

REVIEW

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Women entrepreneurship: research review and future directions

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Abstract

Studies on women entrepreneurship have witnessed a rapid growth over the past 30 years. The field is in an adolescence stage with a considerable number of journal articles, literature reviews and books being published on women entrepreneurs. The objective of this study is twofold. First is to examine the number of papers published on women entrepreneurship in 12 established entrepreneurship journals from 1900 to 2016. Second is to assess the growth of the field by specifically reviewing literature reviews published from 1980s till 2016 and put forward future research directions. Our review findings suggest that there is still a long way to go in terms of building a strong theoretical base for research on women entrepreneurship. The lens of feminist theories can be applied in conjunction with the existing entrepreneurship theories to advance the field. Methodologically, past research is dominated by the positivist paradigm and there is a need to embrace innovative methods to build explanations using a constructionist approach. Further, studies are mostly restricted within national boundaries primarily being conducted in developed economies. There is a need to build transnational networks and foster professional communities to enable the growth of the field.

Keywords: Women Entrepreneurship, Gender and Entrepreneurship, Female Entrepreneurship, New Venture Creation, Literature Review

Introduction

Till the 1990s, mainstream academic journals and leading newspapers in the US perceived women owned firms as only small lifestyle businesses or sole proprietorship firms (Baker et al. 1997). The male-centered business model was considered as the natural model of doing business. However, research on women entrepreneurs' reveals that entrepreneurship is a gendered phenomenon and entrepreneurial activities can be rooted in families (Jennings and Brush 2013).

Emerging literature suggests that women can play a significant role in the larger entrepreneurship phenomenon and economic development (Sarfaraz et al., 2014). As a result, there is an insistent need to investigate various dimensions of women entrepreneurship. The existing theoretical concepts need to be expanded to better explain the uniqueness of women entrepreneurship as a subject of research inquiry.

Addressing the need to build a better understanding, this paper attempts to present an overview of the field and highlight future research directions. In particular, this paper has two broad objectives. The first objective is to highlight the mainstream

entrepreneurship journals and explore the number of papers published on women entrepreneurship in these journals till date. The second objective of the paper is to review the growth of the field and present an analysis of the literature review papers published on women entrepreneurship till 2016.

The paper is organized as follows. First, we discuss the growth and chronological history of the field of women entrepreneurship. Then, we discuss the research review approach followed in the paper and present the findings from our search using e-databases. Next, we present a summary and analysis of the literature review papers published from the 1980s till 2016. Finally, we discuss directions for future research and conclude the paper.

Women entrepreneurship: chronological history of the field

The literature on mainstream entrepreneurship primarily focusing on the male entrepreneur emerged in the 1930s. The late 1970s witnessed the emergence of an explicit sub-domain of women entrepreneurship (Jennings and Brush, 2013). This section outlines the chronological history of development of the literature on women/female entrepreneurship. Table 3 presents a summary of the key historical milestones in this sub-domain.

In 1976, Schwartz published the first academic paper on female entrepreneurship in the *Journal of Contemporary Business* and the first policy report in this area titled "The bottom line: Unequal enterprise in America" was released in 1979 in Washington DC. Hisrich and O'Brien (1981) made the first academic conference presentation on women entrepreneurs at the Babson College Conference on Entrepreneurship in 1981. The first academic book on female entrepreneurs was published in 1985 (Goffee and Scase, 1985).

Initial research on entrepreneurship assumed that male and female entrepreneurs were generally the same and there was no specific need for a separate investigation (Bruni et al. 2004). As a result, the sub-domain of women entrepreneurship did not develop as a significant area until the late 1990s to early 2000s (Jennings and Brush, 2013) with the launch of two dedicated conferences. First, a policy oriented Organization for Economic Cooperation and Development (OECD) Conference on women entrepreneurs in small and medium sized enterprises was held in 1998. Second, an academic conference Diana International was held in 2003.

It was not until 2009 that a niche journal titled the *International Journal of Gender and Entrepreneurship* was launched. Eventually, leading journals in the mainstream Entrepreneurship area recognized the growing need for research in this area. The *Journal of Entrepreneurship Theory and Practice* published a special issue on women entrepreneurship in 2006 and 2007 (de Bruin et al. 2006) and then again in 2012 (Hughes et al., 2012).

Global Entrepreneurship Monitor (GEM, <http://www.gemconsortium.org/>) also published a special report on women and entrepreneurship in 2006 followed by subsequent reports in 2010, 2012 and 2015. In 2015, Global Entrepreneurship Development Institute published the *Female Entrepreneurship Index* report that analyzed conditions for fostering women entrepreneurship in 77 countries. As per the report, the top ten countries for female entrepreneurs in 2015 were- United States, Australia, United Kingdom, Denmark, Netherlands, France, Iceland, Sweden, Finland and Norway (Terjesen and Lloyd, 2015).

Review method

We considered e-databases like EBSCO, ProQuest and Google Scholar as the main source for articles. The first objective of this paper was to identify and analyze the leading research journals in the broader area of entrepreneurship with a focus on women entrepreneurship papers. This analysis would help us reflect on the progress of the field and act as a potential source of published research reviews on women entrepreneurship.

