulus to their employees for success, and the necessary supportive environment as expected by entrepreneurial leaders (Roomi, and Harrison 2011). Interestingly though, no significant relationship is revealed between a certain leadership style and reward. In line with Eagly, et al. (2003), we would expect a transformational leadership style to be positively related to reward and recognition of accomplishments, whereas transactional leaders would be less inclined to these behaviors. Unfortunately, our results do not provide us with a clear indication of any statistical difference between the two leadership styles and attitudes towards 'reward'. One explanation of this could be that the female leaders in our sample are all equally sensitive to recognition and reward engagement, irrespective of the leadership style they adopt. Still, further exploration is necessary before making any bold conjectures.

A further intriguing finding is the lack of a clear relationship between management competencies and leadership styles. In fact, a negative relationship between influence and motivation elements of transformational leadership is only revealed in the full model. This finding can be interpreted in two ways. On the one hand, it has long been suggested that female entrepreneurs perceive themselves as disadvantaged with respect to business and management skills (Collerette and Aubry 1990; Heilbrunn 2004; Hisrich, and Brush 1984), and indeed our interviews confirmed the above. Therefore, we could argue that the lack/negative relationship is a result of the negative perceptions of our female entrepreneurs to such competencies. On the other hand, this finding can be associated with the fact that the

managerial competence factor is the only one consisting of two, rather than one, principal components, as identified in the robustness tests. Hence naturally clear results cannot be conveyed.

Secondly, no one competence seems to be directly related to the adoption of laissez-faire behavior. Perhaps this is due to the negative properties of the specific style. Indeed, laissez-faire has been described as a type of destructive leadership behavior (Skogstad, Einarsen, Torsheim, Aasland, and Hetland 2007) and as a general failure to take responsibility for managing (Eagly, et al. 2003). In fact, Skogstad, et al. (2007) found laissez-faire leadership style to be positively related with role conflict, role ambiguity, and conflicts with coworkers.

In line with previous research (Lerner and Almor, 2002; Zahra and Filatotchev, 2004) the entrepreneurs interviewed for this research suggest that they complement their own weaker competencies by drawing on the skills of their employees and/or hiring staff that have these competencies:

“Jane does the window display, places products like oils and things on display. I am not very good at that, she does a better job than me so I let her do that and it works...I hate doing my book keeping so much and I’m not very good at it so I pay someone to do this.” (Interview 2, Delicatessen)

“My financial skills are very poor so I pay someone a lot to do this for me... I have built a strong team around me” (Interview 3, Health Care Company)

Finally, the management style classification of autocratic, bureaucratic, democratic and laissez-faire does not seem to be particularly influenced by

competencies. As mentioned above, contrary to the belief that women's management style would be more 'feminine' and 'participative' in nature (Brush 1992; Chaganti 1986), the majority (88 percent) of the respondents were reluctant to release control of their firms, adopting a rather autocratic management style when it comes to strategic decision making. This was particularly obvious among the participants who considered themselves well equipped with personal skills and/or higher experience within the firm and the industry. Lerner and Almor (2002) showed indeed that past experience is positively related to female venture performance. Hence, the reluctance of the female entrepreneurs in our sample to release control of their companies can be attributed to their understanding of this underlying relationship.

Similarly to the above, when we try to identify the relationship between managerial style and education, we find generally weak results. This might be of course due to the lack of divergence among our sample. As we can see from Table 1, only 12 respondents did not hold a professional or higher education degree, and even those did take further training in their relevant industries (before or after they established their enterprises). However, even though statistically weak, it is obvious that the relationship between educational background and managerial style is negative, especially with regards to autocratic and bureaucratic leading styles (the latter is actually strong and significant). This indicates that the more educated the leader is, the less autocratic and bureaucratic her management style would be, perhaps because they recognize the importance of a management team in successfully managing their companies. However, further exploration of the matter is necessary before making any particular inferences.

Conclusions, Practical Implications and Further Research

Most leadership research has been situated in corporate contexts, and there has been much less attention given to entrepreneurs as leaders (Cogliser, and Brigham 2004; Jensen, and Luthans 2006). Yet recognizing that, in SMEs, the leadership role is even more important and influential than in larger organizations, this study is one of very few to examine female entrepreneurs' adopted leadership and management styles. We provide new insights into the leadership styles adopted by these female entrepreneurs, while linking their personal, managerial, entrepreneurial and human relation competencies to their adopted style.

Our findings have important practical implications, particularly for policy makers. We clearly show here that perceptions regarding personal skills and competencies have a significant impact on the adopted leadership style. Hence, and if we assume that transformational leadership is the leadership style favored by many female entrepreneurs, policy makers could allocate resources to develop programmes for the enhancement of the competencies linked to transformational leadership styles, such as communication, employee empowerment, responsibility delegation etc. Also, given the fact that these leaders will bring in staff with the competencies that they lack, programmes should also focus on developing the competencies of small business employees as well as developing the competencies of the entrepreneurs themselves, particularly in areas that the entrepreneurs find challenging or competencies that they do not want to personally develop (either due to lack of time or lack of interest). Policymakers should also be wary of presumptions (see for example Shane 2008) that micro and small businesses led by female entrepreneurs do not have growth aspirations and should tailor and target support accordingly.

As in all studies, certain limitations are present. One limitation is the size of the study sample. Despite being quite diverse and well representative of the population, our sample size is still quite small to reveal causality between competencies and leadership style. Future research based on a large-scale survey would provide invaluable insights to the above. A large sample size would provide a clearer identification of all the latent variables which load in each leadership style (transformational vs. transactional) and as such build a scale denoting the level of ‘transformational’, ‘transactional’ or ‘mixed’ leadership style. In addition, a larger scale survey could provide stronger results when it comes to the relationship between qualifications and leadership styles, and inform the literature accordingly.