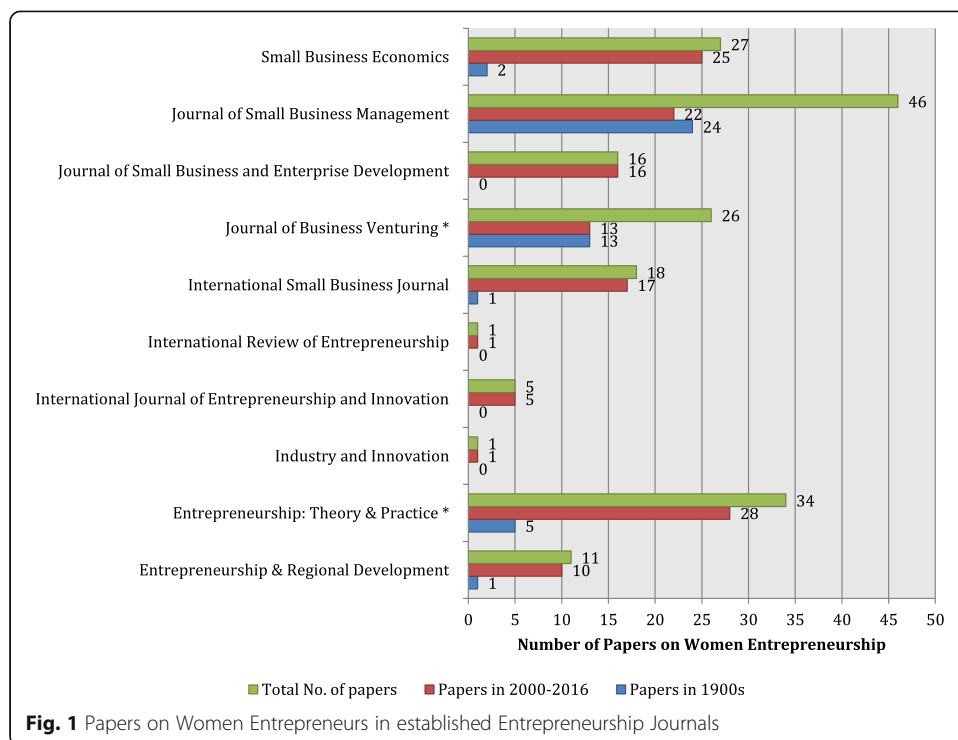
McDonald et al. (2015) reviewed the research methods used in entrepreneurship from the year 1985 to 2013 and identified six top entrepreneurship journals. These include three top US journals (Journal of Business Venturing, Entrepreneurship: Theory and Practice, and Journal of Small Business Management) and two top European journals (International Small Business Journal, and Entrepreneurship and Regional Development) having impact factors ranging from 1.33 to 2.97. We extend this list and add six more entrepreneurship journals from the Harzing journal quality list (Harzing, 2016). The Harzing list is a compilation of journal rankings from various sources like the Australian Business Deans Council (ABDC) Journal Rankings List, WU Wien Journal Rating, HEC Paris Ranking List, Association of Professors of Business in German speaking countries ranking list and others.

Altogether, we consider 12 established entrepreneurship journals having journal quality rankings ranging from A*, A, B and C (Harzing, 2016). Next, an advanced search for articles on women entrepreneurship was conducted with a combination of keywords “women” or “gender” in the paper title using the e-database EBSCO. We carried out 12 separate searches individually for each of the shortlisted entrepreneurship journal. The scope of the search included journal papers that were available online in EBSCO till May 2016.

Table 1 and Fig. 1 summarize our search results. Table 2 lists all the selected entrepreneurship journals along with the total number of 185 papers published on women entrepreneurs. Amongst the mainstream entrepreneurship journals, we find that the

Table 1 Chronological Summary of the first studies on Women Entrepreneurship

Year	Study type	Reference
1976	First Journal article	Schwartz, E. (1976). Entrepreneurship: A new female frontier. <i>Journal of Contemporary Business</i> , 5, 47–76.
1979	First Policy report	The bottom line: Unequal enterprise in America. (1979). Report of the President's Inter-agency Task Force on Women Business Owners. Washington, DC: Government Printing Office.
1983	First Conference paper presentation	Hisrich, R.D., & Brush, C.G. (1983). The woman entrepreneur: implications of family, education, and occupation. In J.A. Hornaday, J.A. Timmons, & K.H. Vesper (Eds.), <i>Frontiers of entrepreneurship research—Proceedings of the Babson College Conference on Entrepreneurship</i> (pp. 255–270) Wellesley, MA: Babson College.
1985	First Academic book	Goffee, R., & Scase, R. (1985). <i>Women in charge: The experiences of female entrepreneurs</i> . London: George Allen and Unwin.
1998	First Policy oriented Conference on Women entrepreneurship	Organization for Economic Cooperation and Development (OECD) Conference on women entrepreneurs (http://www.oecd.org/cfe/smes/womenentrepreneurskeymessages.htm)
2003	First academic Conference on Women entrepreneurship	Diana International Conference on Women's Entrepreneurship Research (http://www.babson.edu/Academics/centers/blank-center/global-research/diana/Pages/home.aspx)
2006	GEM Report on Women and Entrepreneurship	Global Entrepreneurship Monitor's (GEM) special topic report on women and entrepreneurship
2009	First dedicated Journal	International Journal of Gender and Entrepreneurship



Journal of Small Business Management published the first paper in 1973, which was followed by the Journal of Business Venturing in 1988. Total number of papers published in the mainstream journals from 1900s till 2016 was 185 with the Journal of Small Business Management having the maximum number of papers. Interestingly, we find two mainstream entrepreneurship journals having no papers on women entrepreneurship. These two journals are Economics of Innovation and New Technology and the International Journal of Entrepreneurial Behaviour and Research.

Table 2 List of Entrepreneurship Journals and Papers Published on Women Entrepreneurs

Journal Name	First article published in Year	Total papers (1900–2016)
1 Economics of Innovation and New Technology	-	0
2 Entrepreneurship & Regional Development	1998	11
3 Entrepreneurship: Theory & Practice ^a	1991	34
4 Industry and Innovation	2010	1
5 International Journal of Entrepreneurial Behaviour and Research	-	0
6 International Journal of Entrepreneurship and Innovation	2007	5
7 International Review of Entrepreneurship	2015	1
8 International Small Business Journal	1998	18
9 Journal of Business Venturing ^a	1988	26
10 Journal of Small Business and Enterprise Development	2003	16
11 Journal of Small Business Management	1973	46
12 Small Business Economics	1996	27
Total Number of Papers		185

^aJournal is a Leader in the Entrepreneurship Field (Harzing, 2016)

Figure 1 graphically illustrates the number of papers published in the 1900s and 2000–2016 in the 10 journals. The two journals mentioned earlier that had no papers on women entrepreneurship were dropped from this graph. We found a total of 138 papers published during the 2000 to 2016 time period. This clearly illustrates a substantial increase from a total number of 46 papers published during the 1900s. Except for two journals, namely the *Journal of Business Venturing* and the *Journal of Small Business Management* we see that the increase in publication trend is clearly visible in Fig. 1. During the 2000–2016, the *Journal of Entrepreneurship Theory and Practice* published the maximum number of papers (total 28) followed by *Small Business Economics* publishing 25 papers, *Journal of Small Business Management* publishing 22 papers and the *Journal of Business Venturing* publishing 13 papers. It is advisable to note that the journal list in Table 2 is only indicative of the existing established entrepreneurship journals and scholars seeking potential publication outlets can also consider other upcoming journals or interdisciplinary journals that are open to publishing research on women entrepreneurship.

Next, a second round of search was conducted for literature review articles published on women entrepreneurship in management and social science journals. We used a combination of keywords “female” or “women” or “gender” and “entrepreneur” and “review” or “literature” in the paper title using e-databases like EBSCO, ProQuest and Google Scholar. Only relevant review articles were shortlisted for our analysis after reading the abstracts. We also selected a comprehensive review article by Jennings and Brush (2013) published in *The Academy of Management Annals* as our foundational review paper. This paper helped us in identifying few more review articles that did not get covered in our search in paper titles. In all, we found 19 relevant literature review articles on women entrepreneurship published from 1986 till May 2016. These are discussed in detail under the Reviews section that follows.

Reviews

An increase in the number of papers on women entrepreneurs resulted in publications of literature reviews to comprehend the state of the field. Table 3 presents a summary of the literature reviews published in research journals from 1986 to May 2016. There were two review papers published in the 1980s, five reviews in 1990s and twelve review papers in 2000s (up to 2016). These are covered in detail in the following sub-sections.

1980s reviews

Bowen and Hisrich published the first review paper on women entrepreneurs in 1986. They find only piecemeal studies on male and female entrepreneurs till the 1980s. These studies did not examine causal factors, which are likely to encourage a person to choose an entrepreneurial career. Further, they report that very less was known about female than male entrepreneurs. Using the lens of career theory Bowen and Hisrich (1986) proposed a career model including determinants of women’s entrepreneurial behavior. This first research review attempted to develop insights in this area and encourage women entrepreneurs in non-traditional industries.

The second review published by Birley (1989) studied whether female entrepreneurs were different from male entrepreneurs. The major difference between female entrepreneurs and

Table 3 Summary of the Literature Review articles published on Women Entrepreneurship

Sl. No.	Author (Year)	Journal	Key Findings	Theory
1	Bowen and Hisrich (1986)	Academy of Management Review	First literature review paper on female entrepreneurs. Examined literature from an entrepreneurial career perspective and posit a career model containing determinants of women entrepreneurial behavior.	Career theory
2	Birley (1989)	Journal of Small Business Management	The major difference between female entrepreneurs and male entrepreneurs is in their market-entry choices. There is a need to examine subtle factors like cultural conditioning and experiences.	Proposed a new theory- supply of entrepreneurs are situationally and culturally bound
3	Moore (1990)	Journal of Business Ethics	Current studies are limited, fragmented and unrelated. There is a need to develop a statistical research base, typologies and models. Field in an initial stage of paradigm development and there is a need to build theories.	
4	Brush (1992)	Entrepreneurship Theory and Practice	Research over the decade has shown some similarities and some differences between male and female business owners. Similarities have been reported on demographic features, some psychological traits and business skillset. Differences have been reported on educational background, occupation, motivation to start a business and approach to business creation and growth.	Proposed an integrated perspective, rooted in psychological and sociological theories, to explain gender-based differences
5	Fischer et al. (1993)	Journal of Business Venturing	There are atheoretical speculations on the differences between male and female entrepreneurs. Found no strong evidence for women-owned firms being impeded by the female owners' lack of education or experience. Further, access to apprenticeship in target industry for women entrepreneurs can be beneficial.	Liberal feminist theory and social feminist theory can help explain why men and women run their businesses in different yet equally effective ways
6	Baker et al. (1997)	Entrepreneurship and Regional Development	Report a paradox- even though women business ownership has grown substantially in the US, the leading press and academic journals have remained silent. Small but significant gender differences in social behavior and leadership studies can offer interesting insights on gendered differences in business ownership.	Social behavior theory