Another limitation of the study is its focus on specific regions of the North of England and Wales, which limits the findings’ generalizability to the rest of the country or even more so, globally. Future research, utilizing a large sample of female entrepreneurs throughout the country, could provide more generalizable results and invaluable insights. Along these lines, a similar large-scale survey, comparing female entrepreneurs in different parts of the world could significantly advance our understanding of the investigated topic and allow for new theory development.

Finally, our analysis revealed a large proportion of firms on a growth-oriented trajectory contrary to past notions positioning female entrepreneurs as growth averse (Shane 2008). Our survey instrument did not, however, allow for a clear measurement of intentions to grow and their implementation strategies. Future research on growth orientations among female entrepreneurs could shed further light on this, particularly on the link between firm growth and a specific leadership style.

References

- Agbim, Kenneth Chukwuijioke (2013). 'The Relative Contribution of Management Skills to Entrepreneurial Success: A Survey of Small and Medium Enterprises (SMEs) in the Trade Sector,' *International Organization of Scientific Research Journal of Business and Management*, 7(1), 08-16.
- Ahl, Helene (2006). 'Why Research on Women Entrepreneurs Needs New Directions,' *Entrepreneurship Theory and Practice*, 30(5), 595-621.
- Ahl, Helene and Marlow, Susan (2012). 'Exploring the Dynamics of Gender, Feminism and Entrepreneurship: Advancing Debate to Escape a Dead End?,' *Organization* 19(5), 543-562.
- Alimo-Metcalf, Beverly (1995). 'An Investigation of Female and Male Constructs of Leadership and Empowerment,' *Women in Management Review*, 10(2), 3-8.
- Appelbaum, Steven H., Audet, Lynda and Miller, Joanne C. (2003). 'Gender and Leadership? Leadership and Gender? A Journey through the Landscape of Theories,' *Leadership & Organization Development Journal*, 24(1), 43-51.
- Aquino, N. R. (1990). 'Success Secrets' *Business and Economic Review*, 36(4), 20-23.
- Ardichvili, Alexander, Cardozo, Richard N. and Gasparishvili, Alexander (1998). 'Leadership Styles and Management Practices of Russian Entrepreneurs: Implications for Transferability of Western Hard Interventions,' *Human Resource Development Quarterly*, 9(2), 145-155.
- Bales, R.F. and Slater, P.E. (1955). *Role Differentiation in Small Decision-Making Groups*. Glencoe, IL Free Press.
- Barbuto Jr, J. E., Fritz, S. M., Matkin, G. S., and Marx, D. B. (2007). 'Effects of gender, education, and age upon leaders' use of influence tactics and full range leadership behaviors,' *Sex Roles*, 56(1-2), 71-83.
- Bass, Bernard M (1991). 'From Transactional to Transformational Leadership: Learning to Share the Vision,' *Organizational Dynamics*, 18(3), 19-31.
- Bass, Bernard M. and Avolio, Bruce J. (1997). *Full Range Leadership Development: Manual for the Multifactor Leadership Questionnaire*: Mind Garden.
- Bass, Bernard M. and Bass, Ruth (2009). *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications*: SimonandSchuster.com.

Baum, J. Robert and Locke, Edwin A. (2004). 'The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth,' *Journal of Applied Psychology*, 89(4), 587.

Baum, J. Robert, Locke, Edwin A and Kirkpatrick, Shelley A (1998). 'A Longitudinal Study of the Relation of Vision and Vision Communication to Venture Growth in Entrepreneurial Firms,' *Journal of Applied Psychology*, 83(1), 43.

Berryman, Joyce (1983). 'Small business failure and survey of the literature,' *International Small Business Journal*, 1(4), 47-59.

Biernat, Monica, and Kathleen Fuegen (2001) 'Shifting Standards and the Evaluation of Competence: Complexity in Gender-Based Judgment and Decision Making,' *Journal of Social Issues*, 57(4), 707-724

Birley, Sue, Moss, Caroline and Saunders, Peter (1987). 'Do Women Entrepreneurs Require Different Training,' *American Journal of Small Business*, 12(1), 27-35.

Birley, S., Westhead, P. (1990), 'Growth and performance contracts between 'types' of small firms', *Strategic Management Journal*, 11(7), 535-57.

BIS (2009), *Women in Business*: Office for National Statistics, by Causer and Park, Regional Trends, 41, 2009 edition

Bruni, Attila, Gherardi, Silvia and Poggio, Barbara (2004). 'Entrepreneur-Mentality, Gender and the Study of Women Entrepreneurs,' *Journal of Organizational Change Management*, 17(3), 256-268.

Brush, Candida G. (1992). 'Research on Women Business Owners: Past Trends, a New Perspective and Future Directions' *Entrepreneurship Theory and Practice*, 16(4), 5-30.

Brush, Candida, G., Carter, Nancy, Gatewood, Elizabeth, Greene, Patricia and Hart, Myra (2004). *Clearing the Hurdles: Women Building High-Growth Businesses*. Upper Saddle River, NJ: Prentice Hall.

Brush, Candida, G., Carter, Nancy, Gatewood, Elizabeth, Greene, Patricia and Hart, Myra (2006). 'Women's Entrepreneurship in the United States'. In Brush, C., Carter, N., Gatewood, E., Greene, P., and Hart, M. (Eds.), *Growth-Oriented Women Entrepreneurs and Their Businesses*. Cheltenham, UK: Edward Elgar.

Brush, Candida G., Chaganti, Radha (1998), 'Businesses without glamour? An analysis of resources on performance by size and age in small service and retail firms', *Journal of Business Venturing*, 14(3), 223-58

Buttner, E. Holly (2001). 'Examining Female Entrepreneurs' Management Style: An Application of a Relational Frame,' *Journal of Business Ethics*, 29(3), 253-269.

Carless, Sally A. (1998). 'Gender Differences in Transformational Leadership: An Examination of Superior, Leader, and Subordinate Perspectives,' *Sex Roles*, 39(11-12), 887-902.