Table 3 Summary of the Literature Review articles published on Women Entrepreneurship (*Continued*)

7	Mirchandani (1999)	Gender, Work and Organization	Research on women entrepreneurship can be advanced via reflections two concerns (i) construction of the 'female entrepreneur' category that lays greater emphasis on gender over other types of stratification; (ii) examine relationships between gender, occupation and organizational structure and their impact on female versus male entrepreneurs.	Feminist theory
8	Gundry et al. (2002)	Journal of Enterprising Culture	Suggests the need to study comparisons among sectors; examine impact of factors like industry, family, culture and goal orientation in women founded enterprises; and study women entrepreneurship in the context of developing countries.	
9	Ahl (2006)	Entrepreneurship Theory and Practice	Need to expand the research object and move from an individualist focus of examining the female entrepreneur to include more factors and studies, like contingency studies or comparative studies. There is also a need to make a shift in epistemological position from how gender is done to how social orders are gendered.	Feminist theories - Liberal Feminist theory, Social Feminist theory, Psychoanalytical Feminist theory, Radical Feminist theory, Social Constructionist and Post-structural Feminist theory
10	de Bruin et al. (2006)	Entrepreneurship Theory and Practice	Research on women entrepreneurship is still at an early childhood stage and there is a need to pursue research that is connected to theory. There is also a need to nurture professional academic communities in this area like the Diana International Project to advance the field.	
11	de Bruin et al. (2007)	Entrepreneurship Theory and Practice	Existing theoretical concepts need to be expanded to better explain the uniqueness of women entrepreneurship. Research on multiple levels involving multiple units of analysis is required to advance the field.	Propose use of Feminist theories to expand Entrepreneurial theories on Process, Opportunity Recognition, Opportunity Exploitation, Value Creation, Entrepreneurial Environment and Institutional theory
12	Brush et al. (2009)	International Journal of Gender and Entrepreneurship	Propose a gender-aware framework for a holistic understanding of women entrepreneurship. Founded on institutional theory, they build a framework around 3Ms (markets, money and management) and add two more variables (motherhood and meso/macro environment) to construct a 5 M framework.	Institutional theory. Propose Gender as a Social construct theory

Table 3 Summary of the Literature Review articles published on Women Entrepreneurship (*Continued*)

13	Ahl and Nelson (2010)	International Journal of Gender and Entrepreneurship	Re-frame the perspective on gender (differing from biological sex) in entrepreneurship research. Use the word gender as a socially constructed phenomenon. Focus on understanding the distinguishing process of “doing entrepreneurship” in terms of “what women do” and “what men do”.	Use Institutional theory to examine Gender and Entrepreneurship
14	Sullivan and Meek (2012)	Journal of Managerial Psychology	Extend the research examining relationships between I/O psychology and entrepreneurship studies. Present the review as a process model of gender and entrepreneurship.	Expectancy theory, Regulatory Focus theory, Social Cognitive theory to study process model concepts (Entrepreneurial Opportunity recognition, Motivation, Resource Acquisition, Success /Performance)
15	Ahl and Marlow (2012)	Organization	There exists an occluded gender bias within the entrepreneurial discourse, which is contrary to the neo-liberal views on entrepreneurship. Gendered assumptions limit epistemological scope of research in this area and positions women entrepreneurs as either failed or reluctant subjects. There is a need for building a reflexive critical perspective.	Feminist theories
16	Hughes et al. (2012)	Entrepreneurship Theory and Practice	Women entrepreneurship research is on the brink of adolescence. Need to be inclusive of diverse voices and apply a constructionist approaches to answer traditional and non-traditional questions. Research collaborations in the women entrepreneurship area are still restricted within national boundaries and future research needs building networks across transnational borders.	
17	Jennings and Brush (2013)	The Academy of Management Annals	A comprehensive review of the sub-field documenting in detail evolution of research work on women entrepreneurship over a period of 30 years. Use the lens of informed pluralism and report entrepreneurship is a gendered phenomenon, entrepreneurial activity is embedded in families, entrepreneurship can result from necessity as well as opportunity and entrepreneurs pursue goals beyond economic gains.	Feminist theory, Process theory, Motivation and goals

Table 3 Summary of the Literature Review articles published on Women Entrepreneurship (*Continued*)

18	Goyal and Yadav (2014)	Psychosociological Issues in Human Resource Management	Review challenges faced by women entrepreneurs in developing countries. Developing countries have institutional voids and low levels of entrepreneurial education. Women struggle to gain access to finance, face socio-cultural biases and experience low self-esteem. There is a need to address these complex challenges in a comprehensive manner to assist research and policy on women entrepreneurs in developing nations.	
19	Henry et al. (2016)	International Small Business Journal	Review the literature published on gender and entrepreneurship over a period of 30-years in 18 journals. There are large-scale empirical studies that primarily focus on comparisons between male and female entrepreneurs and often less information is given on the industry sector or the sampling methods. There is paucity of feminist critique and future scholars need to engage with post-structural feminist approaches. There is a need to adopt innovative methods like in-depth qualitative approaches.	Post-structural feminist theory

male entrepreneurs was in their market-entry choices. Birley reports that nearly all the studies examined were descriptions of basic backgrounds and characteristics. There was a need to examine subtle factors like cultural conditioning and experiences. She proposes that the differences between men and women entrepreneurs are to be observed in a situational and cultural context. Till 1980s, the role of women in most western economies was seen as that of a wife and a mother. Women drew heavily upon home front for ideas and lacked basic commercial networks. As a result, the market entry choices of women differed. The review paper proposes that the advent of women founded businesses was one of the reflections of a changing society. In future the profile of women entrepreneurs are likely to match changing situations and become closer to that of male entrepreneurs.

1990s reviews

In 1990, the third published review by Moore (1990) suggests that focused studies on female entrepreneurship were a relatively new phenomenon in the late 1980s. The field was in an initial stage of paradigm development. She reviewed 21 studies on female entrepreneurship and reports that these studies were fragmented and unrelated in nature. These studies provided descriptions of only a small section of the larger population of female entrepreneurs. Further, these studies borrowed theoretical concepts from other areas that were not valid for the women entrepreneurship domain. Moore suggests that there is a need to establish a statistical research base and develop typologies, models and theories in this area.

The next review by Brush (1992) suggests that not only has the number of women business owners grown considerably over the past decade but also there has been an increase in the number of research studies on women business owners. She reports that research over the decade has shown some similarities and some differences between male and female business owners. Similarities have been reported on demographic features, some psychological traits and business skillset. Differences have been reported on educational background, occupation, motivation to start a business and approach to business creation and growth. She further suggests that the differences have not been fully explained in literature. Brush proposes an integrated perspective to explain gender-based differences, which is rooted in psychological and sociological theories. The integrated perspective suggests that women perceive their businesses as a cooperative network of relationships comprising of family, society and personal relationships. This view is different from the economic perspective of firm creation and is likely to offer explanations for differences between male and female entrepreneurs.

The fifth review (refer Table 3) by Fischer et al. (1993) also suggests that there is a need to build theoretical foundations in this area. They report that even though the research on women entrepreneurs has grown considerably there is still speculation on the differences between male and female entrepreneurs, which is largely atheoretical in nature. They use the perspectives of liberal feminism and social feminism to interpret the past research in this area. In addition to the review, the article also presents findings from a survey of 136 (including 11 women) manufacturing firm owners, 156 (including 29 women) retail firm owners, and 216 (including 20 women) service firm owners. Fischer et al. (1993) report no strong evidence for women-owned firms being impeded by the female owners' lack of education or experience. From a policy perspective, this study suggests that access to

apprenticeship in industry for women entrepreneurs can be beneficial as it is the best way to prepare for launching a business in a particular industry. Further, women entrepreneurs can also benefit by being exposed to business start-ups. They propose that the theories of liberal feminism and social feminism can be used to further understand undefined male and female socialization differences, which can possibly explain why men and women run their businesses in different yet equally effective ways.

The sixth review by Baker et al. (1997) reports a paradox- even though women business ownership has grown substantially in the US, the number of articles in newspapers (like New York Times and Wall Street Journal) and leading academic journals has declined. They report two dissenting voices including scholars and women advocacy groups. Scholars researching on sex and gender issues reason in favor of systematic empirical differences in male and female work behaviors. Women advocacy groups' state that not only are women different but also women business owners possess unique advantages over men. Mainstream academic journals and media journalists perceived women owned firms as small lifestyle businesses or sole proprietorship firms. Baker et al. (1997) suggest that rising dissenting voices have been ignored by journalist and academic groups due to androcentrism, which assumes that the male-centered business model is the natural model or way of doing business. Baker et al.'s (1997) review finds small but significant gender differences in social behavior and leadership related studies that can offer interesting insights for understanding subtle characteristics of women business ownership behavior.

Mirchandani's (1999) review of literature on female entrepreneurship uses the lens of feminist theory on gendered work. This review also tries to identify and provide explanations for similarities and differences between female and male entrepreneurs. The paper proposes that the field of women entrepreneurship can be advanced via deliberations on two topics. Firstly, scholars need to focus on the very construction of the female entrepreneur category, which lays greater emphasis on gender over other types of stratification. Secondly, there is a need to understand relationships between gender, occupation and organizational structure and their impact on female versus male entrepreneurs.

2000-2015 reviews

Research review by Gundry et al. (2002) suggests that the number of women owned enterprises and research studies on women entrepreneurship has grown steadily in the last two decades. The review summaries key topics, findings and offers directions for future research. Gundry et al. (2002) suggest that there is a need to study comparisons among sectors and understand the impact of factors like industry, family, culture and goal orientation in women founded enterprises. They also suggest that there is a need for research on women entrepreneurs in developing countries.