Carter, Sara and Shaw, Eleanor (2006). *Women's Business Ownership: Recent Research and Policy Developments*. Report to the Small Business Service, London: DTI.

Carter, Sara, Anderson, Susan and Shaw, Eleanor (2001). 'Women's Business Ownership: A Review of the Academic, Popular and Internet Literature,' Available at: <http://www.prowess.org.uk/documents/WomensbusinessownershipSaraCarter.pdf>.

Chaganti, Radha (1986). 'Management in Women-Owned Enterprises,' *Journal of Small Business Management*, 24(4), 18-29.

Chaganti, Rajeswararao, and Radharao Chaganti (1983). 'A profile of profitable and not-so-profitable small businesses,' *Journal of Small Business Management*, 21(3), 43-51.

Chandler, Gaylen N. and Hanks, Steven H. (1994). 'Founder Competence, the Environment, and Venture Performance,' *Entrepreneurship Theory and Practice*, 18(3), 77-89.

Chandler, Gaylen N. and Jensen, Erik (1992). 'The Founder's Self-Assessed Competence and Venture Performance,' *Journal of Business Venturing*, 7(3), 223-236.

Churchill Jr, Gilbert A. and Iacobucci, Dawn (2009). *Marketing Research: Methodological Foundations*. Cengage Learning.

Cogliser, Claudia C. and Brigham, Keith H. (2004). 'The Intersection of Leadership and Entrepreneurship: Mutual Lessons to Be Learned,' *The Leadership Quarterly*, 15(6), 771-799.

Collerette, Pierre and Aubry, Paul (1990). 'Socio-Economic Evolution of Women Business Owners in Quebec (1987),' *Journal of Business Ethics*, 9(4-5), 417-422.

Colombo, Massimo G. and Grilli, Luca (2005). 'Founders' Human Capital and the Growth of New Technology-Based Firms: A Competence-Based View,' *Research Policy*, 34(6), 795-816.

Cooper, Arnold (1981), 'Strategic management: new ventures and small businesses,' *Long Range Planning*, 14(5), 39-45.

Davidsson, Per (1989). 'Entrepreneurship - and after - a Study of Growth Willingness in Small Firms,' *Journal of Business Venturing*, 4(3), 211-226.

De Bruin, Anne, Candida G. Brush, and Friederike Welter (2006). 'Introduction in the Special Issue: Towards building cumulative knowledge on women's entrepreneurship,' *Entrepreneurship Theory and Practice*, 30(5), 585–593.

Eagly, Alice H. and Carli, Linda L. (2003). 'The Female Leadership Advantage: An Evaluation of the Evidence,' *The Leadership Quarterly*, 14(6), 807-834.

Eagly, Alice H., Johannesen-Schmidt, Mary C. and van Engen, Marloes L. (2003). 'Transformational, Transactional, and Laissez-Faire Leadership Styles: A Meta-Analysis Comparing Women and Men,' *Psychological Bulletin*, 129(4), 569-591.

Eagly, Alice H. and Johannesen-Schmidt, Mary C. (2001) 'The Leadership Styles of Women and Men,' *Journal of Social Issues*, 57(4), 781-797

Eagly, Alice H. and Johnson, Blair T. (1990). 'Gender and Leadership Style: A Meta-Analysis,' *Psychological Bulletin*, 108(2), 233-256.

Galanou, Ekaterini (2010). 'The Impact of Leadership Styles on Four Variables of Executives,' *International Journal of Business and Management*, 5(6), 3-16

Gaskill, L. R., Howard E. Van Auken, and Ronald A. Manning (1993). 'A factor analytic study of the perceived causes of small business failure.' *Journal of Small Business Management*, 31, 18-18.

Goodman, Leo A. (1961). 'Snowball Sampling,' *The Annals of Mathematical Statistics*, 32(1), 148-170.

Greve, Arent and Salaff, Janet W. (2003). 'Social Networks and Entrepreneurship,' *Entrepreneurship Theory and Practice*, 28(1), 1-22.

Gundry, Lisa K., Miriam, Ben-Yoseph and Posig, Margaret (2002). 'Contemporary Perspectives on Women's Entrepreneurship: A Review and Strategic Recommendations,' *Journal of Enterprising Culture*, 10(01), 67-86.

Gundry, Lisa K. and Welsch, Harold P. (2001). 'The Ambitious Entrepreneur: High Growth Strategies of Women-Owned Enterprises,' *Journal of Business Venturing*, 16(5), 453-470.

Gupta, Vipin, MacMillan, Ian C. and Surie, Gita (2004). 'Entrepreneurial Leadership: Developing and Measuring a Cross-Cultural Construct,' *Journal of Business Venturing*, 19(2), 241-260.

Gupta, Vishal K., Goktan, A. Banu and Gunay, Gonca (2013). "Gender Differences in Evaluation of New Business Opportunity: A Stereotype Threat Perspective," *Journal of Business Venturing* In Press, Corrected Proof.

Hale, AJ and Cragg, Paul B. (1996). 'Business Process Re-Engineering in the Small Firm: A Case Study,' *Infor*, 34(1), 15-27.

Halford, Susan and Leonard, Pauline (2001). *Gender, Power and Organisations*. Palgrave Macmillan.

Hayton, James C. and McEvoy, Glenn M. (2006). 'Guest Editors' Note on Special Issue: Developing and Assessing Professional and Managerial Competence,' *Human Resource Management*, 45(3), 291-294.

Heilbrunn, Sibylle (2004). 'Impact of Gender on Difficulties Faced by Entrepreneurs,' *The International Journal of Entrepreneurship and Innovation*, 5(3), 159-165.

Henry, Colette, Foss, Lene and Ahl, Helene (2013). *Parallel Lines? A Thirty-Year Review of Methodological Approaches in Gender and Entrepreneurship Research*, presented at Institute for Small Business and Entrepreneurship (ISBE) conference. Cardiff, South Wales.