Ahl's (2006) review article presents a critique using discourse analysis of 81 women entrepreneurship research articles that were published between 1982 and 2000. The review focuses mainly on articles from four leading entrepreneurship research journals namely (i) *Entrepreneurship, Theory and Practice* (ii) *Journal of Business Venturing* (iii) *The Journal of Small Business Management* and (iv) *Entrepreneurship and Regional Development*. Ahl (2006) suggests that there is a need to expand the research object and move from an individualist focus of examining the female entrepreneur to include

more factors and studies like contingency studies or comparative studies that include researchers from different countries. Contingency studies can examine external factors like legislation, social norms, family policy, economic policy, labor market structure, the degree of women entrepreneur's participation, and others. Ahl (2006) also suggests that there is a need to make a shift in epistemological position from how gender is done (how women entrepreneurs construct their lives and businesses) to how social orders are gendered (examples include business legislations, policy, support systems, cultural norms, labor divisions). This paper offers new research directions that are not reproductions of women's subordination but offers a richer perspective on women entrepreneurship grounded in feminist theories.

The next article by de Bruin et al. (2006) is an introduction to *Entrepreneurship Theory and Practice* journal's special issue on women entrepreneurship. It presents an overview of the sub-field and a review of the research articles submitted in response to the special issue's call for papers. The journal received total 52 submissions from 132 authors in 21 countries. Finally 11 articles were published as special issues in two volumes of the journal. de Bruin et al. (2006) suggest that research on women entrepreneurship is still at an early childhood stage. They propose that there is a need to pursue more research that is connected to theory. This can help capture the heterogeneity in women entrepreneurship research. Further, they suggest that the field of entrepreneurship can advance by encouraging several scholarly communities to flourish that focus in depth on closely defined subject areas. And the area of women entrepreneurship can be one such scholarly community. de Bruin et al. (2006) also mention the Diana International Project that was initiated in 1999 to study women entrepreneurship in the US. The project now has participants from 20 countries and can be considered as a good example of developing focused professional communities in this area.

The next article, again, by de Bruin et al. (2007) is an introduction to the second volume of the special issue on women entrepreneurship. They present an analysis of the existing and future research themes in women entrepreneurship. Themes reported are financing the venture; networks or social capital; firm performance covering growth, growth strategies, and success; and individual characteristics like entrepreneurial orientation, self-efficacy, intentions, motivations and decision models. They highlight that very few authors had explicitly studied the entrepreneurial processes of women entrepreneurs. Further, there was paucity of research on environment for women entrepreneurship that may cover studies from different countries, regions (like rural or urban) and different business sectors. They also outline methodological issues and reason whether there is a need for a separate theory on women entrepreneurship. de Bruin et al. (2007) suggest that research on multiple levels involving multiple units of analysis is required to advance the field. They also suggest that the existing theoretical concepts need to be expanded to better explain the uniqueness of women entrepreneurship.

Brush et al. (2009) use an organizational framework to review the academic literature on women entrepreneurship. They propose a gender-aware framework for a holistic understanding of the phenomenon of women entrepreneurship. Founded on institutional theory, they build a framework around 3Ms (markets, money and management) and add two more constructs (motherhood and meso/macro environment) to construct a 5 M framework to study women entrepreneurship. They report that the variable Motherhood is a metaphor, which represents female entrepreneur's household and

family context. This can have a much larger impact especially in the case of female entrepreneurs as compared to male entrepreneurs. Going beyond the domain of markets, the meso/macro environment tries to capture influences of society, culture (macro), intermediate structures and institutions (meso).

The next review by Ahl and Nelson (2010) presents an analysis of the research trends on gender and entrepreneurship and offers recommendations for new directions. They suggest that there is a need to contrast empirical findings using male/female entrepreneurs as binary independent variables. More research is required on differences between male and female entrepreneur's behavior in the context of social forces impacting them. They suggest that there is a need to re-frame the perspective on gender (differing from biological sex) in entrepreneurship research to include aspects of men, women, femininity or masculinity. They assert that a better dialogue can be achieved by using the word gender as a socially constructed phenomenon. In other words, scholars need to focus on understanding the distinguishing process of "doing entrepreneurship" in terms of "what women do" and "what men do".

Sullivan and Meek (2012) review the literature from 1993–2010 on women entrepreneurship. They organize the literature review under a process model of entrepreneurship including pre-launch, launch and post-launch phases, which was initially proposed by Baron and Henry (2011). Sullivan and Meek (2012) extend this model and call it the process model of gender and entrepreneurship. They report that research on women entrepreneurship has increased in the last two decades but there is still a greater need for more studies in this area. They suggest that women are likely to face barriers to entry due to unequal access to assets or resources or education, and are likely to face differing societal attributions and expectations. To mitigate some of these concerns, women can be encouraged to pursue education in fields associated with highgrowth industries.

Ahl and Marlow (2012) argue that there exists an occluded gender bias within the entrepreneurship discourse. This is contrary to the neo-liberal views on entrepreneurship that propose only personal efforts as determinants of reward and status. They highlight that even though there have been calls to use feminist theories as analytical frames, there are scant evidences of such applications. They argue that there are gendered assumptions that limit epistemological scope of research in this area and positions women entrepreneurs as either failed or reluctant subjects. They propose that there is a need to build a reflexive critical perspective. This can help in evaluating the current theoretical approaches on women entrepreneurship within the broader ambit of entrepreneurship research.

The next article by Hughes et al. (2012) characterizes women entrepreneurship research as being on the brink of adolescence in 2012. This characterization is based on the visible growth indicators in the field like increasing number of conferences, journal special issue- call for papers and niche journals starting on this area (like the *International Journal of Gender and Entrepreneurship*). Further, there are examples of other publications like GEM reports, chapters and books being published in the area of women entrepreneurship. This paper is an introduction to the second special issue of the *Entrepreneurship Theory and Practice* journal on women entrepreneurship in the year 2012. It presents a critical review of the state of research and reviews the articles submitted to the journal's call for papers. The special issue received total 40 submissions from 90 authors in 14 countries. The countries of submission included United

States, United Kingdom, Belgium, France, Canada, Germany, China, Netherlands, Finland, Spain, Sweden, Saudi Arabia and Taiwan. The number of papers received was less than the first issue in 2006 and 2007. This could be due to presence niche journals on women entrepreneurship by 2012.

Hughes et al. (2012) report that there has been advancement in the type of questions being asked and the explanations being offered. They suggest that there is a need to be inclusive of diverse voices and apply a constructionist approach to answer traditional and non-traditional questions. They also indicate that most of the research collaborations in women entrepreneurship area are still restricted within national boundaries and future research needs building networks across transnational borders.

The next review paper by Jennings and Brush (2013) is a comprehensive review of the field that documents in detail development of research work on women entrepreneurship over 30 years. It presents an assessment of research contributions with reference to the larger context of entrepreneurship domain. It also discusses the challenges and opportunities for scholars studying the niche area of women entrepreneurship. Jennings and Brush (2013) use the lens of informed pluralism, which seeks to explore women entrepreneurship using extensions to and by general research on entrepreneurship. They further discuss that entrepreneurship is a gendered phenomenon and entrepreneurial activities can be rooted in families.

The next article by Goyal and Yadav (2014) is a review of challenges faced by women entrepreneurs in developing countries like India. They report that female entrepreneurs face challenges of higher magnitude as compared to their male counterparts. These challenges are unique and more complex for women living in developing countries. They find that women in developing countries struggle to gain access to finance, face socio-cultural biases and experience low self-esteem. They report that developing countries have institutional voids and low levels of entrepreneurial education. Goyal and Yadav (2014) suggest that there is a need to address these complex challenges in a comprehensive manner, which can assist research and policy work on women entrepreneurs in developing countries.

Henry et al. (2016) review the literature published on gender and entrepreneurship over a period of 30-years in 18 journals. They identify methodological trends in this area and discuss methodological innovations needed for future research. They find that there are large-scale empirical studies that primarily focus on comparisons between male and female entrepreneurs. There is often less information given on the industry sector or the sampling methods employed. They suggest that there is paucity of feminist critique and future scholars need to engage with post-structural feminist approaches. They suggest that there is a need to adopt innovative methods like in-depth qualitative approaches to study life histories, case studies or discourse analysis.

Directions for future research

Till the 1980s there were only piecemeal studies and very less was known explicitly about female entrepreneurs (Bowen and Hisrich, 1986). Initial studies were fragmented and unrelated in nature. These studies provided descriptions of only a small section of the larger population of female entrepreneurs (Moore, 1990). The role of women in most western economies was seen as that of a wife and a mother till the 1980s. As a result, women lacked basic commercial networks and their market entry choices differed

(Birley, 1989). The advent of women founded businesses was considered as one of the reflections of a changing society.

Build theoretical explanations for gender based comparisons of business owners

In the 1990s, as the number of women business owners grew the number of research studies on women entrepreneurs also grew (Brush, 1992). Initial research was primarily focused on listing similarities and dissimilarities between male and female business owners. Differences were reported on educational background, occupation, motivation and method of business creation and growth. Researchers like Fischer et al. (1993) suggest that the differences reported in literature between male and female entrepreneurs were speculations and largely atheoretical in nature. There is a need to build more theoretical explanations and move beyond recording differences.

For example, Brush (1992) proposed an integrated perspective explaining gender related differences using psychological and sociological theories. This is different from the economic perspective of firm creation and assumes women entrepreneurs to perceive their businesses as cooperative networks of relationships involving family, society and personal relationships. Fischer et al. (1993) suggests using theories of liberal feminism and social feminism to understand undefined male and female socialization differences, which can help explain why men and women run their businesses in different yet equally effective ways.

Extend existing theories of entrepreneurship using a feminist perspective

There exists a debate in literature whether a new theory on women entrepreneurship is required. Many researchers suggest that the existing concepts of entrepreneurship itself can be used in conjunction with feminist theories to extend the theoretical foundation of the larger entrepreneurship field. In the past, many theoretical lenses have been used to examine the phenomenon of women entrepreneurship. For example, Bowen and Hisrich (1986) used career theory to propose a career model of women's entrepreneurial behavior; Brush (1992) used psychological and sociological theories to explain gender-based differences; Brush et al. (2009) used institutional theory to propose gender as a social construct; and Sullivan and Meek (2012) used expectancy theory, regulatory focus theory and social cognitive theory to study entrepreneurial process model concepts. Ahl (2006) reports the use of many feminist theories like the liberal feminist theory, social feminist theory, psychoanalytical feminist theory, radical feminist theory, social constructionist and post-structural feminist theory. To advance our understanding of this field, there is also a need to make a shift in epistemological position from how gender is done to how social orders are gendered (Ahl, 200; Ahl and Nelson, 2010). Research efforts in this direction are likely to offer a richer perspective on women entrepreneurship. Scholars can use the existing concepts of entrepreneurship and ground them in feminist theories.