Herron, Lanny and Robinson, Richard B. (1993). 'A Structural Model of the Effects of Entrepreneurial Characteristics on Venture Performance,' *Journal of Business Venturing*, 8(3), 281-294.

Hiam, Alexander (2002). *Making Horses Drink: How to Lead and Succeed in Business*: Entrepreneur Press.

Hisrich, Robert D. and Brush, Candida (1984). 'The Woman Entrepreneur: Management Skills and Business Problems,' *Journal of Small Business Management*, 22(1), 30-37.

Hughes, Karen D., Jennings, Jennifer E., Brush, Candida, Carter, Sara and Welter, Friederike (2012). 'Extending Women's Entrepreneurship Research in New Directions,' *Entrepreneurship Theory and Practice*, 36(3), 429-442.

IFF Research (2011). *BIS Small Business Survey 2010: Women-led businesses boost*, Report prepared for the Department of Business, Innovation and Skills, June 2011

Ireland, R. Duane, Hitt, Michael A. and Sirmon, David G. (2003). 'A Model of Strategic Entrepreneurship: The Construct and Its Dimensions,' *Journal of Management*, 29(6), 963-989.

Jennings, Peter, and Beaver, Graham (1997). 'The performance and competitive advantage of small firms: a management perspective,' *International Small Business Journal*, 15(2), 63-75.

Jensen, Susan M and Luthans, Fred (2006). 'Entrepreneurs as Authentic Leaders: Impact on Employees' Attitudes,' *Leadership & Organization Development Journal*, 27(8), 646-666.

Johnson, Steven and Winterton, Jonathan (1999). *Management Skills*. Skills Task Force Research Paper 3.

Jones, Sally (2012). 'Gendered Discourses of Entrepreneurship in UK Higher Education: The Fictive Entrepreneur and the Fictive Student,' *International Small Business Journal*, Online First DOI: 10.1177/0266242612453933

Kalleberg, Arne L. and Leicht, Kevin T. (1991). 'Gender and Organization Performance: Determinants of Small Business Survival and Success,' *Academy of Management Journal*, 34(1), 136-161.

Kepler, Erin, and Shane, S., (2007). *Are male and female entrepreneurs really that different?*. Office of Advocacy, US Small Business Administration.

Koenig, Anne M, Eagly, Alice H, Mitchell, Abigail A. and Ristikari, Tiina (2011). 'Are Leader Stereotypes Masculine? A Meta-Analysis of Three Research Paradigms,' *Psychological Bulletin*, 137(4), 616.

Kotter, J. P. (1996). *Leading Change*. Harvard Business Press.

Küpers, Wendelin and Weibler, Jürgen (2008). 'Inter-Leadership: Why and How Should We Think of Leadership and Followership Integrally?,' *Leadership*, 4(4), 443-475.

Kuratko, Donald F. (2007). 'Entrepreneurial Leadership in the 21st Century,' *Journal of Leadership and Organizational Studies*, 13(4), 1.

Langowitz, Nan and Minniti, Maria (2007). 'The Entrepreneurial Propensity of Women,' *Entrepreneurship Theory and Practice*, 31(3), 341-364.

Leitch, Claire M., McMullan, Christel and Harrison, Richard T. (2013). 'The Development of Entrepreneurial Leadership: The Role of Human, Social and Institutional Capital,' *British Journal of Management*, 24(3), 347-366.

Lerner, Miri and Almor, Tamar (2002). 'Relationships among Strategic Capabilities and the Performance of Women-Owned Small Ventures,' *Journal of Small Business Management*, 40(2), 109-125.

Lerner, Miri, Brush, Candida and Hisrich, Robert (1997). 'Israeli Women Entrepreneurs: An Examination of Factors Affecting Performance,' *Journal of Business Venturing*, 12(4), 315-339.

Lewis, Virginia L., and Churchill, Neil C. (1983). 'The five stages of small business growth.' *Harvard Business Review*, 61(3), 30-50.

Ling, Yan, Simsek, Zeki, Lubatkin, Michael H. and Veiga, John F. (2008). 'Transformational Leadership's Role in Promoting Corporate Entrepreneurship: Examining the Ceo-Tmt Interface,' *Academy of Management Journal*, 51(3), 557-576.

Lombard, K., (2001). 'Female Self-Employment and Demand for Flexible, Nonstandard Work Schedules,' *Economic Inquiry*, 39(2), 214-237.

Luthans, Fred and Youssef, Carolyn M. (2007). 'Emerging Positive Organizational Behavior,' *Journal of Management*, 33(3), 321-349.

Man, Thomas W.Y., Lau, Theresa and Chan, K.F. (2002). 'The Competitiveness of Small and Medium Enterprises. A Conceptualization with Focus on Entrepreneurial Competencies,' *Journal of Business Venturing*, 17(2), 123-142.

Marlow, Susan and Strange, Adam (1994). 'Female Entrepreneurs—Success by Whose Standards?,' *Women in Management: A developing presence*, 172-184.

Marlow, Susan and McAdam, Maura (2012). 'Analyzing the Influence of Gender Upon High-Technology Venturing Within the Context of Business Incubation.' *Entrepreneurship Theory and Practice*, 36, 655-676.

Marlow, Susan and McAdam, Maura (2013). 'Gender and Entrepreneurship: Advancing Debate and Challenging Myths; Exploring the Mystery of the under-Performing Female Entrepreneur,' *International Journal of Entrepreneurial Behaviour & Research*, 19(1), 114-124.

McGrath, Rita and MacMillan, Ian C. (2000). *The Entrepreneurial Mindset: Strategies for Continuously Creating Opportunity in an Age of Uncertainty*. Vol 184, Harvard Business Press: Boston, MA.

Mitchelmore, Siwan and Rowley, Jennifer (2010). 'Entrepreneurial Competencies: A Literature Review and Development Agenda,' *International Journal of Entrepreneurial Behaviour & Research*, 16(2), 92-111.