Study entrepreneurial processes of women founded business models

Women entrepreneurs comprise about a half of human resources in developing economies (World Bank, 2009). Despite an influx of women entering the field of entrepreneurship in developing countries (Gichuki et al., 2014), very few authors have explicitly

examined the entrepreneurial processes of women founded businesses (de Bruin et al., 2007). In reality, women in developing countries are more likely to face complex barriers to entry and unequal access to resources and networks (Goyal and Yadav, 2014). Thus, there is a need to build an in-depth understanding of the business models of women founded firms from prelaunch to launch and post launch phases (Sullivan and Meek, 2012). Scholars can use the lens of process theories to understand the influence of gender in business models.

Expand the scope of research on women entrepreneurs: context and content

Our review findings suggest that there is a need to expand the scope of research on women entrepreneurs involving the context as well as the content of the research. de Bruin et al. (2007) report that the *Entrepreneurship Theory and Practice* journal's special issue had generated interest on the topic in the researcher community and the special issue's countries of submission included countries like United States, United Kingdom, Canada, Bulgaria, Denmark, Germany, Switzerland, Finland, Italy, Norway, Sweden, New Zealand, Spain, Australia, China, France, India, Malaysia, Iran, Pakistan and Ghana. Despite the interest, we find that most of the literature on women entrepreneurship reports empirical studies primarily from the west. There are very few studies that explore this phenomenon in a developing economy context and there is a need for research on women entrepreneurs in developing countries (Gundry et al., 2002; Goyal and Yadav, 2014).

Further, the context can also be expanded in terms of the women entrepreneurship environment to study comparisons among class (upper, middle and lower), sectors (manufacturing, services and others), regions (urban and rural) and nations. Scholars can design studies to examine the impact of factors like industry, family, culture and goal orientation in women founded enterprises (Gundry et al., 2002). It would be interesting to observe sociocultural and economic class differences across nations with different cultural backgrounds.

Content-wise, there is a need to move beyond the individualist focus of the female entrepreneur and include more factors like contingency studies or comparative studies (Ahl, 2006). For instance, contingency studies can explore external factors like legislation, social norms, family policy, economic policy, labor market structures, and the degree of female business owner's involvement. From a macro perspective, scholars can explore links between income class, educational attainment and women entrepreneurship. To foster entrepreneurship among young women, it would be useful to explore entrepreneurial intentions of young women from varied socioeconomic and class backgrounds in different cultural contexts.

Embrace innovative research methods to study women entrepreneurs

Review of literature reveals that most of the papers on women entrepreneurship fall under the positivist research paradigm. Many are empirical studies focusing on male and female entrepreneur comparisons, which provide less information on industry sectors or the sampling methods used (Henry et al. 2016). There is a need to adopt inductive methods of qualitative analysis that can help increase our understanding of entrepreneurship as a gendered phenomenon (Mirchandani, 1999) and advance theory

in this area. For example, research methods like in-depth qualitative approaches can be used to investigate life histories, ethnographies and case studies or discourse analysis. Further, scholars can research the phenomenon of women entrepreneurship on multiple levels using multiple units of analysis (de Bruin et al., 2007).

Conclusion

The field of women entrepreneurship has come a long way since its emergence in the late 1970s. In this paper we report findings from 19 literature reviews on women entrepreneurship that were published between 1986 and 2016. We find that the initial studies on entrepreneurship primarily assumed male and female entrepreneurs to be the same and found no explicit need for a separate investigation. As a result, research on women entrepreneurship did not develop as a distinct domain until the late 1990s to early 2000s. This development witnessed the emergence of professional communities like the Diana International project, dedicated conferences and niche journals in this area. Mainstream entrepreneurship journals also acknowledged the need for research in this area and came out with special issues to advance the body of knowledge on women entrepreneurship.

Many studies in the past borrowed theoretical concepts from areas that were not valid for the women entrepreneurship domain. There is a need to be inclusive of diverse voices and consider constructionist approaches to explore traditional as well as non-traditional questions. Particularly, there is a need to use the lens of feminist theories to capture heterogeneity in women entrepreneurship research and extend existing entrepreneurial theories. There is also a need to study entrepreneurial processes of women founded business models and adopt innovativeness in research method choices.

Our review results can also be beneficial for startup managers and women entrepreneurs. In practice, aspiring women entrepreneurs can benefit by gaining access to apprenticeship in target industries. This experience can help them prepare better prior to launching their own business in that particular industry. Specifically, gaining exposure to a business start-up can be beneficial. Further, much of the collaborations in the women entrepreneurship area are still restricted within national boundaries and there is a need to build research as well as practice networks across transnational borders.

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Authors' contributions

VY designed the research and analyzed collected data. VY and JU reviewed the papers and wrote the research. Both authors read and approved the final manuscript.

Competing interests

The authors declare that they have no competing interests.

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