Mitchelmore, Siwan and Rowley, Jennifer (2013). 'Entrepreneurial Competencies of Women Entrepreneurs Pursuing Business Growth,' *Journal of Small Business and Enterprise Development*, 20(1), 125-142.

Morris, Michael H., Miyasaki, Nola N., Watters, Craig E. and Coombes, Susan M. (2006). 'The Dilemma of Growth: Understanding Venture Size Choices of Women Entrepreneurs,' *Journal of Small Business Management*, 44(2), 221-244.

Nicholson, Nigel (1998). 'Personality and Entrepreneurial Leadership: A Study of the Heads of the UK's Most Successful Independent Companies,' *European Management Journal*, 16(5), 529-539.

Oshagbemi, Titus (2004) 'Age influences on the leadership styles and behaviour of managers,' *Employee Relations*, 26(1), 14 - 29

Roomi, Muhammad Azam and Harrison, Pogram (2011). 'Entrepreneurial Leadership: What Is It and How Should It Be Taught?,' http://uobrep.openrepository.com/uobrep/bitstream/10547/222995/1/IJEE1038_revision_sep2011.pdf

Runyan, Rodney C, Huddleston, Patricia and Swinney, Jane (2006). 'Entrepreneurial Orientation and Social Capital as Small Firm Strategies: A Study of Gender Differences from a Resource-Based View,' *The International Entrepreneurship and Management Journal*, 2(4), 455-477.

Sexton, Donald L. and Bowman-Upton, Nancy (1990). 'Female and Male Entrepreneurs: Psychological Characteristics and Their Role in Gender-Related Discrimination,' *Journal of Business Venturing*, 5(1), 29-36.

Shane, Scott A. (2008). *The Illusions of Entrepreneurship: The Costly Myths That Entrepreneurs, Investors, and Policy Makers Live*. Yale University Press.

Shepherd, Dean A, Douglas, Evan J. and Shanley, Mark (2000). 'New Venture Survival: Ignorance, External Shocks, and Risk Reduction Strategies,' *Journal of Business Venturing*, 15(5), 393-410.

Skogstad, Anders, Einarsen, Ståle, Torsheim, Torbjørn, Aasland, Merethe Schanke and Hetland, Hilde (2007). 'The Destructiveness of Laissez-Faire Leadership Behavior,' *Journal of Occupational Health Psychology*, 12(1), 80-92.

Smith, Brock and Morse, Eric (2005). *Entrepreneurial Competencies: Literature Review and Best Practices*. Canada, Ottawa: Small Business Policy Branch.

Spencer, Lyle, M. and Spencer, Signe, M. (2008). *Competence at Work: Models for Superior Performance*. New York: Wiley.com.

Stevenson, Lois A. (1986). 'Against All Odds: The Entrepreneurship of Women,' *Journal of Small Business Management*, 24(4), 30-36.

Storey, J. David, Keasey, Kevin, Watson, Robert and Wynarczyk, Pooran (1994). *The Performance of Small Firms*. Groom Helm, London.

Sull, Donald N. (2005). Why good companies go bad. Financial Times, 3.

Terborg, James R. (1977). 'Women in Management: A Research Review,' *Journal of Applied Psychology*, 62(6), 647-664.

Thorpe, Richard, Cope, Jason, Ram, Monder and Pedler, Mike (2009). 'Leadership Development in Small-and Medium-Sized Enterprises: The Case for Action Learning.', *Action Learning: Research and Practice*, 6(3), 201-208.

Vecchio, Robert P. (2003). 'Entrepreneurship and Leadership: Common Trends and Common Threads,' *Human Resource Management Review*, 13(2), 303-327.

Venkataraman, S., and Murray B. Low (1994). 'The Effects of Liabilities of Age and Size on autonomous Sub-Units of Established Firms in the Steel Distribution Industry,' *Journal of Business Venturing*, 9(3), 189-204.

Visser, D.J., De Coning, T. J. and Smit, EvdM (2005). 'The Relationship between the Characteristics of the Transformational Leader and the Entrepreneur in South African SMEs,' *South African Journal of Business Management*, 36(3), 51-63.

Watson, Warren E., Ponthieu, Louis D. and Critelli, Joseph W. (1995). 'Team Interpersonal Process Effectiveness in Venture Partnerships and its Connection to Perceived Success,' *Journal of Business Venturing*, 10 (5), 393–411.

Yukl, Gary (2008). 'How Leaders Influence Organizational Effectiveness,' *The Leadership Quarterly*, 19(6), 708-722.

Zahra, Shaker A. and Filatotchev, Igor (2004). 'Governance of the Entrepreneurial Threshold Firm: A Knowledge-based Perspective,' *Journal of Management Studies*, 41(5), 885–897

Tables and Figures

Table 1.
Sample Description and Demographic Characteristics

<i>Demographics of the Leader</i>	Frequency	
	N	(%)
Respondent's Age		
17 - 25	1	2%
26 - 35	14	24%
36 - 45	18	31%
46 - 55	21	36%
over 55	4	7%
Highest Qualification	N	(%)
GCSE	6	10%
A-Level	1	2%
Vocational	5	9%
Professional	10	17%
BA/ BSc	21	36%
PG	15	26%
Years of Experience prior to Establishing Enterprise	N	(%)
No experience	9	16%
Less than 5 years	19	33%
6 to 10 Years	9	16%
11 to 15 Years	9	16%
More than 15 years	12	21%

Figure 1.
Firm Demographics

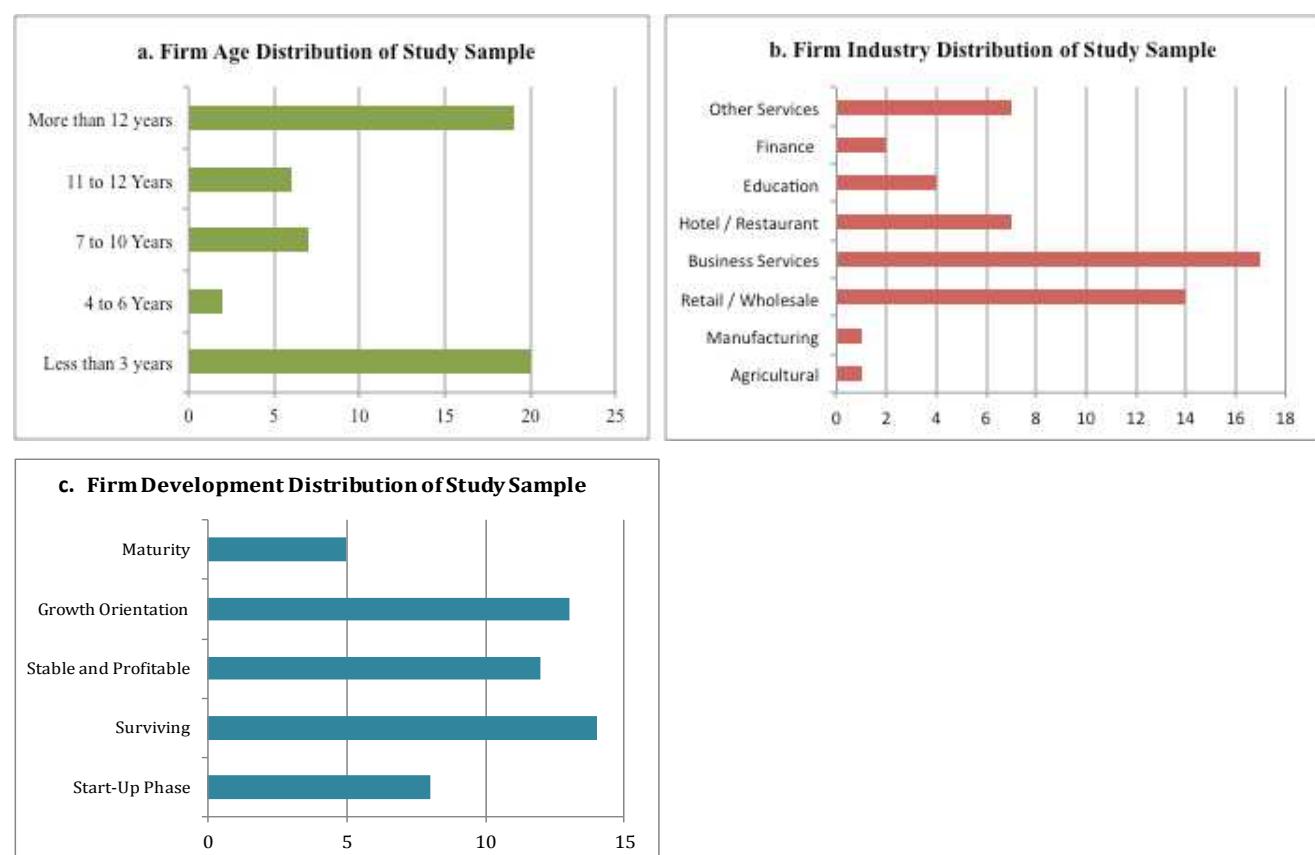


Table 2.
Sample Leadership Characteristics

*Panel A: Behavioral Taxonomy**

	Mean	SD	Min	Median	Max	Low	Moderate	High
Influence	9.140	2.148	0	9	12	2%	26%	72%
Motivation	8.360	2.048	0	9	12	4%	38%	58%
Stimulation	8.180	2.760	0	9	12	8%	40%	52%
Consideration	8.840	2.427	0	9	12	4%	34%	62%
Reward	8.060	2.535	3	8	12	8%	44%	48%
By-exception	7.780	2.359	0	8	12	10%	48%	42%
Laissez - Faire	4.540	2.636	0	4	12	52%	40%	8%

*Panel B: Management Style Taxonomy***

	Mean	SD	Min	Median	Max	Low	Moderate	High
Autocratic	5.120	1.686	1	5	8	12%	42%	46%
Bureaucratic	5.260	1.651	1	5	8	4%	56%	40%
Democratic	4.800	1.604	1	5	8	10%	54%	36%
Laissez - Faire	3.960	1.456	1	4	8	12%	72%	16%

* Low=0-4; Moderate = 5-8; High = 9-12

** Low=0-2; Moderate = 3-5; High = 6-8

Table 3.
Competencies of Female Entrepreneurs in the Study Sample

Survey Item	Mean	SD	Min	Max	Cronbach's α	Competencies	Mean	SD
Creativity & Innovation skills	3.060	0.913	1	4	0.772	Entrepreneurial	2.935	0.638
Ability to envision/ taking advantage of opportunity	3.160	0.738	1	4				
Formulating and Implementing strategies	2.760	0.716	1	4				
Scanning environment for new opportunities	2.760	0.938	0	4				
Familiarity with the Market	3.120	0.689	2	4	0.693	Management	2.698	0.493
Acquisition of appropriate resources	2.780	0.737	1	4				
Planning Business Activities	2.760	0.771	1	4				
Marketing and Sales	2.640	1.005	0	4				
Managing the Financials	2.900	0.814	1	4				
Operational Systems Development	2.380	0.830	1	4				
Ability to use technology	2.480	1.092	0	4				
Business Administration	2.520	1.035	0	4	0.715	Human Relations	2.928	0.575
Ability to Delegate authority and responsibility	2.980	0.869	1	4				
Motivate others	3.120	0.689	1	4				
Hiring Skills	2.560	0.884	0	4				
Monitoring Employee Performance	2.740	0.944	0	4				
Human Relation Skills	3.240	0.822	1	4	0.798	Personal	3.234	0.479
Decision Making Skills	3.400	0.606	2	4				
Interpersonal Skills	3.180	0.691	2	4				
Perseverance	3.440	0.760	2	4				
Self-Confidence	3.220	0.679	1	4				
Communication Skills	3.240	0.687	2	4				
Negotiation Skills	2.980	0.820	1	4				
Self-Management	3.180	0.748	1	4				

Table 4.
Comparisons of Mean Competencies by Level of Leadership Style

Panel A: Behavioral Taxonomy

		Competencies			
		Entrepreneurial	Management	Human Relations	Personal
Influence	Low ¹	2.714	2.688	2.529	2.867
	High	3.021	2.701	3.083	3.377
	Difference	0.307	0.014	0.555 ***	0.510 ***
	T-Test	(1.546)	(0.089)	(3.369)	(3.814)
Motivation	Low	2.655	2.673	2.648	2.952
	High	3.138	2.716	3.131	3.438
	Difference	0.483 ***	0.043	0.483 ***	0.486 ***
	T-Test	(2.822)	(0.301)	(3.196)	(4.060)
Stimulation	Low	2.729	2.609	2.700	3.030
	High	3.125	2.779	3.139	3.423
	Difference	0.396 ***	0.169	0.439 ***	0.393 ***
	T-Test	(2.282)	(1.220)	(2.887)	(3.152)
Consideration	Low	2.645	2.592	2.695	2.993
	High	3.113	2.762	3.071	3.383
	Difference	0.468 ***	0.170	0.376 ***	0.390 ***
	T-Test	(2.669)	(1.188)	(2.345)	(3.015)
Reward	Low	2.783	2.549	2.774	3.075
	High	3.065	2.824	3.059	3.370
	Difference	0.282	0.275 **	0.285 *	0.296 **
	T-Test	(1.581)	(2.029)	(1.786)	(2.265)
By-exception	Low	2.776	2.520	2.747	3.045
	High	3.032	2.807	3.039	3.350
	Difference	0.256 ***	0.287	0.291 ***	0.305 ***
	T-Test	(1.389)	(2.061)	(1.776)	(2.276)
Laissez - Faire	Low	3.000	2.688	2.922	3.270
	High	2.898	2.703	2.931	3.214
	Difference	-0.102	0.016	0.009	-0.055
	T-Test	(-0.536)	(0.106)	(0.053)	(-0.390)

Panel B: Management Style Taxonomy

Autocratic	Low	3.000	2.714	2.800	3.102
	High	2.910	2.691	2.978	3.286
	Difference	-0.090	-0.023	0.178	0.184
	T-Test	(-0.445)	(-0.149)	(0.981)	(1.223)
Bureaucratic	Low	3.143	2.830	3.057	3.418
	High	2.854	2.646	2.878	3.163
	Difference	-0.289	-0.185	-0.179	-0.256 *
	T-Test	(-1.452)	(-1.193)	(-0.990)	(-1.728)
Democratic	Low	2.845	2.655	2.771	3.116
	High	3.000	2.728	3.041	3.320
	Difference	0.155	0.074	0.270	0.205
	T-Test	(0.843)	(0.518)	(1.667)	(1.509)
Laissez - Faire	Low	2.857	2.649	3.105	3.320
	High	2.991	2.733	2.800	3.172
	Difference	0.134	0.084	-0.305 *	-0.147
	T-Test	(0.730)	(0.590)	(-1.897)	(-1.074)

¹ The cut-off point between Low and High is the median of each Leadership Style, as shown in Table 2 (i.e. for Influence: Median=9)

*, **, *** : Significant at 0.1, 0.05 and 0.01 respectively

Table 5.
Regression Models of Female Entrepreneurship Competencies and Leadership Styles

Panel A: Behavioral Taxonomy

DV:	Influence	Motivation	Stimulation	Consideration	Reward	By-exception	Laissez - Faire
Constant	3.102 (1.333)	-0.577 (-0.334)	-0.741 (-0.327)	-0.141 (-0.050)	2.219 (0.756)	2.790 (0.945)	8.097 ** (2.596)
Entrepreneurial	-0.276 (-0.704)	0.539 (1.401)	1.859 *** (3.492)	1.112 ** (2.062)	0.076 (0.119)	-0.244 (-0.432)	-0.710 (-1.185)
Management	-1.357 ** (-2.169)	-1.021 ** (-2.149)	-0.992 (-1.247)	-0.690 (-0.963)	0.418 (0.401)	0.797 (0.882)	0.938 (1.169)
Human Relations	1.693 *** (2.955)	1.247 *** (2.993)	1.181 (1.398)	1.436 * (1.718)	1.129 (1.257)	-0.888 (-1.138)	-0.692 (-0.812)
Personal	2.125 ** (2.497)	2.501 *** (3.603)	0.957 (0.861)	0.906 (0.803)	0.664 (0.603)	2.899 ** (2.513)	1.572 (1.495)
Age	0.055 (0.132)	0.163 (0.677)	0.541 (1.349)	0.104 (0.245)	-0.297 (-0.657)	-0.730 * (-1.863)	-0.633 (-1.335)
Qualifications	0.027 (0.149)	-0.006 (-0.037)	0.239 (0.939)	0.307 (1.255)	0.370 (1.286)	0.016 (0.078)	-0.939 *** (-4.022)
Experience	-0.494 ** (-2.291)	-0.215 (-1.333)	-0.045 (-0.190)	-0.150 (-0.537)	-0.065 (-0.232)	0.470 * (1.753)	0.154 (0.571)
Firm Age	0.104 (0.533)	0.109 (0.664)	-0.401 * (-1.871)	-0.127 (-0.606)	-0.037 (-0.121)	0.246 (0.936)	-0.100 (-0.313)
Stage of Dev.	-0.358 (-1.229)	-0.493 * (-1.859)	-0.353 (-0.980)	0.027 (0.065)	-0.050 (-0.108)	-0.580 (-1.437)	-0.175 (-0.499)
F	5.099	4.582	6.165	3.613	1.472	1.815	4.164
R ²	0.503	0.629	0.496	0.395	0.199	0.297	0.432
Adj. R ²	0.372	0.531	0.363	0.236	-0.012	0.111	0.283

Panel B: Management Style Taxonomy

DV:	Autocratic	Bureaucratic	Democratic	Laissez - Faire
Constant	1.847 (0.757)	6.928 *** (4.785)	-0.238 (-0.104)	2.321 (1.010)
Entrepreneurial	-0.247 (-0.460)	0.202 (0.507)	0.128 (0.219)	0.442 (1.037)
Management	-0.025 (-0.045)	-0.003 (-0.005)	0.177 (0.434)	0.675 (1.286)
Human Relations	-0.447 (-0.766)	0.118 (0.232)	0.427 (0.844)	-0.966 (-1.586)
Personal	1.553 ** (2.223)	-0.578 (-0.835)	0.773 (1.105)	0.313 (0.463)
Age	-0.192 (-0.579)	-0.349 (-1.256)	0.299 (1.053)	-0.051 (-0.172)
Qualifications	-0.138 (-1.032)	-0.252 * (-1.835)	-0.092 (-0.515)	-0.060 (-0.407)
Experience	0.328 * (1.983)	0.060 (0.366)	0.128 (0.825)	0.136 (0.711)
Firm Age	0.351 * (1.885)	0.440 ** (2.573)	0.050 (0.236)	0.259 (1.424)
Stage of Dev.	-0.245 (-1.161)	0.169 (0.891)	-0.012 (-0.040)	-0.194 (-1.246)
F	2.070	2.020	1.592	1.532
R ²	0.291	0.369	0.243	0.199
Adj. R ²	0.105	0.202	0.044	-0.012

* , **, *** : Significant at 0.1, 0.05 and 0.01 respectively
T-Test in brackets (...)

Appendix 1. Sample of the Questionnaire

(The full instrument is available upon request)

Leadership Style

This section of the questionnaire provides a description of your leadership style. Remember; there are no Wrong Answers here!

Please judge how frequently each statement fits you and circle the appropriate key. The word "others" may mean your followers, clients, or group members.

KEY: 1 = Not at all
2 = Once in a while
3 = Sometimes
4 = Fairly often
5 = Frequently, if not always

1. I make others feel good to be around me.	1	2	3	4	5
2. I express with a few simple words what we could and should do.	1	2	3	4	5
3. I enable others to think about old problems in new ways.	1	2	3	4	5
4. I help others develop themselves	1	2	3	4	5
5. I tell others what to do if they want to be rewarded for their work.	1	2	3	4	5
6. I am satisfied when others meet agreed-upon standards.	1	2	3	4	5
7. I am content to let others continue working in the same way as always.	1	2	3	4	5
8. Others have complete faith in me.	1	2	3	4	5
9. I provide appealing images about what we can do.	1	2	3	4	5
10. I provide others with new ways of looking at puzzling things.	1	2	3	4	5
11. I let others know how I think they are doing.	1	2	3	4	5
12. I provide recognition/rewards when others reach their goals.	1	2	3	4	5
13. As long as things are working, I do not try to change anything.	1	2	3	4	5
14. Whatever others want to do is O.K. with me.	1	2	3	4	5
15. Others are proud to be associated with me.	1	2	3	4	5
16. I help others find meaning in their work.	1	2	3	4	5
17. I get others to rethink ideas that they had never questioned before.	1	2	3	4	5
18. I give personal attention to others who seem rejected.	1	2	3	4	5
19. I call attention to what others can get for what they accomplish.	1	2	3	4	5
20. I tell others the standards they have to know to carry out their work.	1	2	3	4	5

21. I ask no more of others than what is absolutely essential.	1	2	3	4	5
--	---	---	---	---	---

What is the decision making approach adopted in your business for every day – operating decisions? (Please choose only one)

- a. I make the decisions on my own and inform the employees about them
- b. I always consult the employees in the organisation, but the final decision is mine
- c. I always consult the employees in the organisation and together we reach a decision
- d. The employees can make decisions without requiring my approval

What is the decision making approach adopted in your business for strategic decisions (decisions that affect the organisation goals and mission, decisions about entering new markets / products, decisions that require significant financial investment etc.)? (Please choose only one)

- a. I make the decisions on my own and inform the employees about them
- b. I always consult the employees in the organisation, but the final decision is mine
- c. I always consult the employees in the organisation and together we reach a decision
- d. The employees can make decisions without requiring my approval

Competencies

This section of the questionnaire provides a description of your individual abilities and skills. Please answer as truthfully as possible. Remember; there are no Wrong Answers here!

Please Rate your ability in the following by circling the appropriate number:

	Weak	Moderate	Strong	
Creativity & Innovation skills	1	2	3	4
Ability to envision taking advantage of opportunity	1	2	3	4
Formulating an Implementing strategies for taking advantages of opportunities (develop programmes, budgets, procedures, evaluate performance)	1	2	3	4
Scan environment for new opportunities	1	2	3	4
Familiarity of the Market	1	2	3	4
Acquisition of appropriate resources	1	2	3	4
Planning Business Activities (strategic planning)	1	2	3	4
Marketing and Sales	1	2	3	4
Mange Finance e.g. accounting and cash control	1	2	3	4
				5

Decision Making Skills	1	2	3	4	5
Development of the operational systems for day-to-day functioning	1	2	3	4	5
Management Tools (e.g. ability to use technology)	1	2	3	4	5
Development of the Organisational Culture (environment)	1	2	3	4	5
Organisation Skills	1	2	3	4	5
Ability to Delegate authority and responsibility	1	2	3	4	5
Motivate others individually and in groups	1	2	3	4	5
Employee Development	1	2	3	4	5
Risk Taking	1	2	3	4	5
.....	1	2	3	4	5
.....	1	2	3	4	5